3rd Status Report

Arab Air Carriers' Organization 31 August 2020

State of Affairs of Travel & Tourism and What is Needed for a Smooth Recovery

aac

الإتحاد العربي للنقل الجوي
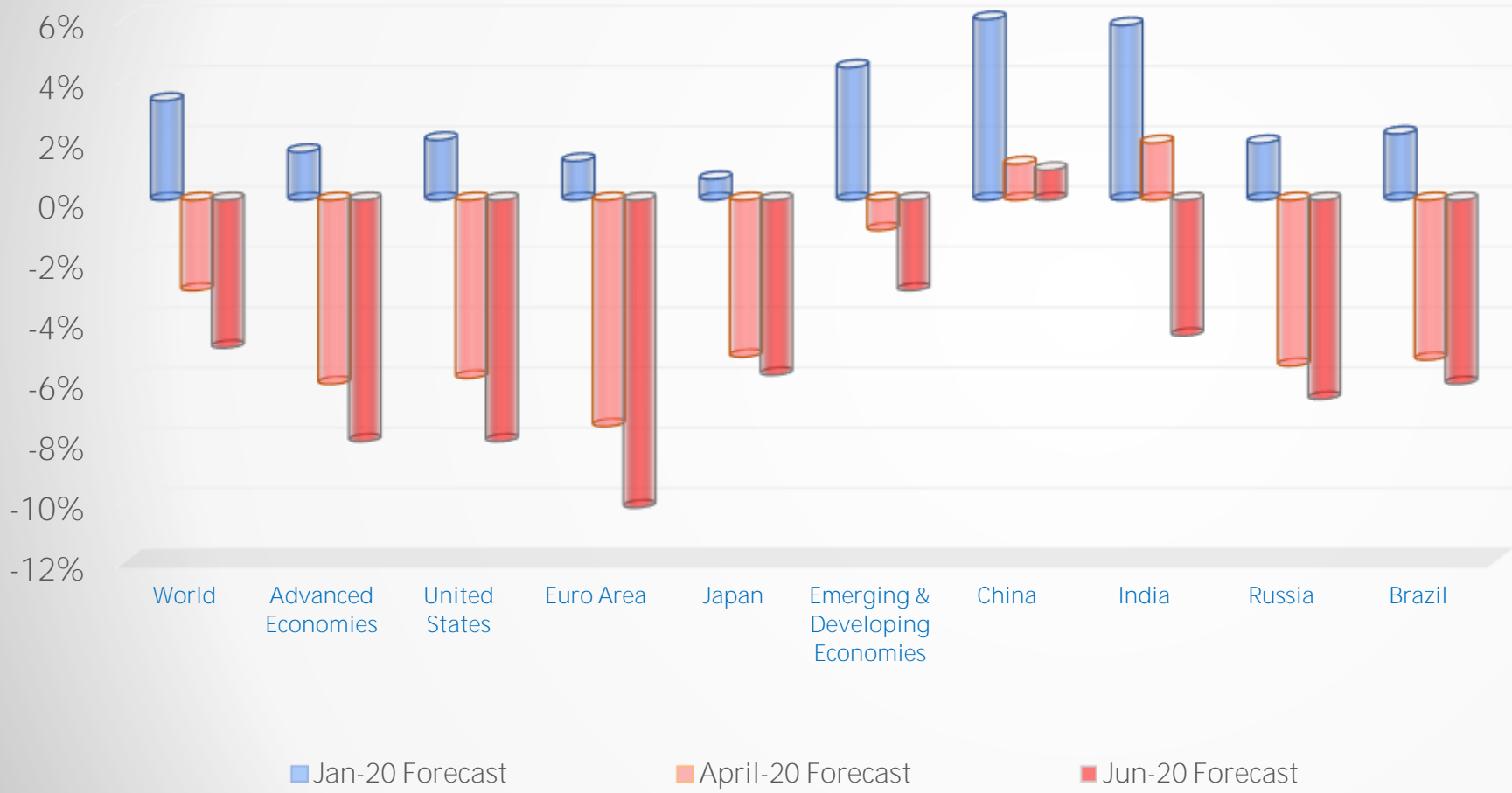arab air carriers' organization

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Impact Analysis on the Economy and Travel & Tourism

COVID-19: Estimates of Impact on the Global Economy

A deeper downturn than originally expected: 4.9% contraction in GDP in 2020 over 2019

Estimates of GDP Changes in 2020/2019 (Before and During the Pandemic)

6%
4%
2%
0%
-2%
-4%
-6%
-8%
-10%
-12%

World | Advanced Economies | United States | Euro Area | Japan | Emerging & Developing Economies | China | India | Russia | Brazil

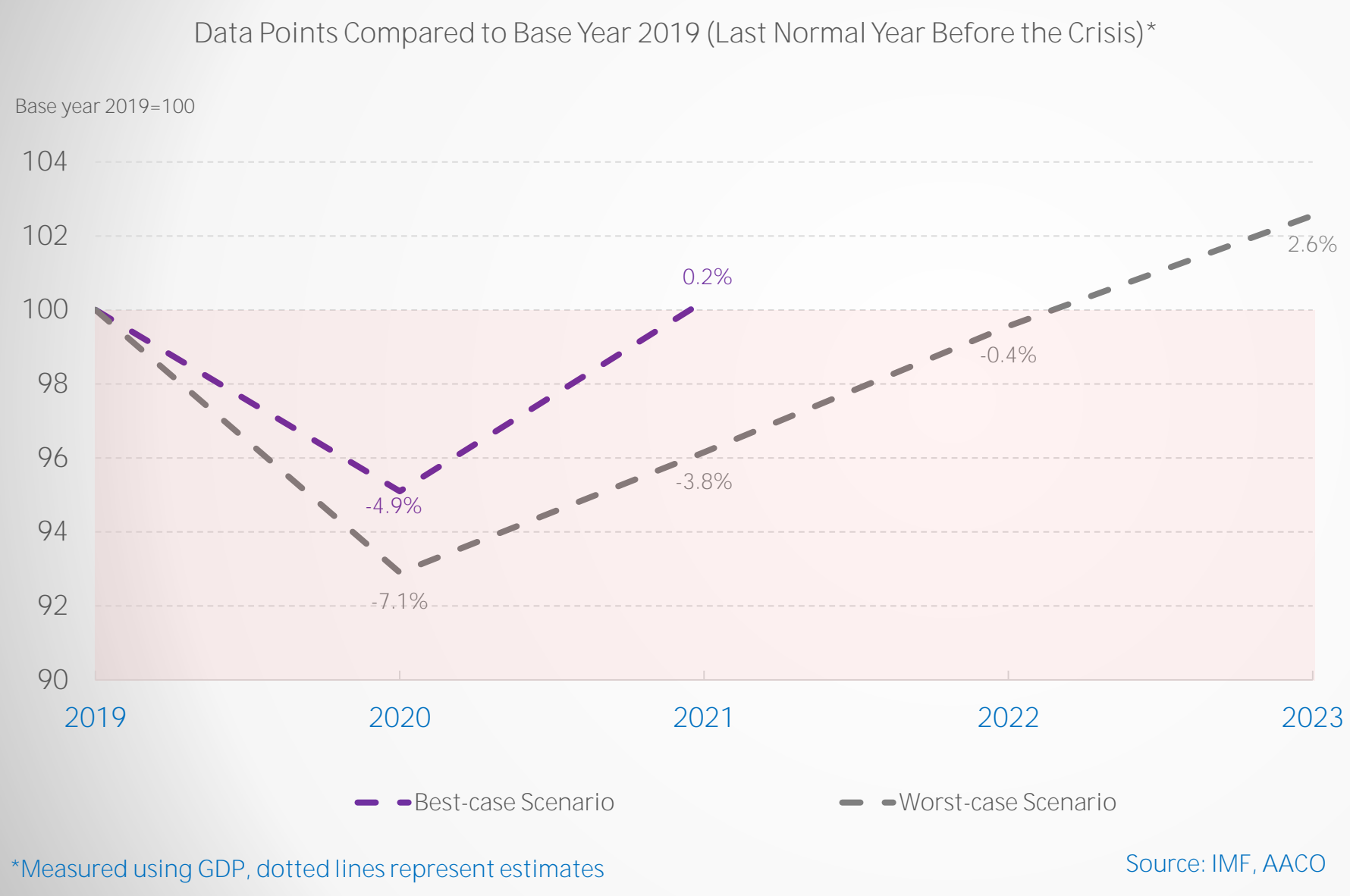Jan-20 Forecast   April-20 Forecast   Jun-20 Forecast

Source: IMF, AACO

In January 2020, the IMF released the initial global economic forecast for 2020 expecting better output when compared to 2019 supported by easing trade tensions between the U.S. and China and diminished fears of a no-deal Brexit. However, COVID-19 triggered the worst economic recession since the **"Great Depression."** During Q1 2020, several countries introduced strict lockdown measures, causing a severe fallout in business activity. Accordingly, the IMF revised the forecast in April, where the global economy was expected to shrink by 3.0% in 2020 over 2019.

Further data releases since April suggested even a deeper downturn, especially in consumption and services output, affected by social distancing, lockdowns, income losses, and weaker consumer confidence. Moreover, the spike in infections, especially across the Americas led the IMF to revise their forecast on June 24, where global GDP was forecasted to shrink by 4.9% in 2020 over 2019. The global economy is forecasted to lose USD 12.5 trillion in output in 2020 and 2021 that could have been achieved based on January's forecast. Estimates could have been worse without the existence of sizable fiscal and financial countermeasures taken by many countries since the beginning of the crisis.

Estimates of Time for Recovery of the Global Economy from COVID-19 Crisis

Recovery by end of 2021 under the best-case scenario; By 2023 under worst-case scenario

Data Points Compared to Base Year 2019 (Last Normal Year Before the Crisis)*

Base year 2019=100

Chart axis labels: 104, 102, 100, 98, 96, 94, 92, 90

Data labels: 0.2%, 2.6%, -0.4%, -4.9%, -3.8%, -7.1%

X-axis: 2019, 2020, 2021, 2022, 2023

Legend: — - Best-case Scenario   — - Worst-case Scenario

*Measured using GDP, dotted lines represent estimates

Source: IMF, AACO

Based on the updated data released during the first half of 2020, we have updated our recovery scenarios for the global economy.

Despite the weaker than anticipated figures of consumer spending and manufacturing activity released during the first half of 2020, we still estimate that the global economy will recover to 2019 levels by the end of 2021 based on our best-case scenario (see left chart).

The best-case scenario assumes, continued financial support provided by governments, a drop in the rate of infections, increase in manufacturing activity, ease of trade tensions, and recovering commodity prices.

On the other hand, our worst-case scenario assumes limited financial support by governments, another global spike in infections, which will force governments to reinstate lockdowns causing more businesses to fail, elevated trade tensions, and a drop in commodity prices.

Considering the worst-case scenario, the economy is forecasted to return to 2019 levels in 2023 (see left chart).

COVID-19: Estimates of Impact on the Arab World Economy
A deeper downturn than originally expected: 5.7% contraction in GDP in 2020 over 2019

Estimates of GDP Changes for Some Arab Countries in 2020/2019 Before and During the Pandemic

