

Aviation

The attempt on long way

2020 – The worst year in History of Aviation

Since March 2020, most countries across the globe have closed borders and limit domestic travel as a response to the COVID-19 outbreak. In the near 120-year development year of the global aviation industry, it witnessed many crises such as Oil crises 1970s and 1990s, the September 11 terrorist attack, or the SARS-2003 outbreak but the COVID-19 pandemic is the worst. It has brought an unprecedented impact on global aviation markets.

Have Gloomy Sunday melodies ended?

Since November 2020, pharmaceutical firms have announced COVID-19 vaccine successfully tests. However, multiple variants of COVID-19 are developing and causing new waves with new infections are rising and so are deaths. The new variant has been fueling India's deadlier new wave of cases in recent times. The future of aviation remains a matter of dispute.

Waiting for a comprehensive innovation

In the past, the aviation industry made dramatic changes to really adapt to the business environment. The oil crisis inspired the quest for fuel efficiency, this first came through weight reduction by using composite materials. R&D of aircraft engines has also continuously promoted, the Airbus NEO is saving fuel around 12%-15% compared to the previous iteration. For a long time, travel by air is a luxury good for humans, airlines primarily catered to the affluent and businessmen. However, the low-cost carrier business model was born by Southwest Airlines. Today, everybody can fly with low ticket prices. The world after the September 11 terrorist attack, aviation safety is more concerned. It witnessed large scale changes in security both onboard and in the airport.

The COVID-19 pandemic has impacted virtually all aspects of our lives such as social distancing, stopping public transport, restrictions on travel, etc. Thanks to technology development and digital transformation, the business trip is made possible by face-to-face call. As a result, many passengers will be lost. Aviation industry will be faced more problems than it. This is a huge challenge for the industry, and it requests a comprehensive innovation as in the past.

Ahead is the Sky

Despite the deep challenges facing aviation because of the pandemic, we believe aviation is an attractive long-term investment. The main reasons are 1) The world is getting steadily richer—about half the world is now middle class or richer so tourism demand continues to rise, 2) A tech revolution in the aviation industry make air travel safer before the pandemic and 3) Ancillary revenue has taken off, promote greater cash flow.

Neutral (Maintain)

Company	Rating	TP (VND)
SCS	BUY	152,600
ACV	Non-Rate	N. A
AST	Non-Rate	N. A
HVN	Non-Rate	N. A
VJC	Non-Rate	N. A

Nam Nguyen

nam.nt@kisvn.vn

Global Aviation Industry

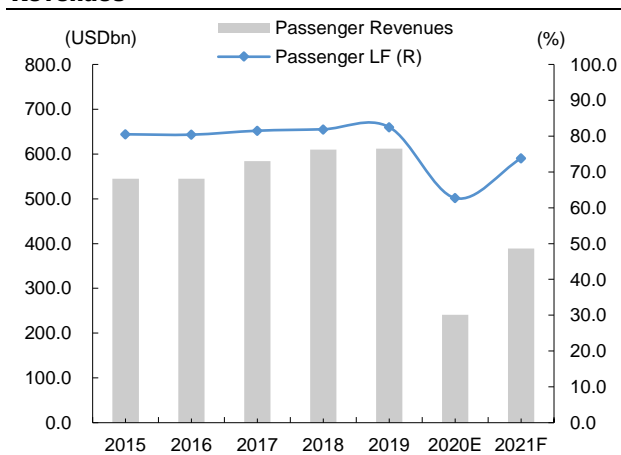
Impact of the COVID-19 pandemic in the world

2020 was a historically unprofitable year for global airlines. Cancelling almost all flights to control the COVID outbreaks has affected the entire airline industry globally. With a grim outlook ahead, IATA forecasts that airlines incurred net losses of USD118bn in 2020 and continued to lose USD38bn in 2021. Passenger numbers plummeted to 1.8 billion pax (a decrease of 60.5% yoy), passenger revenue fell to USD241bn (down from USD612bn in 2019).

For airport operators, the sudden drop in air traffic has led to fewer sales of both aeronautical and non-aeronautical revenues. Because airlines do not fly, the aeronautical revenues such as landing charges for aircraft and PSC declined. As no passenger, non-aeronautical revenues such as parking facilities, restaurants or duty-free also fell. However, airports have a lower risk profile than air carriers. Airlines may go bankrupt due to financial stress, but the traffic demand will still be there and recover slowly.

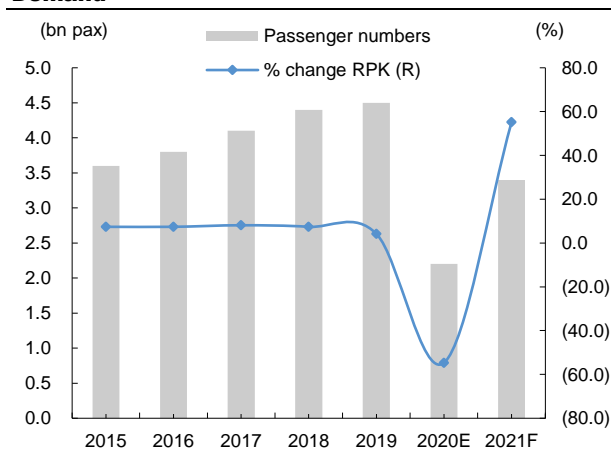
The cargo segment is bucking the trend, it was increased to USD111bn in 2020 from USD102bn in 2019. Cargo interpreted performing than passenger business, but it could not make up for the fall in passenger revenue. Air freights show an important role in vaccine distribution, so cargo yield is predicted to grow in 2021.

Figure 1. Global Aviation Industry Passenger Revenues



Note: Passenger LF = Passenger Load Factor = RPK / ASK
Source: IATA, KIS

Figure 2. Global Aviation Industry Passenger Demand



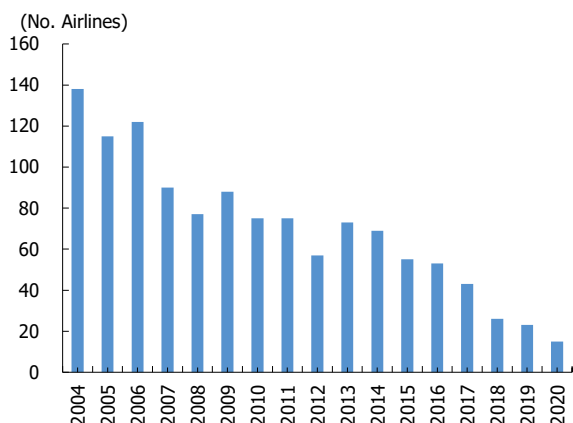
Source: IATA, KIS

Bird's wings get tired

On Sunday, Covid-19 comes and knocks on the Airline's door. We might imagine that Airlines like Icarus wings and Covid-19 like the Sun. Finally, the Sun has burned Icarus's wings because of dreaming of conquering the skies. From 2004 to pre-pandemic, the world witnessed rapid growth with a CAGR of 7%. Many new airlines were established along with commercial aircraft orders thank to the popularity of LCC model. The new growth phase was finished in 2020 by the COVID-19 pandemic.

