

HONGKONG  JET

*Business Jet in APAC Market
before & after COVID-19 pandemic*

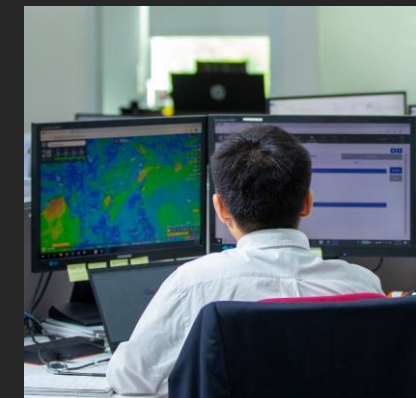
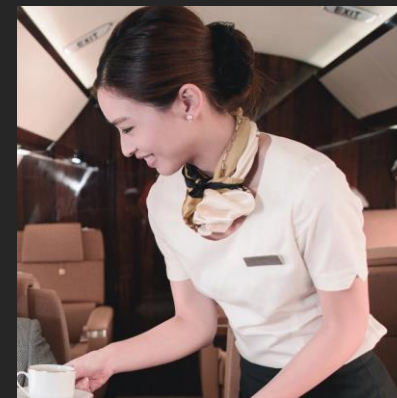
By Alex Jiao, Chairman & CEO of Hongkong Jet

Company Profile

- A Hong Kong-based private jet company
 - Found in 2009

- 4 core business
 - Aircraft management, aircraft maintenance, aircraft charter and consultancy

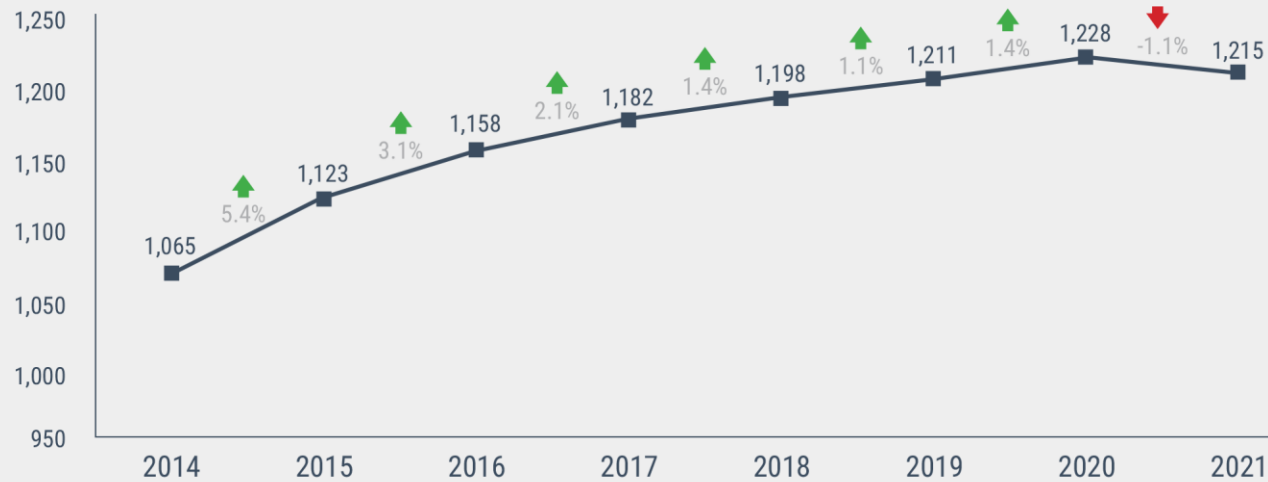
- International Standard for Business Aircraft Operations (IS-BAO) certification
 - Stage I, II and III certifications in 2012, 2013 and 2016 respectively
 - In May 2022, stage III status has successfully renewed



APAC's Business Jet Fleet Number from YE 2014 – YE 2021

- Number of APAC fleet was growing stably before 2020
 - APAC's business jet market has been developing
 - A hot trend of owning a jet among UHNWIs
- With the COVID outbreak at the end of 2019, negative impact on APAC fleet was expected in 2020 (the region had full year growth of +1.4%)
 - Significant no. of commercial flights got cancelled
 - High demand in less touch-point & more safe travel
- Consequence of COVID affected the fleet in 2021 (the region's overall decline of 1.1%)
 - Strict travel & quarantine measures
 - Ongoing outbreak with new virus strain

