



2021 Outlook

As we gaze into 2021, one cannot help but be puzzled. Should we be optimistic? Or remain in our cautious state?

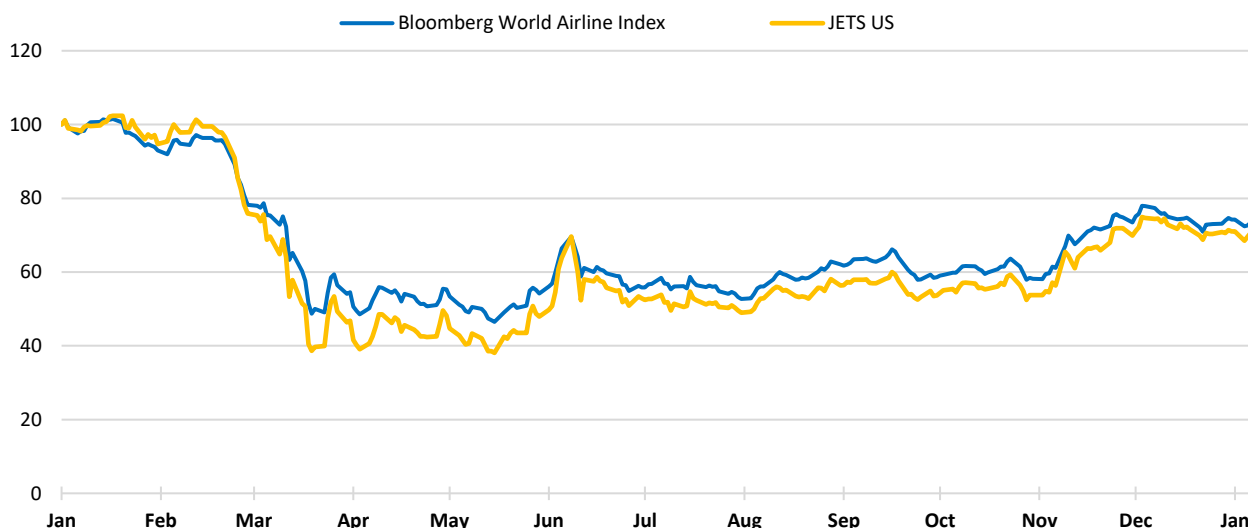
The World Bank forecasts global GDP growth of 4.2% in 2021, after a 5.2% contraction in 2020. This number will probably be revised as it was published back in July. A lot of things have happened since. No matter what final number gets churned out, it matters little as the feeling on the ground is multiple times worse.

2021 began with a second wave (third depending on where you are) of Covid-19 and it is spreading with unparalleled vigour. It makes the first outbreak in early 2020 look as if the virus was just warming up. The economic costs are mounting, and the final bill is far from being tallied.

The equity markets, however, suggest all is good. The S&P 500, and many other indices, are hitting record highs as credit spreads close in on their pre-pandemic levels despite 2020 being the biggest exogenous shock in living memory.

Things have been good for aviation stocks as well. Since the first news came out regarding the vaccines' high efficacy back in early Nov and subsequent emergency approvals for usage by regulators, the Bloomberg World Airline Index and the U.S. based global aviation ETF "JETS" have soared by 22% and 27%, respectively. Relative to where they were at the beginning of 2020, there are still 27% and 29% gaps to bridge.

Figure 1: Aviation benchmark performance in 2020



Source: Bloomberg

Vaccines and Federal banks are the heroes

We can attribute the trust of the markets to the accommodative monetary policy and stimulus support by federal banks across the world. The latest tally of global stimulus packages is USD19.5 trillion (and still growing), which equates to 13.7% of 2019's global GDP of USD142 trillion. That is one heck of a push. This financial support is expected to continue into 2021, though it will not be as large as the quantum seen in 2020. Many investment research strategists forecast half. Still a heck of a push.