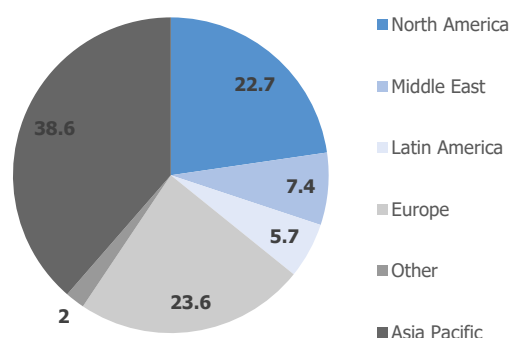
In such turbulent times, reducing customer demand can result in cash flow problems in airlines. Management needs to think about restrictions on travel, economic uncertainties, and market changes to tweak operating rules. Such considerations may include forecasted fuel consumption, depreciation methods, salary assumptions, aircraft maintenance, and overhaul cost, among others. The carrier should be prepared for a long-term survival strategy in unpredictable COVID-19 circumstances.

Figure 3. New Airlines



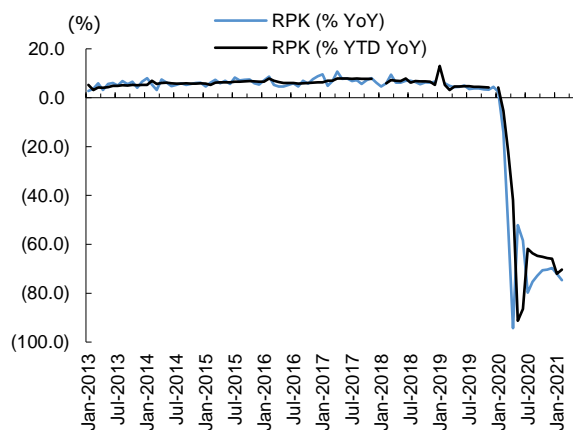
Source: KIS

Figure 4. Total Air Passenger Market Share by Region



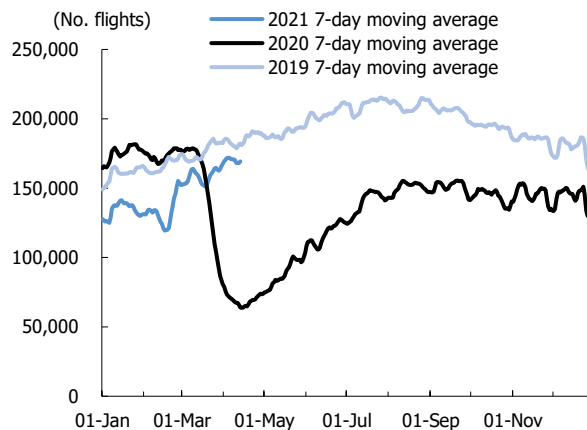
Note: % of industry RPKs
Source: IATA, KIS

Figure 5. Total Air Passenger Market Growth



Source: IATA, KIS

Figure 6. Global Flights Per Day



Source: Flightradar24, KIS

Air Cargo – faster than expected recovery

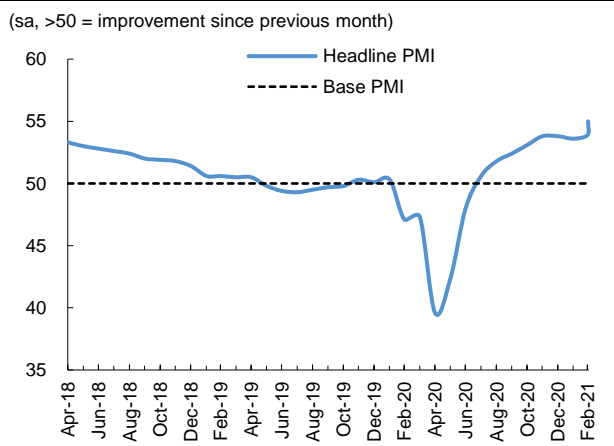
The IATA has released February 2021 data for global air cargo markets which shows that air cargo demand improved to pre-pandemic. Global demand – measures in cargo tonne-kilometers (CTKs) - skyrocketed by 9.0% compared with February 2019 (because comparisons between 2021 and 2020 monthly results do not reflect its substance by the extraordinary impact of COVID-19).

Three main keys supported for air cargo volumes:

- The macroeconomic driver remains supportive of air cargo demand. According to JP Morgan, the global manufacturing Purchasing Managers' Index (PMI) was at 55.0 in Mar 2021 – results above 50 indicate manufacturing growth versus the prior month. It appears conditions in the manufacturing sector remain robust despite new Covid-19 variant outbreaks.

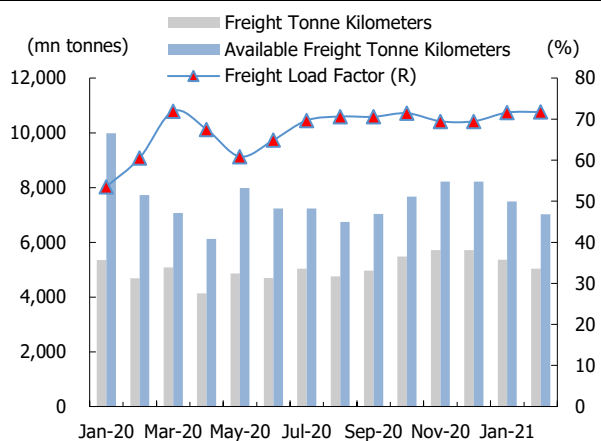
- The new export orders component of the manufacturing PMI has a high correlation with CTK growth - show to further CTK improvement. However, the COVID-19 new wave negatively impacted export business in emerging markets.
- Inventory/Sale volume is low level compared to its mean. In the past, this was a signal that businesses had to quickly refill their storage, for which they also used air cargo services.