Legend: October-19 Forecast, April-20 Forecast, Jul-20 Forecast

Countries: Arab World, Bahrain, Kuwait, Oman, Qatar, Saudi Arabia, UAE, Egypt, Jordan, Lebanon, Morocco, Tunisia
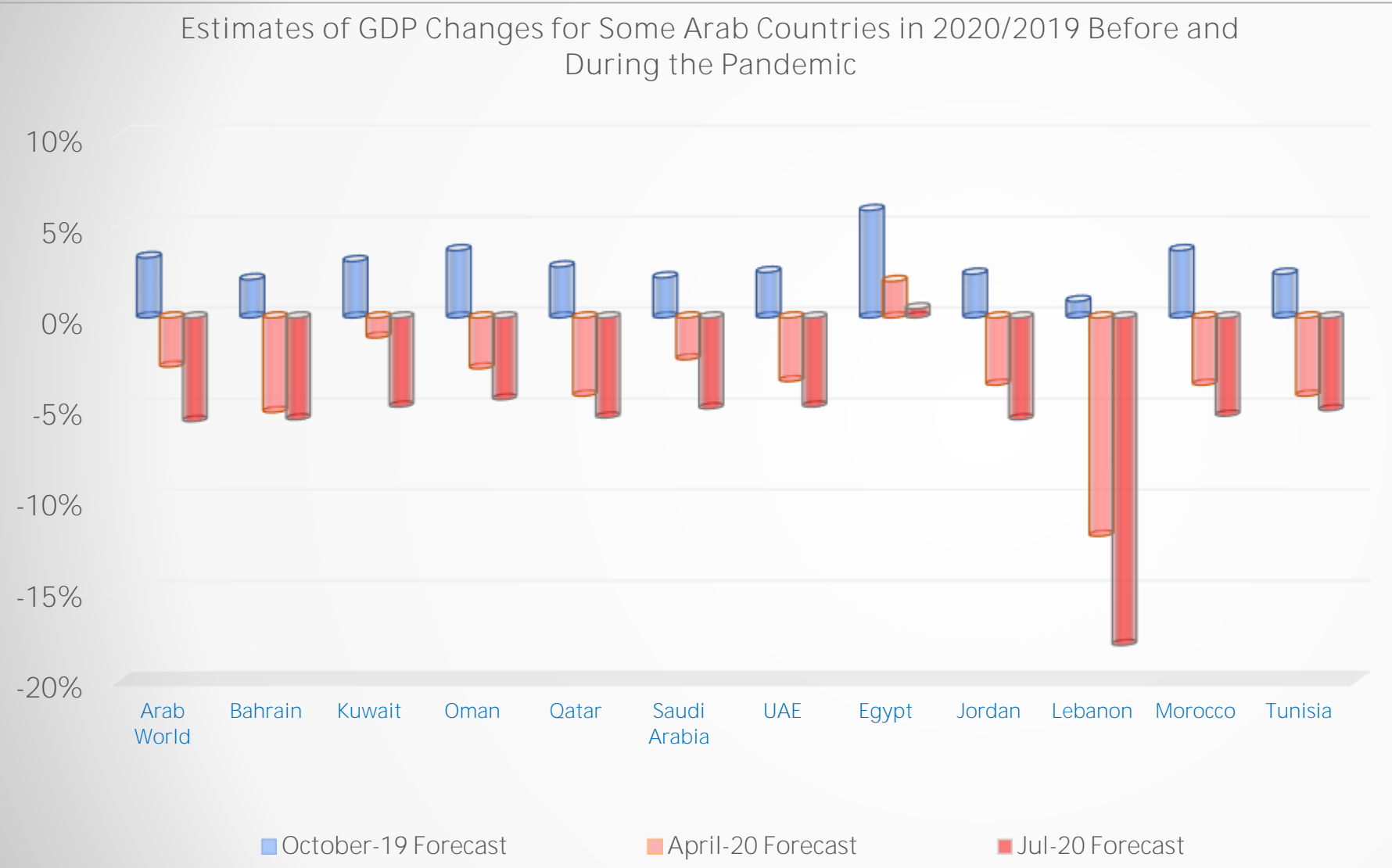
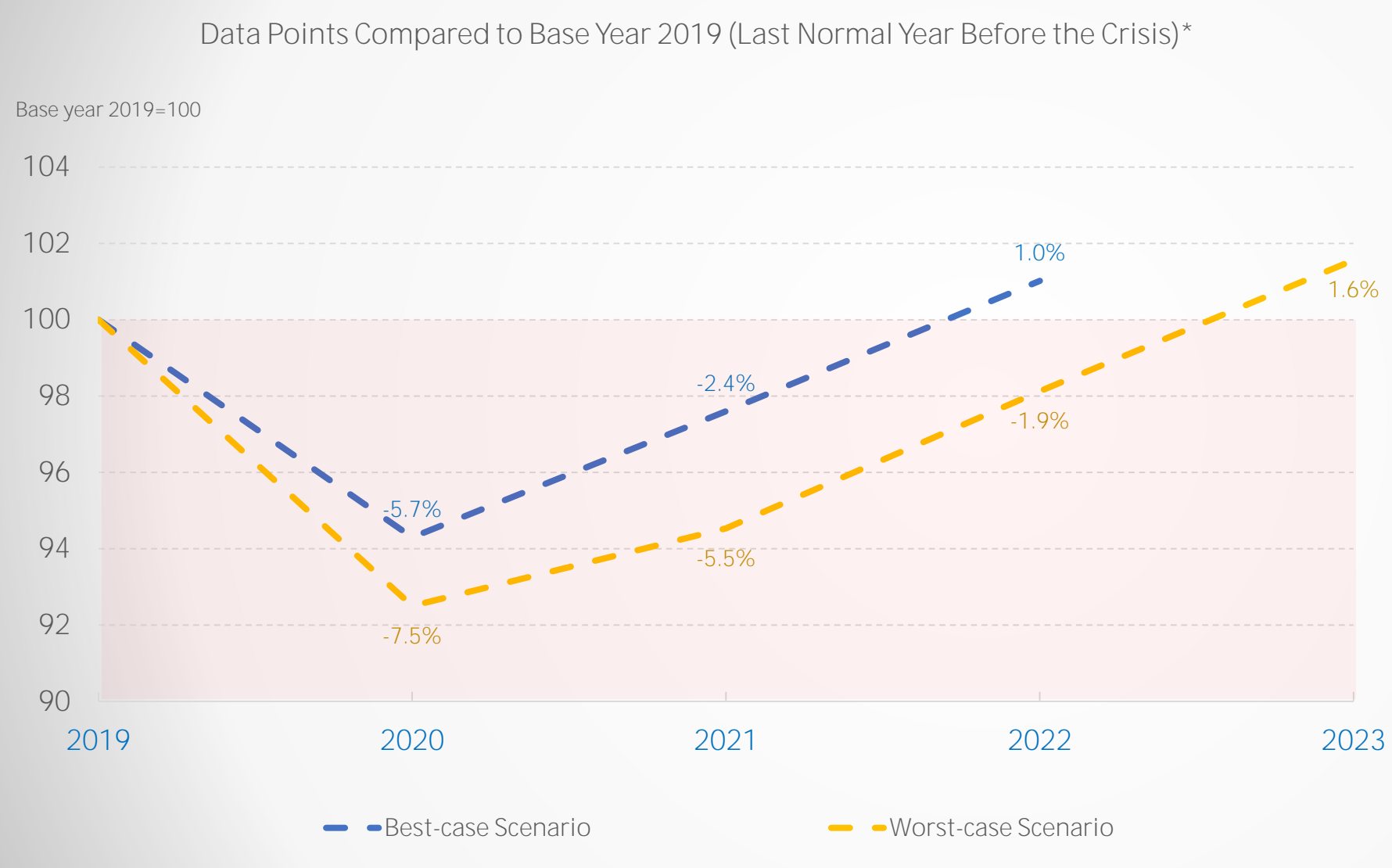Source: IMF, AACO, Various Economic Agencies

According to the October 2019 forecast released by the IMF, the Arab world economy was expected to perform well in 2020, with GDP growing by 3.3% over 2019 (1.4 percentage points increase compared to 2019 growth). Moreover, the increase in oil prices by the end of 2019 supported the outlook. However, as COVID-19 cases scaled-up in 2020, countries-imposed lockdown measures causing severe damage across all sectors of the economy. Also, oil exporting economies witnessed a notable drop in oil revenues due to the drop in oil prices reflecting weaker global demand. Therefore, the IMF revised the outlook for the region in April 2020, where GDP was expected to contract by 2.7% in 2020 over 2019.

With countries reducing domestic lockdown measures gradually, infections continued to increase. At the same time, oil demand and prices remained low, and the travel and tourism sectors continued to suffer from the repercussions of the pandemic. Accordingly, the IMF revised the outlook for the region in July, GDP is expected to contract by 5.7% in 2020 over 2019. The Arab economy is forecasted to lose around USD 900 billion in output between 2020 and 2022 that could have been achieved based on October's forecast. Results could have been worse without the fiscal support provided by governments in the region.

Estimates of Time for Recovery of the Arab World Economy from COVID-19 Crisis

Recovery in 2022 under the best-case scenario; In 2023 under worst-case scenario

Data Points Compared to Base Year 2019 (Last Normal Year Before the Crisis)*

Base year 2019=100

104	
102	1.0%
100	1.6%
98	-2.4%
96	-5.7%
94	-1.9%
92	-5.5%
90	-7.5%

2019   2020   2021   2022   2023

-- ◼ -- Best-case Scenario   -- ◼ -- Worst-case Scenario

*Measured using GDP, dotted lines represent estimates

Source: IMF, AACO

As for the Arab world, in our previous best-case scenario, we forecasted that the **region's** economy will recover to 2019 levels in 2021. However, the impact of the dual-shock (the pandemic and the drop in oil prices), caused more damage than expected, leading to a contraction in trade and a collapse in oil revenues, travel and tourism, and remittances.

Considering best-case scenario, the Arab world GDP is expected to recover to 2019 levels in 2022, assuming that average oil prices would stay between USD 45 to 50 in 2021 and 2022.

However, considering worst-case scenario, Arab world GDP will not recover to 2019 levels before 2023, assuming an average oil price in 2020 of around USD 36 (given the sharp drop early in the year) and maintain an average of around USD 43 in 2021 and 2022.

The outlook in the region remains highly related to the changes in the global oil markets, noting that oil revenues represented on average around 65% of the Arab world nominal GDP in 2019.

Change in Global Traffic in 2020 Compared to 2019, Based on H1-2020 Data
Total year's RPKs and ASKs in 2020 are forecasted to decline by 54.7% and 40.4% respectively compared to 2019

Monthly Year-on-Year Changes in RPKs and ASKs for the Industry

RPKs Change 2020/2019   ASKs Change 2020/2019
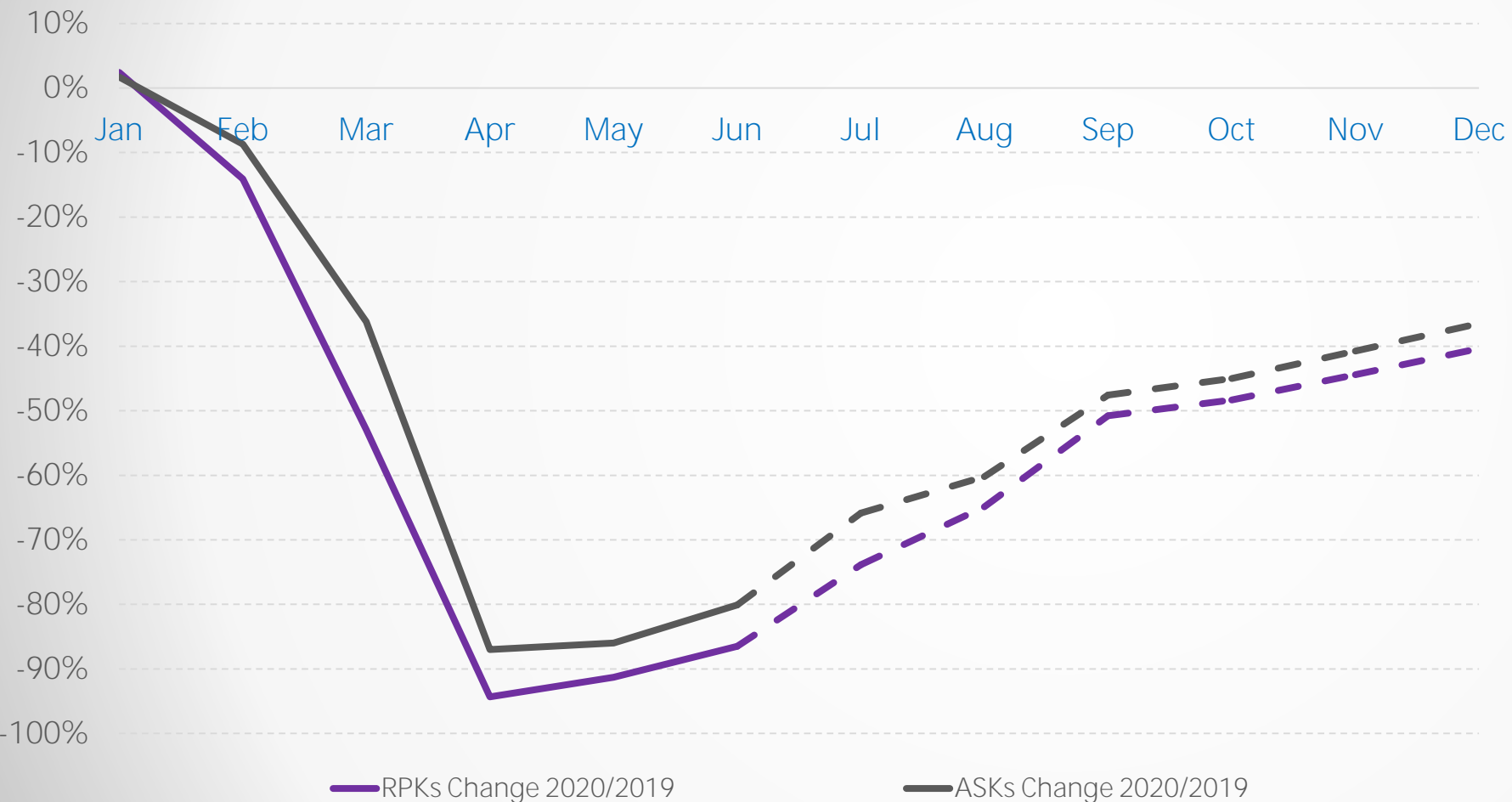
Dotted lines represent estimates

Source: IATA

The first half of 2020 witnessed a huge drop in traffic measured in RPKs and capacity measured in ASKs for the airline industry as a result of the stringent measures implemented by states to curb the spread of COVID-19.

Global RPKs and ASKs witnessed the steepest monthly year-on-year decline in April 2020 over April 2019 contracting by 94.3% and 87.0% respectively, as air travel activity came to nearly a complete stop due to border restrictions.

