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Global outlook: Is this the nadir?

IN THE course of producing this article the British government reversed its Covid policy, imposed a lockdown and in effect suspended air services to/from the UK for at least a month, resulting in unremitting gloom. Then came news of a break-through in a Covid-19 vaccine and the prospect of it being fairly quickly available, resulting in a burst of euphoria.

Airline share prices have perked up, at least confirming that there is still investor belief in the industry's ability to stage a recovery. And Zoom shares, which had been soaring, dropped off sharply, which might also be a source of comfort to airlines.

But the fundamentals have not changed yet. All long-haul markets remain comatose, though domestic and short/medium haul markets have at least come off the bottom, with the latest traffic numbers for indicating a mere 60-80% fall in RPKs compared to a year ago. But, with the exception of the Chinese domestic market where capacity has been restored to pre-Covid levels, the traffic upturns or upticks seem to be very fragile.

The economic recovery will take place but when and how is the big question. Drained by fruitless discussion about whether the recovery will be V, U or L-shaped, some economists have come up with the idea of a K-shaped upturn. What this means is a sectorally unbalanced recovery — that some elements of the economy, represented by the upwards stroke of the K, have been turbo-charged by the Covid crisis — IT, online retail, video conferencing, for example — while other sectors are stuck in the downward stroke. Aviation was clearly meant to be represented by the downward slope.

The more conventional IMF produced its latest forecast in October — see graph below. What is particularly apparent in the geographically unbalanced recovery pattern. China is set for a full recovery, its economic influence further enhanced by the signing of the Regional Economic Partnership Agreement, establishing a comprehensive free trade zone in the SE Asian region. Europe and the US (pre-Bidon) and expected to scarcely recover the 2019 GDP levels in 2021, even assuming an accommodation with the virus. The UK's prospects are marred by the threat of a no-deal Brexit (though from our discussions with interested parties, it is likely that a trade deal will be reached before the end-of-year deadline).

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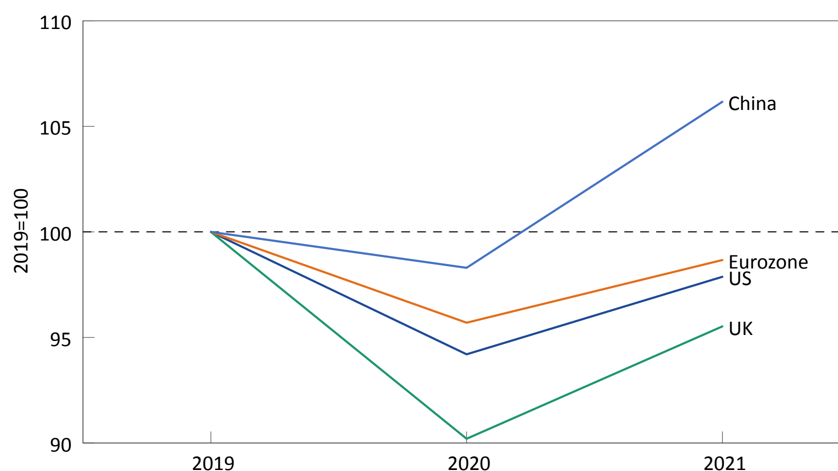
Boeing being courageous

Meanwhile, Boeing has been reconsidering the longer-term aviation demand trends, and has been courageous in producing its annual Cur-



Source: IMF World Economic Outlook, Oct 2020

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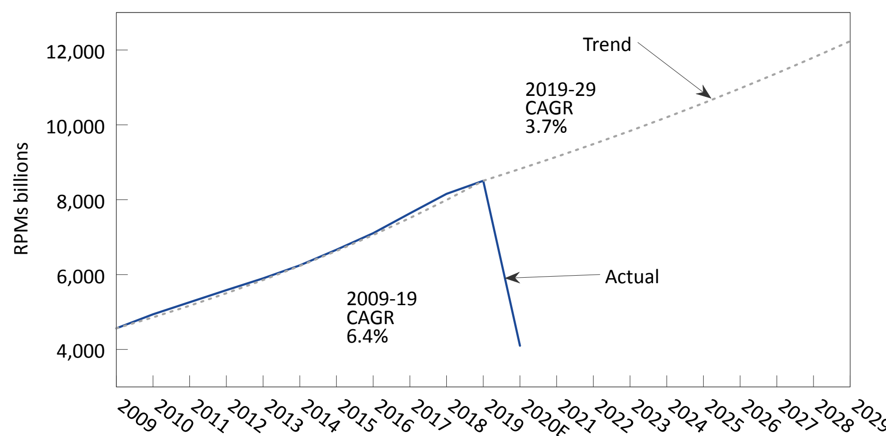


rent Market Outlook for 2020-39 (Airbus will not publish its global forecast this year). Basically, Boeing has reaffirmed its belief in the fundamental linkage between economic output — which Boeing assumes will be 2.5% pa globally for 2020-39 — and traffic demand. The 2020 CMO forecast assumes that the global RPKs will rebound from the Covid depression, though Boeing has not attempted to specify the timing or the quantum. It expects a resumption of a long-term growth trend: for the period 2019-29 the average annual traffic growth rate is put at 3.7%,pa which is a bit lower than but not radically different from, the previous forecast, made in 2019, of 5.1% pa growth for 2018-2028.

This gets global traffic up to 12.5tr RPKs by 2029 compared to 8.5tr in 2019. For historical perspective, Boeing's CMO published back in 2000 projected an increase from 3.2tr RPKs in 1999 to 8.1tr RPKs in 2019. That forecast proved to be quite impressively accurate, especially considering September 11, SARS, Global Financial Crisis, etc. intervened in the following 20 years. But, as the graph above illustrates, the 2020 air traffic collapse, has been like no other.

The projected aircraft delivery forecast has been shifted down to 43,110 units for 2020-39 from 50,660 in the previous forecast. In the medium term, to 2029, the majority of deliveries, 56%, are for replacement of obsolete aircraft rather than growth. The expected replacement percentage in the previous 20-year forecast was 44%.

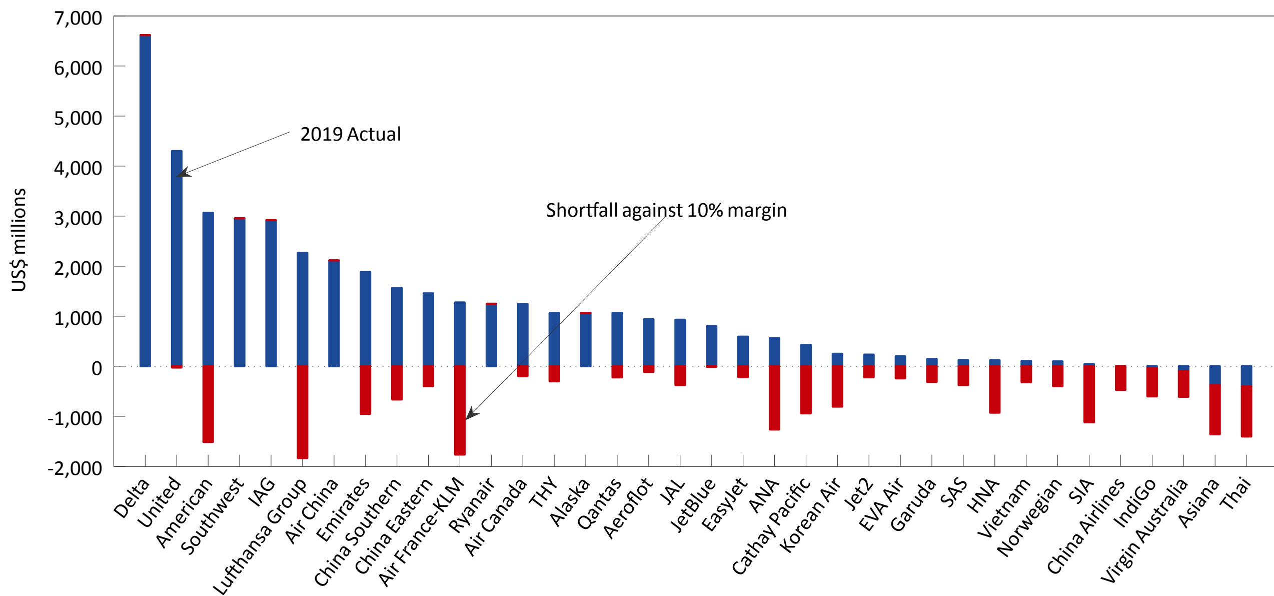
Zombie airlines?

The simple question is: how will airlines be able to pay for these new aircraft?

Even a full traffic rebound in itself does not mean an industry recovery. The legacy of 2020 will be a pile of debt that threatens to turn airlines into Zombie companies, viable just at the operating level but using all their free cashflow to pay down debt rather than for capex, building reserves for the next downturn or even returning cash to shareholders through dividends and share buy-backs.

Global airline debt, according to IATA, was $430bn at the end of 2019; in 2020 governments worldwide will have lent over $100bn to airlines (in addition to injecting about $10m in equity and providing wage and other

ACTUAL AND "REQUIRED" OPERATING PROFIT 2019



subsidies worth about $60bn). As a rough estimate, commercial banks, capital markets and lessors will have provided another $70bn. This brings the global airline debt pile up to at least $600bn by the end of this year (our estimates based on original IATA numbers).

Near zero base interest rates are not relevant to indebted airlines, especially those that have received state aid loans. The terms of these loans, in both Europe and the US, typically include escalation of the interest rates from 3-4% pa to 7-8% pa, in order to incentivise conversion of the government debt to commercial loans or equity.

Sale and leasebacks and asset-based-loans have been a welcome source of funding through the crisis. But it is becoming clear that the lessors are under increasing pressure from deferrals, defaults, and demands to convert leases to power-by-the-hour agreements. The structured finance operations of many investment banks have been frozen.

Legacy CEOs in Europe and the US have started to make semi-optimistic noises about emerging from the crisis and the basic soundness of their business models. Cynics might observe that their remarks are primarily targetted at governments rather than investors, with the aim of ensuring that support is available if/when needed.