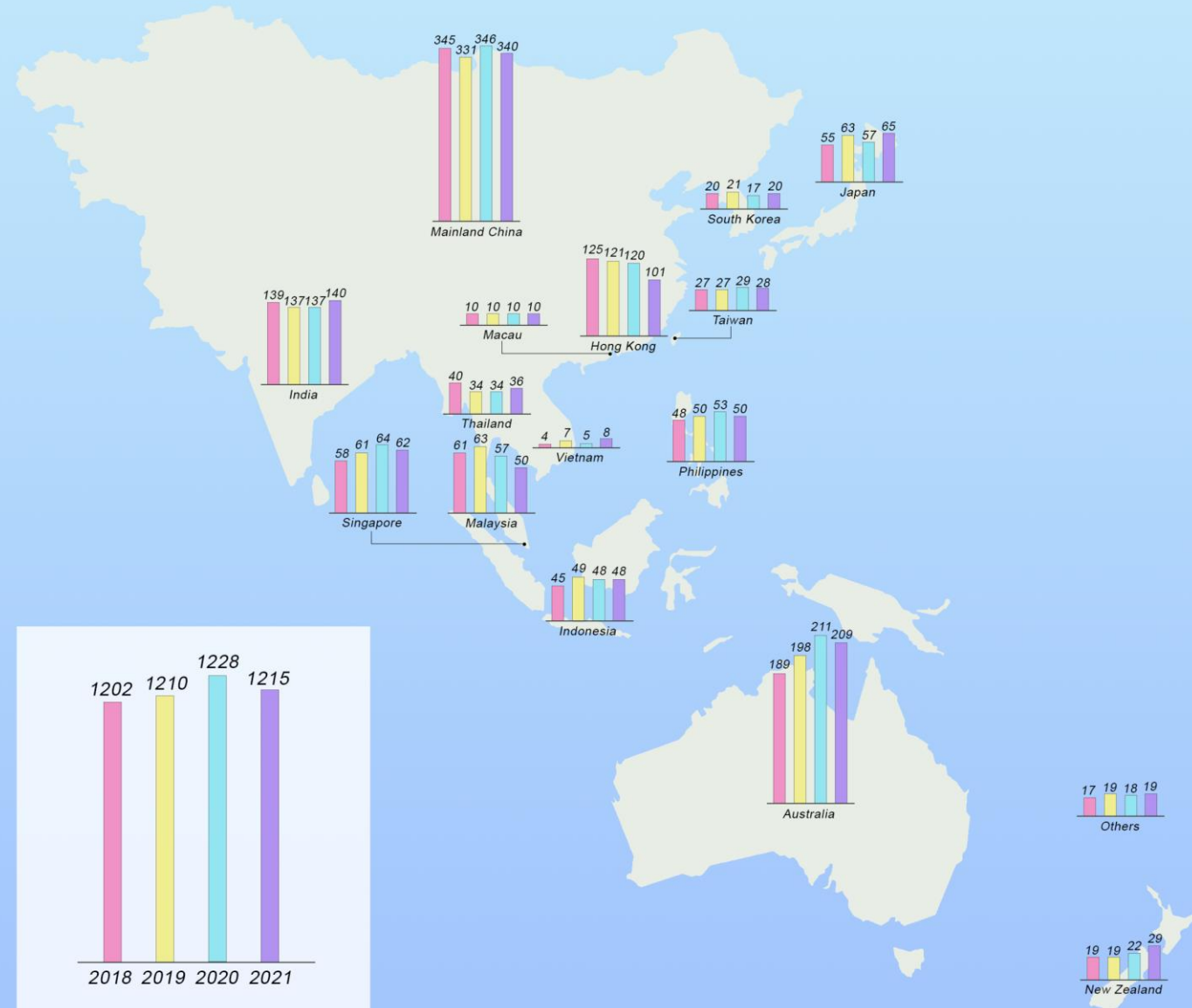
ASIA-PACIFIC BUSINESS JET FLEET GROWTH



NOTE: Historical fleet data is based on Asian Sky Media's adjusted and updated fleet numbers.
Source: Asia-Pacific Business Jet Fleet Report - YE2021

APAC's Fleet Distribution from YE 2018 – YE 2021

- Fleet distributions have been uneven for both before and after COVID
- Mainland China has remained as the largest market in APAC with 300+ jets each year
 - The market share has been marked between 27-29% (10% higher than the second largest market - Australia)
- Hong Kong SAR has been the 4th largest market but it is the only market which has shrunk 4 consecutive years
 - 19.2% growth rate has been accumulated since 2018. The heavy deductions left APAC region completely
 - The market share has dropped from 10% in 2018 to 8% in 2021