Figure 7. J.P.Morgan Global Manufacturing PMI



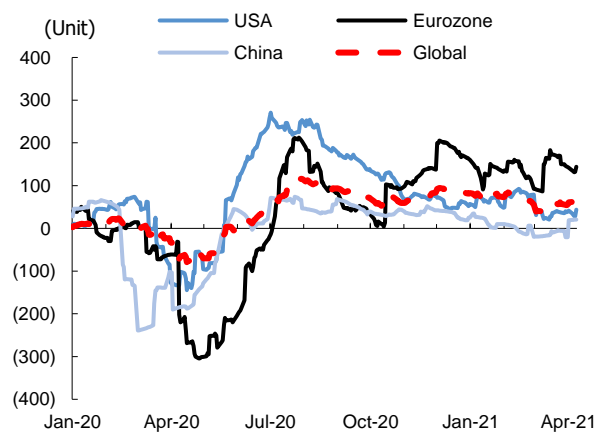
Source: Bloomberg, IHS Markit, KIS

Figure 8. FTK, AFTK and Load Factor of Air Car



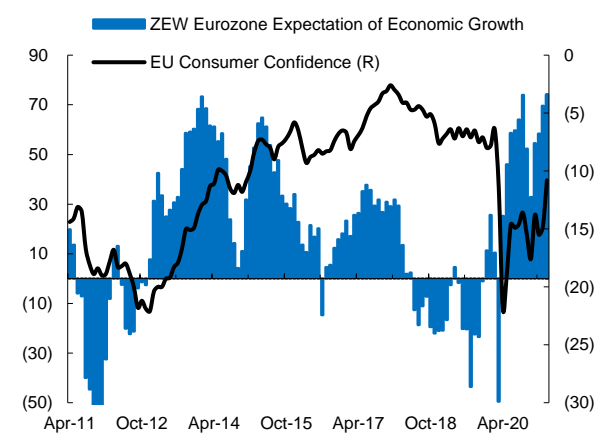
Source: Bloomberg, KIS

Figure 9. Economic Surprises Index



Source: Bloomberg, KIS

Figure 10. ZEW Economic Sentiment Index



Source: Bloomberg, KIS

Table 1. Global PMI Summary

Index	Feb-21	Mar-21	Interpretation
PMI	53.9	55.0	Improvement, Faster rate
Output	54.3	55.1	Growth, Faster rate
New Orders	54.0	55.8	Growth, Faster rate
New Export Orders	51.0	53.4	Growth, Faster rate
Future Output	67.2	66.5	Growth expected, Lesser sentiment
Employment	50.7	51.5	Growth, Faster rate
Input Prices	65.1	68.2	Inflation, Faster rate
Output Prices	55.7	59.3	Inflation, Faster rate

Source: IHS Markit, KIS

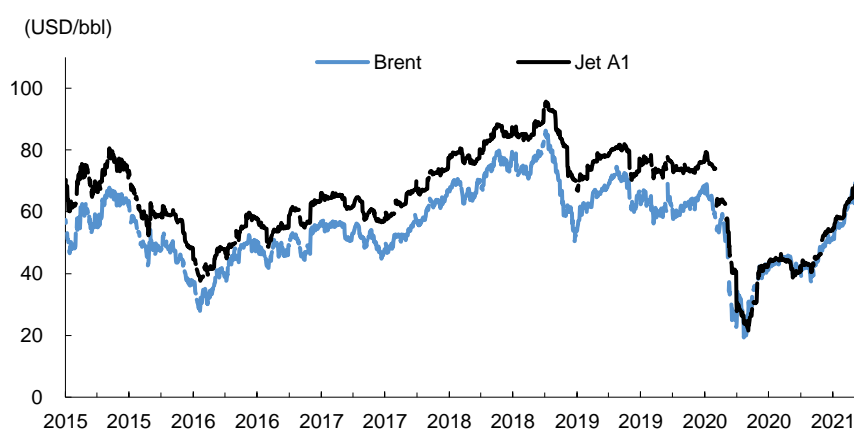
Three problems in Aviation Industry

Fluctuation of fuel price

Fuel expense is one of the critical factors that directly affect the performance of airlines when it is their highest operating cost and can affect noticeably their profitability and competitiveness. There is a strong correlation between airline mission fuel efficiency and fuel price. Crude oil and jet fuel also have similar connections.

Oil crises. In the 1970s oil crisis, the Western world faced substantial petroleum shortages. ICAO reports that the price of oil price increased by 400% and the reason is a crude oil export embargo of OPEC to all countries supporting Israel in the Yom Kippur War. Then after the Iranian Revolution in 1979, oil prices rocketed once again to around \$132 a barrel in today's currency. At a time, travel by air was a luxury good for all, the cost of fuel transfer to ticket prices. As a result, airlines noticed a sharp drop in passenger numbers. Several carriers have gone bankrupt or returned to profitability after 4 years.

Figure 11. Brent and Jet A1 price correlation



Note: Data as of 26 Apr 2021
Source: Bloomberg, KIS

In 2020, Saudi Arabia initiated a price war on oil with Russia. The main reason is the disagreement on oil-production cuts amid the COVID-19 pandemic between OPEC and Russia. Unlike the crises before, this time Brent crude oil fell by 30%, the largest drop since the Gulf War. It is obvious when supply exceeds demand. The trend of a decrease in the number of flights directly impacted jet fuel consumption. Spread between Brent oil and Jet A1 narrowed at lowest level.

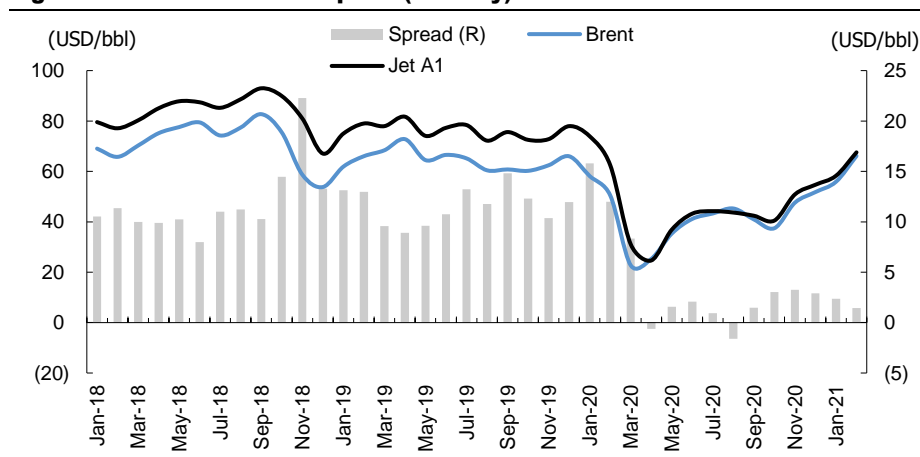
Table 2. Jet Fuel per gallon in 2020

(USD, %)

Month	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Avg.
Price US\$ per gallon	1.78	1.51	0.95	0.61	0.69	0.98	1.08	1.11	1.01	1.05	1.13	1.32	1.10
yoy	0.0	(20.9)	(50.0)	(69.2)	(65.0)	(46.2)	(43.5)	(38.3)	(46.3)	(43.5)	(37.9)	(30.2)	(41.3)
ytd	0.0	(15.2)	(46.6)	(65.7)	(61.2)	(44.9)	(39.3)	(37.6)	(43.3)	(41.0)	(36.5)	(25.8)	(38.1)

Source: Indexmundi, KIS

Figure 12. Brent and Jet A1 price (Monthly)



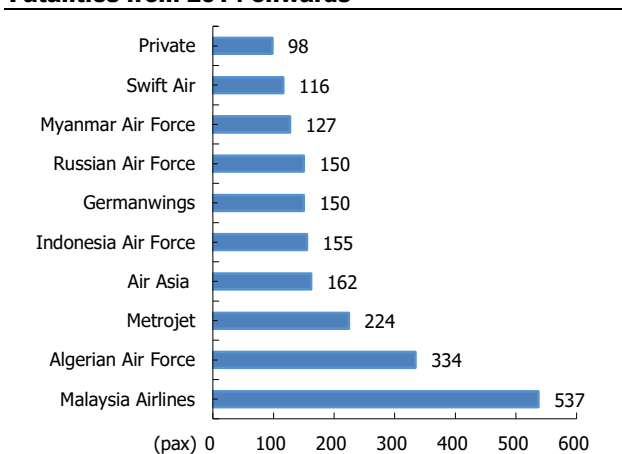
Note: Data as of 26 Apr 2021
Source: Bloomberg, KIS

Aviation safety

Aviation safety fundamentally contributes to the sustainable development of the international civil aviation system. Safety is a core value-offering of rapid and dependable air services. Through ICAO, international cooperation on aviation safety by governments and industry groups has helped make commercial aircraft the safest way to travel. According to the Civil Aviation Authority, the fatality rate per billion kilometers traveled by plane is 0.003 compared to 0.27 by rail and 2.57 by car.