Again according to IATA's analy-

CASH IS KING

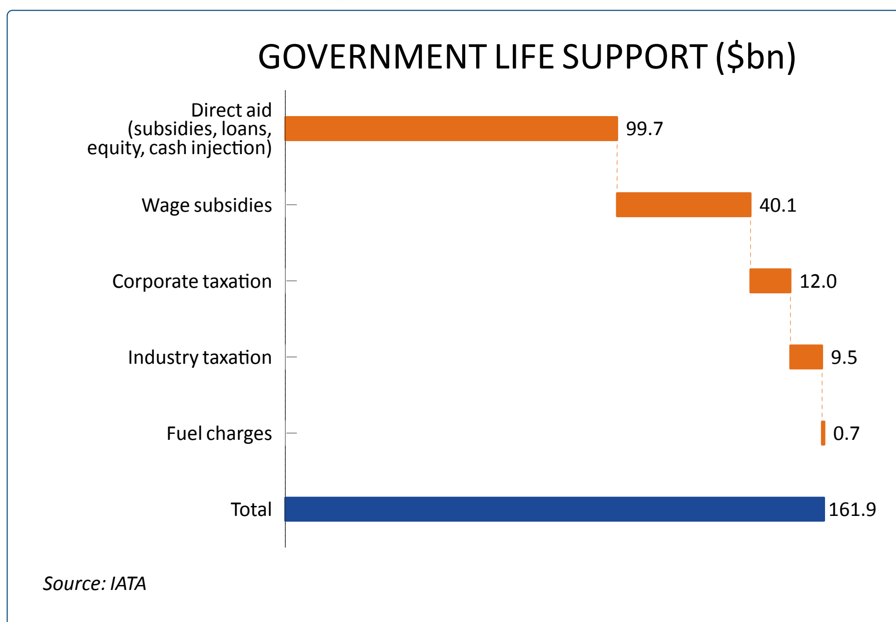
	Cash				Est Cash burn			
	¤m	*% 2019 Revenues*	Available	Total Liquidity	¤m per day	months	Net debt	Inc in net debt
IAG	€7,751	*37%*	1,600	9,351	22	14.2	8,355	784
Lufthansa Group	€3,800	*28%*	6,300	10,100	30	11.1	8,930	2,268
Air France-KLM	€6,872	*46%*	5,528	12,400	13	30.9	9,308	3,161
Ryanair	€3,940	*49%*		3,940	5	24.6	868	465
Delta	$21,525	*46%*		21,525	24	29.5	17,012	6,523
American	$8,300	*30%*	5,300	13,600	44	10.2	32,905	3,445
United	$13,700	*45%*	5,700	19,400	25	25.5	19,161	3,655
Southwest	$14,600	*70%*	1,000	15,600	16	32.0	-2,005	-1,929

sis, the global industry's cashflow will stay negative until the end of 2021 — see chart below. But there is a wide variation in the financial positions of airlines.

Liquidity is not now such a pressing issue now for the leading European and US carriers. Through state loans, junk bond issues and emergency rights issues, the Legacies have built up enough liquidity to last one to two years, though at the expense of greatly increased debt — see table on the previous page. IAG's €2.7bn equity raise looks like an excellent move especially now that the share price has recovered with news of the vaccine. The two major LCCs are in a similar position, but without having had to increase debt significantly (in fact, a decrease in Southwest's case).

The real issue is how to rebuild — or in cases like Alitalia, build for the first time — a commercially successful company. To avoid Zombie status, the deeply indebted airlines need to go through a capital restructuring. In other words, they need to attract equity. And in order to attract equity they will have to greatly improve their commercial fundamentals. Financial engineering will not work on its own.

To put the $600bn debt figure to some form of context: in 2019, a goodish, normal year, the world's top 70 airlines achieved $735bn in revenues and a generated operating profits of $46bn, a margin of 6.2%. With the impact of Covid-19 on balance sheets, a minimum 10% operating margin will be needed. But the chart on the preceding page indicates the extent to which most airlines fail to meet that target — the red bars show the shortfall in operating profit required to achieve a 10% margin. Big names like American, Lufthansa and Air France-KLM fail on this measure; those exceeding the target were Delta, Southwest, Alaska, Ryanair and IAG.

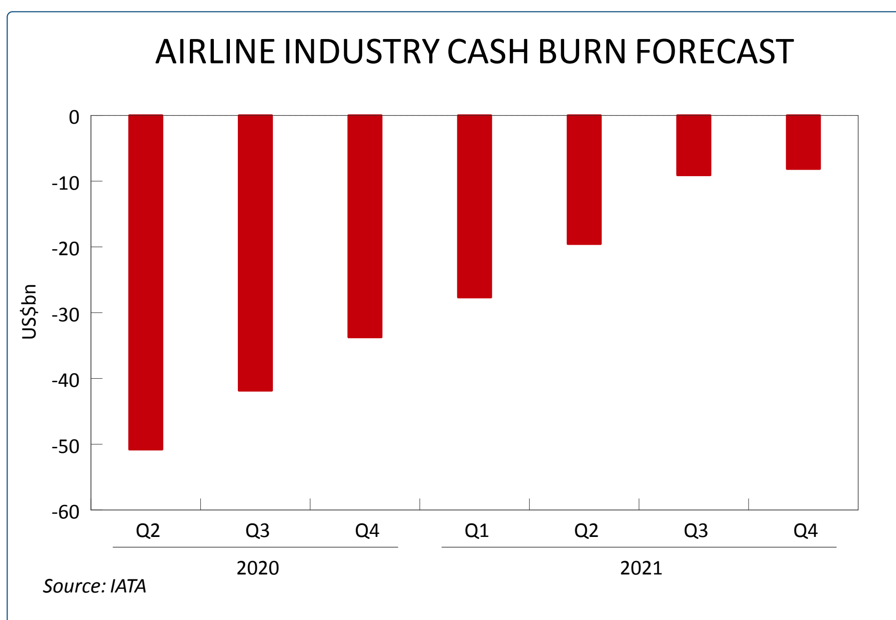


Source: IATA

Post Covid models

Rebuilding networks in the post-Covid world is going to be challenging. In the short/medium term no one can be confident about how much demand will recover in the Leisure, VFR and Business segments, nor be sure to what degree the algorithms in yield management systems (YMS) are still valid. YMSs depend on data on booking profiles built up over years in order to manage fares and allocate capacity between different classes or buckets; the old relationships between price and demand may be re-established, or they may not.

The LCC model is more manageable in that route P&Ls do not have to factor in the complexities of connecting traffic and different aircraft types. When a service is restored it has to generate, after a reasonable time pe-



Source: IATA

riod, enough traffic and revenue to return a profit, or it is terminated.

This is something that the LCCs, or at least the ULCCs, can do fairly smoothly because they do not have sunk costs in a particular but do have alternative routes on which the aircraft can quickly be allocated. They do not have to factor in the impact of closing a route of the profitability of connecting routes.

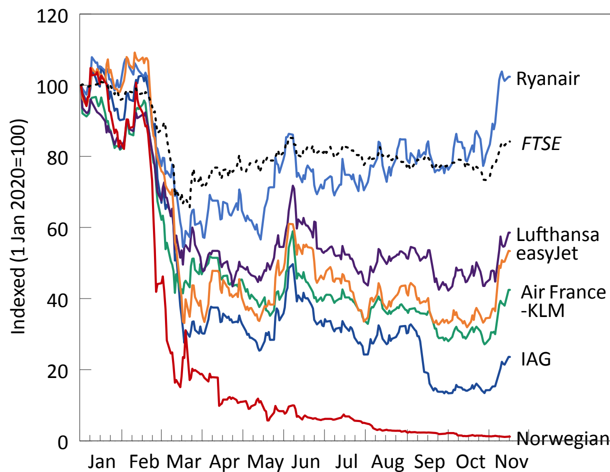
Michael O'Leary, CEO of Ryanair Holdings, as usual cuts through the analytical agonising. Once Covid-19 restrictions are lifted Ryanair will stimulate its markets back to 2019 levels through reducing fares to whatever level is necessary.

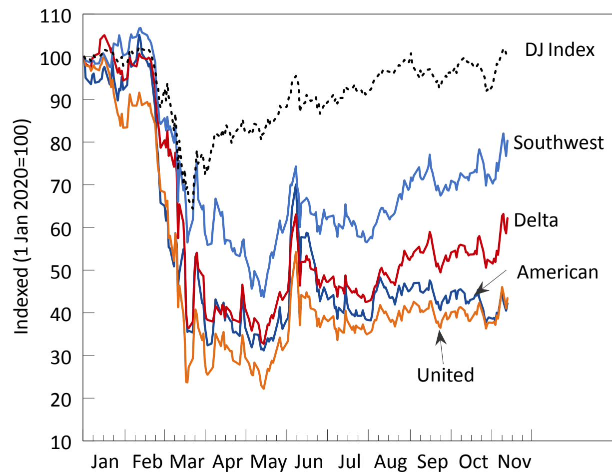
Things are a bit more complicated for the European network carriers whose hubs focus on connecting short/medium haul passengers onto intercontinental flights.

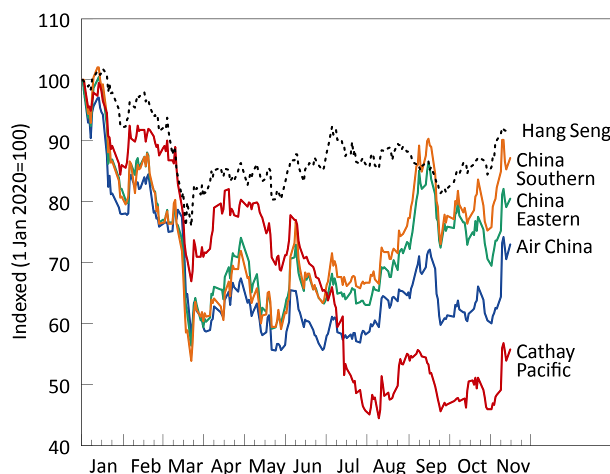
Their recovery depends not only on the re-opening of long-haul markets, which is a political decision, but also on the strength of the long-haul traffic demand.