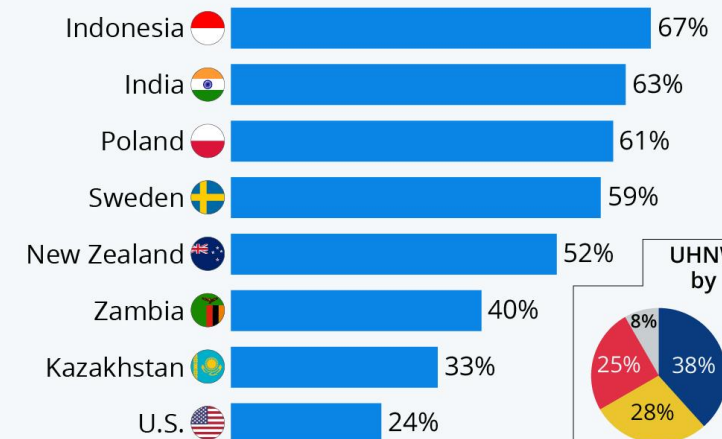


Source: Asia-Pacific Business Jet Fleet Report - YE2019
Asia-Pacific Business Jet Fleet Report - YE2020
Asia-Pacific Business Jet Fleet Report - YE2021

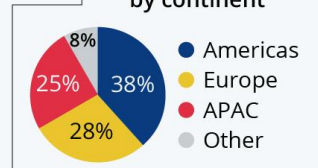
- **Vietnam:** 2-digit growth rate had been marked before and after COVID
 - +75% at YE 2019 and +60% YE 2021 respectively
 - “Vietnam was one of only a few countries to post GDP growth in 2020 when the pandemic hit. GDP growth slowed down to 2.58 percent in 2021 due to the emergence of the Delta variant but is expected to rebound to 5.5 percent in 2022.” – The World Bank (14th April, 2022)
 - “The economy of Vietnam reached that milestone by the third quarter of 2020.” – Mckinsey & Company (18th Oct, 2021)
- **Indonesia and India:** The markets are developing healthily
 - Both countries experienced a fleet drop, but the growth rate in the other years can offset the decline
 - Their fleet size at YE 2021 > YE 2018
 - “The biggest growth countries in Asia (and the world) will be Indonesia and India, which will increase the size of their UHNWI populations by more than 67 and 63 percent, respectively.” – Knight Frank’s 2021 Wealth Report
 - The markets are also beneficial from geographic condition while India is 2nd largest country in APAC and Indonesia is an island country -> demand in domestic flight increases

The Countries Set For A Super Rich Population Boom

Forecast five-year growth in UHNWI populations in selected countries (2020-2025)*



UHNWIs in 2025, by continent



* Ultra high net worth individual – someone with assets of more than \$30m

Source: Knight Frank's 2021 Wealth Report

- **Japan and South Korea:** Their fleet has recovered to pre-COVID levels
 - ANA and Korean Airlines also expand private jet services after COVID (with the law of D&S, means wealthy Japanese and Korean fly private in greater numbers)
 - Match with fleet number data at YE 2021 for East Asia market (Japan and South Korea increase 11 jets together)

“The Asian economy contracted by 1.5 percent in 2020, while the world economy shrank by 3.2 percent. Asia is expected to rebound faster. In July 2021, the International Monetary Fund (IMF) forecast that Asia would grow at 7.5 percent in 2021 and 6.4 percent in 2022, compared with 6.0 percent and 4.9 percent for the world” - McKinsey & Company (18th Oct, 2021)

*“The Asia-Pacific business jet market is anticipated to register a CAGR of over 2.5% during the forecast period 2022-2031.”
– Market Watch (9th June, 2022)*

Before and after COVID: Positive in terms of fleet growth

Mainland China may continue to be the top market in APAC and the distribution will be still uneven (with less difference)

