Aviation Strategy

Issue no. 259

Jan/Feb 2021

A couple of new entrants, so far

PREVIOUS aviation crises have accelerated the entry of new carriers with new operating models into new markets. That hasn't happened with the Covid catastrophe — yet.

The key elements for start-ups are in place:

- Second-hand values and lease rates at least 40% below pre-pandemic levels.
- Deals to be done with the OEMs and lessors, especially for latest-technology types like the A321 and the 737 MAX, with early delivery possibilities.
- A large pool of unemployed pilots and engineers.
- Slots potentially available at congested airports.
- Willingness or desperation of airports to strike favourable deals.
- Incumbents severely weakened and over-laden with debt.

On the other hand:

- No clear outlook on the timing of demand recovery; in previous crises, global and regional traffic only turned slightly negative for relatively short periods of time.
- Willingness of governments to subsidise their national airlines.
- Erratic, below-cost pricing by incumbents.
- Existence of liquid, efficient and aggressive LCCs in all major regional markets (Ryanair, Spirit, Azul, Volaris, Air Arabia, Indigo, Air Asia, Lionair, etc), the exception being Africa.

There is no apparent business model that could improve on the best of the LCCs, though we suspect that the second wave of LHLCCs, when or if it materialises, will be much more effective than Norwegian or Air Asia X. And many niche low-cost airline projects are in the planning or ruminative stge. The two that are close to launch are Breeze Airways and Flyr.

Breeze

As Breeze Airways is David Neeleman's latest venture, it has raised high expectations because of Neeleman's serial success with Morris Air, WestJet, JetBlue and Azul (but not TAP). Breeze has just received authority to fly from the US DoT, though the start-up date for the Salt Lake City-headquartered airline is unclear. Latest reports suggest late 2021/early 2022 is likely.

In fact, little detail about the new

This issue includes

BREEZE BALANCE SHEETS ($m)

	PRE-START-UP	AFTER 12 MONTHS
Cash	83.2	0.6
Receivables/Pre-paid		47.1
Aircraft		293.2
Deposits and PDPs	13.7	46.7
Other Fixed Assets	2.5	12.1
Others	0.6	0.6
TOTAL ASSETS	**100.0**	**400.3**
Current Liabilities	2.9	98.1
Long term Debt	6.9	256.8
TOTAL LIABILITIES	**9.8**	**354.9**
OWNERS' EQUITY	102.8	102.8
RETAINED EARNINGS	-12.6	-57.3
TOTAL EQUITY	90.2	45.5
LIABILITIES & EQUITY	**100.0**	**400.3**

Source: US DOT. Sept 2020

Aviation Strategy

ISSN 2041-4021 (Online)

This newsletter is published ten times a year by Aviation Strategy Limited Jan/Feb and Jul/Aug usually appear as combined issues. Our editorial policy is to analyse and cover contemporary aviation issues and airline strategies in a clear, original and objective manner. Aviation Strategy does not shy away from critical analysis, and takes a global perspective — with balanced coverage of the European, American and Asian markets.

Publisher:

Keith McMullan
James Halstead

Editorial Team

Keith McMullan
kgm@aviationstrategy.aero

James Halstead
jch@aviationstrategy.aero

Subscriptions:

info@aviationstrategy.aero

Aviation Strategy Ltd
Registered No: 8511732 (England)
Registered Office:
6 Langside Avenue
London SW15 5QT
VAT No: GB 162 7100 38
ISSN 2041-4021 (Online)

Typeset in Calibri and Rockwell using XƎLATEX

airline has been revealed, and the US DoT licence application was heavily redacted. However, it looks like being a US version of Volotea, a surprise success in the European market; the closest US competitor would be Allegiant. It will start with Emb195s, probably leased from Azul, quickly converting to A220s, having placed an order of 60 units back in 2018. Neeleman has publicly stated that he expects A220 trip costs to be 15-20% below those of the A319, which is operated by Allegiant.

Breeze will focus on underserved routes between medium-sized cities, having identified 500 potential city-pairs. Beyond that,the airline says it will be "nice", which is nice, and will be at the cutting edge of technology.

An interesting insight into the economics of starting an airline is provided by two balance sheets incorporated in the DoT docket (see table on the preceding page). Some $103m of equity funding is initially being put into the airline, of which $39m or 38% comes from Neeleman himself. After 12 months of operating losses and start-up expenses, this equity will have been more than halved to $45m, while debt used to build the owned A220 fleet will have soared to $257m. Cash will have drained from $83m to practically zero, so hopefully a new round of funding will have been put in place.

Flyr

In Norway, start-up airline Flyr has successfully raised NOK600m ($72m) through a private placement, aiming to start operations in the summer this year. Backed by Erik Braathen (who had been CEO of Braathens SAFE in the 1980s and chairman of Norwegian Air Shuttle in the 2000s, and is conveniently currently on the board of BBAM-managed Fly Leasing) and with the support of Maurice Mason (ex-GPA and Irelandia, serial start-up investor with Tigerair, Allegiant and Viva Aerobus on his CV), the team of ex-Norwegian and former SAS officers comes with good credentials.

The plan appears fairly modest: starting with a fleet of eight aircraft to build gradually to operating 28 units by its fifth year by which time it anticipates carrying over nine million passengers, and the plan suggests breaking even at the EBITDAR level in year two.

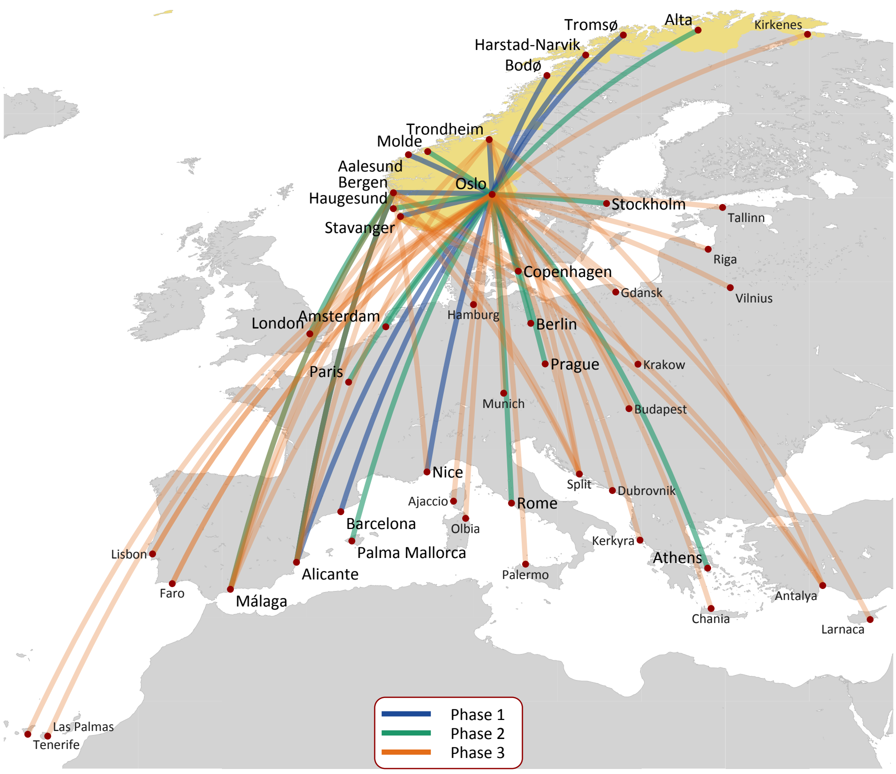
The founders readily admit that Norway is not the best choice of countries to establish a low-cost carrier (because of employment costs) but starting with a blank virtual sheet of paper, concentrating on an efficient flat organisational structure with a high degree of digital and automated processes which in turn will support data-driven decision making, they believe that they will be able to achieve unit costs on a stage adjusted basis similar to Ryanair and Wizzair.

Key to achieving the target is crew productivity and minimising the total number of employees per aircraft. The management team states that it will have stringent planning principles to maximise crew utilisation: a simple route structure with production mainly in and out of crew bases; a hard maximum of two crews per day per aircraft, with changeover, at the base, at mid-day; optimising flight block hours and turn-around times during peak/non-peak hours. Overall, Flyr is targeting flight hours from the crew close to maximum at 850 hours a year and total full time employees of 36 per aircraft — even below that of Ryanair.

In Norway Flyr, has a unique opportunity. Because of the geography there are many routes with unviable transport alternatives. Norway has a wealthy population and one of the highest propensities to fly, with an average 10.2 trips per head in 2019. It also has a terminally sick pair of competitors in Norwegian and SAS.

Flyr contends that it has a sustainable business model. The traditional LCC model it states was focused on constant growth: constantly increasing fleet size, network and passenger figures, artificially inducing demand by offering extremely low fares. This model, Flyr claims, is not adapted to the "new normal" post Covid-19. It says that it will adapt and optimise scale and production to demand from day one; will not fly at times and to destinations where demand needs to be generated by low prices; will not fly on routes where there are adequate connections by more environmentally friendly means of transport.

FLYR: ILLUSTRATIVE NETWORK PLAN



Airports in a new World of Risk

THE COVID crisis has exposed unexpected weaknesses in European airport business models and contradictions in the regulatory regimes, revealing that airports are as risk-prone as airlines, maybe more so.