As countries began to relax some restrictions in June 2020, passenger traffic and capacity offered slightly improved. Global RPKs and ASKs contracted by 86.5% and 80.1% respectively in June 2020 over June 2019. The improvement was mainly attributed to domestic traffic, as across several major domestic markets travelers can commute freely with no restrictions. The overall decline in RPKs and ASKs in H1-2020 compared to H1-2019 reached 58.4% and 51.0% respectively.
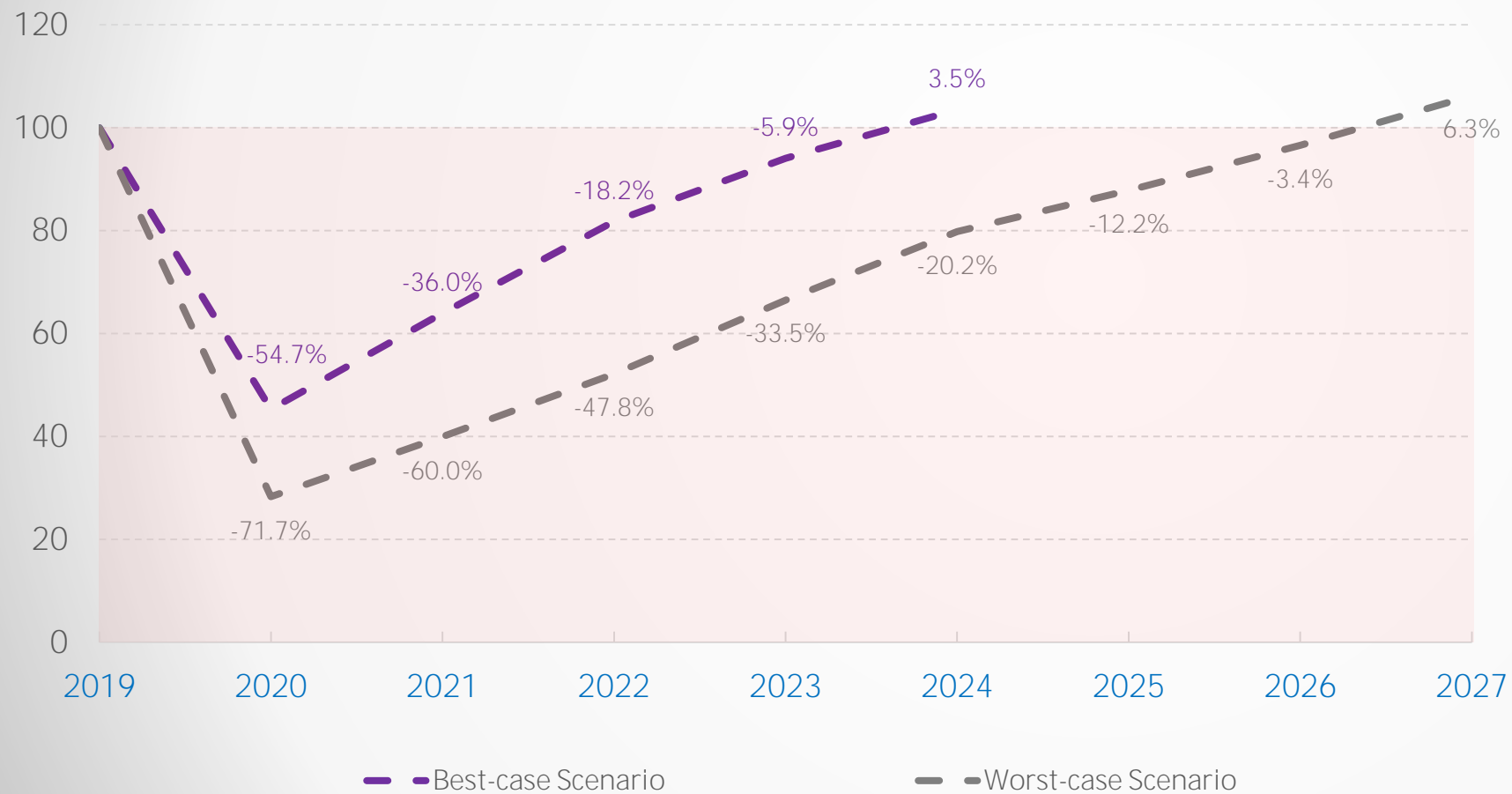
Estimates for the second half of the year remain positive as travel activity resumed in most areas of the world (see left chart). Total year RPKs and ASKs in 2020 are forecasted to decline by 54.7% and 40.4% respectively when compared to 2019.

Estimates of Time for Recovery of Global Traffic from COVID-19 Crisis

Recovery by 2024 under the best-case scenario; By 2027 under worst-case scenario

Data Points Compared to Base Year 2019 (Last Normal Year Before the Crisis)*

Base year 2019=100

- -54.7%
- -71.7%
- -36.0%
- -60.0%
- -18.2%
- -47.8%
- -5.9%
- -33.5%
- 3.5%
- -20.2%
- -12.2%
- -3.4%
- 6.3%

Best-case Scenario — Worst-case Scenario

*Measured using RPKs, dotted lines represent estimates

Source: IATA, AACO

Similar to the global economy, we have updated our estimates for the recovery period of travel. Data sets were updated considering the data released during the first half of 2020.

In our previous study and based on our best-case scenario, we forecasted that passenger traffic, measured in RPKs will recover to 2019 levels by 2023. However, relying on the data released during H1-2020 and the change in market dynamics, we now estimate that passenger traffic will recover to 2019 levels by 2024.

The updated best-case scenario assumes, economies recovering gradually, the wide-use of technology in the travel journey, harmonious and risk-based health measures used by states, a vaccine is widely available by the end of 2021, or the virus dissipating by that time.

On the other hand, our worst-case scenario assumes that economies will witness a slow recovery, lack of passenger confidence in travel due to excessive health measures and limited use of touchless technology, a global spike in infections, and the availability of a vaccine will take more than 18 months. Considering this scenario, passenger traffic is expected to return to 2019 levels by 2027.

Change in Traffic for AACO Members in 2020 Compared to 2019, Based on H1-2020 Data
Total year's decline in RPKs and ASKs is forecasted to reach 57.1% and 34.0%

Monthly Year-on-Year Changes in RPKs and ASKs for AACO Members

— RPKs Change 2020/2019   — ASKs Change 2020/2019
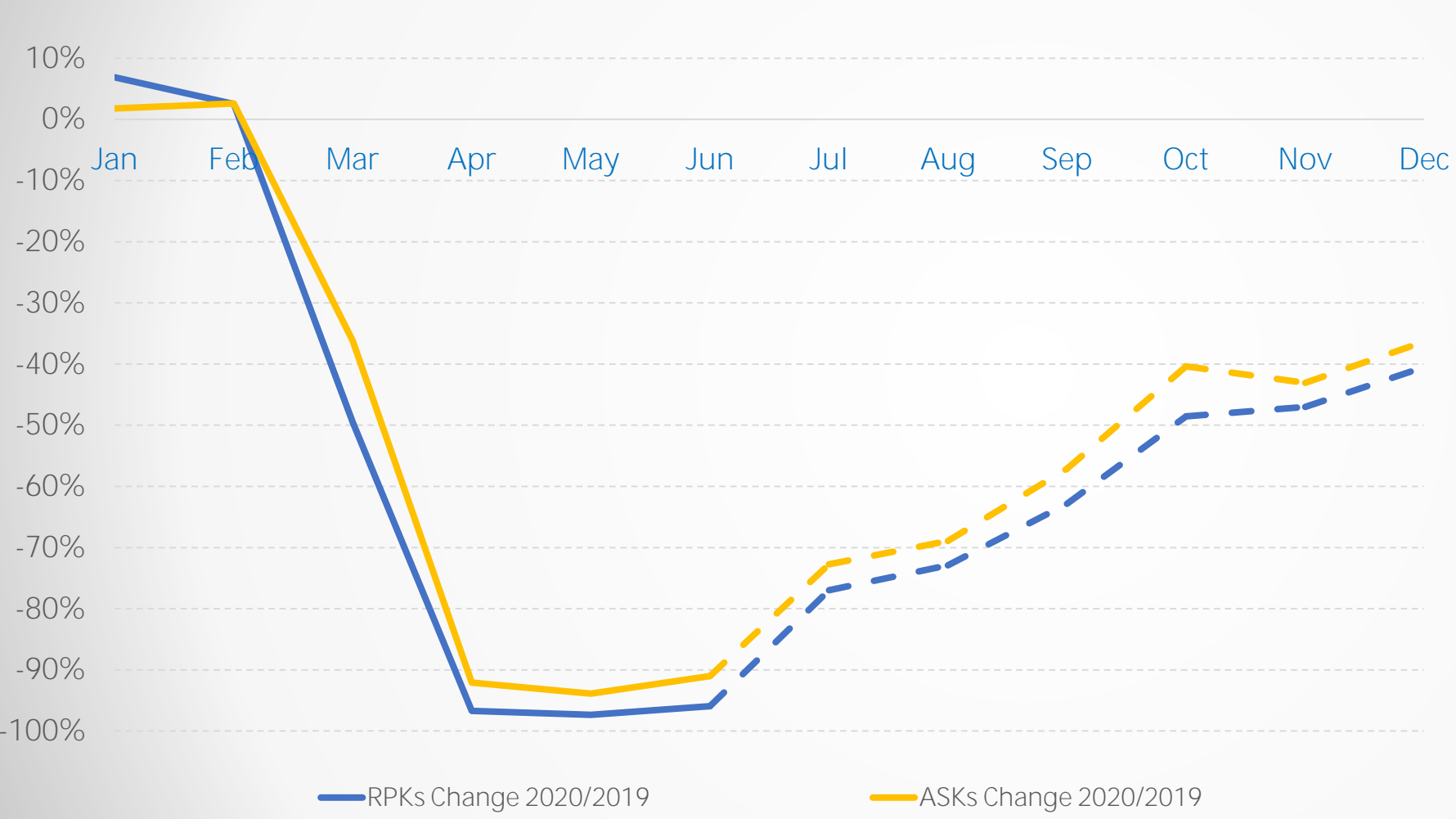
Dotted lines represent estimates

Source: IATA, AACO

Despite the good start in 2020, AACO members took the hit from the global pandemic. Passenger traffic measured in RPKs declined by 49.0%, and 97.3% in March and April 2020 respectively when compared to 2019.

A tick-up in traffic was expected in June 2020, yet most Arab countries were still witnessing an increasing level of infections causing authorities to keep travel restrictions in place, which weakened the recovery process.

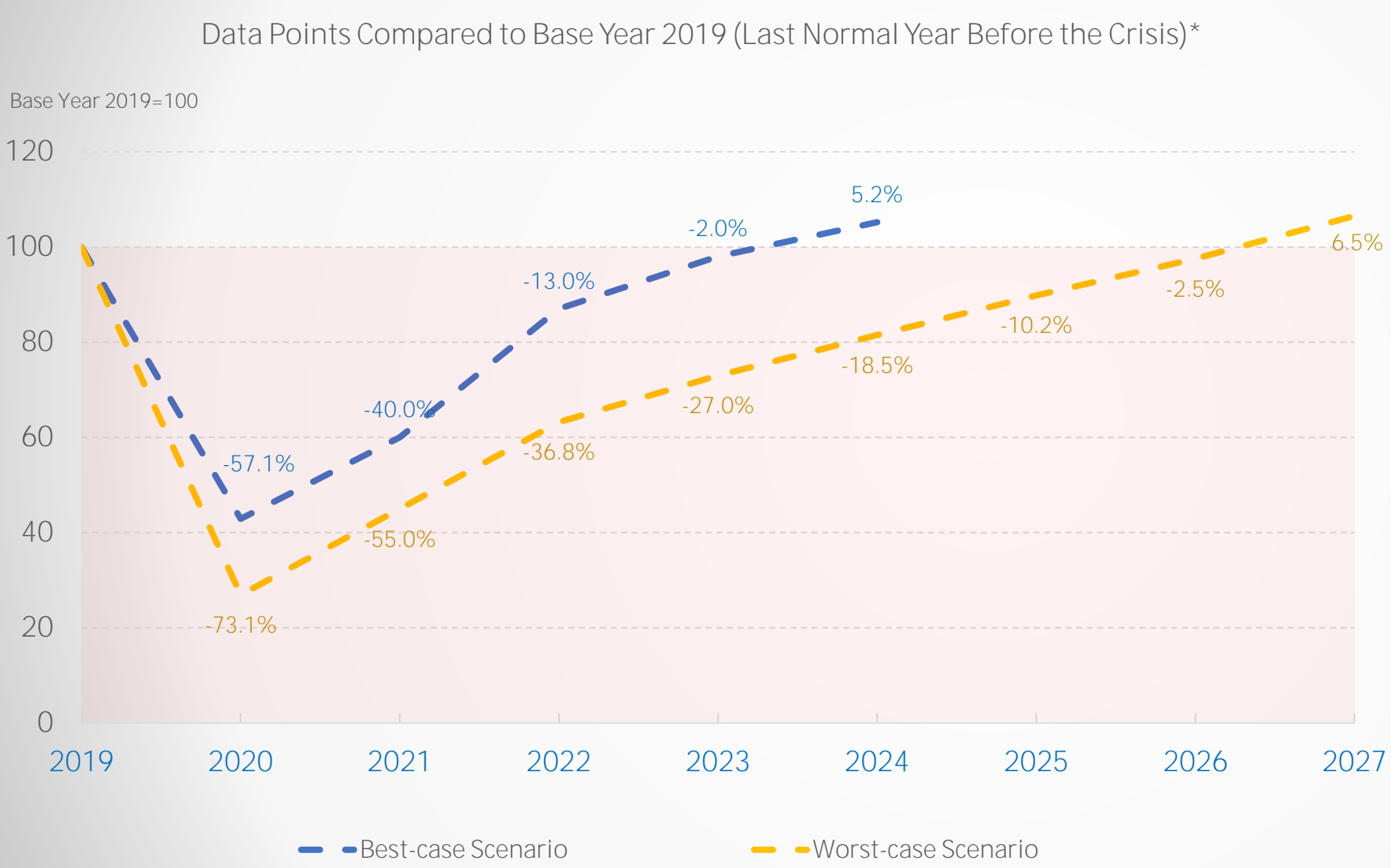Overall, passenger traffic measured in RPKs contracted by 55.5% and capacity offered measured in ASKs by 51.1% in H1-2020 compared to H1-2019.