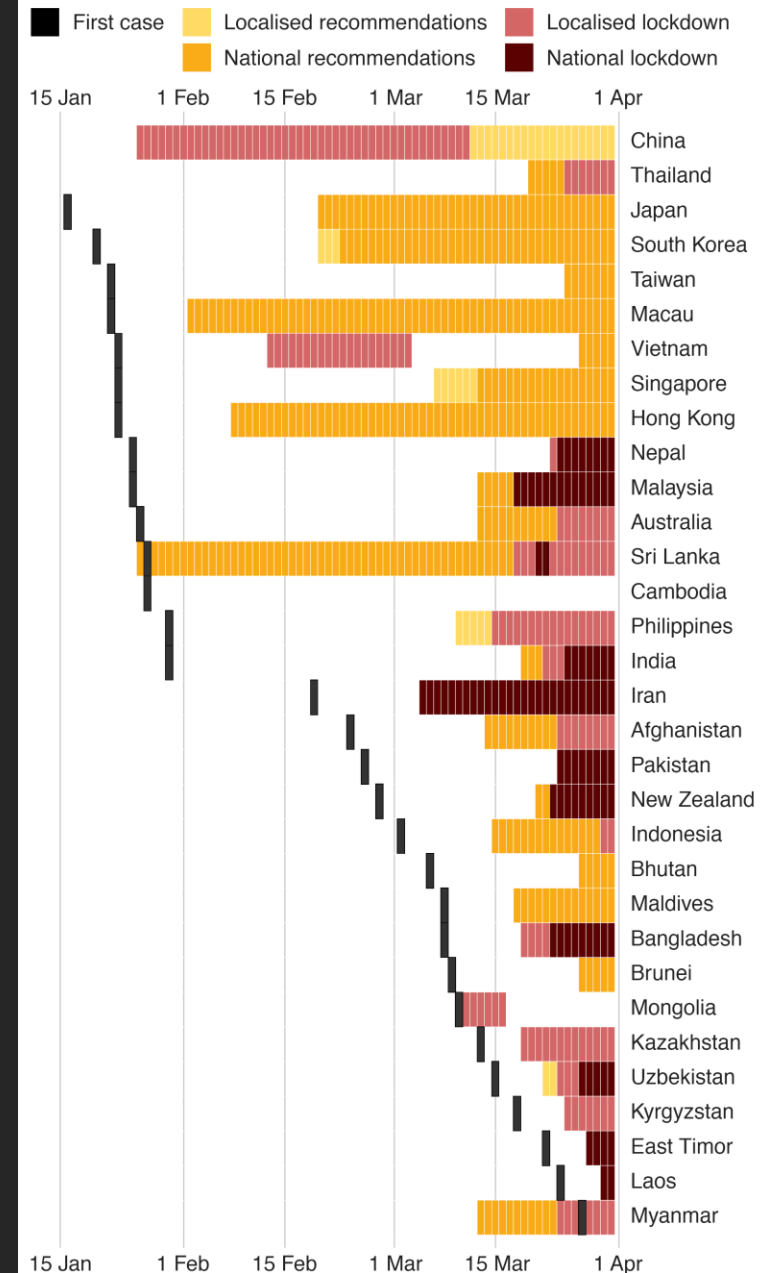
APAC's Business Jet Flight Activity

COVID Timeline X Flight Activity

- First COVID-19 cased report on 31 December 2019
- Outbreak in APAC started from the beginning of 2020
- The World Health Organization declared the COVID-19 outbreak a global pandemic on 11 March 2020
- APAC's countries imposed lockdown from mid-March 2020
- First started from Thailand, Malaysia, Australia, the Philippines, India, New Zealand, Indonesia etc..
- Then China, Japan, South Korea, Taiwan, Macau SAR, Vietnam, Hong Kong SAR after April 2020

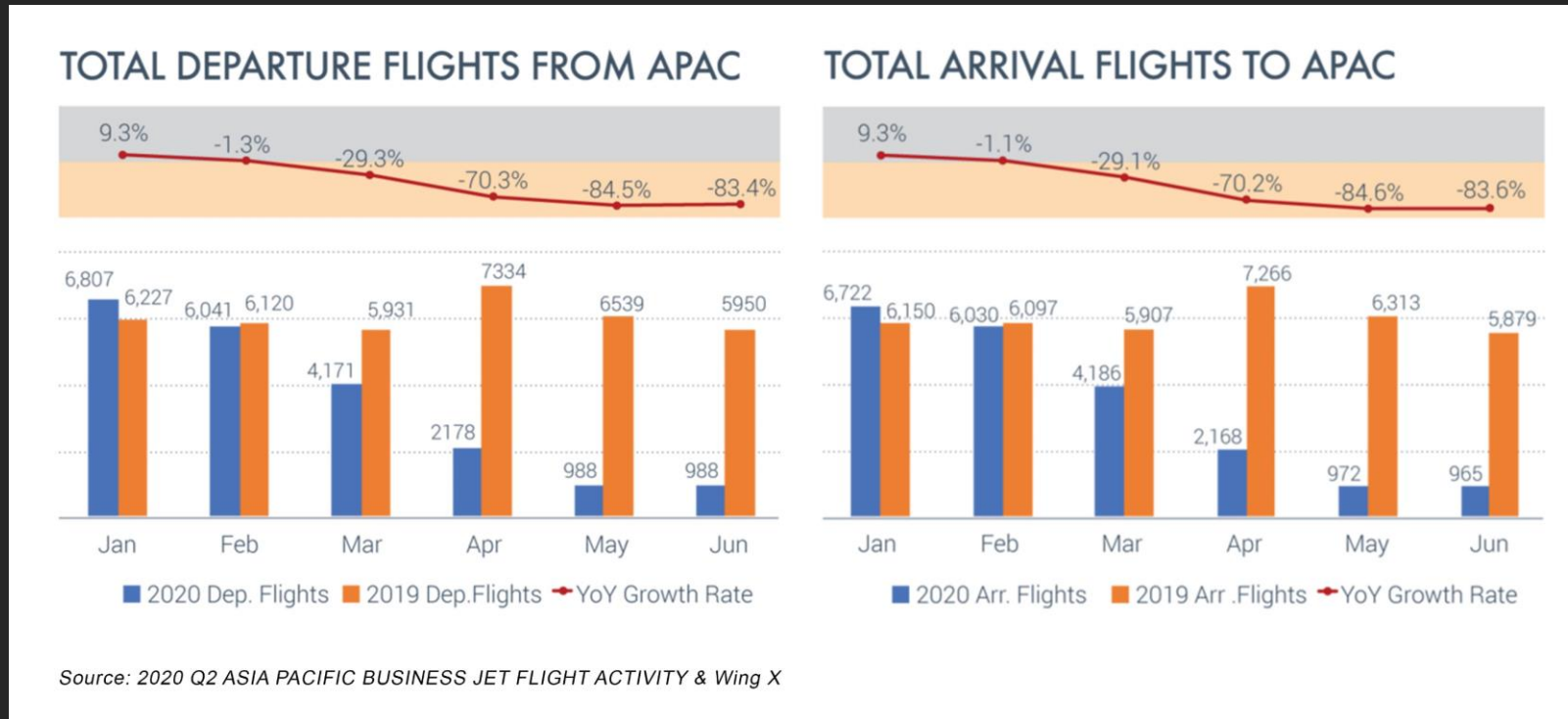
Asia, Australia and New Zealand in lockdown