In 2019 PWC, in a report on airport valuations and investments, confidently stated:

"Airports are a uniquely appealing class of asset for investors. While they typically offer strong growth fundamentals, diverse income streams, asset resilience and cash distributions, they also provide the potential to realise significant capital gains upon disposal".

A year later ACI-Europe reported a collapse in 2020 airport revenues of €32bn or 66% from the previous year. It warned that 200-plus European airports faced insolvency. It also complained that airports, in contrast to airlines, had received relatively little government support: according to ACI-Europe airlines received €32.1bn in state support in 2020, airports a mere €2.2bn.

One of the reasons for government reluctance to fund airports in the Covid crisis is that taxpayers' funds would in many cases end up with the airport shareholders — construction and engineering conglomerates, private equity, pension and sovereign wealth funds and so on — supporting multinational capital rather than national assets.

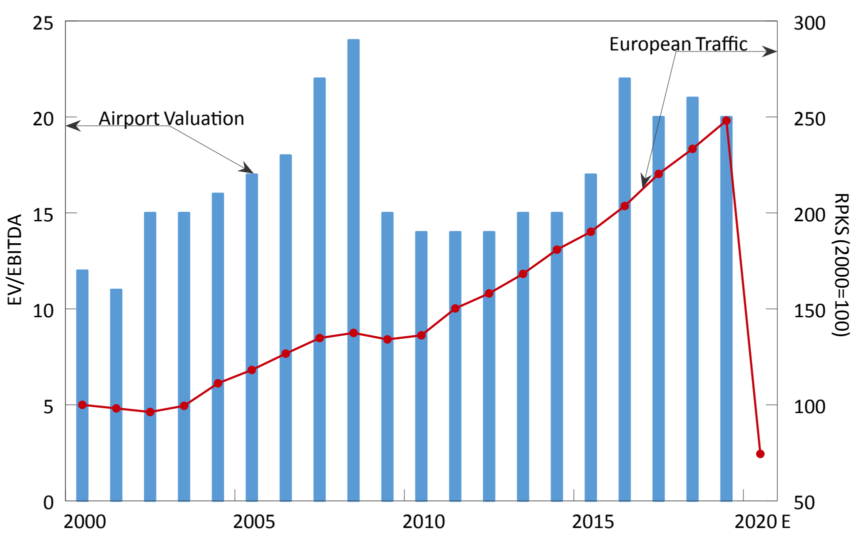
The history of airports as investable assets, as opposed to public utilities, is relatively brief, starting with the privatisation of BAA in 1986 followed by the sale of UK regional airports in the 1990s and 2000s then in quick succession Western European, Asian and South American airports in the 2000s. US airports, by contrast, have not been part of the privatisation trend.

The chart below summarises PWC's tracking of European airport values as measured, by Enterprise Value (EV — Equity plus Net Debt) divided by operating cashflow (EBITDA).The prices paid for airports have varied with financial cycles — peaking at around a multiple of 25 in the period leading up to the global financial crisis, a decline during the recession then a recovery in recent years to around 22 in 2018/19. The background was a reassuring constant increase in passenger traffic, interrupted only by what now look like minor blips like September 11 and the global financial crisis.

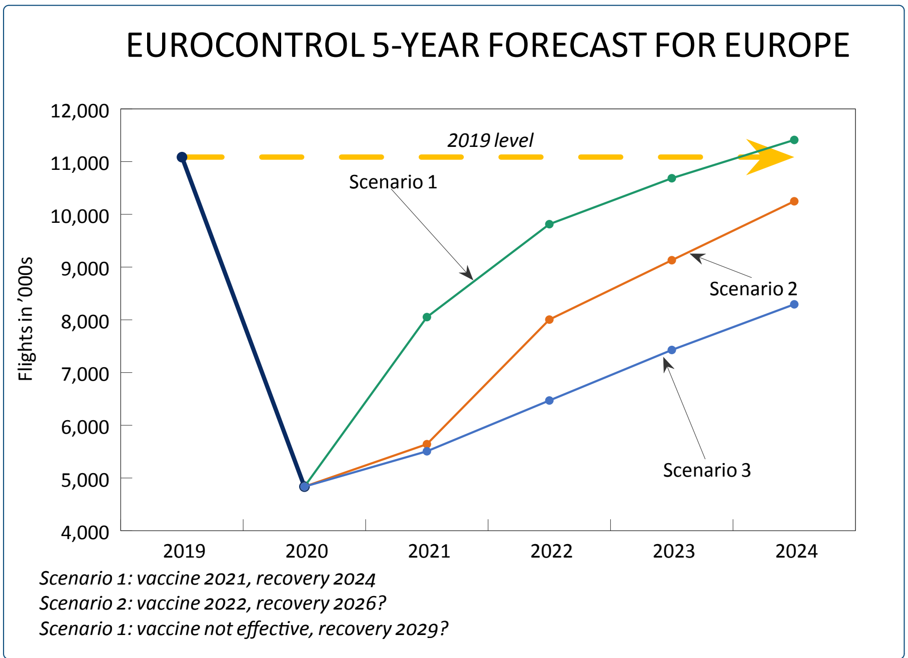
The Covid-19 catastrophe is of a vastly different order of magnitude, bringing airport transactions to a near halt in Europe. A full traffic recovery is even more important for airports, which require traffic volume and revenue to cover their high fixed costs, than for airlines, some of which will be able to adjust to the world and operate profitably in a downsized market, especially if inefficient competitors are forced out. What is the value of airports now is just unknown, given that debt is swamping equity and cashflow is so reduced.

Latest thinking on traffic recovery pushes the 2019-equivalent year out to 2024 or 25, with the prospect that, in the European market at least, Summer 2021 will be another write-

EUROPEAN AIRLINE TRAFFIC AND INDICATIVE VALUATION MULTIPLES FOR EUROPEAN AIRPORTS



Sources: ICAO, PWC, Aviation Strategy



off as international travel restrictions will remain in place. Thereafter, some form of fairly rapid S-shaped traffic recovery seems likely, with pent up leisure demand being unleashed but the recovery then levelling off until a resumption in business travel causes a second shift in the curve.

The members of the consortia that have bought and sold airports assets have different priorities — construction companies see the potential of massive building projects, airport groups look to diversify risk and sell their operating expertise, private equity makes cyclical plays and pension funds are attracted by the long-term nature of the investment — but until 2020 all were comforted by the solidity of airport investment. The pandemic, however, has exposed the fragility at the core of airport values.

Traffic forecasting mythology

At the base of any airport valuation exercise is the traffic forecast. Projected passenger throughput drives, directly or indirectly, just about every revenue item — aeronautical (passenger handling charges, landing fees, CUTE and CUSS, etc) and commercial (car parking fees. Concessionaire contracts, etc). The forecast also drives Opex, with employee numbers being linked to traffic via various elasticities. Most critically, the traffic forecasts determine the timing for Capex decisions.

Traffic methodologies have become more sophisticated over time, but, pre-Covid, the forecast traffic CAGR almost always worked out at 3.5% ±1%. There are basically two elements to any forecast:

✈ In the short term, a focus on airline plans, which in normal times works well for larger airports but is questionable at smaller ones when an unexpected decision to downsize by an airline (usually Ryanair) totally undermines the numbers.

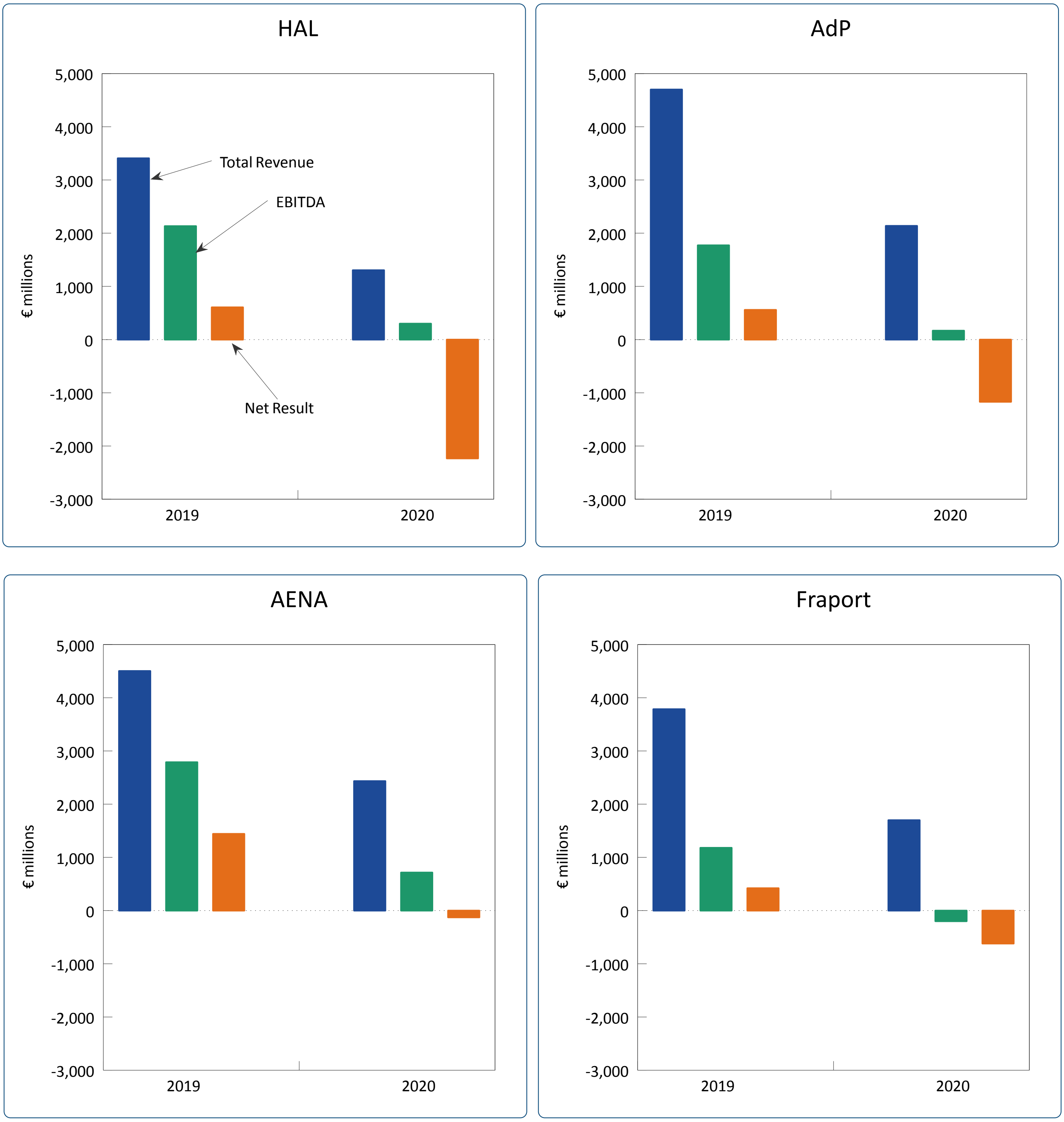
✈ In the long term, the traffic numbers are linked to and driven by some form of GDP forecast, which depends on finding someone to make an accurate long-term GDP forecast. And then there is a conceptual problem. The relationship between GDP and air transport is a correlation not a causation; to produce a forecast for a whole economy, one must input assumptions, explicitly or implicitly, about the growth in sectors like travel, communications, leisure and indeed aviation.