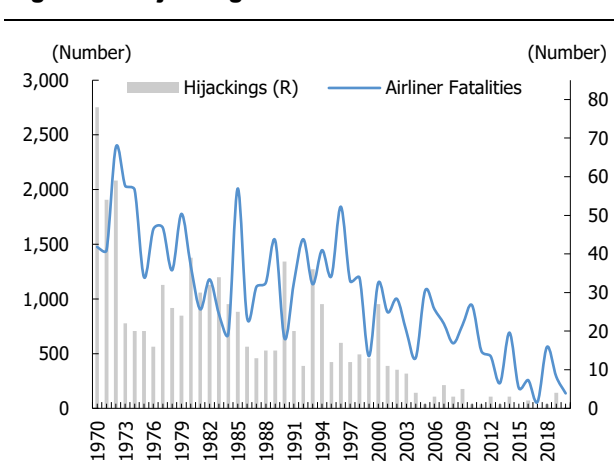
In the past, the MH370 disappearance and September 11 terrorist attacks are unforgettable moments in the aviation industry. Worries about flying are all too often a result of inconsistencies and lack of assurance about what they will be met with at the airport, on the plane, or at the destination. Officials need to more to ensure the safety of air travel.

Figure 13. Top 10 Airline Companies by Number of Fatalities from 2014 onwards



Source: Aviation Safety Network, KIS

Figure 14. Hijacking Incidents and Airliner Fatalities



Source: Aviation Safety Network, KIS

Aviation and Pandemic

If the aviation accidents come from the supply, pandemics cause demand shock. It can be a major factor in the behavior change of passengers. History shows that SARS 2003 has been the most serious epidemic impacting traffic volumes in recent years. In 2003, the loss of confidence and fears of global spread impacted both business and leisure travel to, from, and within the region, resulting in Asia-Pacific airlines losing 8% of annual RPKs and \$6 billion of revenues. By contrast, the avian flu outbreaks in 2005 and 2013 had less impact, and air travel rebounded quickly as the fears of the global spread of the virus eased. The recent pandemic was MERS, air travel volumes began to recover after two months and had returned to normal levels within 6 months.

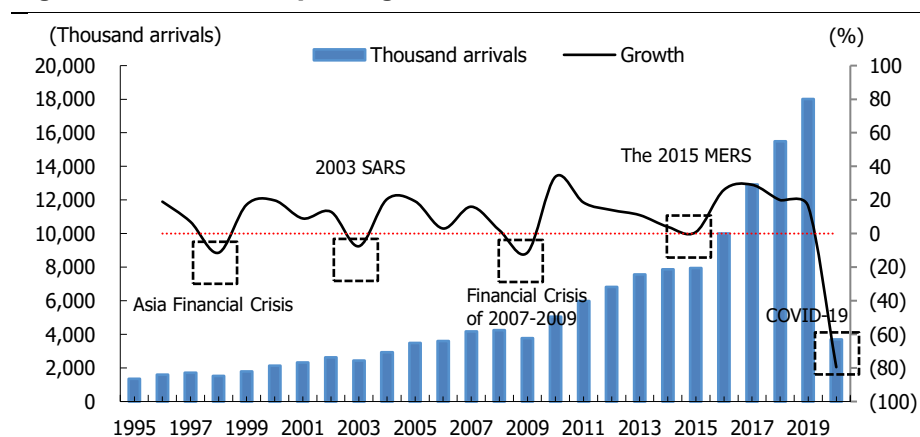
In the past, the airline industry has proven resilient to shocks, including pandemics. The recovery drives by trends in globalization and the demand for tourism. However, passenger behaviors and expectations have been growing constantly, customer experience will need to followed suit to accommodate new needs. After the COVID-19 pandemic, humans and businesses are looking for ways to return to a new normal and public health is emphasized again.

Vietnam – bright spot amid the pandemic

Vietnam reports first coronavirus cases on January 28th, 2020 on lights from Wuhan, China. In a flash, Vietnam Government suspended all flights from Mainland China on February 1st and all international flights on March 25th. PM. Nguyen Xuan Phuc issued Directive No.16/CT-TTg to combat COVID-19 on March 31st, 2020 in which it mandates strict social distancing throughout the country for 15 days, from April 1st to April 15th. Thanks to drastic measures, Vietnam has stood for three COVID outbreaks.

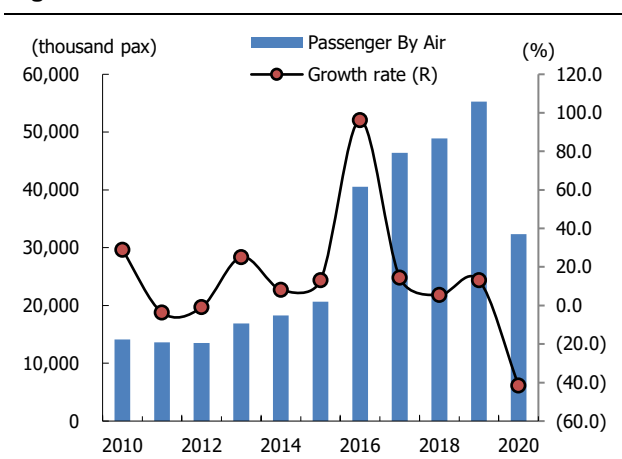
Pre-COVID, the combination between low fuel price and booming air travelers from Mid-2014 has significantly benefited the performance of Vietnam Aviation. Vietnam airlines expanded their fleet rapidly. ACV also recorded the increase of throughput volume (passenger and cargo) at airports. However, the growth of Vietnam Aviation was intercepted by COVID-19. Particularly, the number of passengers passing through Vietnam airports reached 66.0 million pax (-43.5% yoy), cargo volume recorded 1.3 million tonne (-14.7% yoy). This reflects a sharp drop of 31.9% yoy in number of flights.

Figure 15. International passenger volume in 1996 – 2020



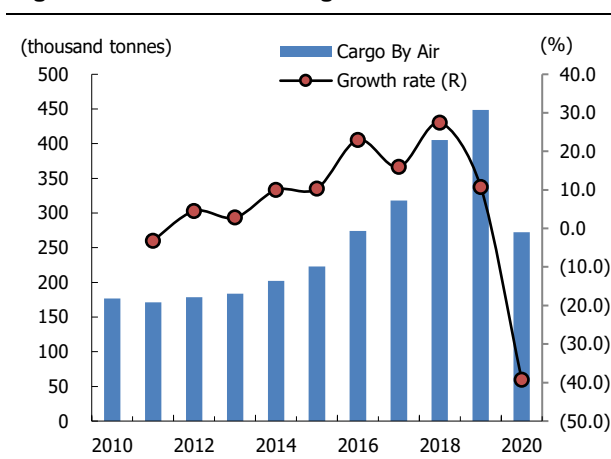
Source: GSO, Vietnamtourism, KIS

Figure 16. Vietnam Air Travel



Source: GSO, Bloomberg, KIS

Figure 17. Vietnam Air Cargo



Source: GSO, Bloomberg, KIS

International route and infrastructure development

From 2012 to 2016, despite that local airlines of Vietnam (HVN and VJC majorly) have showed a rapid expansion, especially the low-cost carrier VJC, they mainly focus on capturing their domestic share as well as adequately serving the sharp growth of the domestic markets, most international markets are dominated by foreign airlines. Since 2017, the growth of the domestic market has slowed down significantly after a Golden time. Tourism is the new growth driver of Vietnam aviation. The robust boost in international passengers was confirmed by inbound tourism from North Asia markets. This booming triggered overcapacity at Vietnam international airports such as Tan Son Nhat, Noi Bai, Da Nang and Cam Ranh.