Dates and severity of restricted internal movement by country



Note: China and Thailand confirmed their first cases prior to 15 January 2020

Source: Oxford COVID-19 Government Response Tracker, BBC Research

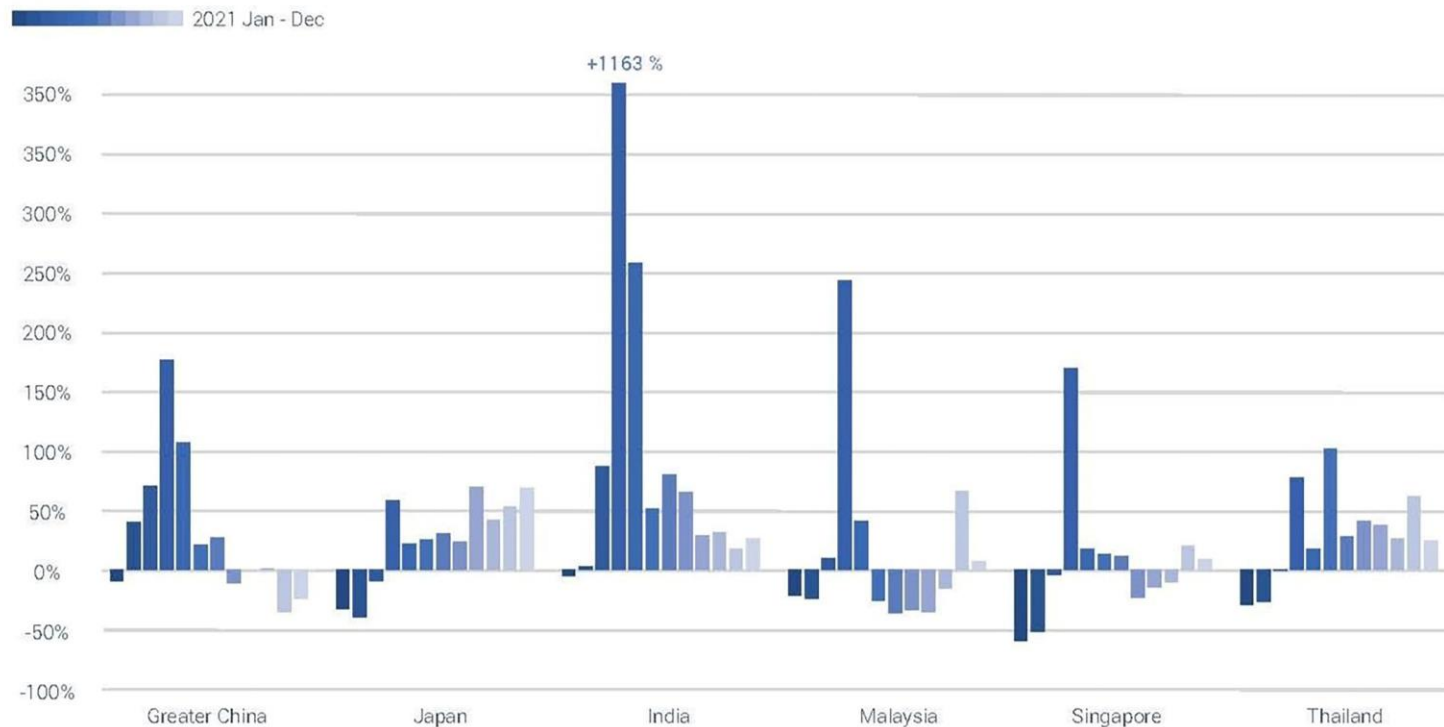
During COVID

- In January 2020, APAC business jet activities marked more than 9% YoY growth rate for both inbound and outbound
- In February 2020, the market was still very active with only -1% YoY growth rate for both arrival and departure (overseas people wanted to go back home)
- Starting from March 2020, the market suffered from 2-digit negative growth rate due to the border lockdown