Uncertainty tends to be dealt with by developing numerous scenarios and attributing P numbers, representing the percentage chances of that scenario being met or exceeded, to each one; so, for example, a very low traffic forecast would have a P95 rating while an aggressive forecast would be a, say, P50. A plausible narrative can be attached to most scenarios, but in the end practicality prevails and a middle-type forecast is chosen as the basis for discounting future cashflow and arriving at an approximate valuation that can be negotiated around.

This standard forecasting methodology in effect excludes catastrophic events and has created the misleading impression that airports are inherently low risk investments. At the start of the pandemic, we discussed the concept of the "Black Swan" as popularised by Nicholas Taleb (see *Aviation Strategy*, March 2020). It seems even more relevant now. Taleb observed that Black Swan events were not only unpredictable and improbable but they are also inevitable, and it is necessary to prepare for catastrophes.

But, as Taleb has pointed out, people, especially specialist forecasters, are psychologically very poor at accepting the inevitability of Black Swans and preparing for them. He is particularly dismissive about standard forecasting, which he sees as little more than a projection of "normal" times, with false security provided by statistical technique. (To be fair, Macquarie in the days when it

EUROPE's MAJOR AIRPORT COMPANIES:
FINANCIAL IMPACT OF COVID



was the innovator of airport privatisation transactions used to ask its traffic advisors to think about a repeat of the 1918 flu epidemic, an exercise that over-stressed the forecasting models and the forecasters.)

Airports vs airlines: Dilemmas and conundrums

European LCCs changed regional airports, introducing the concept of trading guaranteed traffic growth for low — in some cases, negative — fees per passenger, rates that bore no resemblance to the official schedule of charges that airports continued to publish. Underutilised facilities began to fill up, revenue from commercial activities soared, expansion plans were drawn up, and governments, both central and local, realised that there was money to be made through privatisations.

Over time airports were able to regain some pricing power as the LCC sector matured and growth rates slowed; the European Commission also intervened, finding that some of the airport deals constituted illegal state aid.

In 2020 the balance of power inverted again. Airports were left viciously exposed to the collapse in traffic — as evidenced by the 200 airports facing insolvency according to ACI-Europe — while LCCs like Ryanair and Wizz and, to a lesser extent, easyJet had more than sufficient liquidity to weather the crisis. Pre-Covid contracts rapidly became unenforceable as the LCCs naturally used the crisis as an opportunity to lower costs; Michael O'Leary of Ryanair put it simply: "Aircraft numbers are going to move significantly to wherever we can get the best deals." European regional airports have offered airlines "Recovery Incentives", "Welcome Back Packages, "Airline Support Schemes"; in other words, they have discounted like crazy.

Larger, formerly congested airports have another dilemma. In order to preserve connectivity in the Covid crisis, and to protect flag-carriers, WASB (the Worldwide Airport Slot Board, which comprises IATA and ACI) has changed the slot utilisation rules. Instead of the standard 80% "use it or lose it" criterion for slot usage, a 50% rule was implemented in 2020 and extended to the Summer 2021 season.

It is unlikely that this rule change can be extended further, raising the possibility of LCC incursion into major hubs — easyJet could expand services at CDG and might enter Heathrow (it has in the past talked about its planned schedule there); Ryanair and Wiz would be interested in Amsterdam. There is the theoretical possibility of a new, more effective version of LHLCC.

For Europe's largest regulated airports, the essential problem is how to respond to the traffic loss from global network carriers, in particular long-haul business orientated traffic that is going to much slower to recover than short-haul leisure-orientated traffic. In these unprecedented times the regulatory regimes tend to prompt airports into raising aeronautical charges, the opposite of what might be expected.

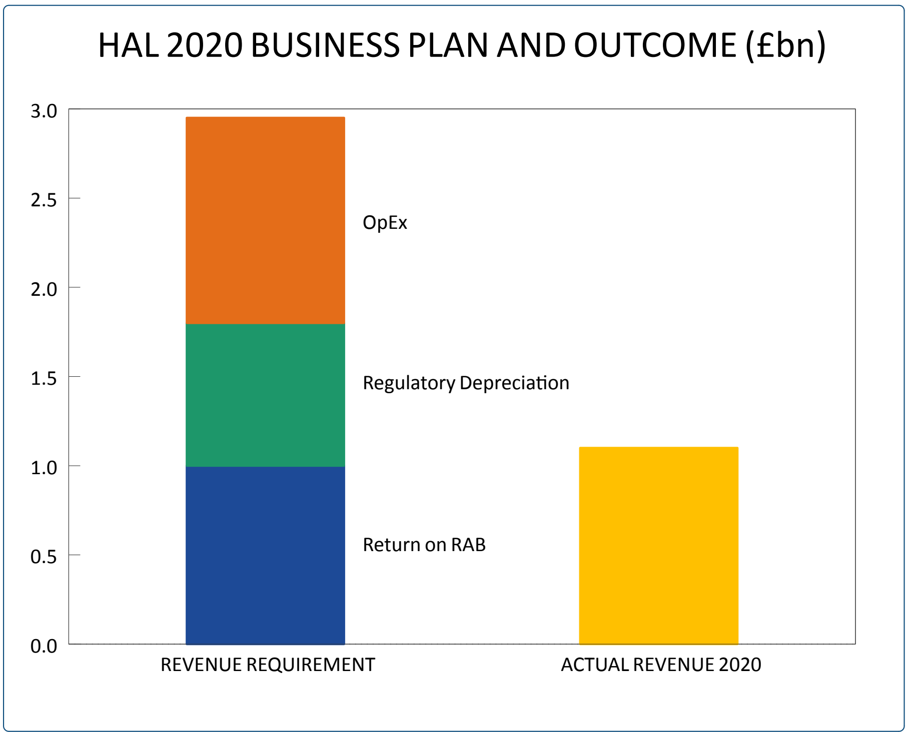
Andrew Lobbenberg, equity analyst at HSBC explained this issueas succinctly as possible in a recent research report: "Traditional airport charges regulation at economically regulated major airports, is designed to protect airlines and their passengers from the potential abuse of dominant position by the monopoly providers of airport capacity. The structures are typically designed to define charges that allow airports to earn a return on capital equivalent to their cost of capital: ROCE = WACC regulation.

"In the present circumstances, these structures look out of place: we forecast five stockmarket-quoted European airports [AdP, AENA, Fraport, Vienna and Zurich] to report net losses in 2020, negative returns and wide gaps to their WACCs. If the financial regulator were to reset tariffs to allow ROCE to reach WACC in the short term, conceptually airport charges would need to rise rapidly …. challenging from a pragmatic perspective, given that the airlines have battled to survive the pandemic and many are only trading thanks to significant state aid injections."

HAL: Regulatory ructions upset IAG

Heathrow Airport Holdings' (HAL) response to the 75% collapse in its traffic and £2.1bn net loss in 2020 has raised a number of regulatory issues as well as deeply upsetting its airline clients. In essence HAL turned to its regulator, the CAA, asking for a 5% increase in its airport charges from 2022 in addition to planned increases associated with the construction of the third runway. HAL had not got close to breaching its loan covenants. The request to the CAA, made last October, was prompted by concern about its cost of funding and its shareholders.