Aviation industry in general and airlines in specific are affected strongly by the infrastructure of airports. As the major hubs are overcapacity, the congestion issue is causing more concerns for the potential development of Vietnam aviation. Because of this, MoT and CAA have planned to develop a system of Vietnam airports. The new plan is Master plan the development of the national airport network to 2030 with a vision to 2050. Accordingly, Vietnam was set to have a total of 28 airports by 2030, including 14 international and 18 domestic ones. Air transportation demand was forecast to grow at a CAGR rate of 5.9% from 2019 to 2050. Besides, aviation logistics centers also will be more concerned and developed some new centers at Van Don, Chu Lai, and Long Thanh airports.

Ancillary revenue will continue to boost passenger yield. With the international route expansion, the revenue from ancillary not only grows from the higher demand for these services in the longer international flights but also can be adjusted more easily through a dynamic pricing strategy. For instance, when total passengers plummeted 39.8% (with a decrease of 82.4% in the international passengers and a decrease of 17.7% in the domestic passengers). In 2020, VJC reported a slight reduction rate of 15.3% in its per pax. But ancillary revenue accounted for 41.2% of total transportation revenue. Vietnam is an emerging and developing country, so ancillary revenue from domestic is still an attractive segment for airlines.

Table 3. Draft master plan on the development of the national airport network to 2030 with a vision to 2050

				(million passenger per year)	
No.	Aerodrome Ref. Code	Province	Designed Capacity to 2030F	Designed Capacity to 2050F	
International Airports			266.0	576.0	
1	Noi Bai International Airport	4F	Ha Noi	60.0	100.0
2	Hai Duong International Airport	4F	Hai Duong		50.0
3	Van Don International Airport	4E	Hai Phong	5.0	18.0
4	Cat Bi International Airport	4E	Quang Ninh	13.0	20.0
5	Tho Xuan International Airport	4E	Thanh Hoa	5.0	7.0
6	Vinh International Airport	4E	Nghe An	8.0	15.0
7	Phu Bai International Airport	4E	Thua Thien – Hue	9.0	15.0
8	Da Nang International Airport	4E	Da Nang	28.0	50.0
9	Chu Lai International Airport	4F	Quang Nam	5.0	20.0
10	Cam Ranh International Airport	4E	Khanh Hoa	25.0	66.0
11	Long Thanh International Airport	4F	Dong Nai	50.0	100.0
12	Tan Son Nhat International Airport	4E	Ho Chi Minh	45.0	70.0
13	Can Tho International Airport	4E	Can Tho	3.0	30.0
14	Phu Quoc International Airport	4E	Kien Giang	10.0	15.0
Domestic Airports			42.0	116.0	
1	Cao Bang Airport	4D	Cao Bang		5.0
2	Lai Chau Airport	3C	Lai Chau	0.5	3.0
3	Dien Bien Airport	3C	Dien Bien	2.0	2.0
4	SaPa Airport	4C	Lao Cai	3.0	5.0
5	Na San Airport	4C	Son La	1.0	4.0
6	Dong Hoi Airport	4C	Quang Binh	3.0	7.0
7	Quang Tri Airport	4C	Quang Tri	1.0	2.0
8	Kon Tum Airport	4D	Kon Tum		8.0
9	Pleiku Airport	4D	Gia Lai	4.0	7.0
10	Phu Cat Airport	4E	Binh Dinh	7.0	17.0
11	Tuy Hoa Airport	4D	Phu Yen	3.0	5.0
12	Buon Ma Thuot Airport	4D	Dak Lak	5.0	10.0
13	Lien Khuong Airport	4E	Lam Dong	7.0	10.0
14	Phan Thiet Airport	4E	Binh Thuan	2.0	7.0
15	An Giang Airport	4E	An Giang		12.0
16	Rach Gia Airport	4C	Kien Giang	0.5	2.0
17	Ca Mau Airport	4C	Ca Mau	1.0	5.0
18	Con Dao Airport	4C	Ba Ria – Vung Tau	2.0	5.0
TOTAL			308.0	692.0	

Note: Aerodrome Code is derived from various aircraft dimensions and approach performance. Inside, number between 1 and 4 determined by runway field length and letter (A-F) determined by maximum allowable Wingspan and Main Gear Outer Track.

Source: CAA, MoT, KIS

Recommendation

We issued BUY rating for SCS with TP at VND152,600. As started in our last Review Report, [SCS – 4Q20 Review \[BUY +21.1%\] Recovering faster than expected](#), dated 9 Feb 2021, we forecast SCS's 2021/2022F revenue to grow 10.4%/9.8% yoy thanks to 6.2%/6.0% and 3.6%/6.0% international and domestic cargo volume in 2021 and 2022, respectively.

We do not rate for Airline's stock (HVN and VJC) because we think that HVN and VJC will have a rough time in 2021. Now, Vietnam having a plan to reconnect international routes from July 2021. It contributes to the recovery, but Airline's stocks outlook is still uncertain.

For airport operator – ACV, we foresee an upside rating with a high total stock return, pending a fuller report. Now, ACV is trading on a TTM EV/EBITDA of 44.3x.