After COVID

- 2021 Q1-3, business jet flight activities were supported by domestic flight mainly (as most of the APAC countries still closed border)
 - According to the data from Wing X, flight durations were between 30 minutes to 2 hours
- 2021 Q4, APAC countries eased domestic and international travel restrictions such as Thailand, Vietnam, Cambodia, Malaysia and Australia etc.
 - Greater China is the only region experienced negative YoY growth for the entire 2021 Q4 due to strict travel restrictions
 - According to the data from Wing X, flights last more than 5 hours marked +116% growth rate

FLIGHT ACTIVITY TREND: 2020 VS. 2021

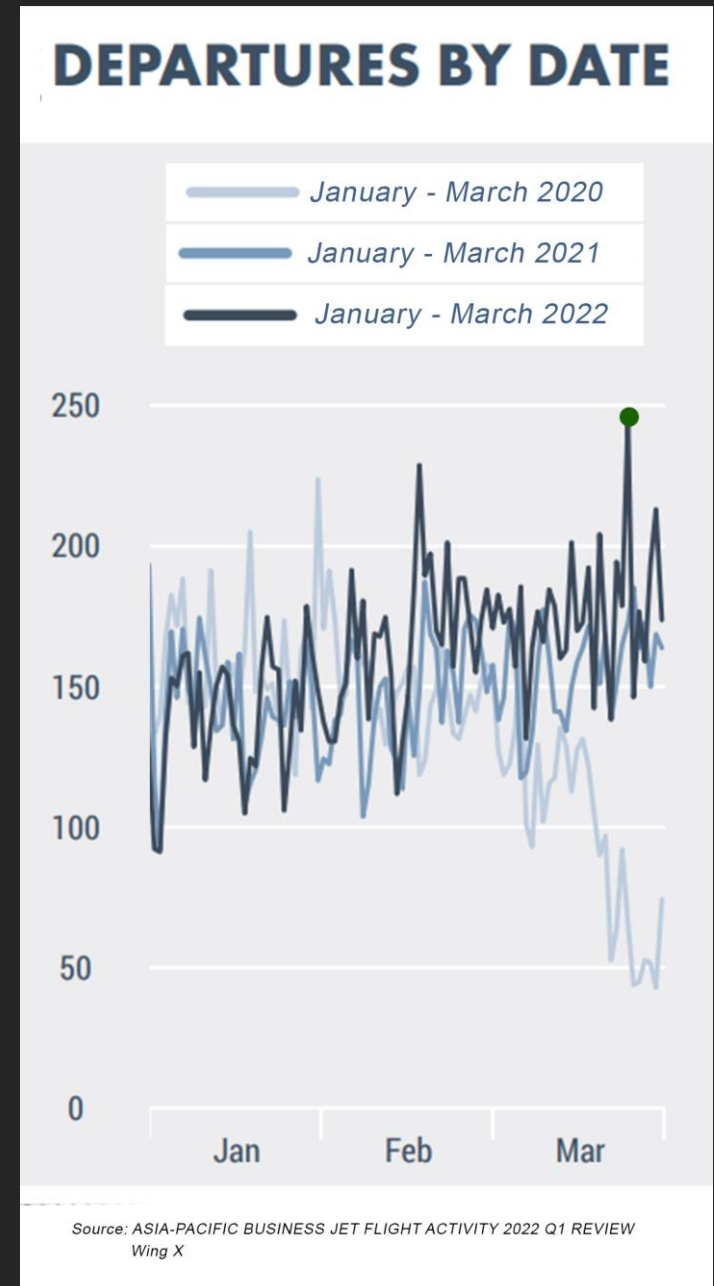


Source: ASIA-PACIFIC BUSINESS JET FLIGHT ACTIVITY 2021 ANNUAL REVIEW & Wing X

2022 Q1 & Forecast

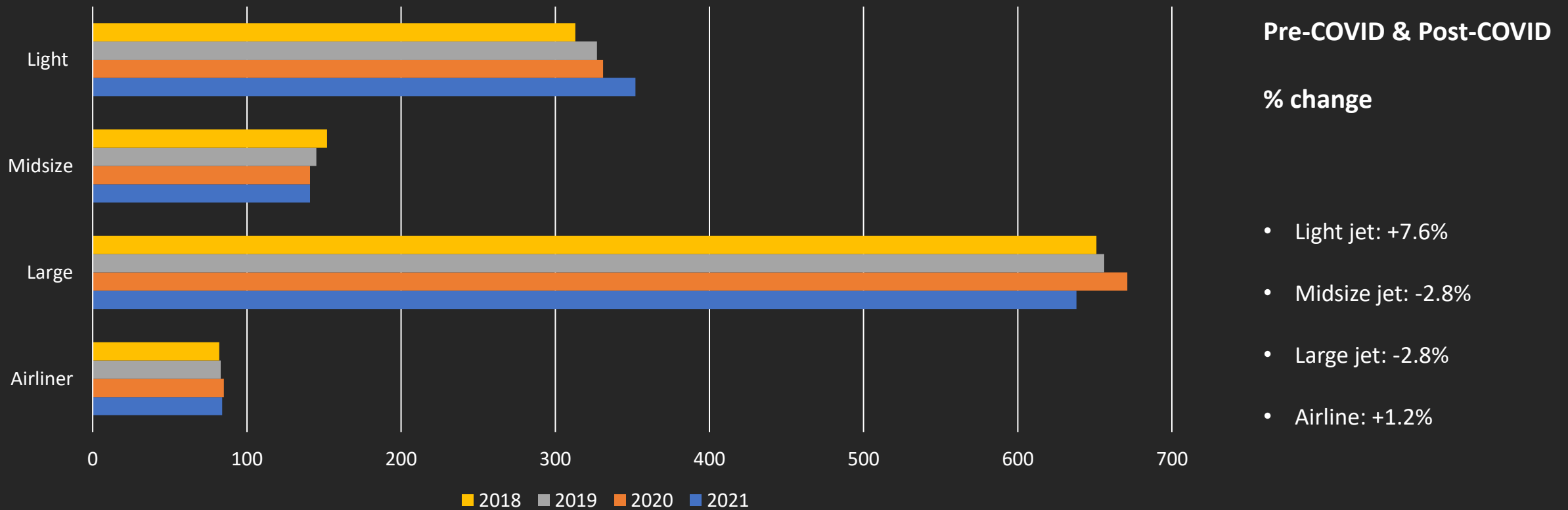
- 2022 Q1, flight activity has been overall increasing
 - Reached a peak of 248 flights on 25 March
 - Flight activity in late-March outperformed pre-pandemic levels