The consortium that owns Heathrow is led by the Spanish infrastructure conglomerate Ferrovial (25%); the other shareholders are the Qatar Investment Authority (20%), CDPQ, the Québec provincial pension fund (12.6%), GIC, the Singaporean sovereign wealth fund (11.2%), Alinda Capital, the US private equity fund (11.2%), the China Investment Corporation (10%) and the UK's



Universities Superannuation Scheme (10%) — an immensely wealthy group which in the pre-Covid years was extracting about £500m a year in dividends from HAL.

In order to raise fees HAL has asked the CAA — whose regulatory role is primarily to protect the consumer, ie the passenger, from the monopolistic power of the airport owner by setting maximum airport charges for five-year periods — to increase the Regulatory Asset Base (RAB). The RAB is a regulatory parameter defined as "representing the value of the investments that HAL has made in its regulated business that have not yet been fully recovered through airport charges" RAB is used by the CAA as the basis for calculating revenues allowed to HAL given an agreed return on the asset base. It is one of three building blocks — along with Regulatory Depreciation and Opex — which sum to the expected revenue for HAL given expected passenger volumes. But, as the bar chart below vividly illustrates, in 2020 actual revenue amounted to only about a third of the required revenue expected in HAL's business plan.

Increasing the RAB, through adding in more future expenditure (£1.8bn), is therefore the mechanism through which HAL can justify a price increase to the regulator. The concept behind a RAB is to give HAL, or any regulated utility, a strong incentive to use its cashflow for capital expenditure to improve the asset. But HAL's critics, including the dominant airline at Heathrow, argue that the RAB perverts the investment process.

HAL has been accused of exercising lax cost control, particularly, in its Capex because inflating the RAB automatically increases its own revenues through the return on investment the CAA allows the airport owners. These costs can then be passed on to captive airline customers through passenger charges.

Since Ferrovial took over BAA in 2006 the RAB has increased from £5bn to £16.5bn in 2020, and net debt has soared in parallel to £13.1bn, while book equity at the end of 2020 had turned negative, around -£600m (our estimate, this number has not yet been published). Again critics point to distortion caused by the regulatory regime: the company has become over-leveraged — a debt/equity ratio of over 14 in recent years — because debt providers have perceived the regulatory regime as a process that almost eliminates risk in funding capex.

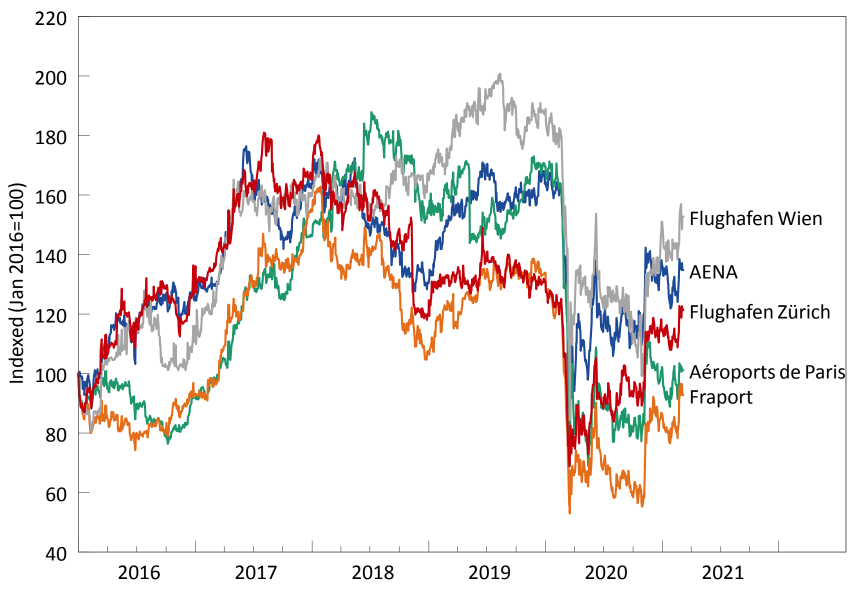
All that has changed drastically with the pandemic, and the airlines are not being sympathetic. In its February 2021 report on HAL's RAB application, the airlines' opinion was summarised as:

"HAL's current financial concerns are caused by its highly leveraged financial structure … HAL should be looking to shareholders, not passengers, to address these concerns. Airlines are particularly concerned by media reports that HAL would look to pay dividends to its shareholders in 2022 …. evidence that HAL is not directing capital towards supporting service quality".

Former IAG CEO Willy Walsh was more pithy with his parting shot before leaving the airline group last year: "Heathrow is on a massive gravy train and will do everything to protect that. We have absolutely no confidence in its ability to deliver cost-effective expansion."

Walsh was particularly exercised by the issue of prefunding the third runway, in which the CAA is supporting HAL. In essence this means the current Heathrow carriers will be paying for the new runway long before it becomes operational, with no guarantee of receiving additional slots, as they may be prioritised for new entrants, or indeed of surviving the financial fall-out from the pandemic.

EUROPEAN AIRPORTS SHARE PRICE PERFORMANCE



HAL has been pretty dismissive of its biggest client's opinions and has concentrated on arguing its position with the regulator. Its position boils down to the contention that if the CAA does not intervene in the exceptional circumstances of the pandemic to allow HAL to increase its RAB, and hence its passenger charges, then its financiers will take a radically different view of Heathrow as a fundamentally risky business, which will mean the cost of funding will soar, and in the longer term passenger charges will be significantly higher than they otherwise would have been.

For the period 2022-2026, HAL expects the passenger charge to average £32.76 if the RAB adjustment it has demanded is allowed, but warns that it will have to rise to an average of £42.44 if no RAB adjustment is made. The current maximum passenger yield is £23.56 (excluding a temporary Airport Cost Recovery Charge £8.90 surcharge to compensate for keeping underutilised check-in facilities operational.)

HAL makes a particularly interesting assertion with regard to the cost of its equity: it estimates that the impact of the Covid-19 pandemic on its cost of equity — unless the CAA intervenes — is an increase from 8.30% to 16.79% because of the increased riskiness of the investment (in technical terms, an increase in the beta value). This implies a halving in the equity value of Heathrow; for comparison, the stockmarket-quoted European airports have shown more modest declines in their equity values since the beginning of the crisis — AdP, -38%, Fraport, -25%, AENA, -16%.

Further, HAL appears to argue that the regulatory regime has misled investors as to the riskiness of the Heathrow investment, because an event like the pandemic could not have been factored into their calculations. It stated explicitly, "it is not appropriate for a regulated company to be expected to bear downside impacts that occur less frequently than once every 20-years."

The CAA did not buy that, responding that the shareholders assumed all traffic risk when they invested. HAL's view does, however, accurately reflect the Black Swan blindness described above.

Nevertheless, it is likely that when the CAA reaches its decision, sometime in March, it will allow some exceptional increase in charges related to the pandemic and may introduce some traffic risk element into the charging mechanism. But the pandemic has laid bare basic weaknesses in the regulation of Heathrow in terms of distortions on the perception of risk, a consequently over-leveraged capital structure, and an inflated expenditure programme. And it just seems wrong that the regime foments such acrimony between HAL and IAG (and other British airlines).

In all the pages of sometimes arcane arguments generated by HAL's request to the CAA and the CAA's responses, the elephant on the apron hardly gets a mention. What is the impact of the pandemic on the viability of the third runway? Are the former traffic forecasts still valid? (HAL, unsurprisingly, says yes.). What are the chances of more cost inflation given the changes in risk perception? Have the environmental arguments against the project hardened? All questions that raise the spectre of another Heathrow enquiry.

AdP: The Greening of Paris

In contrast to Heathrow, Aéroports de Paris (AdP) has embarked on what appears to a radical new strategy based on a much lower traffic profile. It does not expect traffic at CDG and Orly to return to the 2019 level until sometime between 2024 and 2027, noticeably later than the outlook from most other airports and airlines; so instead of a 2025 throughput of 126m, its previous planning assumption, traffic volume will be around 107m, according to the new plan.

The airport group appears to have embraced a green agenda: "Shifting from a high-growth model to a new profitable airport model in accordance with new environmental and societal challenges".

The strategy has not yet been worked out in detail but encompasses these elements:

- ✈ A marked reduction in capex: AdP has already made the decision to cancel the fourth terminal project at CDG, with the French Environment Minster noting that the expansion plan has been based on traffic forecasts that had been rendered meaningless by the pandemic. Only projects that have already been started are guaranteed.
- ✈ An implied curtailing of international investments after the completion of existing projects in India and Kazakhstan (AdP has stakes in 24 airports worldwide including a 46% stake in the Turkish operator TAV).
- ✈ Specific carbon targets: AdP's target is to achieve carbon neutrality at the Paris airports by 2030 and net zero emissions by 2050 for these airports plus Zagreb, Liège, Ankara and İzmir (the difference between the two targets is that carbon neutrality can be reached by, for example, buying carbon credits whereas net zero emissions is a physical commitment at the AdP airports).
- ✈ Greening ground handling (electrification, natural gas and hydrogen).
- ✈ Partnering in consortia, alongside Airbus and Air Liquide, which are developing alternative aviation fuels.

AdP's strategy is naturally tied in with that of Air France, which is facing the challenges of right-sizing its CDG hub, probably permanently cutting back intercontinental operations, switching to a A220 short-haul fleet and rebalancing its traffic mix away from connecting to O&D. AdP is 51% owned by the French state, with the majority stake encapsulated in law, while the Air France Group is 28% owned by the French and Dutch states, but that ownership and control is set to expand as a further tranche of state aid is almost inevitable. The green post-pandemic AdP is probably going be more of a statist institution than a global airport investor and developer.