Table 4. Companies of Vietnam Aviation Industry

Ticket	Full name	Sub-industry	Subsidiary / Associate of	Exchange
ACV	Airports Corporation of Vietnam	Airport, Aviation Infrastructure	State-owned	UPCoM
ARM	General Aviation Import Export JSC	Aviation Services	HVN (41.3%)	HNX
ASG	ASG Corporation	Aviation Services		HSX
AST	Taseco Air Services JSC	Aviation Services	Taseco Thang Long (51.0%)	HSX
CIA	Cam Ranh International Airport Services JSC	Aviation Services	ASG (48.8%)	HNX
HVN	Vietnam Airlines JSC	Airline	State-owned (86.2%)*	HSX
MAS	Danang Airports Services JSC	Aviation Services	ACV (36.1%)	HNX
NAS	Noibai Airport Services JSC	Aviation Services		UPCoM
NCS	Noi Bai Catering Services JSC	Aviation Services	HVN (60.2%)	UPCoM
NCT	Noi Bai Cargo Terminal Service JSC	Air Freight and Logistics	HVN (55.1%)	HSX
SAS	Southern Airports Services JSC	Aviation Services	ACV ()	UPCoM
SCS	SCSC Cargo Service Corporation	Air Freight and Logistics	GMD (36.7%) and ACV (14.9%)	HSX
SGN	Saigon Ground Services JSC	Air Freight and Logistics	ACV (48.0%)	HSX
VJC	Vietjet Aviation JSC	Airline	Private owner	HSX
ACSV	Air Cargo Services of Vietnam JSC	Air Freight and Logistics	ACV (20.0%)	Non-listed
AEC	Airport Engineering Consultancy and Services JSC	Aviation Services		Non-listed
AGS	Aviation Ground Services Ltd	Air Freight and Logistics	CIA (75.0%)	Non-listed
ALS	Aviation Logistics Corporation	Air Freight and Logistics		Non-listed
AVIPRINT	Aviation Printing Joint Stock Company	Aviation Services		Non-listed
BAV	Bamboo Airways JSC	Airline	FLC (51.3%)	Non-listed
HGS	Hanoi Ground Services JSC	Aviation Services	ACV (20.0%)	Non-listed
JESTAR	Pacific Airlines**	Airline	HVN (98.9%***)	Non-listed
NAFSC	Noibai Aviation Fuel Service JSC	Aviation Services	ACV (60.0%)	Non-listed
SAAM	Southern Airports Aircraft Maintenance Services Company Ltd	Aviation Services	ACV (51.0%)	Non-listed
SAPL	Southern Air Petrol Logistics JSC	Aviation Services		Non-listed
SATCO	Southern Airports Trading JSC	Aviation Services		Non-listed
SATSCO	Southern Airports Transportation JSC	Aviation Services	ACV (30.0%)	Non-listed
SKYPEC	Vietnam Air Petrol Company Ltd	Aviation Services	HVN (100.0%)	Non-listed
TAPETCO	Tan Son Nhat Petrol Commercial JSC	Aviation Services		Non-listed
TCSC	Tan Son Nhat Cargo Services Company Ltd	Aviation Services	ACV (49.1%) and HVN (55.0%)	Non-listed
VACS	Vietnam Airlines Caterers Ltd	Aviation Services		Non-listed
VAECO	Vietnam Airlines Engineering Company Ltd	Aviation Services	HVN (100.0%)	Non-listed
VALC	Vietnam Aircraft Leasing Company JSC	Aircraft Leasing	HVN (32.5%)	Non-listed
VASCO	Vietnam Air Services Company	Aviation Services		Non-listed
VATC	Vietnam Aviation Tourism Joint Stock Company	Aviation Services		Non-listed
VATM	Vietnam Air Traffic Management Corporation	Aviation Services		Non-listed
VIAGS	Vietnam Airport Ground Services Company Ltd	Aviation Services	HVN (100.0%)	Non-listed
VINACS	Vietnam Air Catering Services JSC	Aviation Services	HVN (100.0%)	Non-listed

Notes: *no calculate Rescue Plan, **Jetstar Pacific change its brand name to Pacific Airlines, ***In June 2020, Vietnam Airlines announced Qantas Airways' plan to transfer its 30% stake in Pacific Airlines.
Source: KIS

Table 6. Global aviation valuation

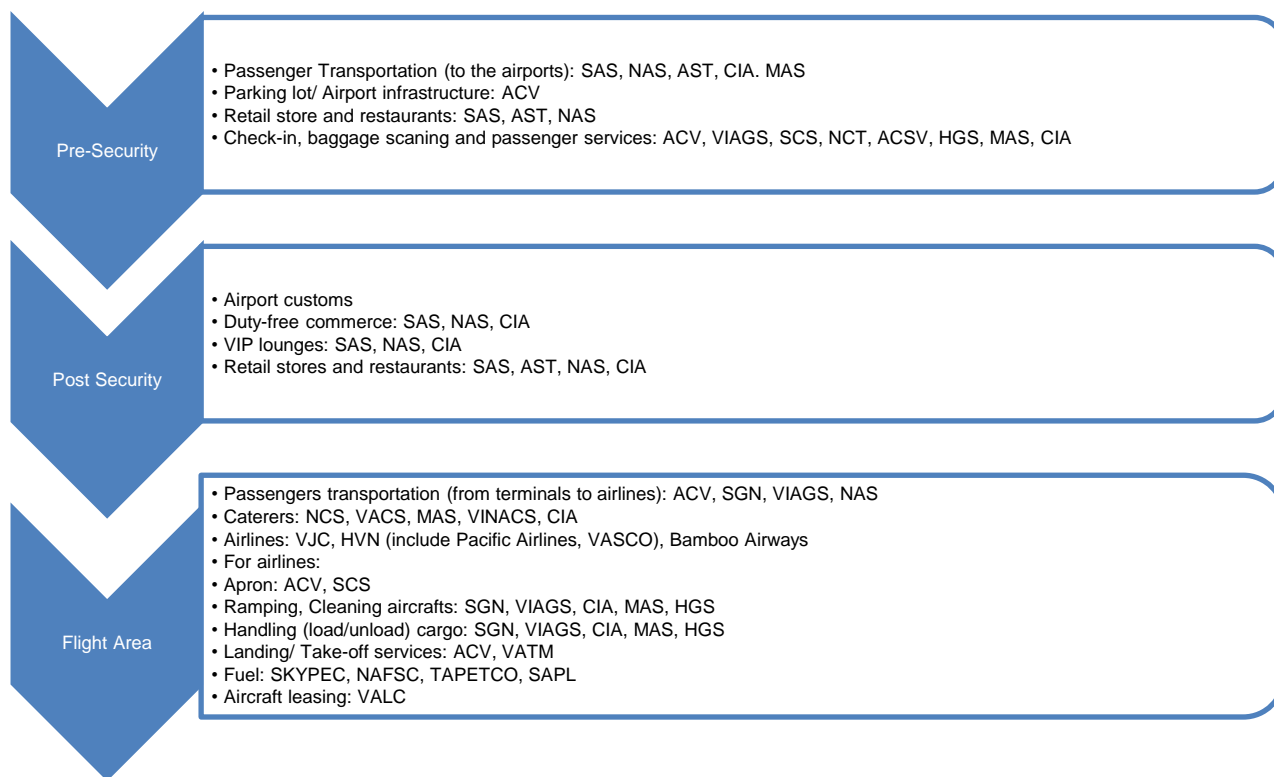
Airports		Earnings & Valuation										
Company name	Country	Mkt Capital	TTM Net Sales	YoY	TTM NPAT	YoY	ROE	ROA	EV/EBITDA	P/E	P/B	Net D/E
		(USDmn)	(USDmn)	(%)	(USDmn)	(%)	(x)	(x)	(x)	(x)	(x)	(%)
Airports of Thailand PCL	Thailand	28,747	552	(72.8)	(207)		(4.5)	(3.2)			7.1	(23.1)
Malaysia Airports HLDGS BHD	Malaysia	2,432	444	(64.2)	(266)		(15.2)	(5.3)	21.2		1.4	46.5
Shanghai International Air-A	China	15,817	624	(60.7)	(184)		(4.1)	(3.6)			3.5	(25.9)
Xiamen International Air-A	China	820	183	(28.5)	31	(58.5)	6.0	4.8		24.4	1.4	(29.9)
Beijing Capital INTL Airport-H	China	3,476	520	(66.8)	(295)	(85.4)	(8.6)	(5.8)	10.6		1.0	19.6
Guangzhou Baiyun Inter-A	China	4,626	815	(29.2)	15	(87.4)	0.7	0.4			1.6	(3.7)
Shenzhen Airport Co-A	China	2,693	435	(21.3)	4	(95.3)	0.2	0.2			1.5	(0.8)
Airports Corp of Vietnam JSC	Vietnam	6,856	334	(57.6)	71	(79.9)	3.4	2.9	44.3	125.8	4.2	(48.2)