Second, the vaccines are here. Both in record time and the number of variants. It also came right at the season of merry. "Things will be back to normal this summer" tune has surpassed Christmas carols back in December. J.P. Morgan's Chair of Global Research Joyce Chang said, "2021 will see the strongest global recovery in a decade if the vaccine prospects play out as expected". The market is clearly front-loaded with optimism that the vaccine/s rollout will overturn most, if not all the disruptions experienced this year. But this is a possibility and not a certainty.

Our thoughts on 2021 outlook

As we mobilise the Pangolin Aviation Recovery Fund this week, I think it is worthwhile for us to share our thoughts. You will see that we are guided by mathematics and logical thinking. The power of sentiment (both positive and negative) can be overwhelming at times, and greatly affect the market. But sentiments can change, numbers do not.

Here are our **six** themes of our investment thoughts into 2021.

1. Vaccines rollout will take a longer time than we hope for

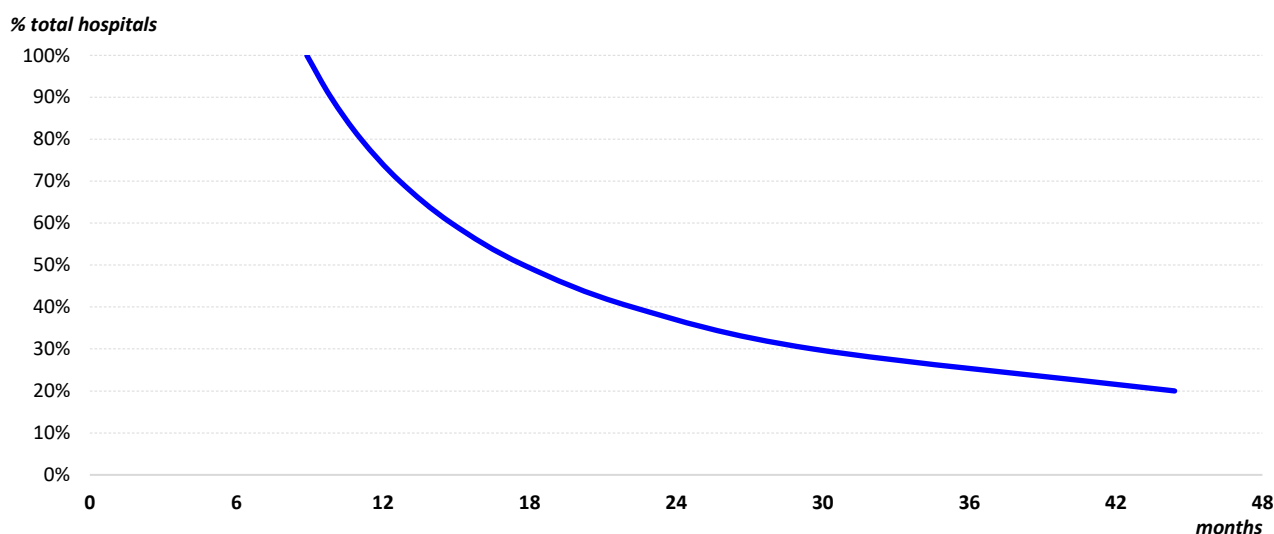
Bloomberg is following the development of the vaccine rollout, and thus far 17.5 million doses have been administered across 38 countries globally (updated as of 8 Jan 2021). The current global run-rate is estimated at 1.2 million persons vaccinated per day. At this rate, it will take 35.6 years to vaccinate the entire global population, assuming no new births and everyone obliges to their second booster shot. Even to achieve the minimum estimated level for herd immunity of 60% (herd immunity is estimated to be achieved when 60-80% of the population is inoculated), we are 21 years away. Thankfully, the number of people to be vaccinated daily will increase as the number of vaccination centres and participating countries rises.

There are sound bites that we can have the virus on the rear-view mirror by summer. But these statements are not supported by any numbers or explanations. Therefore, we attempt to validate this claim. We look to Israel's Covid-19 vaccination drive as a benchmark, as they are purported to have the best vaccination program. The country has been able to vaccinate on average 60,000 people per day across 85 healthcare facilities. Each facility vaccinates an average of 700 people per day and operates seven days a week.