Financially, the new AdP has a few problems in recovering its pre-Covid profitability — in 2019 the company achieved net profits of €588m equivalent to 12.4% of total revenues but in 2020 it made a loss of €1.17bn. Moving to a low traffic model means than AdP will be unable to contain its unit costs through volume growth. With four runways at CDG it has potentially twice the capacity, 120m passengers a year, of two-runway Heathrow, but that potential will not be realised for a long time. And rigid French labour laws make cost cutting through workforce rationalisation very challenging.

On the revenue side it may be able to push up its aeronautical pricing through the cost of capital/ return on investment formula encapsulated in its regulatory regime, but commercial revenues which do not come under the regulatory regime (AdP's dual till pricing regulation is based just on aeronautical operations, unlike Heathrow's which combines both aeronautical and commercial, the single till model). AdP has been an innovator in the commercial field focusing on selling upmarket goods to long-haul passengers, especially the Chinese and Japanese. In 2020 commercial revenues collapsed by 57% against 54% for total revenues, and the easy-spending long-haul traffic segment is expected to be the last to recover post-Covid.

Commercial activity: Compatible post-pandemic?

European airports have come to rely on commercial activities for 40-50% of their total revenues. Is this model compatible with requirements of the post-pandemic world?

Optimising passengers "dwell-time" in airside terminals in close proximity to the attractions of shops, bars and restaurants used to be a key element of airports' commercial strategies. Around 50 minutes was thought to be optimal — long enough to encourage spending, whether through desire or boredom, but short enough to avoid over-crowding. Post-Covid, encouraging dwelling in terminals is unlikely to prove too popular, and medical checks on top of security are likely to make the airport experience more stressful.

Even before Covid, the airport retail offering was being questioned. Brian McBride, formerly chairman of Asos and CEO of Amazon UK and the online retail guru, was very sceptical about the prospects for duty-free shopping at a GAD conference back in 2017; he simply could not see a future for these strange shops. The pandemic is estimated, by consultancies which specialise in such things, to have advanced online retail by at least ten years while dealing a death blow to the high/main street. The question airports should be contemplating is: what will Amazon do to disrupt airport duty-free shopping?

Collecting online purchases at the departure terminal is fairly well established at some airports. Could airport shopping be virtualised by linking online purchases to electronic records of airline tickets and/or boarding passes, with the goodies being delivered to home addresses?

Car parking is the most important single commercial revenue source for many airports yet this seems more and more like an anomaly in an environmentally conscious world which encourages trains over roads. Emission from cars travelling to/from airports are a major element in airports' carbon footprints.

Airport retail may prove to be more resilient than suggested here, but these issues are not going to go away. Moreover, airports have a fundamental problem with their contracts with their concessionaires. These contracts normally contain Minimum Revenue Guarantees, fees that are paid regardless of passenger footfall at the airport, in other words concessionaires take a large part of the traffic risk. But in the pandemic crisis these minimum fees have simply not been paid, and all are up for renegotiation. Yet some airports appear not have recognised this reality, continuing to book the minimum contracted commercial revenues in their accounts even though they may well be uncollectable. For instance, AENA, the Spanish airport group, reported traffic down by 72% in 2020, aeronautical revenue down by 67% and, by contrast, commercial revenue down by only 17%.

So many issues — No easy solutions

Taking all these issues into account, there appears to be no rapid recovery path for airports, though clearly some are in better positions than others.

At the same time as aeronautical revenues are being squeezed by the oversupply of airport capacity relative to the weakness of airline demand, commercial revenues are also under threat because of changing travel requirements and technical innovation. With former assumptions of growth now untenable, pressure may increase on unit operating costs.

Unless financiers and investors take the very benign view that traffic will soon resume at normal growth rates and the pandemic was just a one in hundred-year event, the cost of both debt and equity will rise significantly. Which implies a fall in asset values. Airports will no longer be regarded as low risk investments.

But, unlike airlines, airports are rarely shut down. Solutions come from financial restructurings and management change.

Alitalia: Rinascimento o Morte

FOUR YEARS ago, well before the onset of the coronavirus pandemic, Alitalia ran out of cash and was put into short-term emergency administration. It was given a government loan of €900m, to be repaid within six months. The idea was to allow the administrators time to find a buyer for the financially-challenged Italian flag-carrier.

And Alitalia has forever been financially challenged. As the chart below shows, it has reported an operating profit in only two of the past 25 years (1997 and 1998) and a net profit (benefiting from asset sales) in only four.

It could have been good timing to find a buyer: the industry was profitable and on a continued upswing; and there seemed to be a lot of interest with suitors such as easyJet, Lufthansa and even Ryanair. Air France-KLM, having had its fingers burnt in previous restructurings, bowed out of the race but got its partner Delta involved — at the time on a roll of buying minority stakes in airlines round the world (including Air France-KLM) — to keep the airline in the Skyteam alliance and their immunised transatlantic joint venture.

But the cogs of Italian bureaucracy move slowly at the best of times, and were not helped by political infighting about the necessity of keeping the national flag-carrier in Italian hands. In the previous restructuring in 2013 four of Italy's major banks (UniCredito, Banca Intesa Sanpaolo, Banca Popolare di Sondrio and Banca Monte Paschi di Senna) along with Atlantia (which runs Rome's airports), the state-owned postal service Poste Italiane and national stalwart Pirelli had been persuaded support the flag carrier. That paved the way for Etihad to invest €1.75bn for a 49% stake, sweetened by side deals including the sale of some of Alitalia's Heathrow slots and a 75% stake in its frequent flyer programme MilleMiglia.

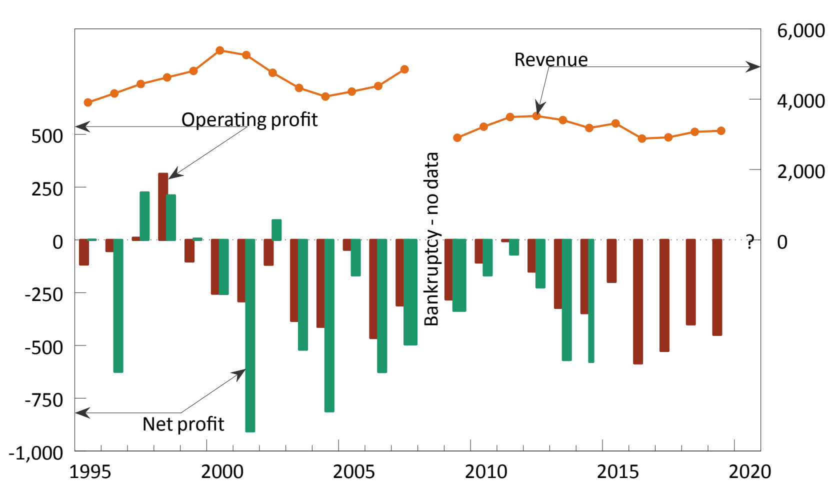
In the 2017 bankruptcy, all these players will have lost their equity investments, but in the attempt to find a new buyer, the government had the bright idea of getting the national railways involved (see *Aviation Strategy* May 2019) and the period of special administration was extended to allow Ferrovie dello Stato (FS) to develop a commercially realistic case for investment.

But FS could not justify holding more than 35% of the equity. The Italian Ministry of Finance felt it could take a 15% stake without incurring wrath from Brussels for providing illegal state aid. But by the end of 2019 it could not persuade Delta (who had just bought a 20% stake in LATAM for $1.9bn) to improve its offer of €100m for a 10% stake in the newest version of Alitalia, and it was left with a massive funding gap.

Then by March 2020, the first wave of Covid-19 pandemic devastating airline revenues worldwide, time had run out on the idea of ever finding a buyer. The Italian government announced that it would renationalise Alitalia.

By June 2020, it was said, a new state-owned company, Italia Trasporte Aereo (ITA), with €3bn of funding would acquire the "good" parts of Alitalia — the brand, the frequent flyer programme MilleMiglia (at the end of 2019 Alitalia had apparently bought back the 75% it had previously sold to Etihad), and the slots at Milan Linate — exactly

ALITALIA: FINANCIAL RESULTS (€m)



ALITALIA: FLEET

	In service	Parked	Total	Avg Age
A319	20	2	22	13.8
A320	5	33	38	14.1
A321	1	4	5	22.0
A330	3	9	12	11.4
777	6	6	12	17.2
ERJ170	8	2	10	8.8
ERJ190	4	1	5	9.2
Total	**47**	**57**	**104**	**13.7**

what should have happened in the 2008 and then the 2013 restructuring — and relaunch the airline with a modestly smaller fleet (of 90 aircraft compared with the prepandemic 133). What would happen to the maintenance and ground handling units, employing 4,000 people, wasn't made clear.

In doing so the government was perhaps emboldened by the ease in which Germany, France and the Netherlands had been able to pour in billions to support *their* flag-carriers; and the approval by the European Commission of Italy's own provision of €199.45m in cash to Alitalia during the pandemic, judging that to be valid state aid.

The June deadline passed, and the relaunch of the new and improved Alitalia slipped through the rest of the year: there seems to have been broad consensus that Francesco Caio, an executive with a background in telecoms and banking and who led the postal service Poste Italiane to an IPO in 2015, should be the company's Chairman and Fabio Lazzerini, a former general manager of Emirates and most recently Alitalia's chief business officer, should take over as chief executive; but political infighting among the country's fragile coalition government apparently failed to find agreement on other members of the board.