As for the second half of 2020, demand is expected to improve gradually as restrictions are relaxed and passengers regain confidence to travel.

Total year decline in RPKs and ASKs is forecasted to reach 57.1% and 34.0% respectively in 2020 compared to 2019.

Estimates of Time for Recovery of AACO Members' Traffic from COVID-19 Crisis

Recovery by 2024 under the best-case scenario; By 2027 under worst-case scenario

Data Points Compared to Base Year 2019 (Last Normal Year Before the Crisis)*

Base Year 2019=100

- - ● - Best-case Scenario
- - ● - Worst-case Scenario

*Measured using RPKs, dotted lines represent estimates

Source: AACO

The updated scenarios discussed earlier was applied on the updated data set for the Arab airlines.

Considering the best-case[1] scenario passenger traffic is expected to recover to 2019 levels by 2024. However, considering the worst-case[2] scenario, the recovery to 2019 levels is forecasted to be extended until 2027.

The outlook remains highly uncertain considering the continuous change in market dynamics.

[1]*economies recovering gradually, the wide-use of technology in the travel journey, harmonious and risk-based health measures used by states, a vaccine is widely available by the end of 2021, or the virus dissipating by that time.*

[2]*economies will witness a slow recovery, lack of passenger confidence in travel due to excessive health measures and limited use of touchless technology, a global spike in infections, and the availability of a vaccine will take more than 18 months.*

Estimates of Impact of COVID-19 Crisis on Airports

Global airport passenger traffic is forecasted to decline by 59.6% in 2020 compared to the pre-COVID-19 forecast scenario

Estimates of Impact on Airports' Passenger Traffic per Quarter for 2020*

World
- Q4: -49.5%
- Q3: -68.9%
- Q2: -89.6%
- Q1: -26.3%

North America
- Q4: -59.4%
- Q3: -69.0%
- Q2: -89.0%
- Q1: -19.1%

Middle East
- Q4: -49.8%
- Q3: -76.1%
- Q2: -97.4%
- Q1: -16.1%

LAC
- Q4: -63.8%
- Q3: -74.2%
- Q2: -93.1%
- Q1: -15.3%

Europe
- Q4: -49.7%
- Q3: -74.4%
- Q2: -96.3%
- Q1: -23.2%

Asia-Pacific
- Q4: -40.5%
- Q3: -61.4%
- Q2: -82.7%
- Q1: -36.3%

Africa
- Q4: -50.1%
- Q3: -76.1%
- Q2: -97.4%
- Q1: -18.5%

Legend: ■ Q4 ■ Q3 ■ Q2 ■ Q1
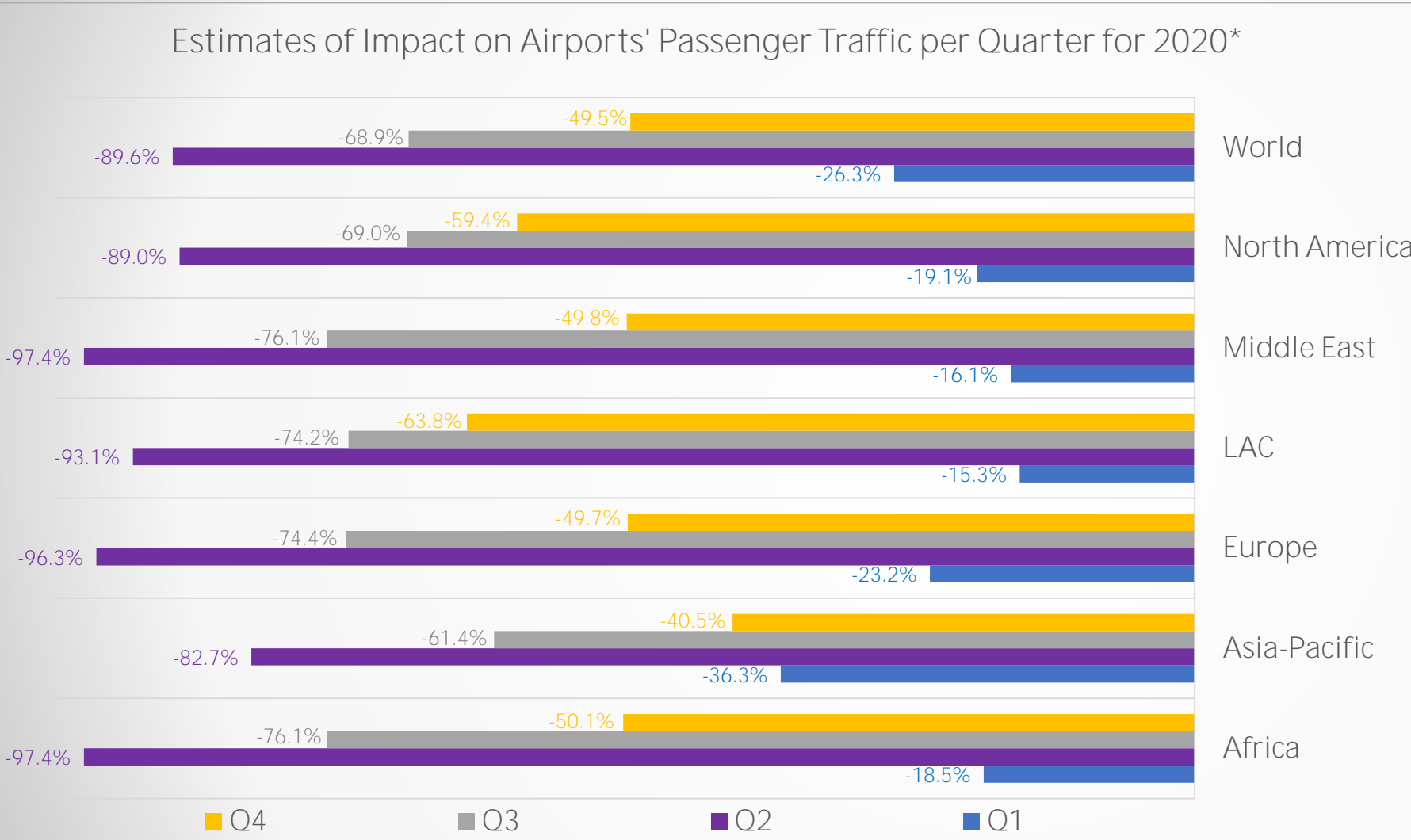
*Change is compared to the pre-COVID-19 forecast scenario

LAC: Latin America and the Caribbean

Source: ACI

Airports' operations took the hit from the COVID-19 pandemic. Looking at the drop in airports' passenger traffic, Q2-2020 witnessed the deepest contraction as most lockdown measures were implemented by the end of March and until early June 2020.

Two regions took the highest hit in Q2-2020 namely Africa and the Middle East compared to the originally forecasted scenario (pre-COVID-19), with passenger traffic declining by 97.4% for each of the two regions, followed by Europe 96.3%, Latin America and the Caribbean (LAC) 93.1%, North America 89.0%, and finally Asia-Pacific 82.7%.

The impact is forecasted to be much less during Q3 and Q4 2020 when compared to the originally forecasted scenario as border restrictions started to ease in June 2020.

Overall, global airport passenger traffic is forecasted to decline by 59.6% in 2020 compared to the pre-COVID-19 forecast scenario, a 9.3 percentage points downward revision compared to the estimates released by the Airports Council International (ACI) during May 2020.

Global Fleet Status

The number of in-service aircraft started to increase in early June 2020

Global Fleet Status During Different Phases of the COVID-19 Crisis*
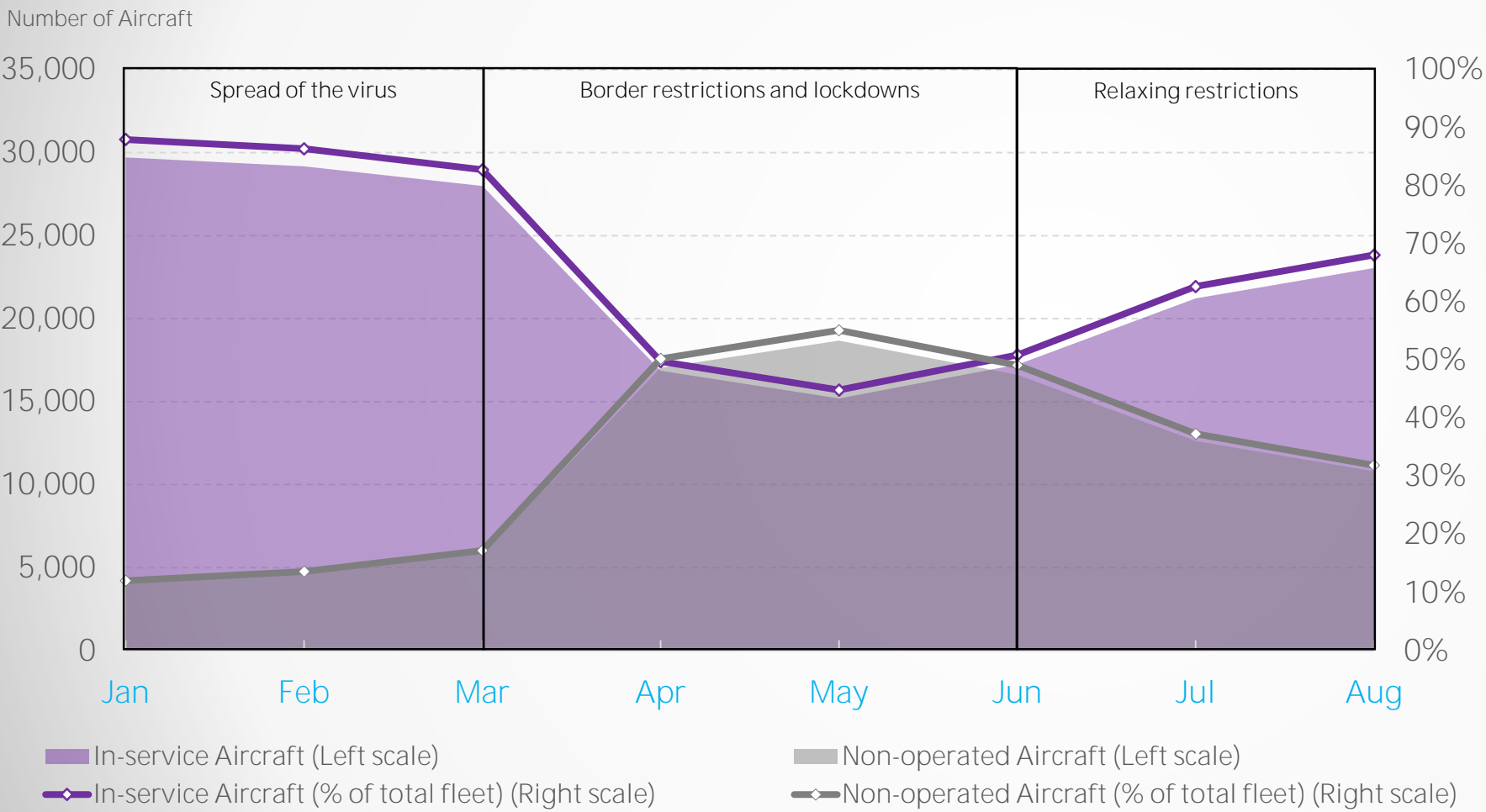
Number of Aircraft

Spread of the virus | Border restrictions and lockdowns | Relaxing restrictions

Legend:
- In-service Aircraft (Left scale)
- Non-operated Aircraft (Left scale)
- In-service Aircraft (% of total fleet) (Right scale)
- Non-operated Aircraft (% of total fleet) (Right scale)

*Data is as of the first week of each month, aircraft having a maximum take-off mass of less than 9,000 kg (20,000 lbs) are not included

Source: Cirium Fleets Analyzer, AACO

Reflecting the drop in demand, airlines started increasing aircraft storage activity.