Assuming all the vaccination centres in the world can get up to Israel's level of efficiency, how quickly do we think the world can be vaccinated? The best-case scenario is based on the following assumptions: (1) the World's population is 7.8 billion; (2) every vaccination centre operates at the same level as Israel's, at 700 people/day; (3) the facilities are open every day; (4) uninterrupted supply of vaccine; and (5) every person shows up on-time for their second booster shot.

According to the World Bank, there are 165,000 dedicated hospitals worldwide in 2016. Not all these hospitals can be used as some are psychiatric related, children's hospital, hospice, or maternity-care only. Assuming 100% of global hospitals are used, it will take approximately nine months for the world to be vaccinated against the Covid-19 virus. I think we will be closer to 50% or 8 months.

Figure 2: Time taken to vaccinate world population vs. number of global hospitals mobilised for vaccination effort



Sources: World Bank, Pangolin Aviation Recovery Fund forecast

As you can see, the claim that the pandemic will be over by summer is spurious. Clearly, it is not possible. We have the utmost confidence that the vaccines will work wonders. If targeted at individuals with the highest risk first, death rates could plunge very quickly. Transmission rate will trend down gradually in a linear fashion, proportional to the number of people vaccinated. The initial decline is linear but will rise exponentially when it gets closer to the herd immunity level, which is estimated at 60-80%. We need to give the vaccines a bit of time to work their magic.

2. Covid-19 will get worse before it gets better

The pace of new Covid-19 infections is accelerating in the U.S., much of Europe, and other parts of the world. The virus has mutated and has become more virulent.

As the pandemic drags on and fatigue sets in, new waves of infections are likely. Avoiding complacency, controlling stress, maintaining discipline, and adhering to social distancing will be serious challenges, particularly because we cannot forever remain closed to each other and the world. We have also seen how people have given in to the temptation of large or small gatherings.

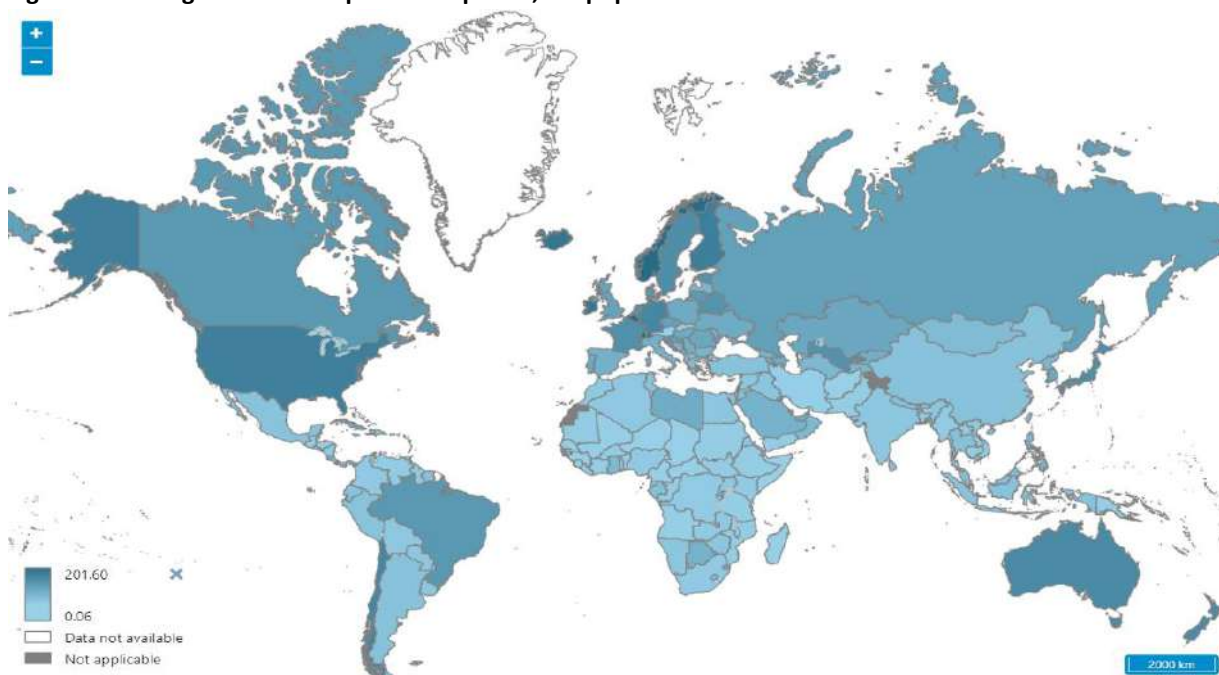
Furthermore, it is winter in the Northern Hemisphere. Winter forces people to spend more time indoors and breathe stale heated air. The dry air often cracks open the skin in the nostrils and lips, which serves as a gateway for pathogens to enter the body. Covid-19 does not discern indoors or outdoors. It is not bothered by climate, and it will take advantage of any lapse or opportunity.