The plan resurfaced in January, with a new launch date for Alitalia IAT in April. This time the idea was to start up with an even smaller fleet of 50 aircraft, but rebuild operations back to over 100 aircraft over the following few years. As in all the previous restructurings, the business plan seems to target break-even within two years and a sustainable 8-10% operating margin thereafter.

But the architects of the plan had possibly forgotten that the Commission was still investigating the €900m "short term" government loan provided in 2017 and a subsequent €400m government grant in 2019, still to decide whether these contravened the Union's state aid rules.

According to report in *L'Espresso* news magazine, the European Commission wrote to the Conte Government in January asking for guidance on the proposed plans. The leaked correspondence apparently expressed concern that the project as it stood was merely "a simple corporate transfer operation without discontinuity with the old company," and stressed that the constituent parts of the old Alitalia should be split and sold separately through an "open, transparent, non-discriminatory, unconditional tender" to third parties, and not just transferred to the new nationalised

ALITALIA: TOP 20 ROUTE PAIRS (PRE-COVID)

Route pair	Seats (000s)	Daily flights	Dom	Eur	Int
Milan-Rome	1,705	19	•		
Catania-Rome	1,357	11	•		
Palermo-Rome	1,019	8	•		
Cagliari-Rome	839	7	•		
Catania-Milan	718	7	•		
Rome-Venice	716	6	•		
Rome-Turin	689	6	•		
Cagliari-Milan	672	6	•		
Bari-Rome	667	5	•		
Lamezia-Terme-Rome	615	5	•		
Milan-Naples	605	7	•		
Bari-Milan	538	6	•		
Genoa-Rome	535	5	•		
Paris-Rome	530	4		•	
Rome-Tel Aviv	522	4			•
Milan-Palermo	515	5	•		
Brindisi-Rome	509	4	•		
New York-Rome	494	3			•
London-Rome	460	4		•	
Naples-Rome	445	4	•		

entity in a private transaction.

And then at the end of January, with the fragile coalition collapsing, the Conte government resigned, paving the way for the appointment of a technocrat government led by former head of the European Central Bank, Mario Draghi.

Shortly after *his* appointment, Italian daily newspaper *La Repubblica* ran a story suggesting that because of Draghi's "good relations" with Germany and Angela Merkel, Italy was now investigating another exit route for the flag carrier. The idea promulgated was to put the Alitalia airline operations into the company's regional subsidiary CityLiner, hand it over to the Ministry of Finance, and persuade Lufthansa to buy it — in the same way that Lufthansa had invested in the resurrections of Swissair (through Crossair, renamed Swiss) and Sabena (through its regional subsidiary DAT, renamed SN Brussels).

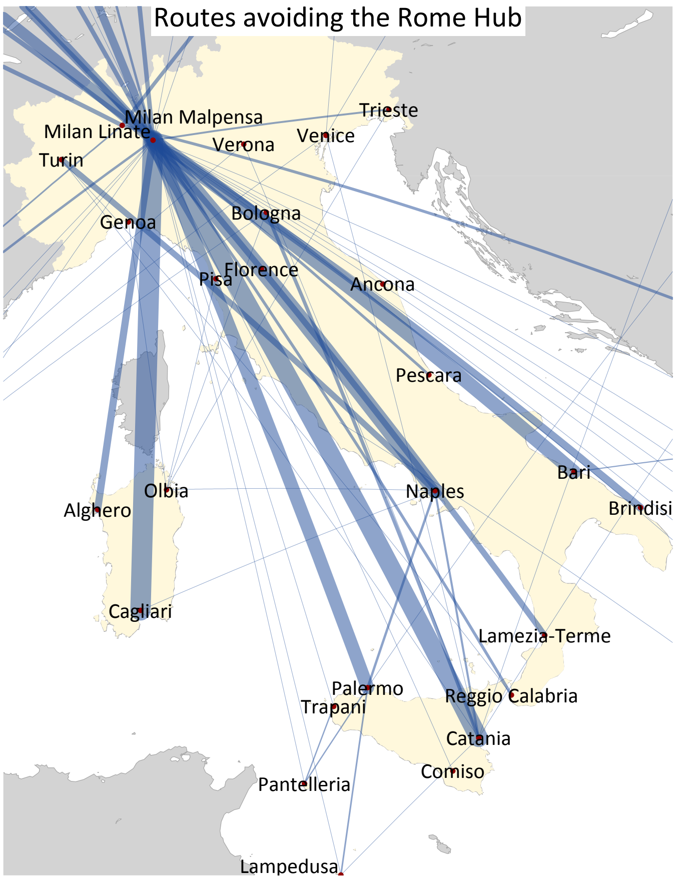
The article failed to mention that Lufthansa had waited for Swiss to become profitable (and the Swiss government to renegotiate all its bilateral air service agreements) before taking a majority; reluctantly acquired a majority in Brussels Airlines before it could produce a profit; and is specifically precluded from making acquisitions under the terms of its €9bn bailout from the German government in 2020. It also has its own existential crisis.

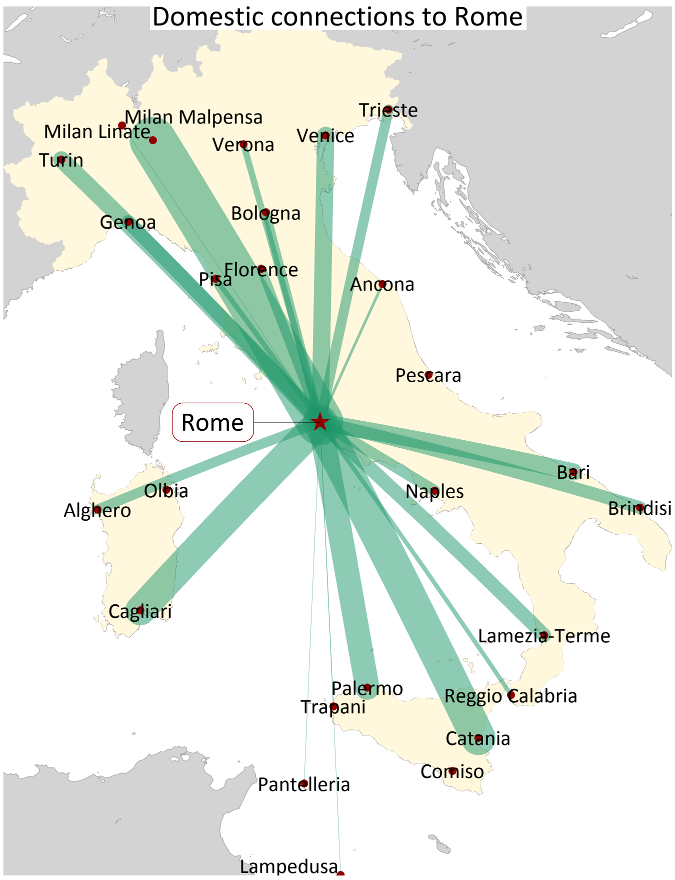
Italian flag dilemma

The political will is to maintain a national flag-carrier (and incidentally safeguard at least some of 10,000 jobs in a highly unionised workforce). After signing the decree published last year to create the new ITA, transport minister Paola de Micheli said, "a national airline is born that will have to play a leading role on the European and international market... a large industrial operation at the service of the country, in support of the competitiveness of our businesses and the relaunch of Italian tourism".

But the political will ignores the commercial realities, and the legacy of Alitalia's failure to react to the development of the air transport indus-

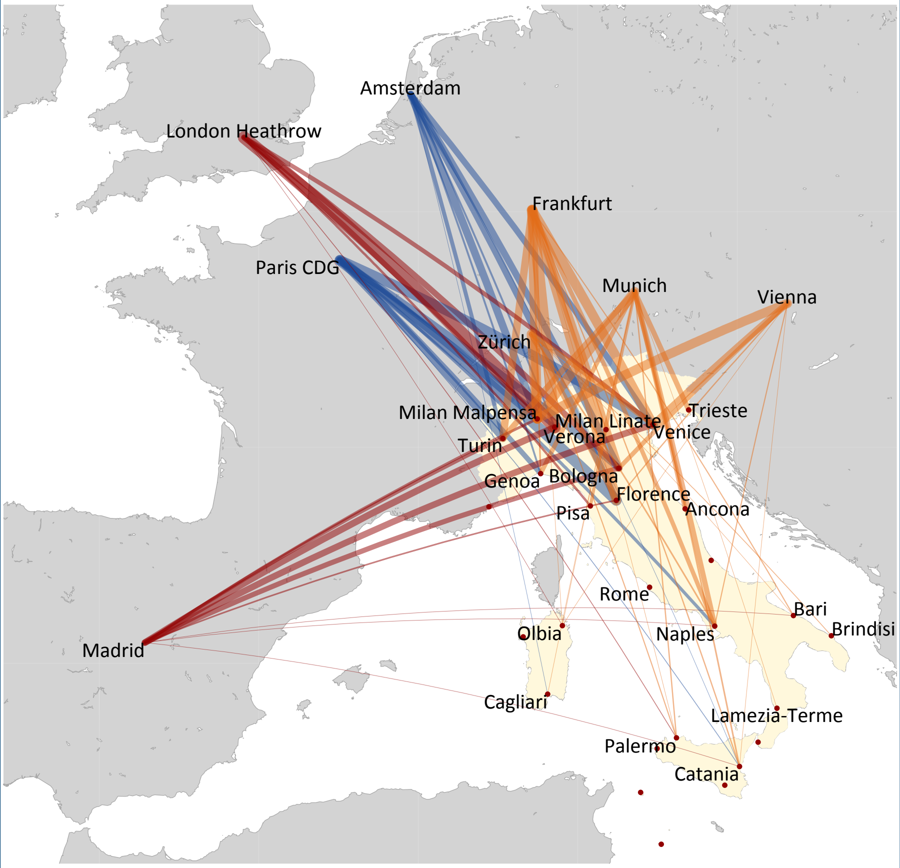
ALITALIA: DIVIDED FOCUS IN ITALY (PRE-COVID)





Note: thickness of lines directly related to number of seats

NORTHERN ITALY'S HUB ATTRACTION



Routes operated (pre-Covid) by Europe's three largest network carrier groups (IAG, Air France-KLM and Lufthansa Group) from their respective hubs to points in Italy excluding Rome.
Note: thickness of lines directly relate to number of daily flights

try since deregulation.