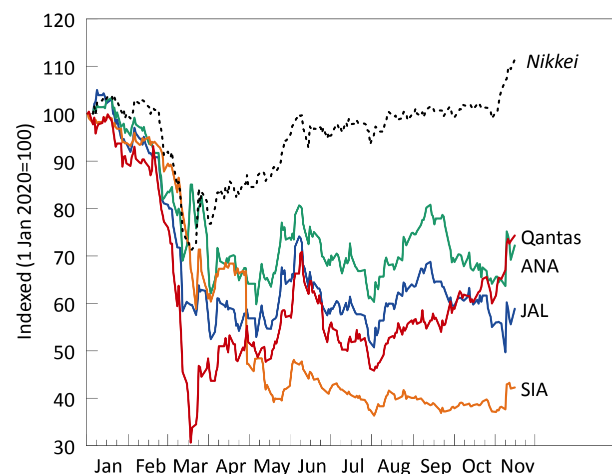
The worrying prospect is that intercontinental, in particular North Atlantic, traffic may be suppressed for some time even if all the Covid

AIRLINE SHARE PRICE PERFORMANCE 2020









barriers are removed. The reason is that long-haul business travel will probably not rebound to anything like pre-Covid levels, partly because of new communication technology, partly because corporate travel budgets will continue to be squeezed, partly because the top echelons will switch to business jets. This means that the old revenue rules — for example, premium class accounts for 10% of the passenger load, 40% of passenger revenue — no longer apply. Business classes will no longer be capable of "cross-subsiding" Economy classes, which implies higher Economy fares and suppressed demand from leisure passengers, already uncertain about resuming long-haul flying.

For the European network carriers, a key strategic issue will be right-sizing feed networks to match the new long-haul networks, culling short-haul capacity to mitigate competition from the LCCs and abandoning non-hub short-haul operations. The European hubs that appear to be most vulnerable in the post-Covid world are those like Amsterdam, and even Frankfurt, which do not have strong Origin and Destination flows and have to funnel larger volumes of connecting, and lower yielding traffic through the systems. London, with very strong and high yielding intercontinental O&D markets, would appear to be the best positioned hub as it has a high proportion of local traffic in its overall passenger mix.

US network carriers, which operate hubs that principally connect domestic routes, could see their traffic surge in a robust recovery. As individual flights are added back into the hub and spoke systems, the number of connecting opportunities between city-pairs increases exponentially. All those thin O&D segments agglomerate through the power of the hub. Then restoring full waves of flights further reinforces the traffic upturn (the classic S-shaped demand curve).

But Covid-19, despite the hope of an effective virus, may now pose more of a threat to the US than to Europe. Up to now President Trump's response has been, well, laissez-faire; under a Biden Administration, there will be a more proactive policy, with the prospect in 2021 of lock-downs on a European scale.

Sixth freedom global networks have been the hardest hit by the Covid-19 shutdowns, losing up to 90% of their passenger traffic (cargo providing a bit of life support). Emirates' first-half loss of $3.4bn suggests that its total losses for this year will wipe out its accumulated profits for the past five years. State aid received by SIA so far more than 20% higher than its 2019 revenues. The only solution would appear to be downsizing and reliance on government support until travel restrictions are lifted and international travel resuscitates.

A bit of optimism

Airlines will make a total net loss of $84bn in 2020, IATA estimates. maybe more as everything that can feasibly be written off should be dumped into the 2020 financials. But, because of the vaccine, this could be the nadir, and there are opportunities at this point in the cycle. IAG has recapitalised through the equity markets. Air France; if it is allowed to fully implement it, has an effective turnaround strategy; Delta and United remain powerful; the Chinese network carriers are growing, being boosted by China's increasing economic and political power in Asia; LCCs like Ryanair, Wizz, Southwest, JetBlue and Spirit will rebound as markets reopen; investors are willing to take punts — Bain Capital with a reinvented Virgin Australia, individuals with Breeze, David Neeleman's new A220 venture scheduled for next year; new start-up business plans, of varying plausibility, are appearing.

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- Super-Connectors: Financial and Strategic Analysis
- Key Trends in Operating Leasing
- Business Jet Operating Leasing Prospects
- Widebody Jet Demand Trends

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AirAsia: KISS principles lost in Digital Lifestyle

The Felicitous Tony Fernandes, CEO of AirAsia, always seems to manage to find a way to put a positive spin on news. So, at the publication of AirAsia's Q2 results he tried to suggest that AirAsia is more than an airline and happily mentioned as a key highlight of the year that the company had "successfully pivoted the airline into a digital lifestyle company".

The group, stating "travel has changed and so have we", has set up a new reporting division from its RedBeat Ventures (renamed as AirAsia Digital) which is to act as an "all-in-one digital travel and lifestyle ecosystem for ASEAN". It includes:

✈ website platform AirAsia.com which, beyond selling its own flights, acts as an online travel agent selling flights on other airlines (piggy-backing on OTA aggregator kiwi.com), direct sourced hotels, travel packages, experiences, food and groceries. It has plans to expand its product offerings into Hajj and Umrah packages, Medical tourism and Corporate Travel. Apparently revenues grew by 137% year-on-year in the three months to June despite the fact that most of the airline fleet had been grounded.

✈ Teleport Anywhere — the group's cargo operation — which this year has concentrated on last mile deliveries and developed home deliveries of "Food by AirAsia" and "Fresh by AirAsia". It claims a unique position in the Asean region with available capacity of around 1bn parcels and a network reach of 85 cities;

✈ BigPay, a financial services application which provides a digital wallet for payment in Malaysia and Singapore (it expects to get licences for the Philippines and Thailand soon), international money transfer services to 18 countries from Malaysia and Singapore, with ambitions to provide billpayments, lending, wealth management and insurance;

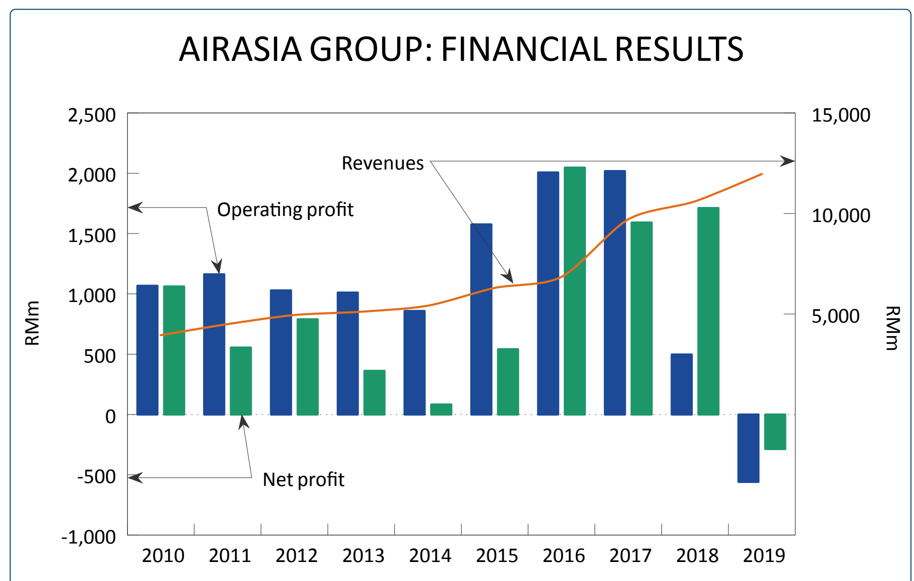
✈ AirAsia Big Loyalty, its frequent flyer programme with 26m members. In September it rebranded as BIG Loyalty, as if to divorce it from the AirAsia brand.

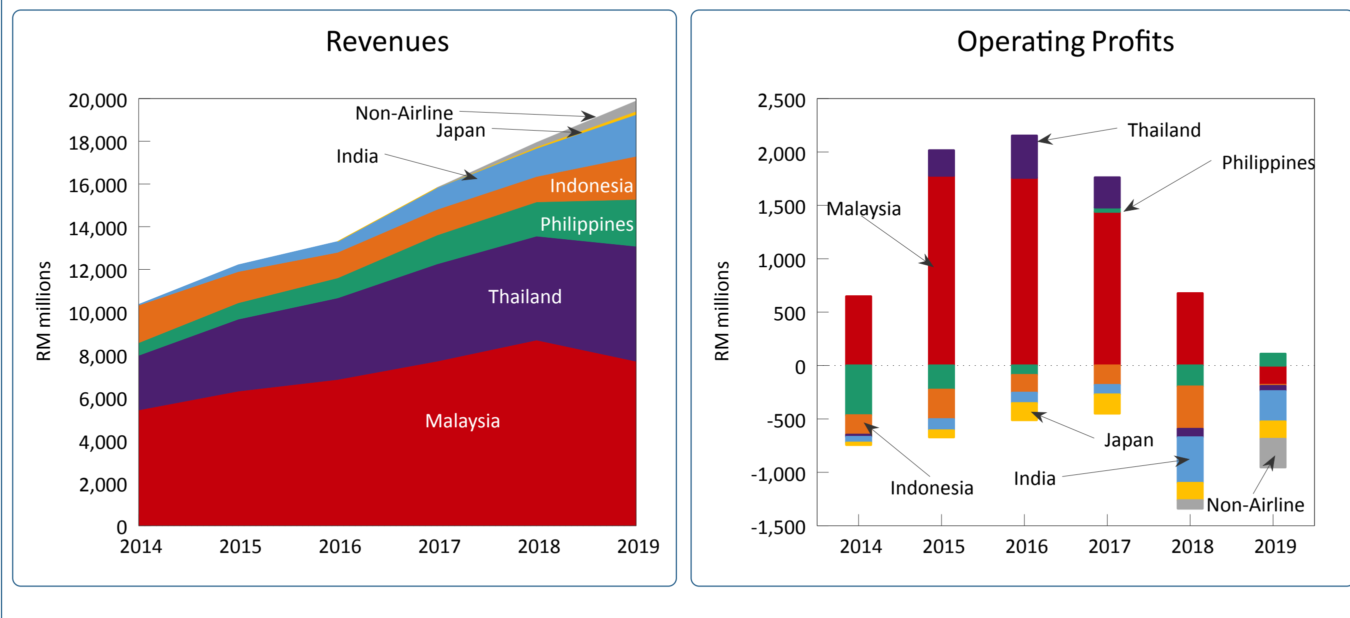
To claim that this transformation is a success is going a bit far: in the first half of the year BigPay doubled its EBITDA losses to RM52m, AirAsia.com produced a RM21m loss from RM0.9m profit in the prior year period, and Teleport halved profits to RM58m, with a RM5m loss in the second quarter.

But these numbers pale into insignificance in comparison with the losses at the group's airlines, which were all but effectively closed in the second quarter. The group announced a net loss of RM1.2bn (US$278m) for the three months to end June making a cumulative loss for the half year of RM2.1bn ($508m).