 - Business activities and leisure travel began to return (Thailand, Singapore are fully open: no COVID test required before arrival, quarantine etc.)
 - Greater China continued to experience negative YoY growth (strict travel restrictions)

- Forecast, APAC's flight activities may continue to increase
 - Europe and US are nearly fully open (no mask is required); travel between APAC and those markets
 - Hong Kong SAR vaccination % increase and introduce the 4th dose (news about the new SAR government will shorten and simplify the quarantine policy)



APAC's Business Jet Size Change

APAC's Fleet Size Category from 2018 - 2021



Source: ASIA-PACIFIC BUSINESS JET FLEET REPORT – YEAR END 2020 & ASIA-PACIFIC BUSINESS JET FLEET REPORT – YEAR END 2021

APAC's Business Jet Model Change

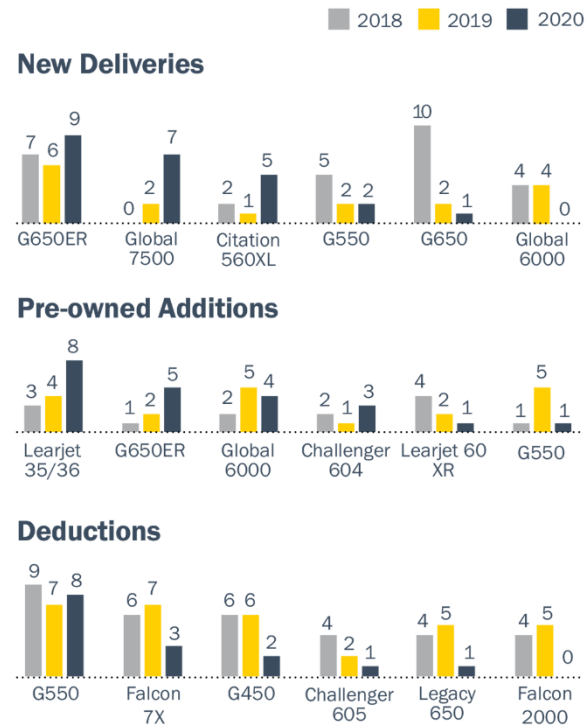
- New deliveries & Pre-owned

- G650(ER): +40 aircrafts
- Global 7500: +16 aircrafts
- Learjet: +22 aircrafts
- Citation: +24 aircrafts