Worse, the people we need the most, are increasingly out of reach. People in the frontline of healthcare are susceptible to the virus and increasingly being put to self-isolation due to contact with positive individuals. The same goes for people involved in transportation and enforcement agencies. The odds are increasing that lockdowns are necessary for many regions to avoid overwhelming hospitals and other critical infrastructures.

3. Vaccination progress will be divided

Figure 3 shows the number of nurses per population spread across the world. As the vaccines are likely to be administered by them, and therefore, the higher the number of nurses, the better. The strength and resource of the healthcare industry will greatly influence the speed of the vaccination process.

Figure 3: Nursing and midwife personnel per 10,000 population



Source: World Health Organisation

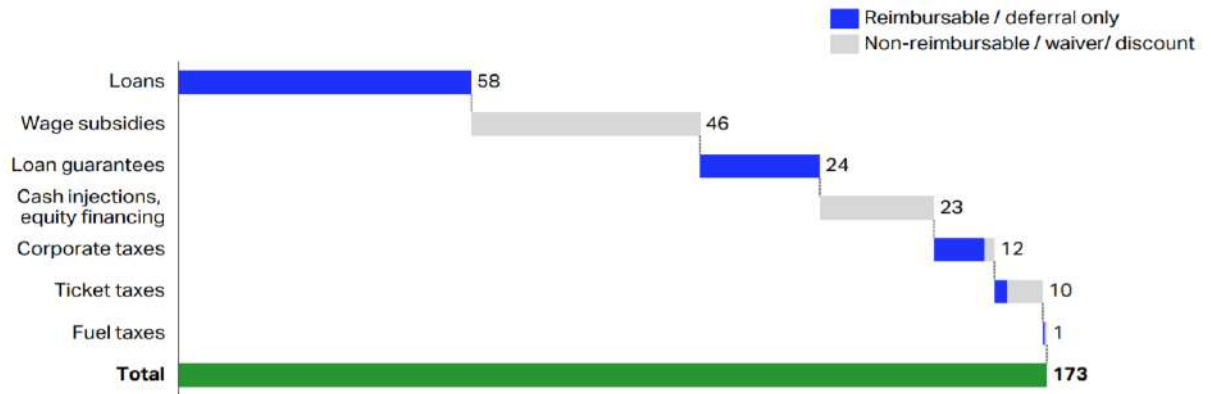
We think the smaller prosperous nations with rigid borders such as New Zealand, Singapore, Brunei, Hong Kong, Macau, Qatar, Bahrain, Kuwait, Malta, Israel, Iceland, and Ireland can resolve this in as little as 4-6 months – assuming they have secured their vaccine supplies. We think these countries will promote travel bubbles with each other as soon as a high level of population has been vaccinated.

The bigger countries face greater complexity due to greater population, difficulty in manpower mobilisation, and resource scarcity. It will take them a great deal longer to resolve the pandemic.