Total group revenues in the quarter were down by 97.5% at a mere RM68m. Yet the group managed to slash operating costs by 72% overall with staff costs cut by a third and maintenance costs by over 90% — concentrating the aircraft it did have in service on the newer equipment and those furthest away from major checks. Depreciation and interest costs in the P&L rose strongly following a spate of sale and leaseback transactions over the previous year. However, it had successfully negotiated payment holidays/deferrals with its lessors, and seems to have paid no cash on its lease commitments in the second quarter (although it still had to account for them as if it had).

Overall AirAsia did well to limit





the overall cash outflow to RM1.7bn in the first half of the year — equally split between the two quarters — without massively increasing debt. It ended the period with cash and cash equivalents of RM1bn down from RM2.6bn at the start of the year; while net cash (including investment securities but excluding lease liabilities) stood at RM1.2bn down from RM3.1bn.

Strangely the company downplayed liquidity concerns in its announcement and presentation on the results. While admitting that it was in talks for government backed loans in Malaysia, the Philippines and Indonesia, had been approached by various investment banks to raise equity, and has "ongoing deliberations" for third party investments in some segments of its business, it stated "we have sufficient working capital to sustain the business operations".

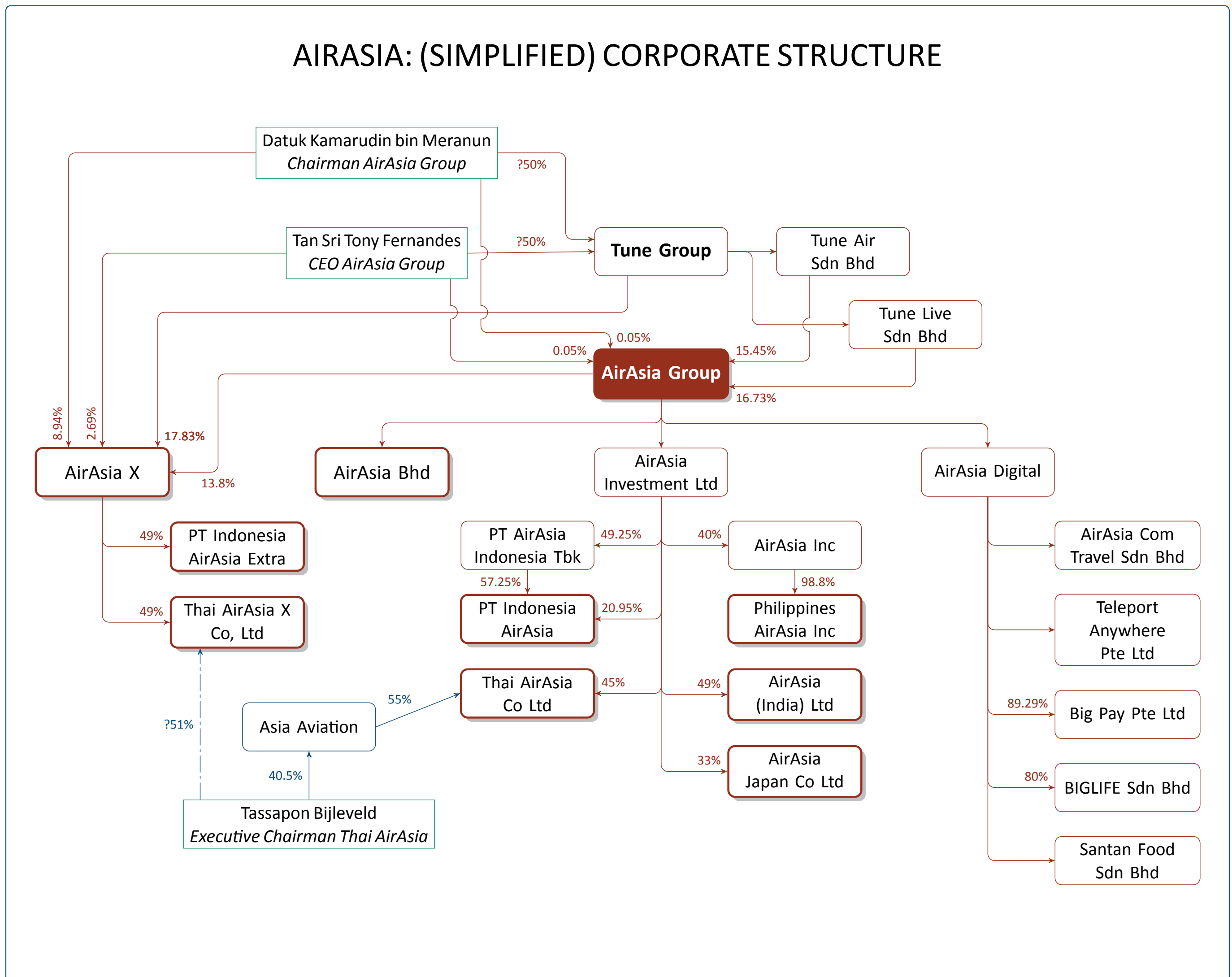
Problems before the pandemic

AirAsia is the second largest low cost airline group in South East Asia (behind the Indonesian-based Lion Air Group) and has grown strongly in the last decade. According to its published accounts, group revenues had increased at a compound annual average 14% a year since 2010 while at the same time it had been able (at least until 2017) to generate operating margins of 20%-30%.

But the company's annual accounts, while no doubt reflecting a "true and fair view" of the state of affairs, lack clarity. If anything they highlight that AirAsia has not followed the key KISS (keep it simple, *stupid*) principle of the low cost model — not merely in its operating philosophy but also in its corporate structure (see chart on the next page). Apart from anything else, opening a restaurant in central Kuala Lumpur, or establishing its own record label as AirAsia did last year can only be a distraction.

As AirAsia has grown, it has expanded operations from its Malaysia base into neighbouring ASEAN countries. But while the bloc has been moving towards an open skies aviation regime, there has not been any agreement on rights of establishment and control. Consequently AirAsia has had to establish individual AOCs in each of the countries in partnership with local investors, and because it officially is not allowed to be a controlling shareholder, most of these are treated as associate companies (only AirAsia Philippines and AirAsia Indonesia are consolidated in the accounts).

The group's greatest strength is in its home country of Malaysia. (This and subsequent country market comments refer to the charts on pages 10–11). The domestic market is relatively small primarily linking the capital Kuala Lumpur with the main cities in peninsular Malaysia and providing essential links to those in Sabah and Sarawak on the island of Borneo. It has grown by a modest 5% a year over the last decade, but the troubled national flag carrier MAS (along with its regional subsidiary FireFly) has stultified in the the period



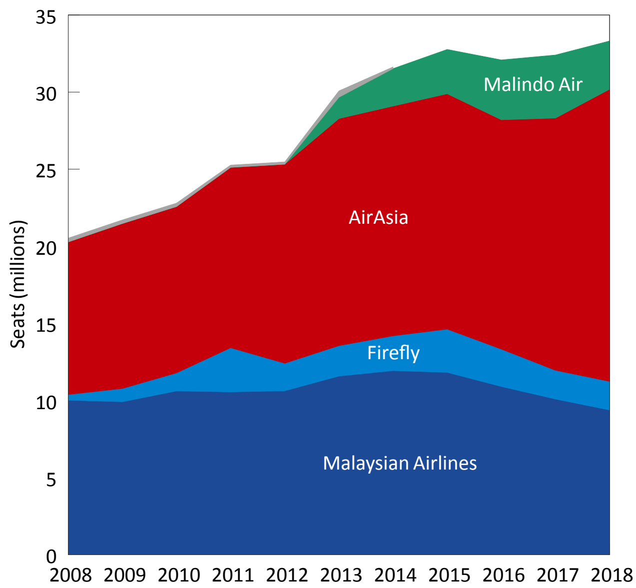
— and especially after renationalisation in 2014) and AirAsia by 2019 had built up a 60% share of the market. (The other major player, with a 10% share, is Lion Air subsidiary Malindo). The international market has grown a bit faster, with an annual average 8% increase, and the AirAsia group in 2019 operated twice as many seats as MAS giving it a commanding 40% share. Malaysia had been the backbone of the group's profitability, but a hefty domestic price war and a chase for market share in the last two years pushed AirAsia Malaysia into what seems to have been an underlying operating loss in 2019.

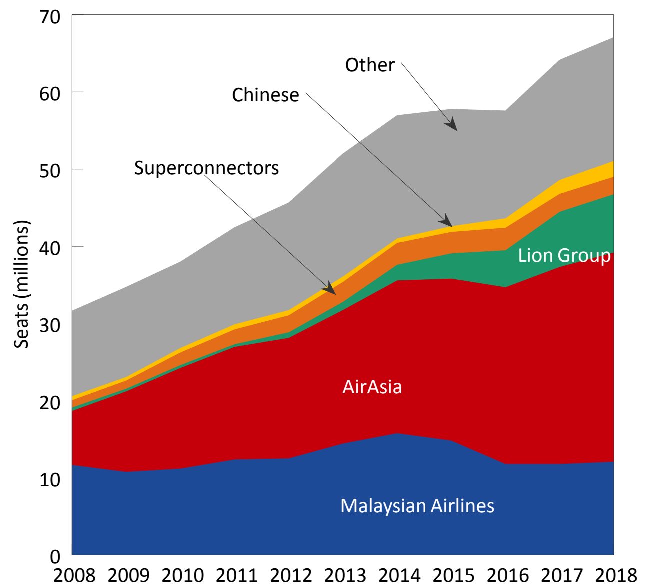
Its second most important market is Thailand. Here the growth in the past decade had been far more exciting. With an annual average rate of growth of over 10% the domestic market has nearly tripled in size since 2008. AirAsia has grown aggressively — at more than 15% a year on average — and has developed from being half the size of national flag carrier Thai International to being twice the size and having a 33% domestic market share. The international market, significantly larger than that of Malaysia, benefits from strong levels of inbound tourist demand and has grown at an average 7.5% a year.

AirAsia Thailand is the group's most successful associate. Established in partnership with Asia Aviation (separately listed on the Bangkok stock exchange), it has at least produced an underlying operating profit in three of the last six years (see graph on the facing page). But it is only an associate company and not consolidated in the AirAsia Group accounts (Asia Aviation on the other hand accounts for it as a joint venture).