Storage activity picked up by the end of March 2020, where most passenger traffic was halted due to border restrictions. By the end of March 2020, more than 17% of the global fleet was non-operated (see left chart), which is equivalent to 5,830 aircraft.

In April and May 2020, the total number of non-operated aircraft reached 17,035 and 18,679 aircraft respectively, which represented more than half of the global fleet. The total number of non-operated aircraft in May 2020 was 4 folds larger than the number of non-operated aircraft in the aftermath of 9/11 and the global financial crisis.

The number of in-service aircraft started to increase in early June 2020, where many countries partially reopened their skies. The total number of in-service aircraft reached 17,231 (50.9% of the global fleet) in June 2020. The situation improved further in July and August, where the number of in-service aircraft reached 62.7% and 68.1% respectively of the total global fleet, which is equivalent to 21,213 and 23,046 aircraft. The number of in-service aircraft is expected to remain steady for the upcoming months if the situation maintains status-quo.

AACO Members' Fleet Status

In July, the number of in-service aircraft rose to exceed those that are non-operated, for the first time since April 2020

AACO Members' Fleet Status During Different Phases of the COVID-19 Crisis*

Number of Aircraft

Legend:
- In-service Aircraft (Left scale)
- Non-operated Aircraft (Left scale)
- In-service Aircraft (% of total fleet) (Right scale)
- Non-operated Aircraft (% of total fleet) (Right scale)

Chart phases: Spread of the virus | Border restrictions and lockdowns | Relaxing restrictions

Months: Jan, Feb, Mar, Apr, May, Jun, Jul, Aug
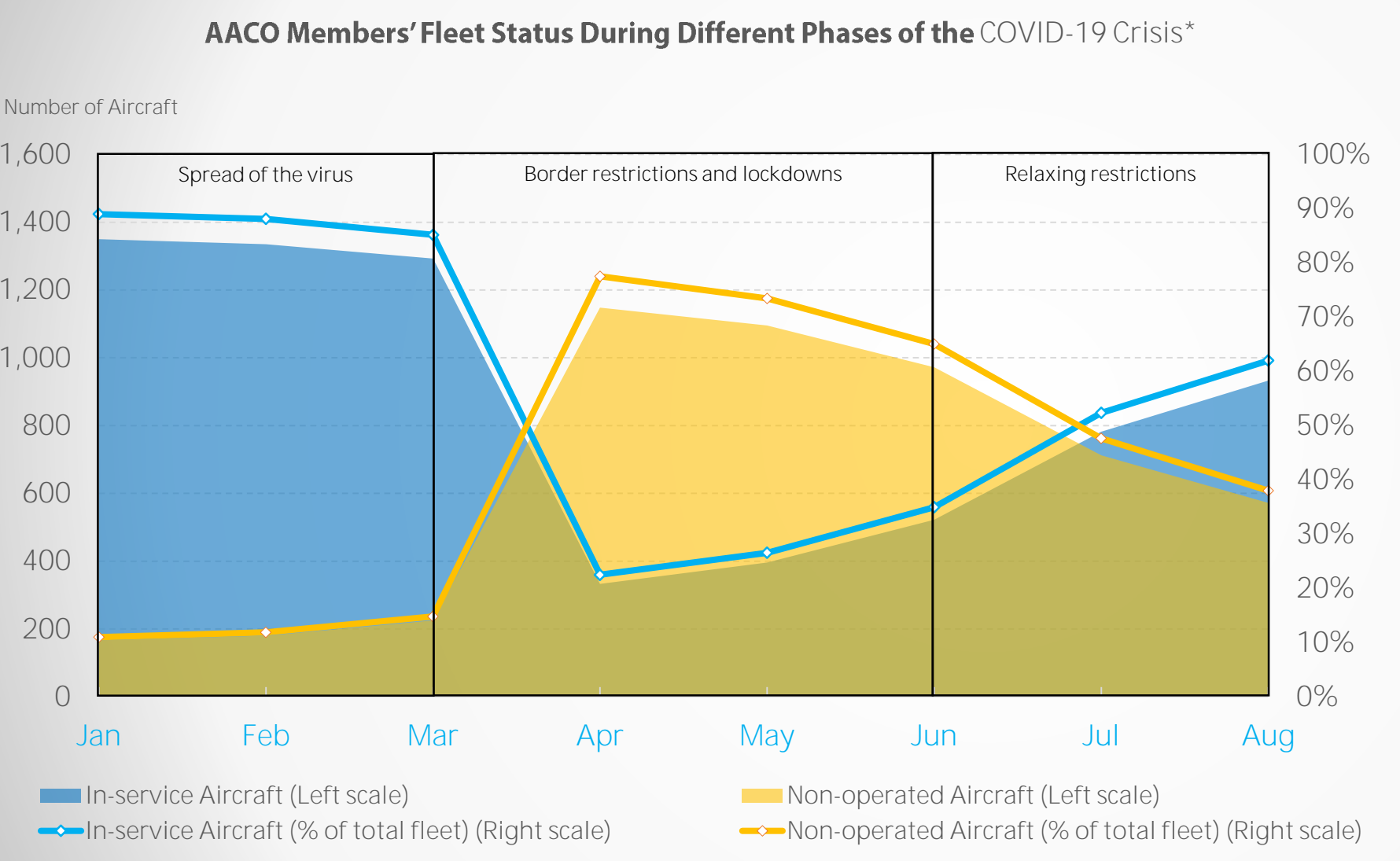
*Data is as of the first week of each month, aircraft having a maximum take-off mass of less than 9,000 kg (20,000 lbs) are not included

Source: Cirium Fleets Analyzer, AACO

As the lockdown measures in the Arab region gained traction across countries, AACO members started parking their aircraft at a similar pace, to ensure proper parking conditions are being met.

The number of non-operated aircraft started to increase since the beginning of April 2020, to reach 1,148 by end of the month, which is equivalent to 77.5% of the total fleet. Similarly, in May and June, where the share of non-operated aircraft from the total fleet reached 73.4% and 65.3%, respectively, of the total fleet.

Looking at July, the number of in-service aircraft rose to exceed those that are non-operated, for the first time since April 2020. The total number of in-service aircraft reached 782, which is equivalent to 52.3% of the total fleet. Similarly, as restrictions eased further in August, the number of aircraft returning to service increased to reach 933, which is equivalent to 62.0% of the total fleet.

Total in-service aircraft are expected to reach around 68.0% of the total fleet in September 2020, as more members are expected to resume operations.

Estimates of Full Year Impact of COVID-19 Crisis on Tourism

We estimate tourism receipts to drop by 68.0% in 2020 compared to 2019, to reach USD 474 billion.

Global International Tourist Arrivals and Year-on-Year Change

Legend: International Tourist Arrivals (Left scale); Change (Year-on-Year) (Right Scale)
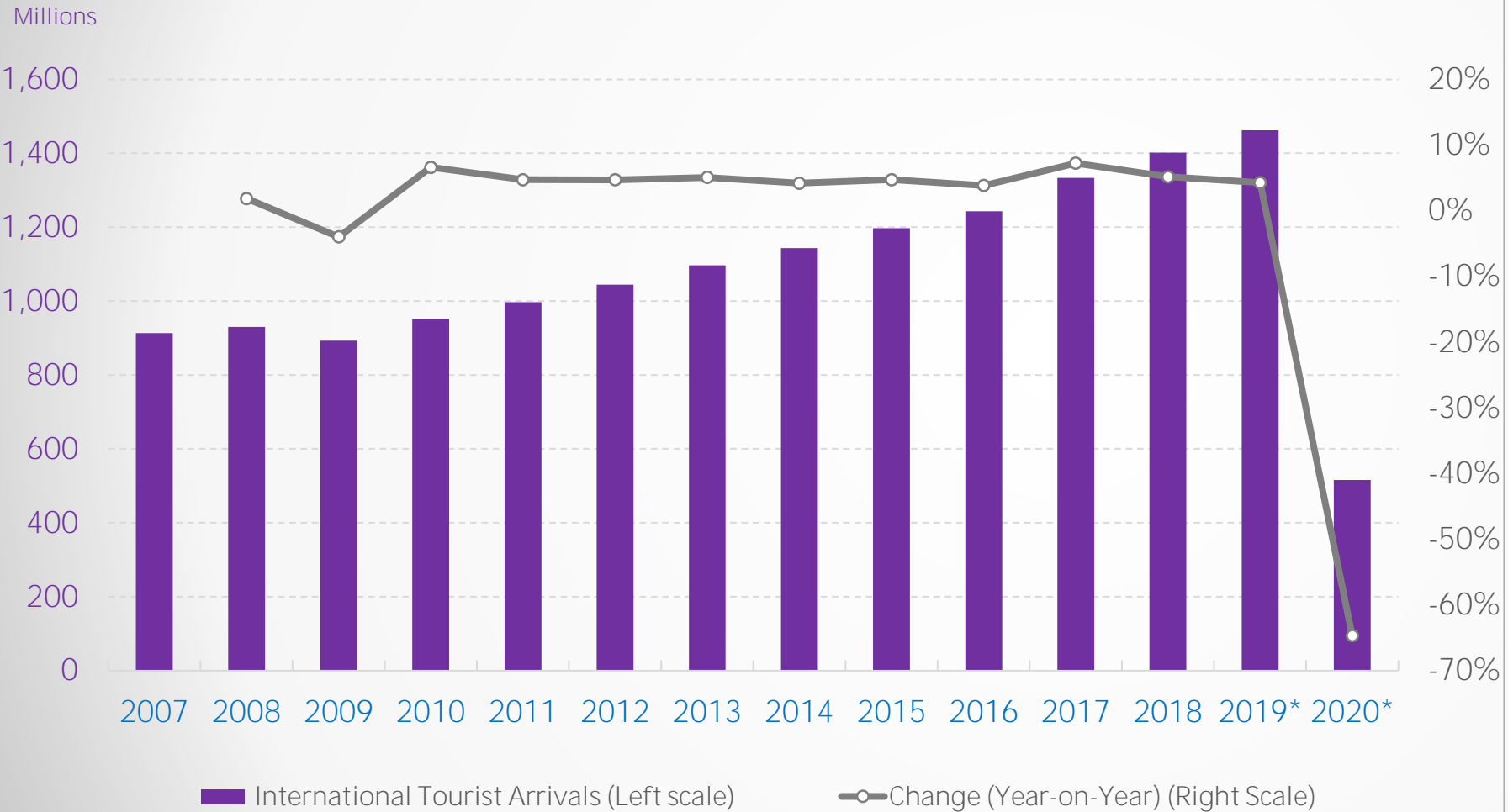
*Estimates

Source: UNWTO, AACO

Tourism weakened more than expected during the first half of 2020 when compared to 2019. Therefore, we estimate international tourist arrivals now to decline by 64.7% in 2020 compared to 2019, which represents 6.7 percentage points downward revision compared to our previous forecast scenario (best-case scenario) released in May 2020. International tourist arrivals are forecasted to reach 516 million in 2020.

In line with the revision for international tourist arrivals, we have modified our estimates for international tourism receipts. International tourism receipts are expected to decline by 68.0% in 2020 compared to 2019 reaching USD 474 billion.

This will reduce the multiplier effect of tourism within the economy, especially in developing countries which heavily rely on tourism as a source of job creation and national income.

As a result, we expect a drop in capital investment related to travel and tourism by around 73.0% in 2020 compared to 2019.

Estimates of Time for Recovery of Global Tourism from COVID-19 Crisis
Similar to travel, the recovery in tourism activity is highly related to economic recovery and the length of the pandemic.