4. More airlines will become state owned

Governments have been helping the airline industry via wage subsidies, cash handouts, tax waivers, and paid for scheduled flight charters. It has also provided indirect assistance with loans and loan guarantees. In aggregate, the financial assistance is USD173b. IATA forecasts the industry to make a loss of USD119b in 2020 and a further USD39b in 2021.

Government aid made available to airlines due to COVID-19, by type (USD bn)

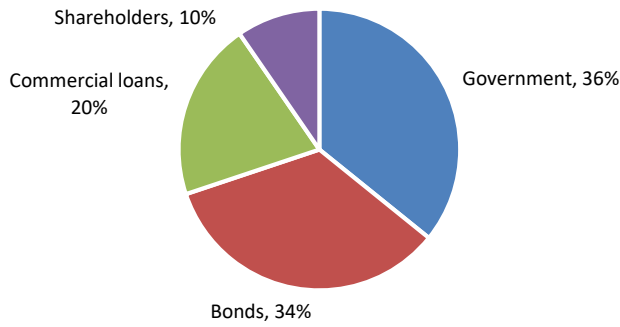


Source: IATA Economics analysis using public information and data from SRS Analyser, DDS, FlightRadar 24, TTBS, ACIC, Platts, Airline Analyst, annual reports. Includes relief measures up to 13 Nov 2020.

The total capital provided to global airlines to shore up their balance sheet amounts to USD229b in 2020. Governments have provided the lion share at 36% of the total amount followed by bondholders at 34%. Many of these bondholders are government-linked companies. The other bondholders participated solely because they are comforted by government's support, not because of the rating – almost all the airlines' bond ratings are below investment grade.

The important thing to highlight is that shareholders are minority supporters and contributed only 10% @ USD22b via participation in rights issue and private placements. In my view, this is not a resounding show of confidence by the shareholders.

Figure 4: Capital Providers to Global Airlines

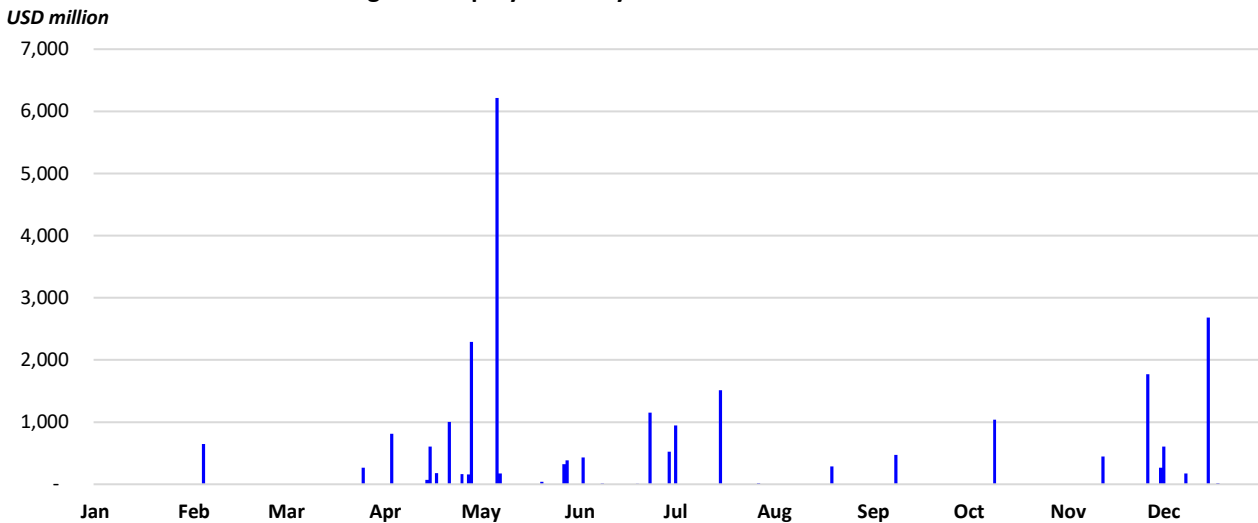


Source: IATA Economics, Bloomberg

Should airlines fail and default on their loans and bonds (and we certainly think there will be a few), Governments will end up becoming the main shareholder. We are heading back to the days where many airlines are state-owned. As it stands, governments are providing 70% of the capital for airlines to continue breathing (both direct and indirect financial assistance). Nobody else has the capacity to buttress the industry.