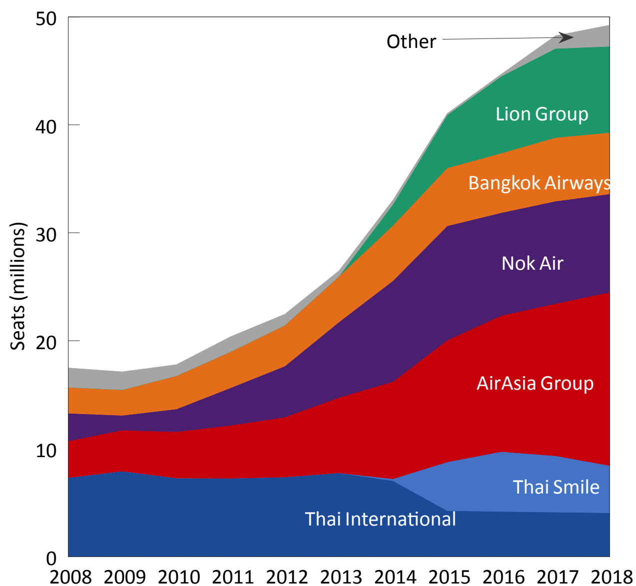
AirAsia's next largest operation in SE Asia is in the Philippines. Here it has around 20% of a domestic market that is roughly the same size as Malaysia's and that has grown at an average annual rate of 8%. However in Cebu Pacific — the country's

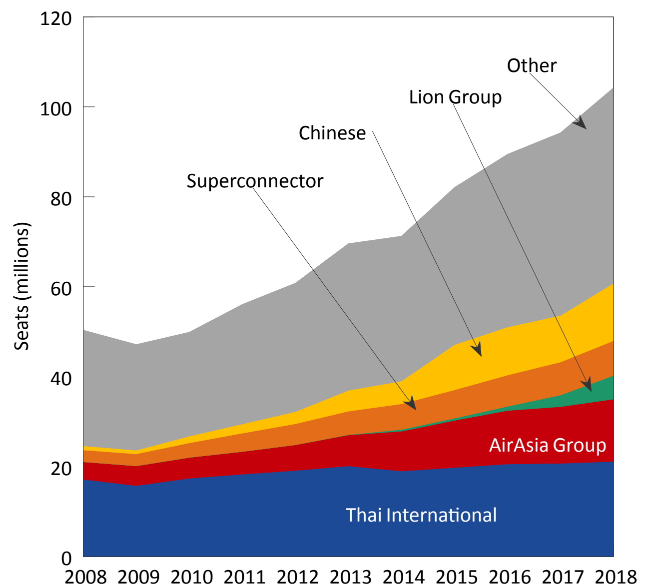
MALAYSIA



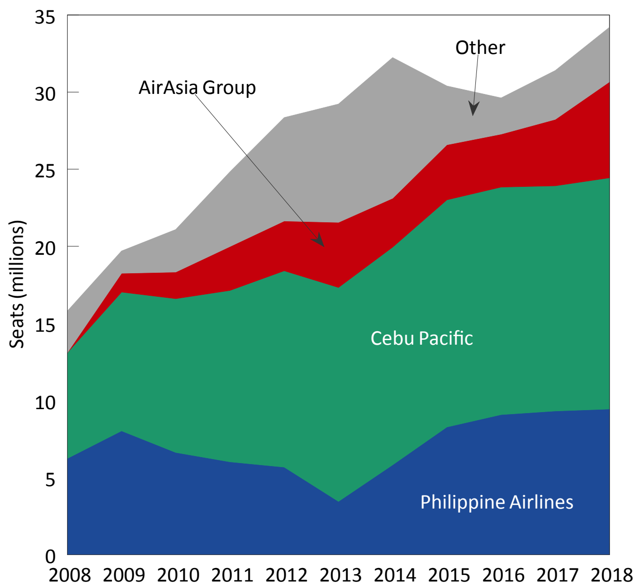


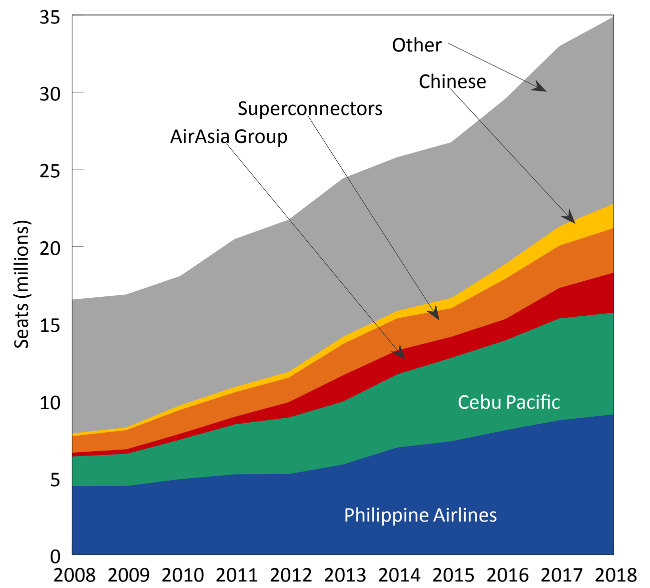
THAILAND



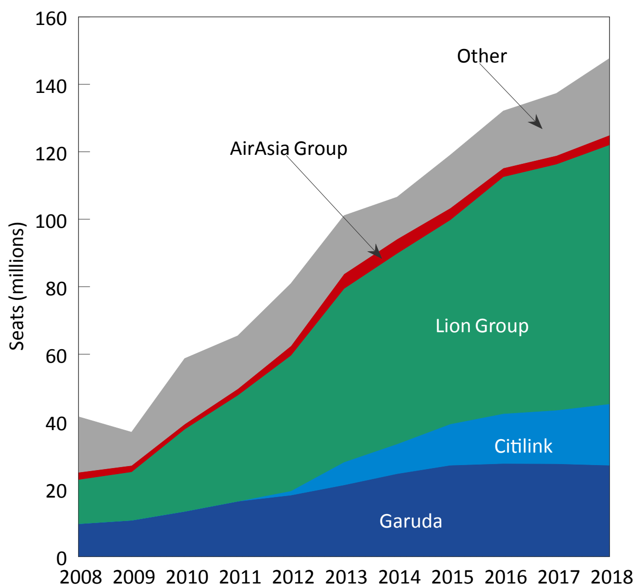


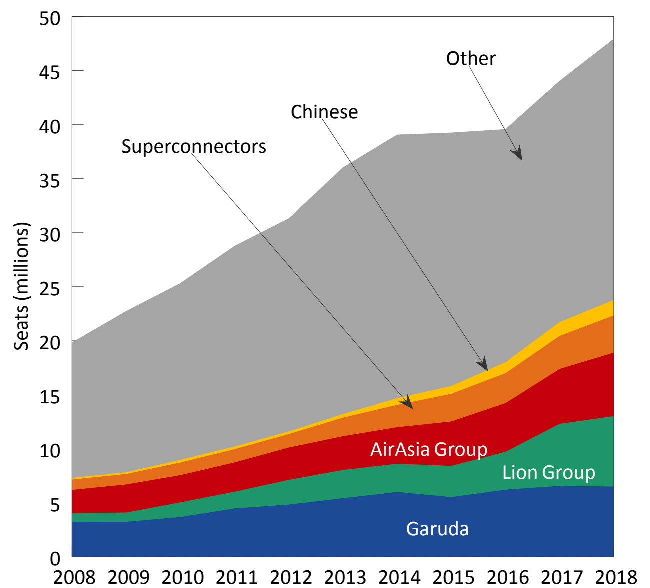
PHILIPPINES





INDONESIA





largest operator — it has a strong low cost competitor. AirAsia Philippines, which by some deft sleight of hand is fully consolidated, seems to have produced an underlying profit in 2019 for the first time.

AirAsia has not had quite as much success in Indonesia. The country is huge — the world's largest archipelagic state with over 17,000 islands covering 1.9m km² and a population of 270m. In the past decade the domestic market had grown by an average annual 13.5% — to a large extent driven by the growth of the Lion Air Group which by 2019 had built a market share of over 50%. AirAsia has not been able to follow this development and has seen its share of the local market fall to 2% from 5% ten years ago.

With a core competency in ASEAN, AirAsia has also tried to expand into other markets. It has a 49%-owned joint venture with Tata Sons in India which had built to a fleet of 30 aircraft and in 2019 carried 9m passengers (36% up on the previous year) allowing it to boast a 7% market share and the dubious accolade of receiving the least number of complaints among Indian LCCs. It had also set up a second version of AirAsia Japan (the first had folded in 2013) which by the end of 2019 had three A320s and carried 0.5m passengers. Plans in the last few years suggested that AirAsia was also planning to establish operations in Vietnam and China.

AIRASIA GROUP FLEET PROFILE

	In service			Parked	Total
	A320	A321	A330		
Malaysia	43	2		50	95
India	18			12	30
Japan				3	3
Indonesia	11			17	28
Philippines	6			18	24
Thailand	39	2		21	62
AirAsia Total	**117**	**4**		**121**	**242**
Malaysia			1	22	23
Indonesia				2	2
Thailand			1	13	14
AirAsia X Total			**2**	**37**	**39**
Group Total	**117**	**4**	**2**	**158**	**281**

Until the beginning of this year AirAsia Group's fleet plans continued to show strong growth ambitions. It had ended 2019 with 244 A320 family aircraft in its subsidiaries' and associates' fleets and had outstanding orders for 349 A321neos — planning net deliveries of around 30 units a year to build a fleet of 515 aircraft by 2028. But the Covid-19 crisis has changed all this (see last section below).

AirAsia X

The group went into long haul low cost with the establishment of AirAsia X. Founded in 2007 and floated on the Bursa Malaysia in 2013 it has been resoundingly unsuccessful, achieving an operating profit in only three of the past ten years. It has mirrored the convoluted structure of the AirAsia Group: AirAsia itself holds 13.8% of the equity, while Tony Fernandes and Kamarudin Meranun have 18% through their private company Tune Group as well as personal stakes of 2.7% and 8.9% respectively. It established an associate joint venture in Thailand, possibly in conjunction with Tassapon Bijleveld, (the Executive Chairman of AirAsia Thailand and major shareholder in Asia Aviation which holds 55% of AirAsia Thailand). For some reason it also seemed a good idea to set up an Indonesian joint venture — but this was more unsuccessful than usual and operated its last scheduled flight in January 2019.