Data Points Compared to Base Year 2019 (Last Normal Year Before the Crisis)*

Base year 2019=100

Best-case Scenario   Worst-case Scenario

*Measured using international tourist arrivals, dotted lines represent estimates

Source: AACO and Various Sources
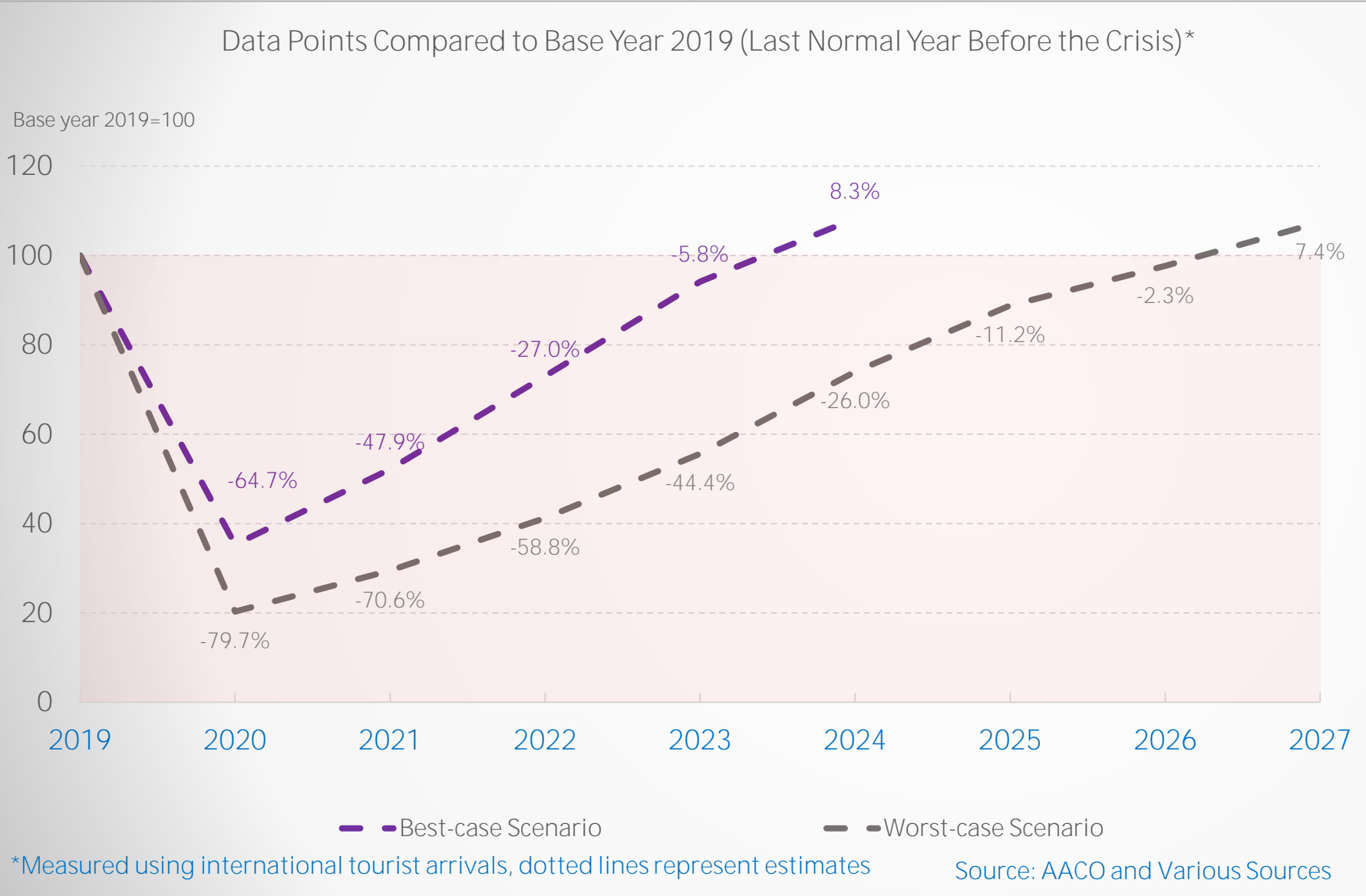
Similar to global travel demand, tourism activity measured in international tourist arrivals, is forecasted to remain below 2019 levels until 2024, if the recovery path follows the best-case scenario discussed earlier (see left chart).

However, if the recovery path follows the worst-case scenario, discussed earlier, international tourist arrivals will need until 2027 to reach 2019 levels (see left chart).

Similar to travel, the recovery in tourism activity is highly related to economic recovery and the length of the pandemic.

The longer the recovery period, the more the adverse impact will continue to cascade on other sectors of the economy, including travel, retail, food and beverage, capital inflows, and investment.

Estimates of Full Year Impact of COVID-19 Crisis on Tourism in the Arab World
We estimate tourism receipts to drop by 69.1% in 2020 compared to 2019, to reach USD 28 billion.

International Tourist Arrivals to the Arab World and Year-on-Year Change

Legend: International Tourist Arrivals (Left scale) — Change (Year-on-Year) (Right Scale)

*Estimates

Source: UNWTO, AACO

Based on the results reported during the first half of 2020, we have updated our estimates concerning the decline in international tourist arrivals to the Arab region in 2020 when compared to 2019.

In our previous releases, we forecasted a drop of 55.0% in international tourist arrivals to the region in 2020 over 2019 (according to our best-case scenario). However, based on recent data releases, we estimate a 65.6% drop in international tourist arrivals to the region in 2020 over 2019. The total number of tourists is expected to reach 31 million in 2020.

In line with the updates for tourist arrivals, we have also modified our estimates for tourism receipts. We estimate tourism receipts to drop by 69.1% in 2020 compared to 2019, to reach USD 28 billion.

The steep decline in overall tourism activity in the region will cause a cascading effect on several sectors including retail, food and beverage, hospitality, and financial services. Moreover, the expected drop will lead to many job losses.

Estimates of Time for Recovery of Tourism in the Arab World from COVID-19 Crisis *Recovery by 2024 under best case scenario; by 2027 under worst case scenario*

Data Points Compared to Base Year 2019 (Last Normal Year Before the Crisis)*

Base year 2019=100

- Best-case Scenario
- Worst-case Scenario
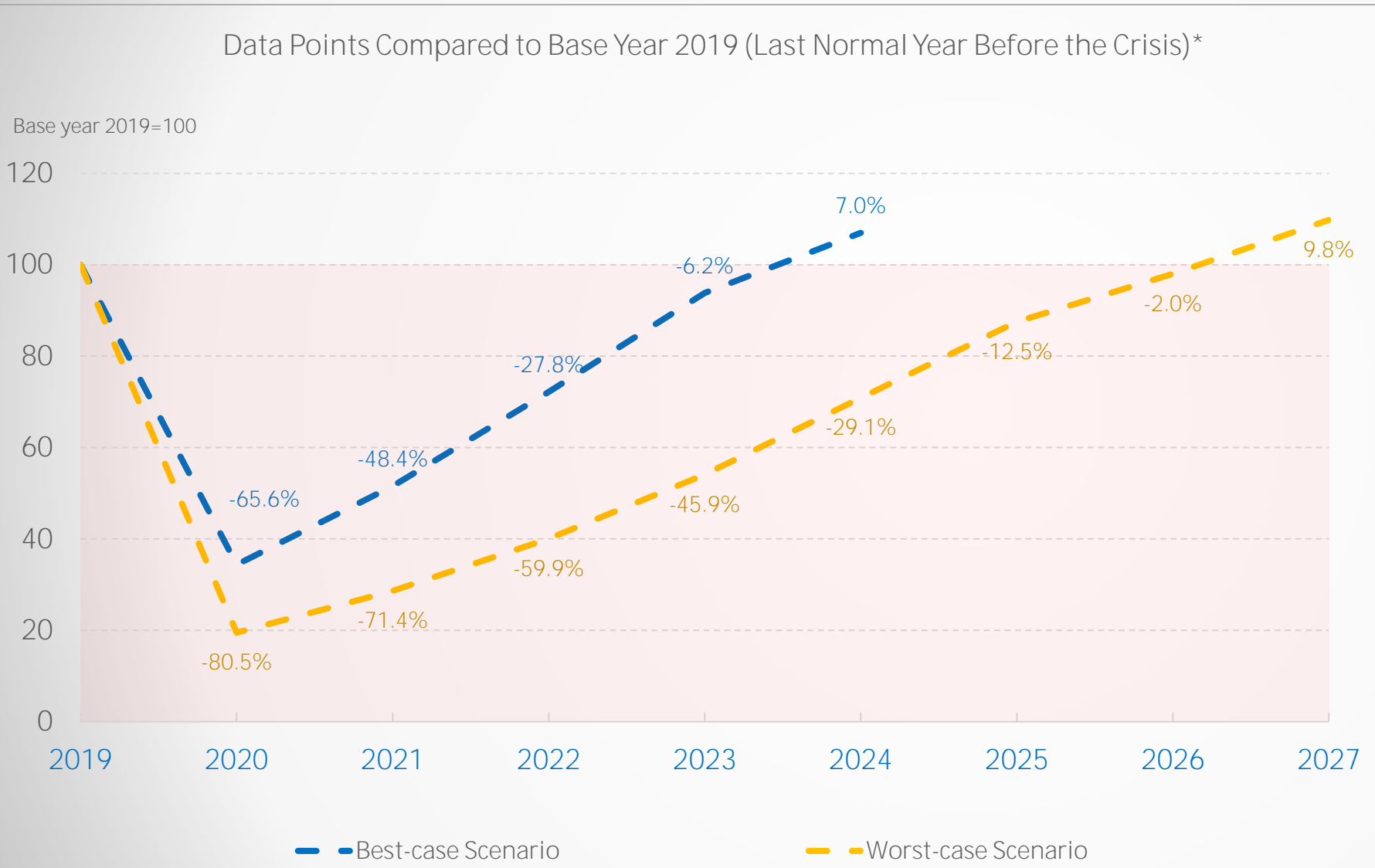
*Measured using international tourist arrivals, doted lines are estimates

Source: AACO and Various Sources

Tourism activity in the Arab world measured in international tourist arrivals was one of the most affected sectors in the economy, as it mainly relies on air transport with the limited availability of other modes of transport.

International tourist arrivals to the Arab world are forecasted to remain below 2019 levels until 2024, if the recovery path follows the best-case scenario discussed earlier (see left chart).

On the other hand, if the pandemic intensifies and other related industries continue to suffer from its repercussions, the recovery path is expected to follow the worst-case scenario, where international tourist arrivals to the Arab world are forecasted to remain below 2019 levels until 2027.

This will have socio-economic impacts on many countries in the region, where the tourism sector is a key a contributor in supporting jobs and generating national income.

Estimates of Impact on Travel & Tourism (T&T)

Total forecasted loss of USD 5.5 trillion in total contribution of Travel & Tourism to global GDP

As air travel and tourism reported weaker than anticipated results during the first half of 2020 compared to 2019, we expect a deeper hit on the economic and social benefits of tourism in all regions.

Considering the updated aspects, we estimate a total loss of around USD 5.5 trillion in total contribution of travel and tourism to global GDP. Therefore, the total contribution of travel and tourism in global GDP is forecasted to reach around USD 3.4 trillion in 2020, which represents a decline of 62.3% when compared to 2019.

As for our estimates for the Arab world, in our previous studies, we forecasted a loss of around USD 130 billion in total contribution of travel and tourism to Arab GDP in 2020 compared to 2019. However, based on the updated data released during the first half of 2020, we now estimate that the contribution of the travel and tourism sector in the Arab world GDP to be less by USD 194 billion in 2020 compared to 2019.

Therefore, the total contribution of travel and tourism in the Arab world GDP is forecasted to reach around USD 72 billion in 2020, which represents a decline of 72.9% when compared to 2019.

Europe
2,018
$ 1,608 (79.7%)

Americas
2,501
$ 1,750 (70.0%)

Asia
2,971
$ 1,888 (63.6%)

Sub-Saharan Africa
145
$ 103 (71.0%)

Arab World
266
$ 194 (72.9%)

T&T contribution to GDP in 2019 in Billion USD

T&T loss in contribution to GDP in 2020 in Billion USD (% loss of (T&T) contribution to GDP)

Source: AACO and Various Sources

Job Losses in 2020 of Travel and Tourism (T&T) vs Total Job Losses

More than half of the forecasted job losses in 2020 are attributed to the Travel & Tourism sector

Job Losses due to COVID-19 and the Share of Travel and Tourism (T&T) Sector

Millions

Total World Job Losses 346 million jobs, of which 57.1% in T&T

197.5

- Asia-Pacific — 54.8%
- Americas — 60.8%
- Europe — 61.6%
- Sub-Saharan Africa — 32.5%
- Arab world — 48.0%