The counterargument is that equity investors are more amenable to investing in airlines as seen by the recent share price surge. Figure 5 shows the quantum of new equity raised by equity investors in 2020. Note that there were more funds raised in the early part of 2020 when the crisis was at its peak than in 4Q20 when the vaccine story was released. The two big equity issuances in Dec came from Japan Airlines and All Nippon Airways, both of which received significant government assistance and loan guarantees.

Figure 5: Equity raised by airlines in 2020



Source: Bloomberg

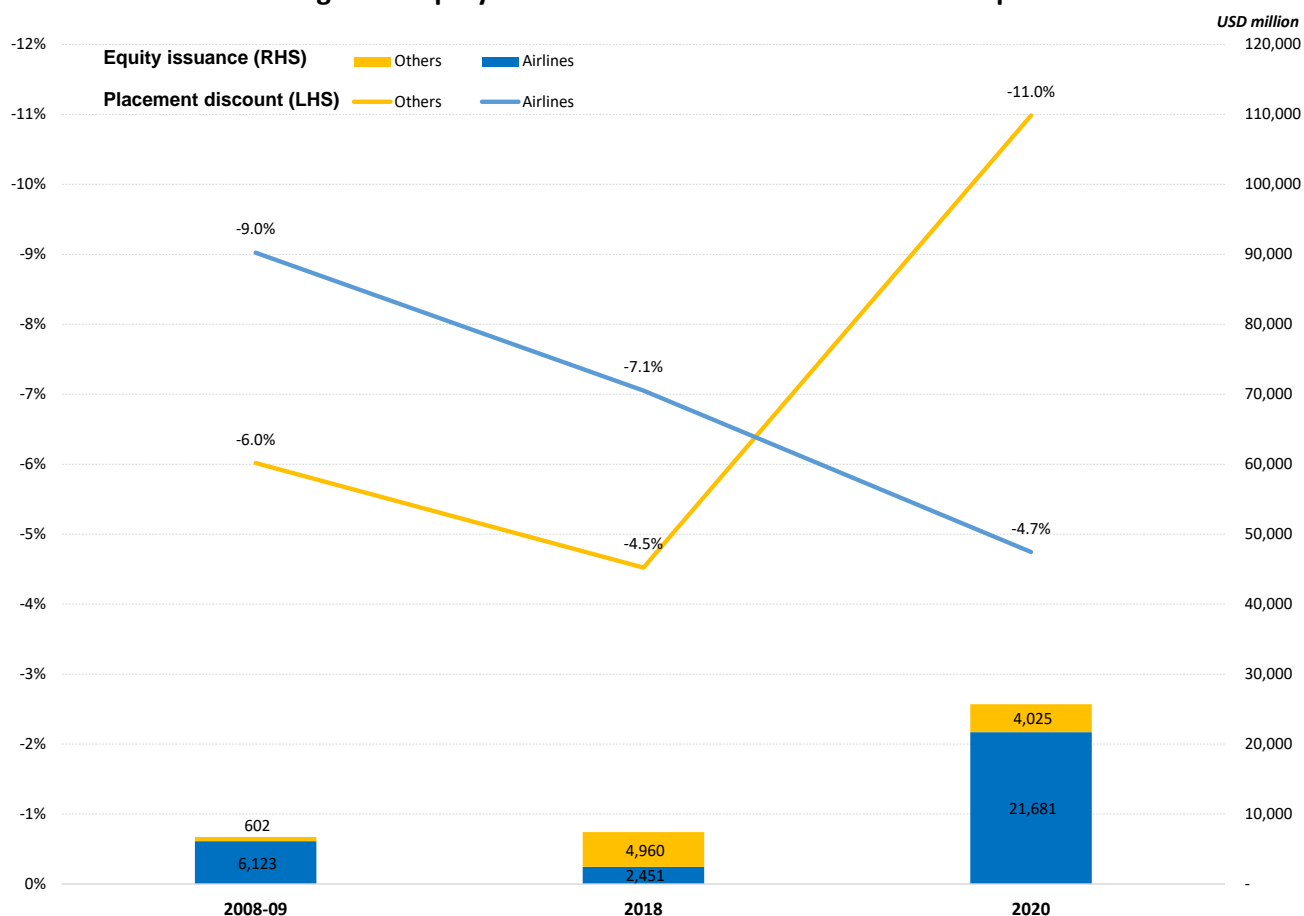
5. Raising new equity will be more challenging compared to 2020