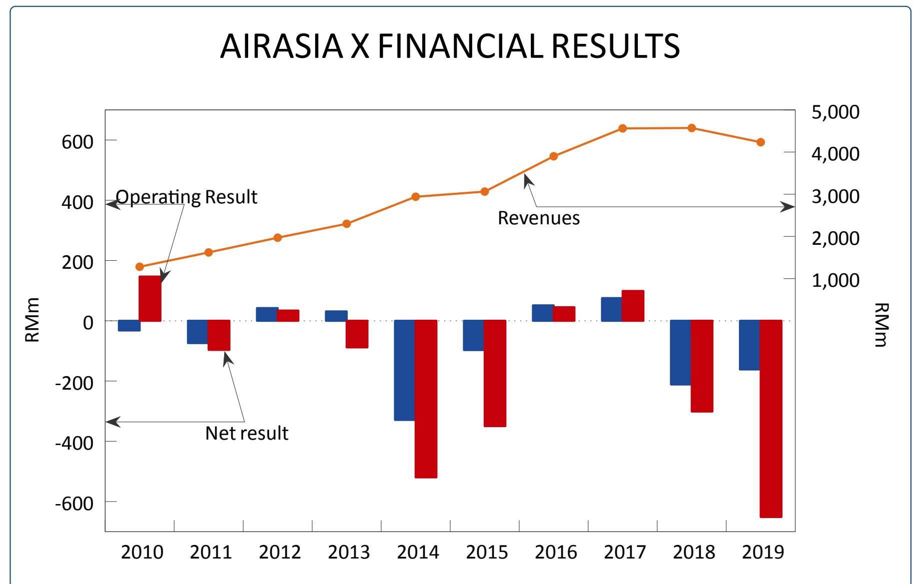
While it has been financially unsuccessful, AirAsia X did carry 8.5m passengers in 2019 and generated revenue of RM4.2bn (US$1bn). But it has been searching for a métier for many years. It gave up on attempts to serve long haul routes to Europe, and tried to build connecting services

AIRASIA ORDER BOOK

		On order	Pct of Airbus backlog
AirAsia	A321neo	349	12% (AirAsia and AirAsia X A321neo combined)
AirAsia X	A321neo	30	
	A330-900	76	28%
	A350-900	10	2%

with AirAsia at Kuala Lumpur (the "fly-thru" connecting product provided 4% of its ancillary revenues) reducing its ambitions to an aim of serving medium-to-long-haul routes within the region. Last year it even found itself operating its A330s for AirAsia Malaysia to provide services on the 300km route between KL and Singapore in face of capacity constraints at Singapore's Changi airport.

It had 30 A330s in operation, and at the beginning of the year still seemed to have ambitious plans having outstanding orders for 76 A330neos (over a quarter of Airbus's backlog for the type), ten A350s and 30 A321neos (see table on the preceding page) which it planned to operate on routes of between four and six hours duration. But the Covid-19 crisis changes all this (see below).



Pandemic reality

International borders may be effectively closed, but AirAsia has one modest benefit: it can still operate in the domestic markets. In the third quarter, its operations in Malaysia and Thailand resumed some semblance of services: statistics for AirAsia Malaysia show seat capacity down by only 75% in the three months ended September compared with the prior year period with load factors off by 15 points to 68%; AirAsia Thailand saw the number of seats down by 56% and load factors falling by 16 points to 65%. AirAsia India too flew 36% of the capacity it had operated in the same period in 2019. AirAsia Indonesia and AirAsia Philippines remained to all intents mothballed, while the group has given up on its Japanese associate and has liquidated AirAsia Japan.

The company suggested in August that it would be prepared and able to ride out the crisis purely on domestic operations through 2021. This may be possible, depending on how long its lessors are willing to defer lease payments, but even if it can get its rate of cash burn down to RM200m a month (from the first half RM270m per month) the group will need to find a significant level of liquidity to be able to do so.

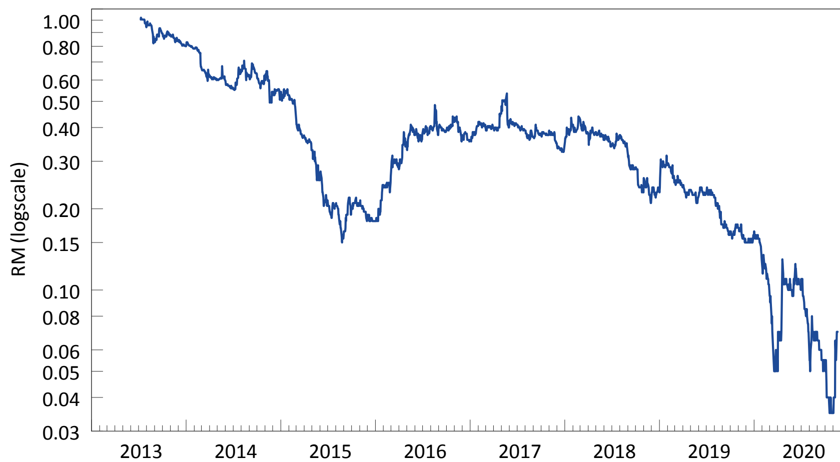
There have been recent unconfirmed suggestions in the press that it has been granted RM1bn ($250m) loan from the government of Malaysia under its Danajamin Prihatin guarantee scheme for businesses affected by Covid-19. CEO Tony Fernandes has been quoted as saying that he would like to be able to raise nearer twice that amount to be comfortable.

It is highly likely that the group will look to the markets to raise new equity, but with a current market cap of only $450m a meaningful capital raising exercise may be difficult, and it may be necessary to dispose of other assets. The notable one could be AirAsia India, and there have been press rumours that Tata Sons may have been negotiating to acquire AirAsia's 49% stake — although avoiding a fire-sale price will be difficult.

The AirAsia Group seems to have accepted that it will emerge from this crisis much smaller. Fernandes suggests it will have a fleet of 180 aircraft by the end of 2021 down from the current 242, but also stated that AirAsia will forego the chase for market share and concentrate on profitability. This will among other things necessitate extricating itself from most of its order for 349 A321neos.

But then he has a worse problem with AirAsia X. The long haul low cost airline, after six months of hibernation, is basically bust. At the end of June it had lease liabilities of RM5.8bn, long term debts of RM288m, unrestricted cash of RM212m and negative equity of RM1bn. Net current liabilities stood at RM2bn.

It has put an application to the courts for a debt and capital restructuring plan to reduce unsecured liabilities of RM63.5bn ($15bn) to RM200m. Most of that figure must refer to capital commitments to Airbus for its orders of A330s, A350s and A321neos (total capital commitments for aircraft purchases



stood at RM141bn at the end of June), but other unsecured creditors include airports, the leasing companies and passengers who had booked flights and, notably, AirAsia Bhd, its subsidiaries and associate companies.

As part of the filing the company stated that its new business plan will revolve around a fleet of 25 aircraft, pursuing medium haul flight operations within the 5-6 hour range, and shift its focus from building market share to that of "sustainability, yield and profitability".

That sounds familiar. But it says that it needs the debt and capital restructuring to put it in a position to raise RM500m in new equity (the current market capitalisation nominally is RM166m).

Objectors to the proposals include lessor BOC Aviation and Malaysian Airports. The latter, 33% owned by sovereign wealth fund Khazanah Nasional Berhad (KNB), is claiming that it should be treated as a secured creditor for the RM78m it is owed by AirAsia X.

These are tough times for all airlines. Looking beyond the crisis, a possible advantage for Fernandes and Kamarudin is that the governments in Malaysia and Thailand are not being that supportive of their national flag carriers.

Malaysia Airlines has also run out of cash. The government has vehemently said that it will not pump any more money into the national flag carrier, and that it will be up to its owner, the sovereign wealth fund KNB, to find a way to support it from its existing resources.

KNB, had said it would give it a RM5bn ($1.2bn) lifeline in 2021 as long as it succeeded in blackmailing its lessors into providing significant reductions in rentals, although that would only go part way to cover the losses of the past five years and further restructuring will be needed.

The alternative could be to close the carrier down, and switch flag carrier operations to its regional AOC firefly. Suggestions of any combination with AirAsia, which had been on the cards six (and ten) years ago, are unrealistic.

Meanwhile, in Thailand, Thai International has seen the government reduce its holding below the 50% that classified it as a state enterprise and itself filed for bankruptcy protection in May. It will be going through a court mandated restructuring programme. The third largest domestic operator, Nok Air (itself 13% owned by Thai International), also filed for bankruptcy protection in July.

AirAsia, in spite of the problems it has created for itself, is a well established brand which should regain its competitive advantage in a post-Covid world, if it refocuses on LCC principles.

Boeing and Airbus: The financial fall-out

SOME 20 months after its grounding, the FAA recertified the 737 MAX in mid-November — finally, some good news. But both Boeing and Airbus still have to confront the financial fall-out from the Covid 19 crisis.

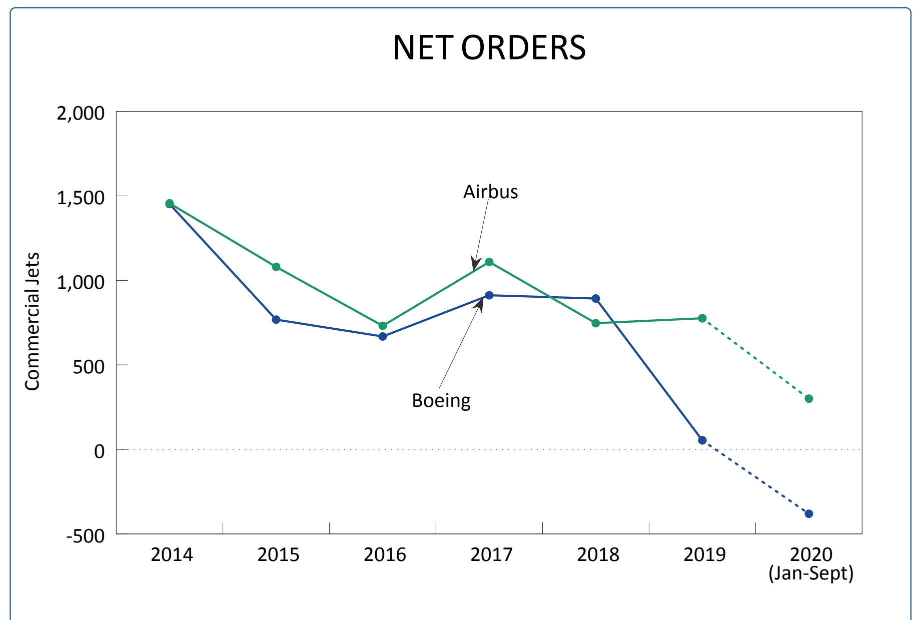
EASA and other regulatory authorities are likely to follow suit, which provides Boeing with the opportunity of shifting the inventory of parked MAXes, 450 in total. But this is not going to be a quick process — the aircraft have to re-activated, the new MCAS software installed and training programmes completed.