☐ Total Forecasted Job Losses   ☐ T&T Forecasted Job Losses in 2020
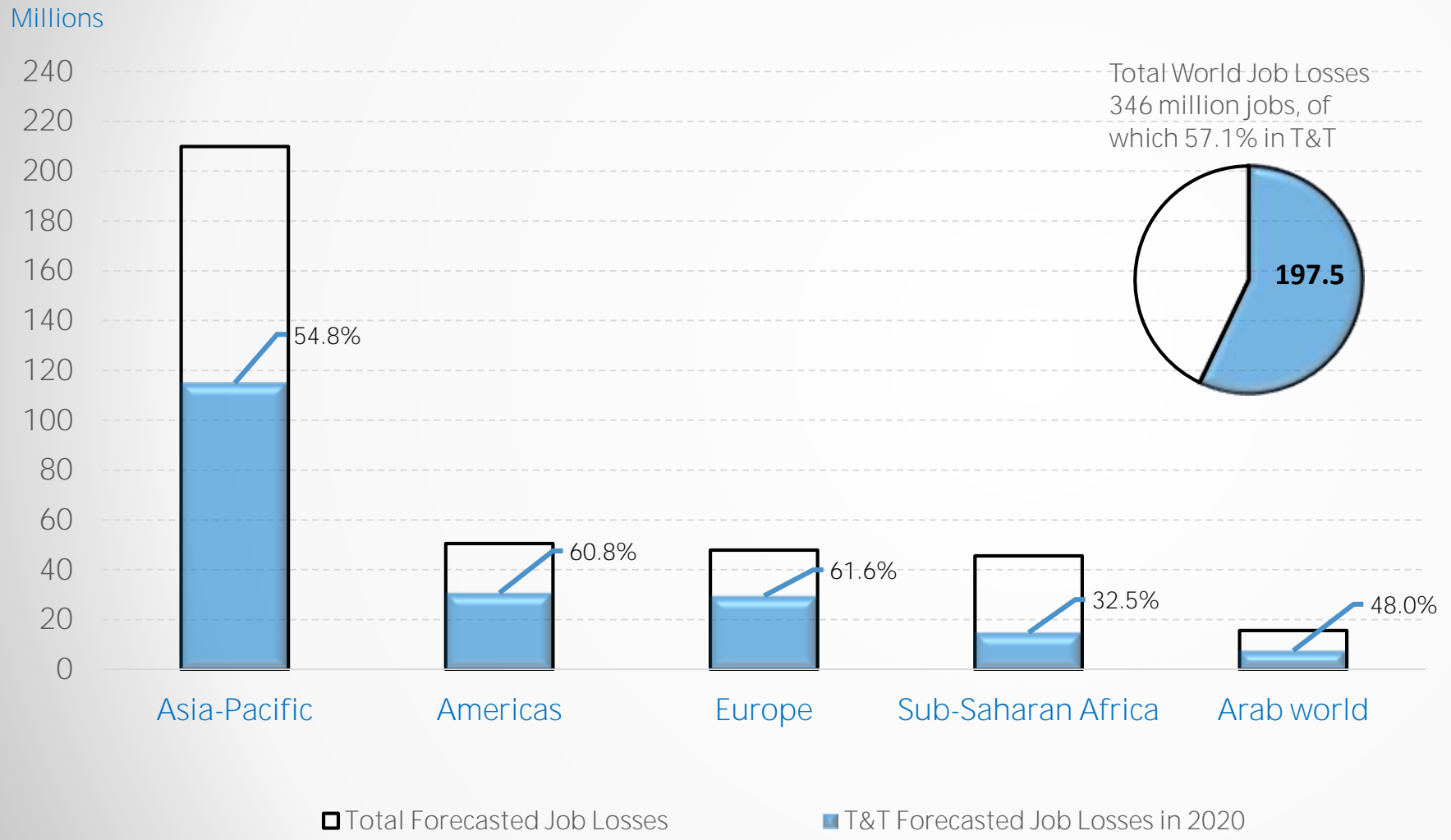
Labels represent contribution of T&T in total forecasted job losses in %

Source: AACO and Various Resources

Similar to previous recessions, the decline in economic activity comes with a hit to the labor market. Based on several indicators, it is forecasted that the global unemployment rate will reach around 10.0% in 2020, which will result in a loss of around 346 million jobs.

Several sectors including travel and tourism suffered heavy financial losses due to the pandemic, leaving most of their workforce jobless. More than half of the forecasted job losses in 2020 are attributed to the travel and tourism sector (57.1%, see left chart), where around 197.5 million jobs are forecasted to be lost on the global level.

As for the Arab world, in our previous studies, we forecasted a loss of around 4 million jobs in the travel and tourism sector, yet considering the new dynamics, we now estimate a loss of around 7.5 million jobs. Total job losses in the travel and tourism sector represents around 48.0% of the total unemployment number that is forecasted to be registered in the Arab region in 2020 (see left chart).

2020 Forecasted Losses in Airline Revenues and Financial Support to Aviation Per Region

Global airlines are forecasted to lose around USD 419 billion in revenues, whereas financial support stands at USD 126 billion

State Support (per region) Allocated for the Aviation Industry Compared to the Forecasted Airline Losses from COVID-19

Billion USD

Global Airline Losses USD 419 Billion, where state support amounts to only 30% of total losses

$126

- Total Forecasted Airline Losses
- Total Confirmed State Support for Airlines (until August 20)
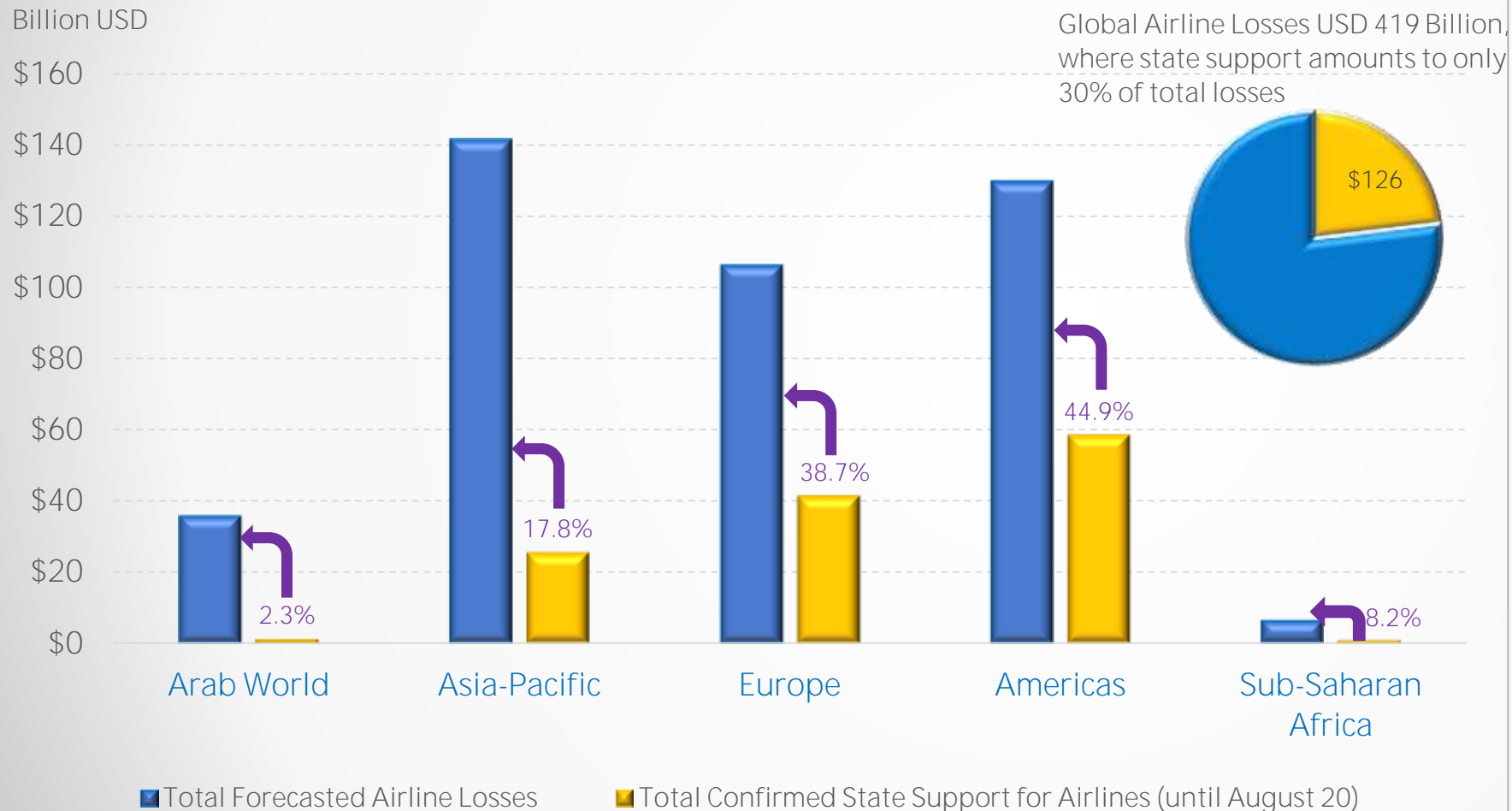
Labels represent % of state support packages from total forecasted losses

Source: Ishka, IATA, AACO

Airlines are forecasted to lose around USD 419 billion in revenues from the COVID-19 crisis in 2020, which represents a 50% decline when compared to 2019.

So far, aggregated state support packages globally reached around USD 126 billion, which represents around 30% of the overall forecasted losses for the aviation industry.

On the regional level, the highest level of support was noticed in the Americas, mainly due to the CARES act in the United States, which provided USD 58 billion in support for the airlines. The total support represents around 45.0% of the total forecasted losses for airlines in the Americas.

In second place comes Europe, where the total support package dedicated for airlines reached around 38.8% of total forecasted losses, followed by Asia-Pacific around 17.8%, Sub-Saharan Africa around 8.2%, and finally the Arab world around 2.3%.

More support is needed to minimize the impact of the loss and allow airlines to overcome this crisis to support the recovery of the economy.

Air Transport Ecosystem is Safe

Adhering to ICAO 'Take-Off' document ensures several layers of prevention and protection, with technology to provide touchless processes, where possible.

Following the publication of AACO's roadmap for the safe restart of air travel based on best practices in ICAO's CART "Take-off Document" for the recovery of air transport, AACO highlighted that the foundation of a successful recovery of Travel & Tourism will depend on the following:

1

Governments' embrace of the value of Travel & Tourism through applying proportionate measures to mitigate the spread of the virus and hence reduce the time of transition to normalcy

2

Regaining passenger confidence in the mitigation of COVID-19 exposure in air travel

3

Facilitating passengers' confidence through the deployment of touchless technologies

Recommendations of WHO, ICAO, and Arab Tourism Organization
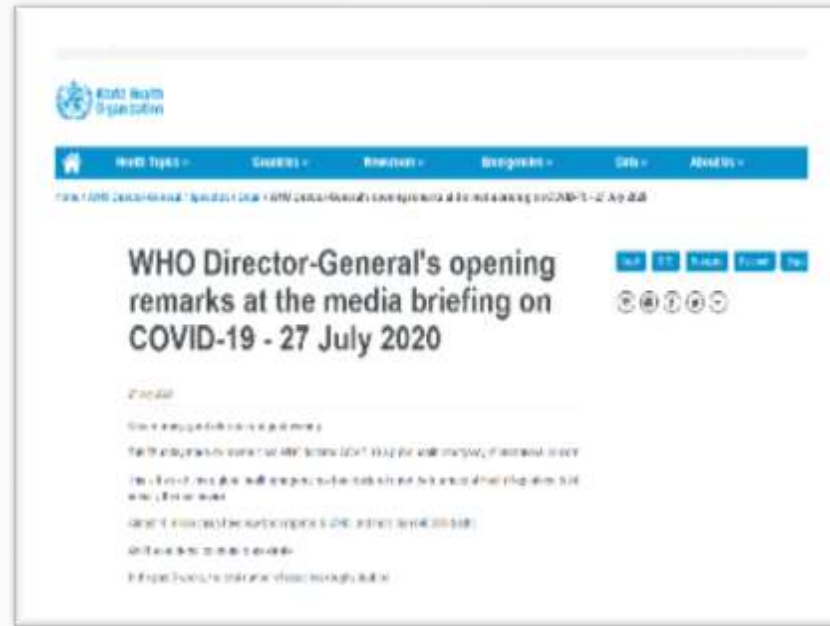
"…Bans on international travel cannot stay in place indefinitely …Only with strict adherence to health measures, from wearing masks to avoiding crowds, would the world manage to beat the COVID-19 pandemic…"

❑ On 1 June 2020, ICAO published the COVID-19 report and guidelines produced by the Council's Aviation Recovery Task Force (CART). They were developed through broad-based consultations with countries and regional organizations, and with important advice from the World Health Organization, IATA, ACI World, CANSO, ACAO, ICCAIA and others.

❑ The report's 'Take Off' document contains guidelines for public health risk mitigation measures and four separate modules relating to airports, aircraft, crew, and air cargo.

❑ On 17 August 2020, ICAO announced that IATA has launched a checklist that aims to support airlines who want to implement the ICAO CART guidelines through self-assessments, while ACI has launched its "Airport Health Accreditation programme," which assesses airports' health measures and procedures against the CART recommendations.

❑ In May 2020, the Arab Tourism Organization published two sets of recommendations:
- Measures for tourists to resume tourism in a safe manner.
- Measures for touristic establishments to ensure a safe resumption of touristic activity in the Arab world.

Air Travel is Not a Spreader of the Virus

97.1% of COVID cases were locally generated in the EU/EEA and the UK.

2.9% of COVID cases were inbound travelers

0.01% of transmission of the virus happened during air travel phases

85% of the would-be travelers wouldn't travel if there is a chance of being quarantined

84% of passengers are still concerned of contracting the virus when travelling, despite the minute numbers of the actual cases

- **Overwhelming majority of new COVID 19 cases are locally contracted.**
- **Air travel, with the preventive measures, is not a cause of further spread.**
- **Quarantine doesn't help in mitigating the virus**

Regaining Travelers' Confidence: Are We There?

Measures are fragmented: they vary from one country to another

Travelers' Confidence in the travel and Tourism sector is dependent on:

CART Measures & the Excessive Ones

- Single disinfection
- On board distancing
- Double disinfection
- Transit Measures
- Travel Insurance
- Baggage restrictions
- Meal limitation
- Temperature Check
- Total Closure
- Restriction on travel
- Social distancing
- Tracing app
- Health declaration
- Quarantine
- PCR on arrival
- PCR before departure
- Gloves
- Masks

1 – 18

1
Trusting the system

A vital element for restoring travel

2
Receiving clear & unified measures

Still needs lots of work

3
Applying reasonable proportionate measures

Avoid quarantine, double disinfection & border closure

Principles to Restart Travel & Tourism and Restore Confidence

The Optimum Scenario

Masks
Wearing masks and face covering prevent transmission

Awareness to Passengers
What is needed and that transmission on board is not a risk

Bio-Security Measures
Governments to take proportionate measures to the threat of exposure

Lifting Borders Restrictions
Operations resume based on Air Services Agreements between states – Not Corridors or Bubbles

Avoid Quarantine
As it is not a biosecurity measure.