Airlines – Low-Cost Carrier		Earnings & Valuation										
Company name	Country	Mkt Capital	TTM Net Sales	YoY	TTM NPAT	YoY	ROE	ROA	EV/EBITDAR	P/E	P/B	Net D/E
		(USDmn)	(USDmn)	(%)	(USDmn)	(%)	(x)	(x)	(x)	(x)	(x)	(%)
Interglobe Aviation Ltd	India	8,065	4,990	25.6	(33)		(3.6)	(0.7)	8.7		10.2	34.2
Spring Airlines Co Ltd-A	China	8,903	1,437	(30.6)	(4)		(0.2)	(0.1)			4.0	15.8
Air Arabia PJSC	UAE	1,626	504	(61.1)	(52)		(3.8)	(1.5)	16.7		1.3	24.1
Jeju Air Co Ltd	South Korea	813	320	(72.8)	(260)	(825.4)	(113.1)	(23.3)			4.2	207.3
Vietjet Aviation JSC	Vietnam	2,897	784	(64.0)	3	(98.2)	0.5	0.1	965.3	4.5	52.2	

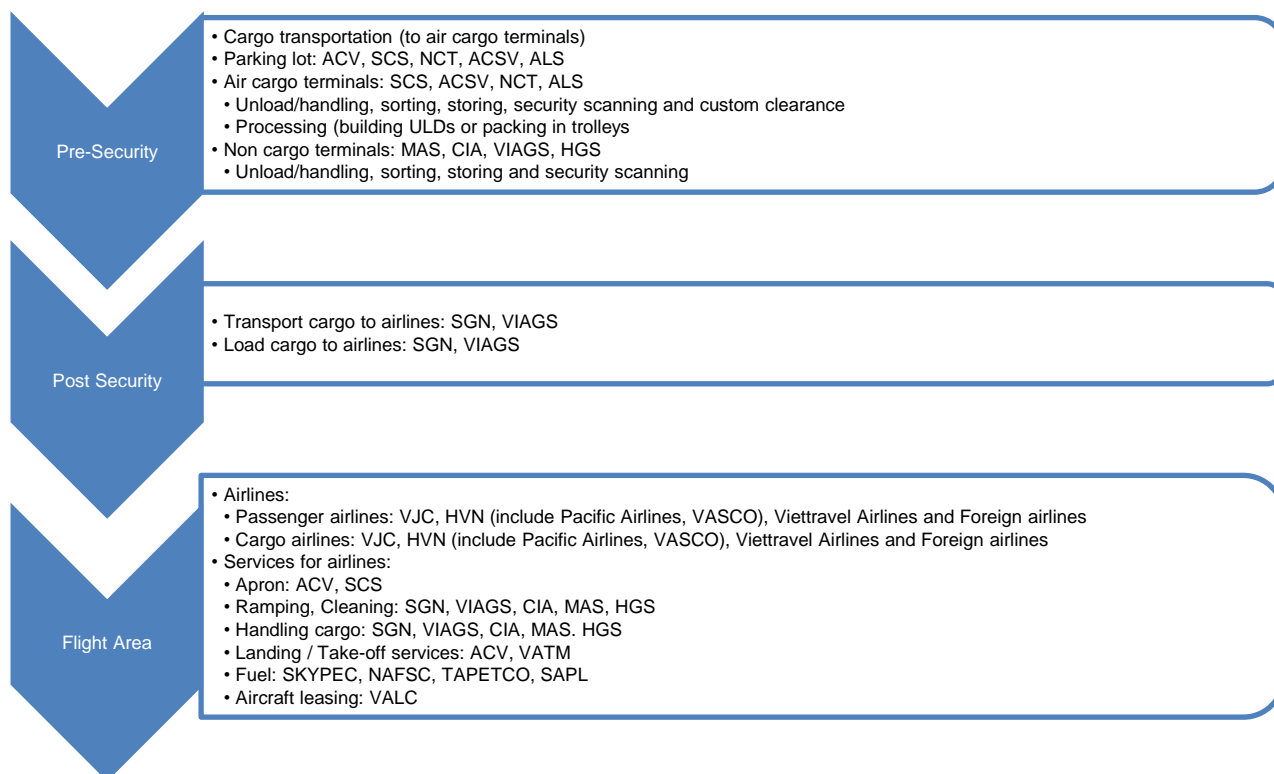
Airlines – Full-Service Carrier		Earnings & Valuation										
Company name	Country	Mkt Capital	TTM Net Sales	YoY	TTM NPAT	YoY	ROE	ROA	EV/EBITDAR	P/E	P/B	Net D/E
		(USDmn)	(USDmn)	(%)	(USDmn)	(%)	(x)	(x)	(x)	(x)	(x)	(%)
ANA Holdings Inc	Japan	11,272	8,617	(55.6)	(3,452)		(33.2)	(12.2)			1.1	56.5
Japan Airlines Co Ltd	Japan	9,344	5,968	(56.6)	(2,208)		(22.5)	(11.2)			1.0	(12.1)
Korean Airlines Co Ltd	South Korea	8,389	6,458	(39.3)	(180)	66.4	(9.1)	(0.8)	8.9		1.9	408.9
China Eastern Airlines	China	11,876	8,507	(51.5)	(1,717)		(19.6)	(4.2)	28.5		0.9	311.4
Hainan Airlines Holding	China	4,145	5,105	(50.3)	(2,241)	(323.2)	(40.0)	(8.4)	15.5		0.9	130.5
China Southern Airlines	China	14,128	13,429	(40.0)	(1,573)		(16.3)	(3.4)	14.4		1.0	205.1
Cathay Pacific Airways	Hong Kong	5,865	6,051	(56.1)	(2,791)		(37.5)	(10.3)			0.8	100.7
EVA Airways Corp	Taiwan	3,335	3,025	(50.9)	(114)		(4.7)	(1.0)	5.4		1.3	99.4
Thai Airways International	Thailand	142	1,526	(53.3)	(4,516)	(1072.3)		(60.9)				191.6
Garuda Indonesia Persero	Indonesia	584	2,171	(56.6)	(1,190)			(16.6)	1.5			
Vietnam Airlines JSC	Vietnam	1,772	1,745	(58.7)	(470)		(89.3)	(15.7)			6.5	525.5

Value Chain of Vietnam Aviation

For Passengers



For Cargo



■ **Guide to KIS Vietnam Securities Corp. stock ratings based on 12-month forward performance**

- BUY: Expected total return will be 15)p or more
- Hold: Expected total return will be between -5)p and 15)p
- Sell: Expected total return will be -5)p or less
- KIS Vietnam Securities Corp. does not offer target prices for stocks with Hold or Sell ratings.