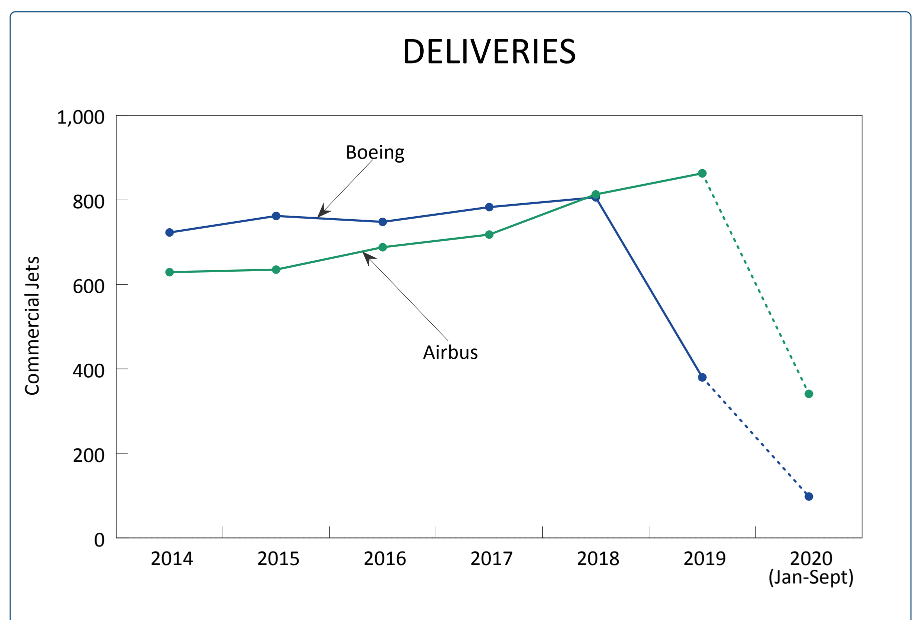
Moreover, there is the possibility or probability of more deferrals and cancellation from airlines and lessors (usually clients can cancel without penalty and retrieve deposits if the delivery is delayed by more than 12 months from its scheduled date). Boeing also has to pay compensation to MAX customers when it hands over the aircraft, for which it has currently allocated about $6bn.

The calamity that has hit Boeing and Airbus is highlighted in the order and delivery charts on this page. Having roughly matched each other on orders and deliveries, Boeing's performance fell away sharply in 2019 with the MAX crisis. So far this year (January to September) Boeing has achieved a negative net order total of -381 (67 new orders and 448 cancellations) and delivered 98 aircraft. Airbus managed in pick up 300 net new orders, almost all A320/21s and delivered 341 units.

Since April Airbus has been producing A320/321s at a rate of 40 a month, five a month for A350s and two a month for A330s. Possibly the last A380 was rolled out in September. These rates are about one third below pre-Covid production norms, but Airbus wants to ramp up production with the aim of getting A320 neo family output up to 47 a month by the third quarter of 2021

Boeing's production cut-back has been on a different scale. The MAX was supposed to be produced at 57 a month but by the beginning of this year production had been sus-





pended; the current plan is cautious, increasing output gradually to 31 by the beginning of 2022. The 787 programme has dropped from 14 a month pre-Covid to 10 currently, then will be cut further to six in 2021. The 777 programme, including the 777X, is currently five and will be cut back to two in 2021. The 767 was 12 a month pre-Covid, and is now at three where it will remain next year. A single 747 is planned for every two months for the rest of this year and next year.

The two OEMs have contrasting strategies in this regard. Airbus is maintaining a relatively high production rate because of fairly firm demand for A321s, even in the Covid crisis, and because its production efficiencies depend on a high level of throughput. Its calculation is that the unit cost of storing undelivered aircraft would be less than the increase in unit cost through losing scale economies from low production rates. Boeing already has an inventory of undelivered aircraft, but it also has a more flexible cost structure, as the result of extensive outsourcing strategy, and cutting production rates drastically makes sense because suppliers are then forced to bear a proportion of the pain.

Comparative calamities

Neither company could have anticipated Covid 19, but equally neither company had pursued the type of financial strategy that might have mitigated its impact. To put the 2020 crisis into perspective, the charts on page 17 trace key financial numbers for the two OEMs from 2014 through to the first three quarters of 2020.

As we have argued in previous articles (for example, *Aviation Strategy*, November 2019), both Boeing's and Airbus' financial priorities were questionable in the period following the recovery from the Global Financial Crisis, with unsustainable amounts of cash being returned to shareholders, with admittedly a very positive effect on the share prices, and probably too little being allocated for investment in new products or simply to bolster reserves in case something unexpected happened (like Covid 19).

In terms of total revenues, Boeing had been by some margin the bigger company until 2019 when Airbus caught up, achieving $78.8bn against $76.6bn. 2020 turnover will be about 30% down on last year at both companies.

Boeing had also been a significantly more profitable company than Airbus, with a net result peaking at $10.5bn in 2018, a margin of 10.4%, more than twice that of its European rival. The two manufacturers were equally successful in 2019, Boeing losing $0.6bn, because of the MAX grounding, and Arbus $1.5bn. because of production difficulties with the A321, cost increases from suppliers and labour unrest.

In the first nine months of 2020 Boeing produced a loss of $3.5bn while Airbus lost $3.1bn. Boeing's loss would have been much high but for positive contributions from Defense and Global Service of $1.3bn in total.

A major difference between the two OEMs used to be Boeing's superior ability to generate cash. Operating cashflow — ie, profits plus depreciation and amortisation, changes in inventories, creditors and debtors, etc — was huge at Boeing — $15.3bn in 2018, a margin on revenues of 15.1% in contrast to just $2.7bn or a margin of 3.6% at Airbus. Then in 2019 everything went wrong at Boeing; operating cashflow turned negative, -$2.4bn, while Airbus manged to maintain positive cashflow of $4.3bn.

Subtracting capex and investments — which includes new and replacement manufacturing equipment, R&D, investments on other companies, such as Airbus' purchase of Bombardier and Boeing's aborted joint venture with Embraer — gets us to free cashflow, which again was historically much stronger at Boeing than Airbus. In 2018 for instance Boeing generated $10.7bn, dwarfing Airbus' $0.8bn. Last year Boeing's free cashflow shrivelled to -$3.9bn while Airbus was just marginally positive. January-September 2020 free cashflow is simply painful, though Boeing's outflow is somewhat distorted by the inclusion of the purchase of short-term financial notes using funds from the long term debt it raised

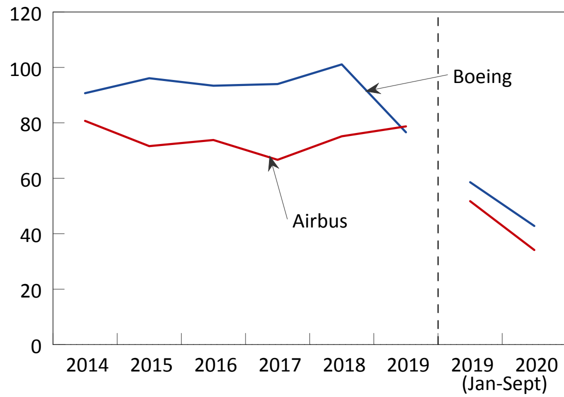
Nevertheless, both OEMs earned substantial funds in free cashflow during the six-year period 2014-19 — Boeing generated $43.9bn and Airbus a more modest $6.5b. The basic question then became: what to do with this cash? Which proportions to return to shareholders or pay down debt or add to reserves?

The strategy pursued by both OEMs was to return all this cash to shareholders. In fact, they returned more to shareholders in dividends and share re-purchases than they generated in free cashflow. Boeing returned $60.1bn and Airbus $8.2bn during the period 2012-19. These sums exceeded free cash by $14.2bn and $1.7bn respectively. Unsurprisingly, no dividends are currently being paid, and share buy-backs are inconceivable.

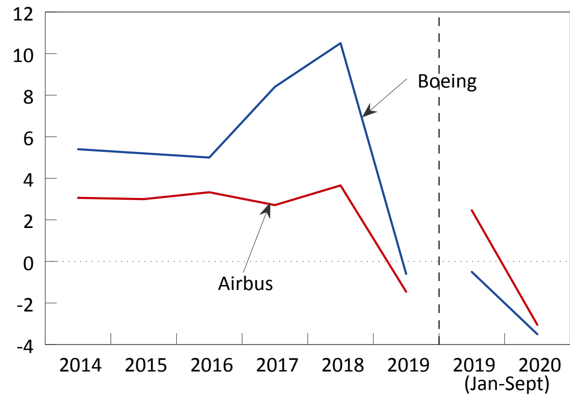
Most of the increase in net debt during 2102-18 went to fund the shortfall between free cashflow and dividend/share buy-back spending —

OEM FINANCIAL DATA

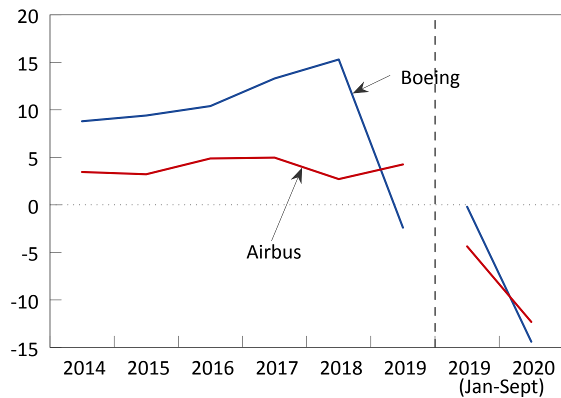
Total Revenues (US$bn)



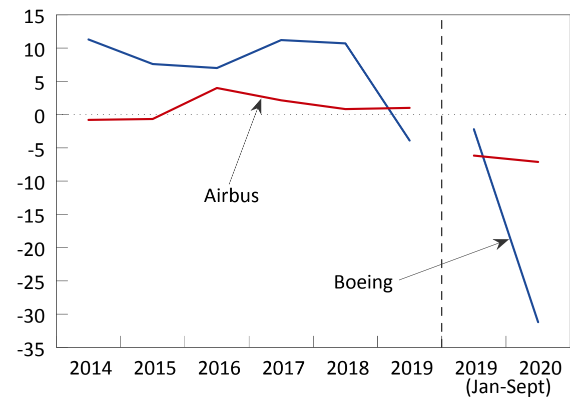
Net Result (US$bn)