Touchless Travel
Deploy technology that eliminates physical contact to avoid transmission

Upstream Prevention
Implement measures to ensure COVID-19 free before start of travel

Social Distancing
Ensure at airports

The Role of Technology in Restarting Air Transport

Public Health measures alone will not suffice in restoring and restarting air travel

- This pandemic is truly unprecedented in terms of scope and reach. It is one that has impacted virtually all industries, with air transportation taking the strongest hit.
- Despite implementing Public Health measures in order to loosen up lockdowns, the global community failed to contain the virus as some countries were late to respond and borders remain closed for nearly 85 countries around the world.

Technology plays a fundamental role in diminishing physical touch

- Facial recognition & biometrics exceptionally fast-track the airport process and make it more seamless.
- Touchless technologies grant travelers the ability to interact with kiosks using their mobile phones, thereby containing physical transmission of the virus.
- Traveler data collection can be further expedited using online format.
- Governments can collect, analyze, and properly disseminate health information from inbound and outbound travelers rapidly and efficiently, thus managing the movements of infectious cases at home and aiding the global efforts in tracking information.

The COVID-19 crisis brought about a true opportunity for a much-needed change, one that will elevate air travel to a new standard. A more digitized travel process will inevitably lead to:

Reducing touchpoints and limiting viral spread

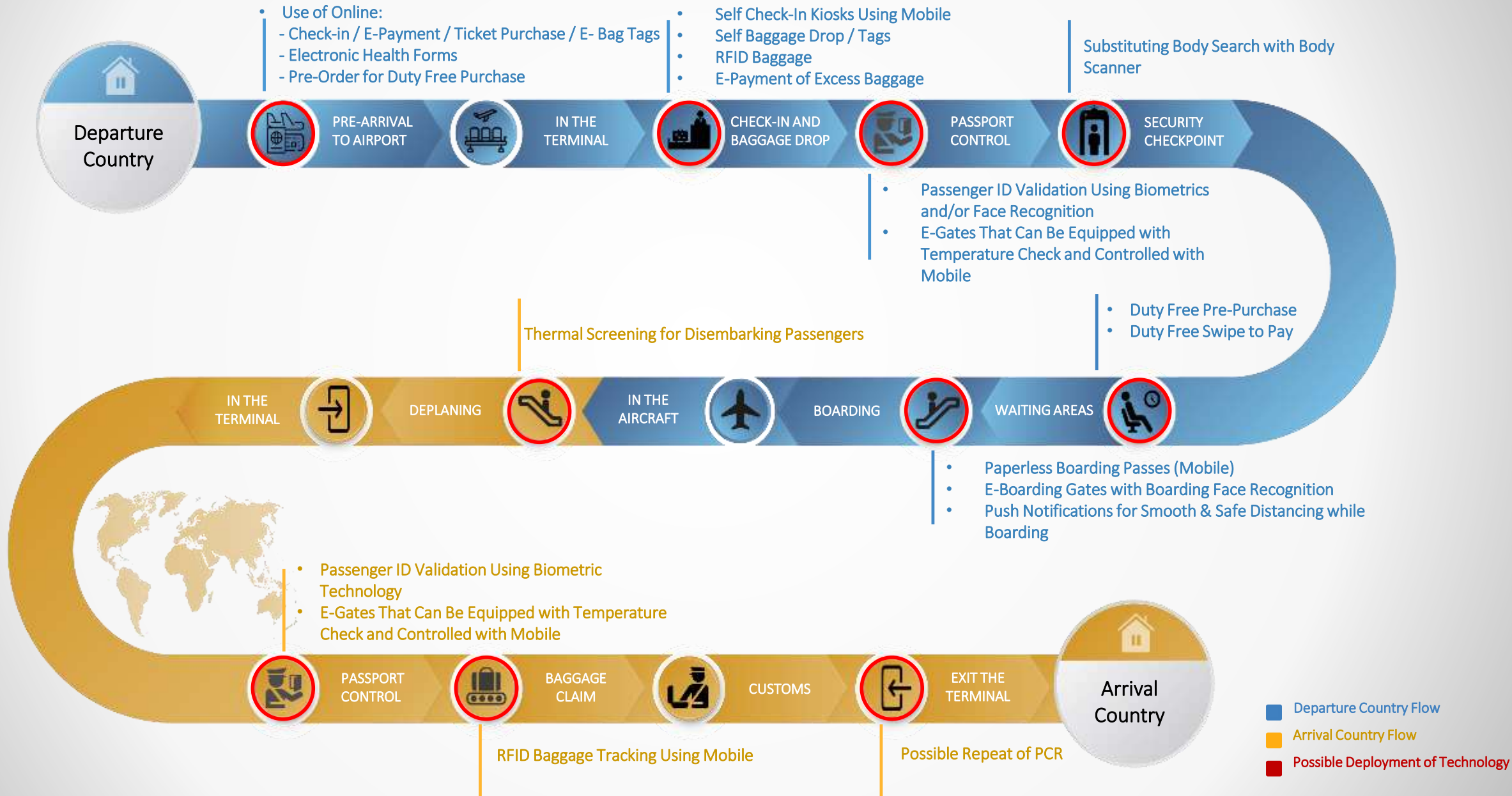Reducing waiting and queuing time

Efficiently collecting and managing essential data and health information

Increasing overall happiness and return business

Technology: Complementing the Travel-Related Processes

Departure Country

Use of Online:
- Check-in / E-Payment / Ticket Purchase / E- Bag Tags
- Electronic Health Forms
- Pre-Order for Duty Free Purchase

- Self Check-In Kiosks Using Mobile
- Self Baggage Drop / Tags
- RFID Baggage
- E-Payment of Excess Baggage

Substituting Body Search with Body Scanner

PRE-ARRIVAL TO AIRPORT

IN THE TERMINAL

CHECK-IN AND BAGGAGE DROP

PASSPORT CONTROL

SECURITY CHECKPOINT

- Passenger ID Validation Using Biometrics and/or Face Recognition
- E-Gates That Can Be Equipped with Temperature Check and Controlled with Mobile

- Duty Free Pre-Purchase
- Duty Free Swipe to Pay

Thermal Screening for Disembarking Passengers

IN THE TERMINAL

DEPLANING

IN THE AIRCRAFT

BOARDING

WAITING AREAS

- Paperless Boarding Passes (Mobile)
- E-Boarding Gates with Boarding Face Recognition
- Push Notifications for Smooth & Safe Distancing while Boarding

- Passenger ID Validation Using Biometric Technology
- E-Gates That Can Be Equipped with Temperature Check and Controlled with Mobile

PASSPORT CONTROL

BAGGAGE CLAIM

CUSTOMS

EXIT THE TERMINAL

Arrival Country

RFID Baggage Tracking Using Mobile

Possible Repeat of PCR

Departure Country Flow
Arrival Country Flow
Possible Deployment of Technology

Touchless Processes: A Paradigm Shift in Air Travel

THE TRAVELER EXPECTS A MORE TOUCHLESS EXPERIENCE

TECHNOLOGY IN THE DNA

The past few years have brought about more behavioral change than ever before.

Technology is revolutionizing the way people interact with the world and the way they expect the world to interact with them.

AN ALREADY EVOLVING TRAVELER

The rate of technology adoption among travelers globally has been on a geometric increase, with the percentage of people using automated gates or kiosks more than doubling in one year.

Studies show that travelers were rapidly adopting new technology when available & were scoring significantly higher satisfaction rates when doing so.

COVID-19 AND THE NEW NORMAL

The "new normal" that was brought about by the pandemic has further solidified traveler's expectations of technology.

Recent studies reveal that the striking majority of travelers expect an increased adoption of touchless technology as well as greater use of self-service and automation for passenger processing.

Technology can complement the travel-related processes to achieve safe, seamless & touchless travel

74% of travelers are concerned about **queuing** at check-in, security, border control, or boarding

57% would definitively use **biometrics** instead of passport or boarding pass across the journey

65% of travelers are concerned about **handing** over passport/phone/boarding pass to airport officials

84% of travelers believe that **touchless** processing through the airport will make them feel safer about future travel

Face Recognition & Biometrics: A Game-Changer in the Travel Experience

Facial Recognition and biometrics *have become increasingly prevalent parts of our lives. A testimony to its popularity is the growing number of smartphones and apps that use facial recognition. Today, many businesses, organizations, and entire sectors are trying to find new ways to utilize its capabilities. With the ongoing pandemic, the want for such a technology becomes a need for a more seamless, fast, secure and efficient travel experience.*
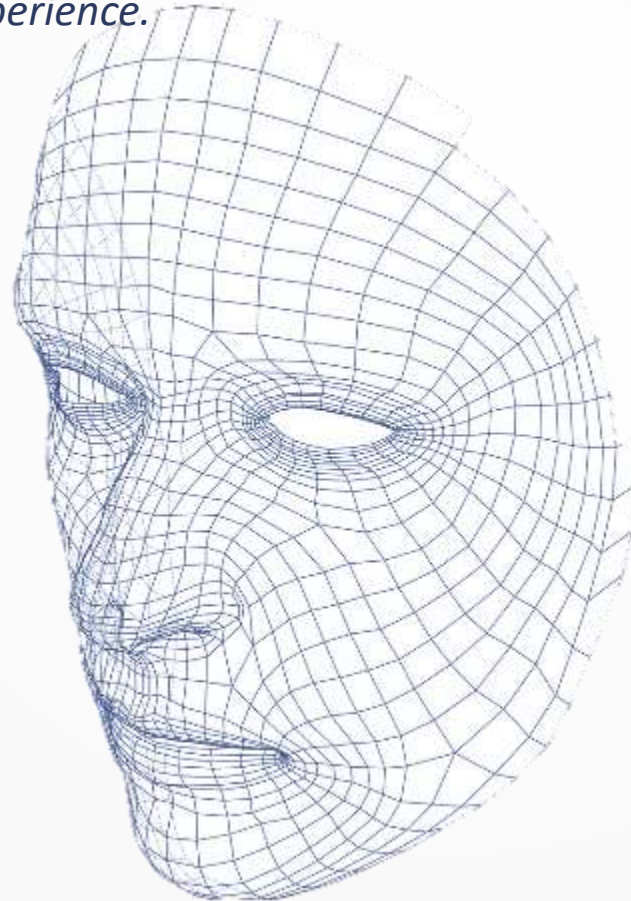
- Eliminating Repetitive Processes
- The Ticketless Potential
- Personalization
- Data Analysis
- Security
- Commercial Opportunities

The primary feature which will make such end-to-end integration possible is the creation of a unique biometric key for every passenger which is connected by that individual's face and biometrics. The information that is currently included in airline tickets, boarding passes, and even passports could then easily be uploaded onto the biometric key with facial recognition used to connect that data to the passenger. This innovation would eliminate queuing at certain check points during the traveler's journey and could increase the passenger flow in other parts of the airport, where facial recognition might also be used at certain points of transactions. In addition to that, facial recognition will also benefit the travel industry by improving personalization to customers and increasing security at airports. Another area where facial technology has strong potential is data analysis, as reliable information about customers could be collected with businesses then using this data to pick out important trends.

Economy

Impact	Action	Still Needed
Total loss in global GDP is forecasted to reach USD 12.5 trillion in 2020	Total stimuli to-date reached around USD 9.0 trillion	A minimum of USD 3.5 trillion to bridge the gap

Travel

Impact	Action	Still Needed
Total airline losses are forecasted to reach USD 419 billion in 2020	Total confirmed support packages to-date reached USD 126 billion	USD 293 billion to bridge the gap

Tourism

Impact	Action	Still Needed
Total loss in tourism receipts is forecasted to reach around USD 1.0 trillion	Support packages for the tourism industry are not yet quantifiable	Support packages dedicated for tourism to be able to bridge the gap

Economic losses of the Travel and Tourism (T&T) are equivalent to 11.4% of total economic losses. However, job losses for the T&T represents around 57.1% of total forecasted job losses worldwide amounting to 197.5 million

Confidence

Reality	Impact	Remedy
• Each State applying its own measures • Traveler confusion and lack of awareness, leading to further lack of confidence in travel • Mandatory quarantines, double disinfection, and other burdening measures	85% of travellers are yet to be encouraged to trust air travel	• Follow the international guidelines • Provide clarity and raise awareness of what is needed from the travelers • Implement proportionate and reasonable measures

97.1 % of Contagion
Locally generated cases

2.9 % of Contagion
Inbound travelers' cases

0.01 % of Contagion
In the air travel

Technology

Reality	Impact	Remedy
In response to traveler's expectations and concern, airlines and a number of airports started digitizing their processes, where possible.	• 65% of travelers are concerned about handing over documents to airport officials • 84% of travelers feel safer if touchless processing through the airport is implemented	• Governments to adopt advanced biometric technologies on security, customs, and passport control points. • The Industry to adopt a standard which allows the integration of passengers' travel data with the airport biometrics