- Deductions

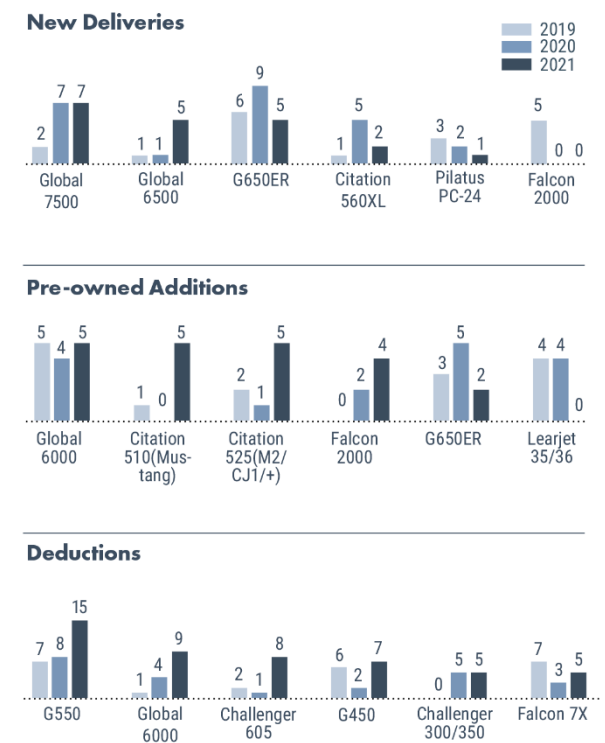
- G550: -39 aircrafts
- G450: -21 aircrafts
- Challenger 605: -15 aircrafts

TOP MODELS IN LAST 3 YEARS



Source: ASIA-PACIFIC BUSINESS JET FLEET REPORT – YEAR END 2020

TOP MODELS IN LAST 3 YEARS



Source: ASIA-PACIFIC BUSINESS JET FLEET REPORT – YEAR END 2021

Summary

- APAC's business jet fleet number
 - The number may eventually increase in the coming decade (although the number is different to forecast in a short-term,)
- APAC's fleet distribution
 - Mainland China may continue to be the top market in APAC and the distribution will be still uneven with less difference
- APAC's business jet flight activity
 - Activity may continue to increase
- APAC's business jet size change
 - Large jet still dominates the APAC's market but % of market share may be still uneven with less difference (the demand for domestic travel increase -> light jet)
- APAC's business jet model change
 - New model comes and the previous generations leave

References

- ASIA-PACIFIC BUSINESS JET FLIGHT ACTIVITY 2020 Q2 REVIEW
- ASIA-PACIFIC BUSINESS JET FLIGHT ACTIVITY 2021 ANNUAL REVIEW
- ASIA-PACIFIC BUSINESS JET FLIGHT ACTIVITY 2022 Q1 REVIEW
- ASIA-PACIFIC BUSINESS JET FLEET REPORT – YEAR END 2020
- ASIA-PACIFIC BUSINESS JET FLEET REPORT – YEAR END 2021
- Wing X
- BBC Research
- Market Watch (9th June, 2022)
- Mckinsey & Company (18th Oct, 2021)
- The World Bank (14th April, 2022)
- International Monetary Fund

LIGHT

Beechcraft Hawker 800XP Series
Beechcraft Hawker 900XP Series
Beechcraft Premier Series

Bombardier Learjet Series

Cessna Citation 500 Series
Cessna Citation 510 Series
Cessna Citation 525 Series
Cessna Citation 550 Series
Cessna Citation 560 Series
Cessna Citation 650 Series

Cirrus SF50 Series

Dassault Falcon 10/20/100 Series

Embraer Phenom 100 Series
Embraer Phenom 300 Series

Honda HondaJet Series

Pilatus PC-24 Series

MIDSIZE

Beechcraft Hawker 4000 Series

Bombardier Challenger 300 Series
Bombardier Challenger 600 Series

Cessna Citation 680 Series
Cessna Citation 700 Series
Cessna Citation 750 Series

Dassault Falcon 2000 Series
Dassault Falcon 50 Series

Embraer Legacy 450 Series
Embraer Legacy 500 Series
Embraer Legacy 600/650 Series
Embraer Praetor 500 Series
Embraer Praetor 600 Series

Gulfstream G100/G150 Series
Gulfstream G200/G280 Series
Gulfstream GII/GIII Series

LARGE

Bombardier Global 5000/5500 Series
Bombardier Global 6000/6500 Series
Bombardier Global 7500 Series
Bombardier Global Express/XRS Series

Dassault Falcon 7X Series
Dassault Falcon 8X Series
Dassault Falcon 900 Series

Gulfstream G300/G400 Series
Gulfstream G350/G450 Series
Gulfstream G500 Series
Gulfstream G550 Series
Gulfstream G650/G650ER Series
Gulfstream GIV/GIV-SP Series
Gulfstream GV Series

AIRLINER

Airbus ACJ Series

Boeing BBJ Series

Bombardier Challenger 850 Series

Embraer Lineage Series

Q & A