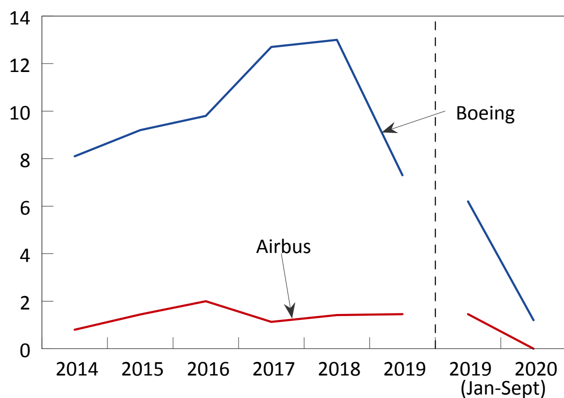
Operating Cashflow (US$bn)



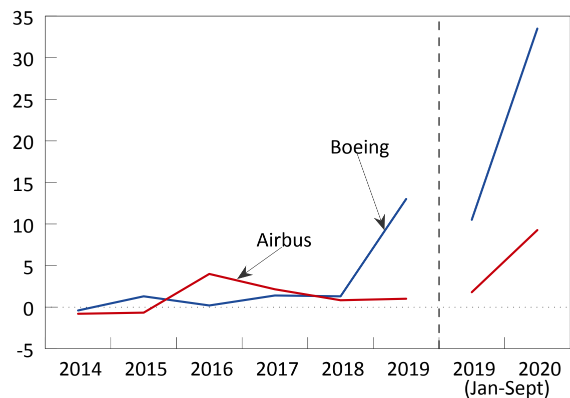
Free Cashflow (US$bn)



Dividends paid plus share buybacks (US$bn)



Change in Net Debt (US$bn)



BOEING'S BALANCE SHEET

Sept 2020	$bn
Property and Plant	12.0
Intangibles (inc Goodwill)	11.0
Inventories	87.0
Cash etc	27.1
Other Assets	24.2
TOTAL ASSETS	**161.3**
Advances and PDPs	52.0
Accrued Liabilities	22.2
Pension/Health Plans	19.7
Accounts payable	14.5
Short-term debt	3.6
Long-term debt	**60.2**
Other	**0.7**
TOTAL LIABILITIES	**172.9**
EQUITY (DEFICIT)	**(11.6)**

in effect, the OEMs borrowed money to pay their shareholders to enhance to share prices, which quadrupled between 2014 and 2018. Such a strategy depends on nothing going wrong, which it certainly did with the MAX grounding and Covid 19.

Boeing and Airbus found themselves with inadequate liquidity to deal with the crises — Boeing held $9.6bn in cash at the end of 2019, Airbus $11.2bn. This led to a surge in borrowing to cover liabilities and contingencies: during January to September 2020 Boeing increased its net debt by $33.5bn, Airbus by $9.3bn.

As a result, the liquidity problem has been solved at least for the short term. At the end of September Boeing held $27.1bn in cash and near-cash while Airbus had $12.5bn. (Both OEMs also have broader definitions of liquidity). This may be just enough to get Boeing through to the end of 2021 when it projects that it will turn cash positive. Airbus is aiming for cash positivity by the end of this year.

Debt (long and short term) now stands at $64.0bn at Boeing and $44.1bn at Airbus. The OEMs have not taken state loans, but they have benefitted from implicit state support. For instance, Boeing's $25bn bond issue in April, which carried an interest rate of 5.1% over 10 years, was issued against the background of the Federal Reserve's $2tr commitment to buy up distressed corporate bonds.

Both OEMs have managed to retain their investment grade ratings but that is looking less certain for Boeing. In October Fitch downgraded its long-term debt from BBB to BBB- which is the lowest of the investment grades. Airbus too has recently been downgraded from A- to BBB+ on unsecured senior debt.

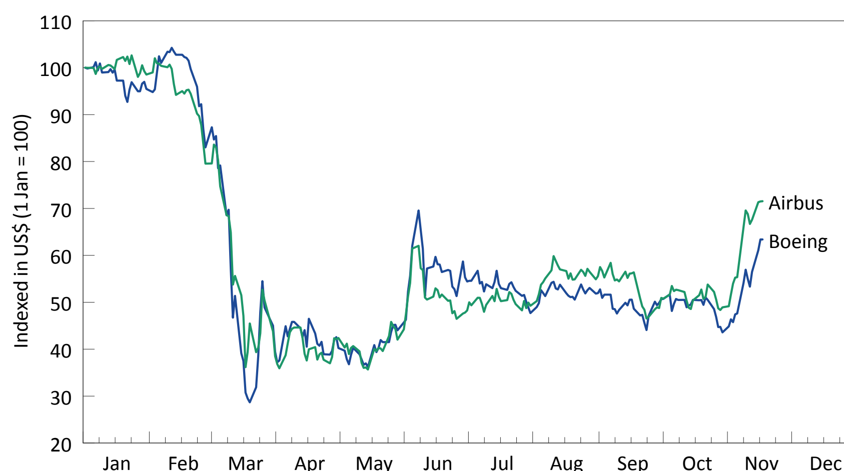
The end-September balance sheets shown that with the increase in borrowing this year, Boeing's liabilities now exceed assets by $11.6bn — technical insolvency for one of the US's largest and most iconic corporations. Airbus still has positive equity, just, €1.9bn. The debt/equity ratios for OEMs are unmeasurable in Boeing's case, 23:1 in Airbus'.

The paradox is that they cannot fail (unlike airlines). The stockmarket believes this, as Boeing is currently valued at $114bn, Airbus at €70bn. Between them the OEMs have a commercial jet backlog of 11,700, aircraft that nobody else can supply. Boeing is part of the US military complex while Airbus is partly state-owned and a symbol of European unity.

That status, however, does not provide a solution to the massive balance sheet problems that Covid 19 and the MAX grounding have created.

AIRBUS'S BALANCE SHEET

Sept 2020	€bn
Property and Plant	16.7
Intangibles (inc Goodwill)	16.4
Inventories	36.7
Cash etc	12.5
Other Assets	31.0
TOTAL ASSETS	**113.3**
Advances and PDPs	36.1
Other Short Term Liabilities	21.2
Pension Plans	9.5
Other Liabilities	5.1
Long term debt	39.5
TOTAL LIABILITIES	**111.4**
EQUITY (DEFICIT)	**1.9**



Jet Values and Lease Rates

THE FOLLOWING tables reflect the current values (not "fair market") and lease rates for narrowbody and widebody jets. Figures are provided by The Aircraft Value Analysis Company (see following page for contact details) and are not based exclusively on recent market transactions but more generally reflect AVAC's opinion of the worth of the aircraft. In assessing current values, AVAC bases its calculations on many factors such as number of type in service, number on order and backlog, projected life span, build standard, specification etc.

Lease rates are calculated independently of values and are all market based.

Values have been hit massively by the Covid-19 crisis. New and five year old narrow body jets on average are some 22% down on the values at this time last year and lease rates for new narrowbodies lower by 30-40%. Widebody values on average have fallen by nearer 30%, with their lease rates down by 40%: the larger the plane the bigger the fall, and the A380 is valued at two fifths of the price it might have had in 2019.

JET VALUES ($m)

			Years old					Years old		
		New	5	10	20		New	5	10	20
Regional	Emb 175†	18.9	14.8			S100-95	12.9	9.3		
	Emb195 E2	27.5								
Narrowbody	A220-100	26.3	21.1			717-200				3.1
	A220-300	29.1	24.3			737-300§				1.0
	A319§	25.9	19.2	12.6		737-400§				2.0
	A319neo	29.8				737-500§				1.0
	A320-200§	32.5	25.0	17.5	7.9	737-600§				2.6
	A320neo	42.3	32.2			737-700§		20.7	11.4	6.3
	A321-200	35.1	27.5	19.0		737-800	33.1	26.0	14.8§	8.3§
	A321neo	47.6	41.3			737 MAX 7	30.5			
	A321neo LR	49.2				737 MAX 8	42.4			
						737 MAX 9	41.7			
						737 MAX 10	44.3			
						757-200∞				5.0
Widebody	A330-200	47.8	37.3	26.8		747-400∞				4.3
	A330-300	55.8	43.7			747-8I		45.8	31.3	
	A330-900neo	76.2				767-300ER§			16.2	9.8
	A340-300 ER∞				5.7	777-300ER	92.3	79.7		
	A350-900	110.5	80.2			777-8	92.8			
	A350-1000	122.2				777-9	149.0			
	A380-800	72.8	55.6	38.4		787-8	78	58.4	38.7	
						787-9	107.7	79.1		
						787-10	112			

Source: AVAC. Notes: As at end October 2020, lease rates assessed separately from values. Second hand values may refer to 4-6 years old rather than exactly 5 years old, etc. † = Enhanced, § = HGW, ∞ = for conversion

JET LEASE RATES ($'000s/month)

		New	Years old 5	10	20		New	Years old 5	10	20
Regional	Emb 175†	123	115			S100-95	91	88		
	Emb195 E2	219								
Narrowbody	A220-100	178	155			717-200§				46
	A220-300	218	189			737-300§				46
	A319§	178	144	112		737-400§				48
	A319neo	219				737-500§				40
	A320-200§	208	177	144	114	737-600§				40
	A320neo	256	209			737-700§		163	105	72
	A321-200	236	194	157		737-800	215	183	131§	115§
	A321neo	302	285			737 MAX 7	225			
	A321neo LR	314				737 MAX 8	248			
						737 MAX 9	244			
						737 MAX 10	259			
						757-200				
Widebody	A330-200	372	311	239		747-8I		331	276	
	A330-300	420	380			767-300ER§			162	144
	A330-900neo	571				777-300ER	828	757		
	A340-300 ER					777-8	832			
	A350-900	789	620			777-9	1,175			
	A350-1000	947				787-8	525	438	360	
	A380-800	494	393	294		787-9	724	598		
						787-10	846			

Source: AVAC. Notes: As at end October 2020, lease rates assessed separately from values. Second hand values may refer to 4-6 years old rather than exactly 5 years old, etc. † = Enhanced, § = HGW

AIRCRAFT AND ASSET VALUATIONS

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