Figure 6 shows the equity raised by shareholders and the placement discounts across three different periods. The first is during the Global Financial Crisis of 2008-09 (GFC). Airlines raised USD6.1b with an average placement discount of 9%. Other aviation-related companies raised USD0.6b with an average discount of 6%. These data provide good insight into market behaviour in a crisis.

The second data point is 2018, the year the aviation industry enjoyed record profits. The placement discounts have narrowed to 7.1% for airlines and 4.5% for other aviation-related companies. This makes sense as the strong financial performance commands superior valuation.

In 2020 however, we see startling anomalies. The placement discount for airlines has narrowed further to 4.7%, at a time when the industry is facing its worst crisis ever. Other aviation-related companies saw erosion in their placement discount, which is to be expected during a crisis.

Figure 6: Equity raised and issuance discount to market price



We think the key reason for the narrow placement discount for airlines is because of strong government support. Investors were confident the airlines will survive and rise from their multi-year lows. We believe this sentiment is no longer as resounding, judging by the scale of financial losses and how quickly airlines burnt through the capital raised.

6. 4Q20 results will give a jolt of a reality check

We have been talking to a number of airlines globally. All have said that demand has softened in late November, planes are flying emptier, and average ticket prices are way lower. Many airlines and other aviation-related companies have issued a negative trading statement. I am not sure if the market fully understands that airlines lose way more money flying empty planes than grounding the aircraft.

The first glimpse of D-day happens on 29 Jan 2021 when Japan Airlines and All Nippon Airways reports their Dec-2020 quarter numbers. We think the Japanese market will serve as a credible barometer for the bulk of the Northern Hemisphere (except China which is already at an advanced stage of recovery). The parameters are similar: (1) people who can clearly afford and want to travel; (2) but, rising Covid-19 numbers have forced border closures and stricter travel restrictions; and (3) many flight cancellations and revisions in the Winter schedule.

We see opportunities in.....

I know that my six themes might sound a little negative. But I believe that by the end of this year, we will be able to look back and say that 2021 was an improvement over 2020. The first half of 2021 will bring forth deep challenges that necessitate two hard decisions to make with no further delay or pushback.

First, not all airlines will survive. The sooner they disappear, the better chances for the industry to recover speedily and efficiently. Investors are increasingly alarmed at the rate of cash burn by many aviation companies. Capital raising in 2021 may be even more challenging than in 2020. Therefore, we will build positions in companies that we are confident that will survive this crisis, as they should thrive in a consolidated market.

Second, industry consolidation will accelerate. We think there will be a few mergers and acquisitions in the online travel agencies and component manufacturers segments. Some airlines will merge, like it did in South Korea between Korean Air and Asiana.

Against this backdrop, we see better investment opportunities in Asia and Australasia particularly specialised travel agencies focusing on premium travel. We have seen in this pandemic that niche operators do much better than mainstream companies. Our target investments are trading at attractive valuations that commensurate with its strong fundamentals. We think most companies in Europe and the U.S. are trading at lofty levels. They will struggle to justify their recent stratospheric share price rise.

It will be an exciting year ahead, and hopefully rewarding too. I hope you have a safe and healthy 2021.