It had emerged from the 2008 bankruptcy two-thirds the size of its former self — and that was after an effective merger with Air One. Since then Alitalia had hardly grown at all — and this in an industry that depends on long term growth to stand still. Its share of the Italian short haul market fell ten points from 30% to 20% leaving it in 2019 well behind market leader Ryanair, and just ahead of easyJet.

Half of its total seat capacity in 2019 was accounted for by twenty routes — all but four domestic (see table on page 13) — the first international route, that of Rome to Paris, coming in at number 14. Moreover, six of the top twenty routes avoid the hub in Rome entirely. Indeed as the map on the preceding page shows, Alitalia operated a large number of point-to-point routes that avoided Rome; and a reasonable number of thick routes centred on Milan Linate — the northern city's convenient but constrained downtown airport at which Alitalia holds over 60% of the slots.

In the current restructuring plan Alitalia has suggested that it will eliminate all "hub-bypass" routes lacking international connections (supposedly such as Turin to Sicily — which it doesn't actually fly). Presumably it will retain its network of point-to-point routes to Milan, and has said it would leverage the "negotiating power" of its superior portfolio of slots at Milan-Linate through a deal with Air France or Lufthansa (or anyone else?).

The real dilemma is that Italy is really two disparate countries within one. The north, and particularly the Po valley, is the wealthy industrial area. The south — the *Mezzogiorno* — is a relatively impoverished area with regional annual per capita incomes less than half that of the North. The industrial north is centered in Milan; the political centre is in Rome. There are strong traffic flows between them undermined by the development of high speed rail.

Italy, like the other mediterranean countries, is a tourist destination. Inbound tourist traffic is intent on reaching the leisure destinations, well away from the industrial or political centres: highly seasonal and price oriented.

However, there is also strong demand from the Po valley on longer haul routes, and this (without having to go through Milan) is easily diverted to feed the major European hubs (see map left) each of which able to offer more numerous and convenient connections supported by underlying O&D demand than Alitalia at Rome.

In all the confused discussion of the restructuring plan, no-one seems to address the fundamental question of quite where Alitalia makes its losses: Milan, Rome, regional, or long haul.

HNA: Grey Rhino topples into bankruptcy

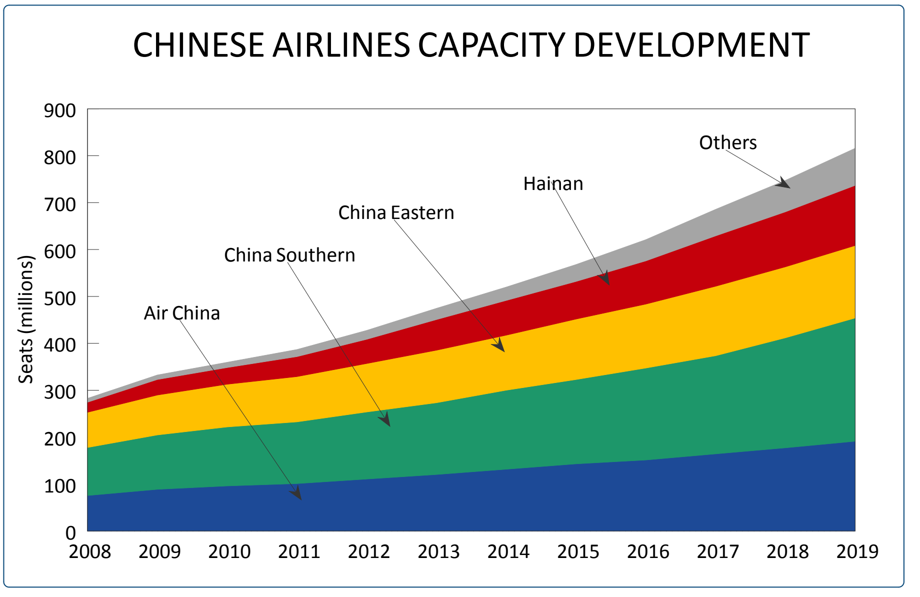
HAINAN Airlines Group is on the brink of bankruptcy, having accumulated an estimated $10bn loss for 2020. And this situation is not the fault of Covid-19.

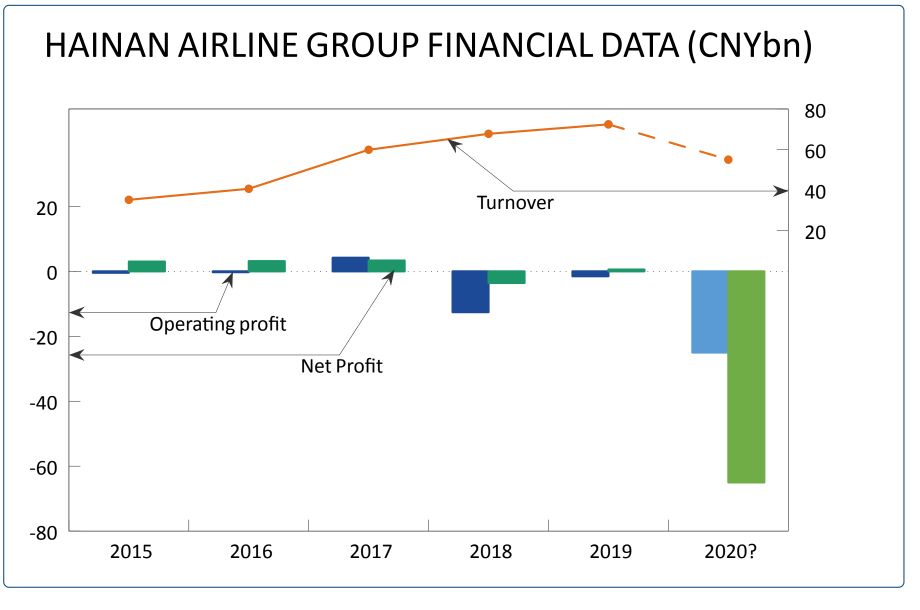
Founded in 1993 as one of China's first "privately-owned" airlines (albeit with the help and support of the Hainan Provincial Government), Hainan Airlines had grown at a phenomenal rate. By the end of 2019 the group had a 16% share of the Chinese airlines' market — just behind China Eastern — having grown at an annual average rate of 16% a year over the previous decade, well above the market growth of 9% a year. A Skytrax 5-star airline, it was starting to look as if it might be a real challenger to the "Big 3" state-owned carriers — Air China, China Southern and China Eastern.

Hainan Airlines itself had a fleet of 220 aircraft as of the beginning of this year. Its main base is at Haikou on Hainan island and has hubs in Beijing and Xi'an and a strong presence in Shenzhen and Guangzhou, serving pre-pandemic 340 domestic routes between 69 cities in mainland China and internationally operating 77 routes to 50 destinations in 24 countries worldwide. It has a large number of subsidiary and associate airlines including Beijing Capital Airlines, Tianjin Airlines, Urumqi Airlines, Lucky Air and China West Air which add another 340 domestic routes and 80 domestic destinations to the group network along with 46 international routes to 16 destinations in another 7 countries. In total the group has a fleet of 592 aircraft (see fleet profile on page 19).

In the early 2000s the founders, Chen Feng and Wang Jian, established HNA Group, in the wake of the SARS crisis. It acted as a holding company for Hainan Airlines and as a vehicle for expansion into airports (with a sizeable stake in its home base airport of Hainan Meilan) and related travel and tourism based businesses. This was just at the start of China's "Going Out" strategy designed to encourage outward direct foreign investment and a precursor to the country's quasi-imperialist "One Belt One Road" intiative.