■ **Guide to KIS Vietnam Securities Corp. sector ratings for the next 12 months**

- Overweight: Recommend increasing the sector's weighting in the portfolio compared to its respective weighting in the VNIndex based on market capitalization.
- Neutral: Recommend maintaining the sector's weighting in the portfolio in line with its respective weighting in the VNIndex based on market capitalization.
- Underweight: Recommend reducing the sector's weighting in the portfolio compared to its respective weighting in the VNIndex based on market capitalization.

■ **Analyst Certification**

I/We, as the research analyst/analysts who prepared this report, do hereby certify that the views expressed in this research report accurately reflect my/our personal views about the subject securities and issuers discussed in this report. I/We do hereby also certify that no part of my/our compensation was, is, or will be directly or indirectly related to the specific recommendations or views contained in this research report.

■ **Important compliance notice**

As of the end of the month immediately preceding the date of publication of the research report or the public appearance (or the end of the second most recent month if the publication date is less than 10 calendar days after the end of the most recent month), KIS Vietnam Securities Corp. or its affiliates does not own 1) or more of any class of common equity securities of the companies mentioned in this report.

There is no actual, material conflict of interest of the research analyst or KIS Vietnam Securities Corp. or its affiliates known at the time of publication of the research report or at the time of the public appearance.

KIS Vietnam Securities Corp. or its affiliates has not managed or co-managed a public offering of securities for the companies mentioned in this report in the past 12 months;

KIS Vietnam Securities Corp. or its affiliates has not received compensation for investment banking services from the companies mentioned in this report in the past 12 months; KIS Vietnam Securities Corp. or its affiliates does not expect to receive or intend to seek compensation for investment banking services from the companies mentioned in this report in the next 3 months.

KIS Vietnam Securities Corp. or its affiliates was not making a market in securities of the companies mentioned in this report at the time that the research report was published.

KIS Vietnam Securities Corp. does not own over 1) of shares of the companies mentioned in this report as of 26 Apr 2021.

KIS Vietnam Securities Corp. has not provided this report to various third parties.

Neither the analyst/analysts who prepared this report nor their associates own any shares of the company/companies mentioned in this report as of 26 Apr 2021.

KIS Vietnam Securities Corp. has issued CW with underlying stocks of stock names and is the liquidity provider.

Prepared by: Nam Nguyen

Global Disclaimer

■ General

This research report and marketing materials for Vietnamese securities are originally prepared and issued by the Research Center of KIS Vietnam Securities Corp., an organization licensed with the State Securities Commission of Vietnam. The analyst(s) who participated in preparing and issuing this research report and marketing materials is/are licensed and regulated by the State Securities Commission of Vietnam in Vietnam only. This report and marketing materials are copyrighted and may not be copied, redistributed, forwarded or altered in any way without the consent of KIS Vietnam Securities Corp..

This research report and marketing materials are for information purposes only. They are not and should not be construed as an offer or solicitation of an offer to purchase or sell any securities or other financial instruments or to participate in any trading strategy. This research report and marketing materials do not provide individually tailored investment advice. This research report and marketing materials do not take into account individual investor circumstances, objectives or needs, and are not intended as recommendations of particular securities, financial instruments or strategies to any particular investor. The securities and other financial instruments discussed in this research report and marketing materials may not be suitable for all investors. The recipient of this research report and marketing materials must make their own independent decisions regarding any securities or financial instruments mentioned herein and investors should seek the advice of a financial adviser. KIS Vietnam Securities Corp. does not undertake that investors will obtain any profits, nor will it share with investors any investment profits. KIS Vietnam Securities Corp., its affiliates, or their affiliates and directors, officers, employees or agents of each of them disclaim any and all responsibility or liability whatsoever for any loss (director consequential) or damage arising out of the use of all or any part of this report or its contents or otherwise arising in connection therewith. Information and opinions contained herein are subject to change without notice and may differ or be contrary to opinions expressed by other business areas or KIS Vietnam Securities Corp. The final investment decision is based on the client's judgment, and this research report and marketing materials cannot be used as evidence in any legal dispute related to investment decisions.

■ Country-specific disclaimer

United States: This report is distributed in the U.S. by Korea Investment & Securities America, Inc., a member of FINRA/SIPC, and is only intended for major U.S. institutional investors as defined in Rule 15a-6(a)(2) under the U.S. Securities Exchange Act of 1934. All U.S. persons that receive this document by their acceptance thereof represent and warrant that they are a major U.S. institutional investor and have not received this report under any express or implied understanding that they will direct commission income to Korea Investment & Securities, Co., Ltd. or its affiliates. Pursuant to Rule 15a-6(a)(3), any U.S. recipient of this document wishing to effect a transaction in any securities discussed herein should contact and place orders with Korea Investment & Securities America, Inc., which accepts responsibility for the contents of this report in the U.S. The securities described in this report may not have been registered under the U.S. Securities Act of 1933, as amended, and, in such case, may not be offered or sold in the U.S. or to U.S. person absent registration or an applicable exemption from the registration requirement.

United Kingdom: This report is not an invitation nor is it intended to be an inducement to engage in investment activity for the purpose of section 21 of the Financial Services and Markets Act 2000 of the United Kingdom ("FSMA"). To the extent that this report does constitute such an invitation or inducement, it is directed only at (i) persons who are investment professionals within the meaning of Article 19(5) of the Financial Services and Markets Act 2000 (Financial Promotion) Order 2005 (as amended) of the United Kingdom (the "Financial Promotion Order"); (ii) persons who fall within Articles 49(2)(a) to (d) ("high net worth companies, unincorporated associations etc.") of the Financial Promotion Order; and (iii) any other persons to whom this report can, for the purposes of section 21 of FSMA, otherwise lawfully be made (all such persons together being referred to as "relevant persons"). Any investment or investment activity to which this report relates is available only to relevant persons and will be engaged in only with relevant persons. Persons who are not relevant persons must not act or rely on this report.

Hong Kong: This research report and marketing materials may be distributed in Hong Kong to institutional clients by Korea Investment & Securities Asia Limited (KISA), a Hong Kong representative subsidiary of Korea Investment & Securities Co., Ltd., and may not otherwise be distributed to any other party. KISA provides equity sales service to institutional clients in Hong Kong for Korean securities under its sole discretion, and is thus solely responsible for provision of the aforementioned equity selling activities in Hong Kong. All requests by and correspondence with Hong Kong investors involving securities discussed in this report and marketing materials must be effected through KISA, which is registered with The Securities & Futures Commission (SFC) of Hong Kong. Korea Investment & Securities Co., Ltd. is not a registered financial institution under Hong Kong's SFC.

Singapore: This report is provided pursuant to the financial advisory licensing exemption under Regulation 27(1)(e) of the Financial Advisers Regulation of Singapore and accordingly may only be provided to persons in Singapore who are "institutional investors" as defined in Section 4A of the Securities and Futures Act, Chapter 289 of Singapore. This report is intended only for the person to whom Korea Investment & Securities Co., Ltd. has provided this report and such person may not send, forward or transmit in any way this report or any copy of this report to any other person. Please contact Korea Investment & Securities Singapore Pte Ltd in respect of any matters arising from, or in connection with, the analysis or report (Contact Number: 65 6501 5600).

Copyright © 2021 KIS Vietnam Securities Corp. All rights reserved. No part of this report may be reproduced or distributed in any manner without permission of KIS Vietnam Securities Corp.