In the early part of the 2010s the HNA Group followed the investment





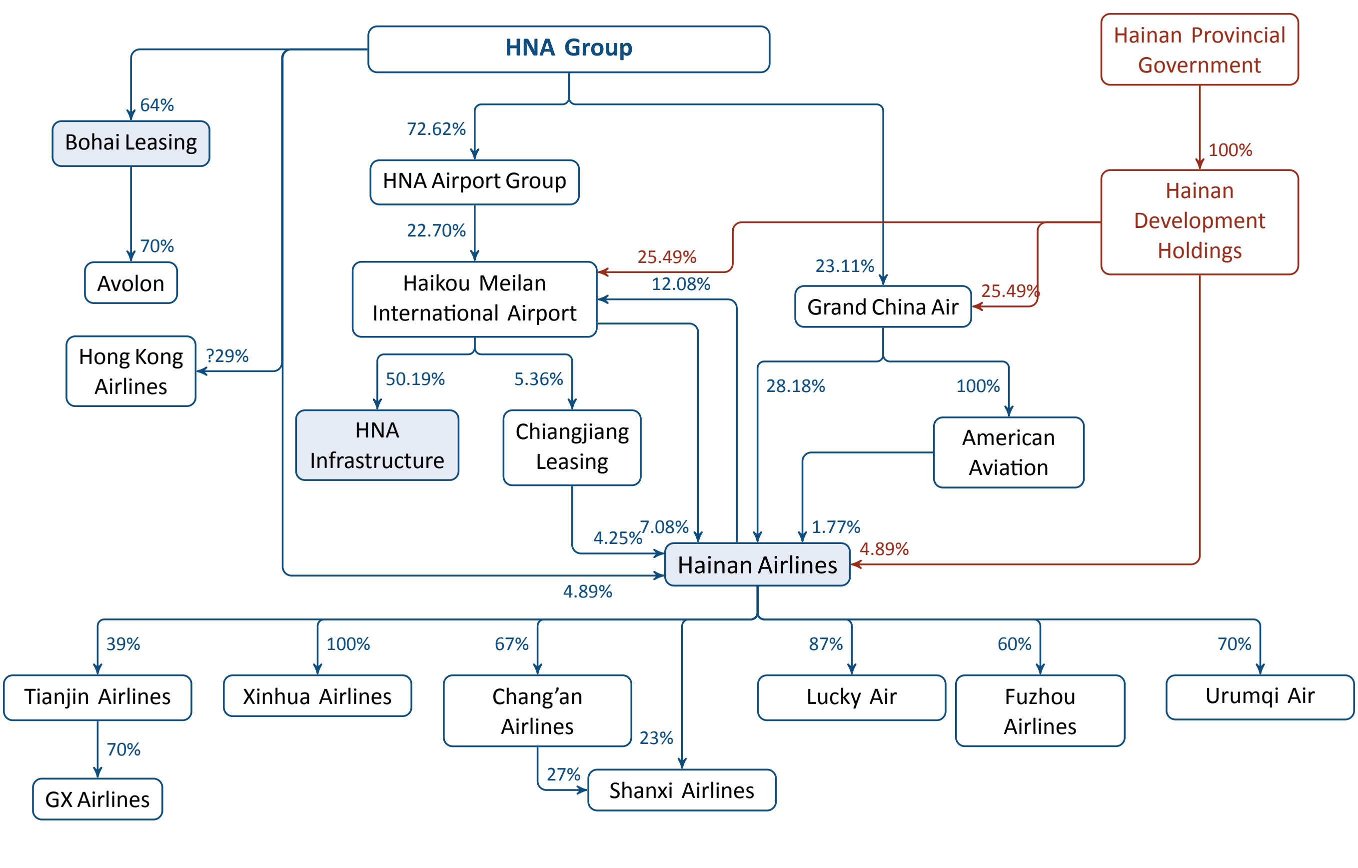
strategy to an astonishing degree, acquiring stakes in airlines (Ghana World Airways, Aigle Azur, South Africa's Comair, Azul, TAP Air Portugal, Virgin Australia), hotels (taking a 29% stake in Spain's NH Hoteles in 2014 and 25% of Hilton Worldwide in 2017), aircraft leasing (Australian Allco in 2010 and Avolon, for $2.5bn, in 2015, which then was used to buy CIT Group's aviation leasing unit for $10bn in 2016), airports (Frankfurt Hahn and Rio de Janeiro), handling (Swissport, CHF2.8bn 2015), catering (Gategroup, CHF1.5bn 2016), travel retail (20% of Dufry, $1bn 2017) container and trailer leasing operations in the US, Caribbean and the Netherlands; and logistics with a $6bn acquisition of US-based IT distributor Ingram Micro in 2016. It also moved into real estate (buying the Reuters HQ office building in London's Canary Wharf for c$280m) and banking (snapping up a 10% stake in Deutsche Bank in 2017). It announced an ambition of establishing its own global investment bank.

By 2016 HNA Group had entered the Fortune 500 global list of companies (at number 464) and anticipated being in the top 100 by 2020 and the top 50 by 2030. Its acquisition spree peaked in 2016 with over $30bn spent: in that year it was the largest Chinese outward direct foreign investor accounting for over 12.5% of total. That year also saw the Chinese authorities start to worry about the consequences of unconstrained debt-fuelled M&A activity, and the PRC started to put brakes on the availability of cheap loans from state-controlled banks. The Group went on to spend a further $15bn in 2017, albeit on deals below the $1bn mark supposedly in the attempt to keep its head below the parapet of scrutiny.

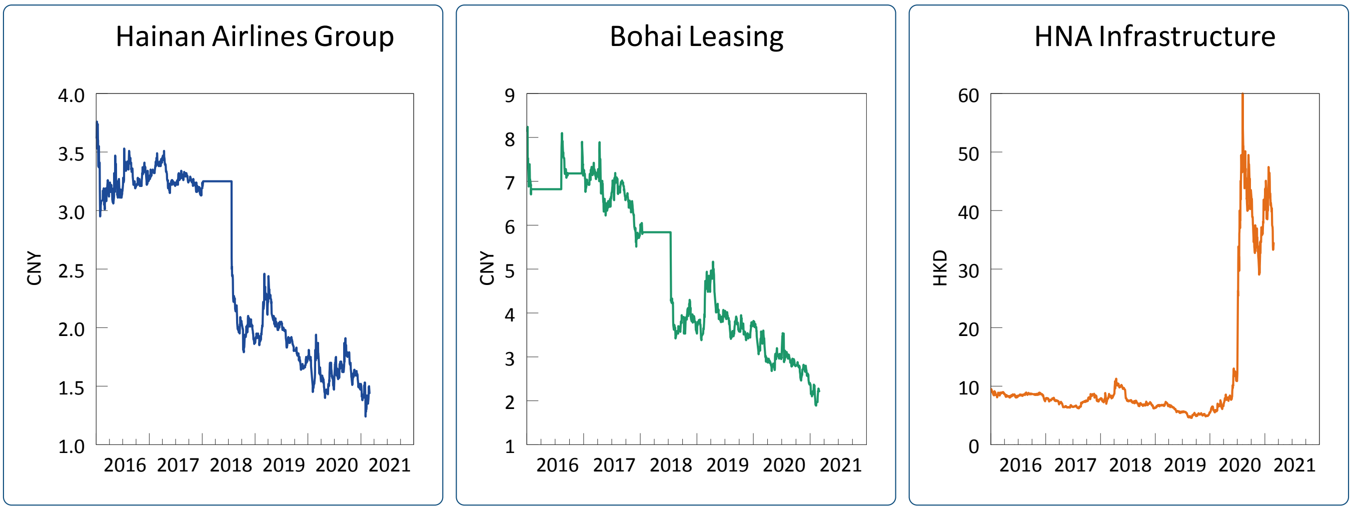
But some of its acquisitions — particularly those of its stake in Deutsche Bank and takeover of Swissport and Gategroup — raised regulatory concerns over HNA Group's ownership structure and the quality of its probity as an acquiror.

As a private conglomerate it was not particularly open to publishing detailed information and its structure is particularly opaque. The organogram below goes some way to attempt to present the interwoven connections and cross-holdings

HNA GROUP: SIMPLIFIED OWNERSHIP STRUCTURE



HNA GROUP ENTITIES SHARE PERFORMANCE



within the aviation interests of HNA Group (updated from our analysis in *Aviation Strategy*, March 2016, although we have been unable to verify changes in shareholdings that resulted from an internal restructuring that took place in 2018).

Liquidity concerns first appeared early in 2018, and the group pushed through restructurings at some of its quoted vehicles: Bohai Leasing and Hainan Airlines had share trading suspended for much of 2018 as the group tried to shore up its liquidity through financial juggling (see charts above). The airline group reported a hefty full year operating loss of CNY12.5bn (US$1.9bn).

And then in late 2018, founder Wang Jian fell to his death from a wall while on holiday in the south of France.

Since then, apparently with oversight from state-owned banks and the Hainan provincial government, the group has been disposing of its overseas investments — at least where it could; Aigle Azur and Virgin Australia both succumbed to insolvency.

Liquidity problems intensified. In September 2020 a court in Xi'an declared HNA Group and co-founder Chen Feng *laolai* (which may translate as "discredited" or "deadbeat") for the failure one of the group companies to pay a court-mandated debt of a mere $5,500; the court granted Chen Feng full state opprobrium by placing him on the social blacklist — banning him from spending on "luxuries" (including travel by air, high speed train, taking holidays, staying at star-rated hotels, playing golf or sending his children to private schools).

At the end of January 2021, a local court in Haikou received a petition requesting the group be placed in bankruptcy and restructured. A couple of days later, three of the group's listed companies, Hainan Airlines Group, HNA Infrastructure and Shenzhen-listed retailer CCOOP Group announced that CNY61.5bn (nearly $10bn) had been "embezzled by shareholders and other related parties" and that they and their subsidiaries had provided non-compliant guarantees for another CNY46.5bn.

Hainan Airlines subsequently stated that it might have to report a full year loss for 2020 approaching the equivalent of $10bn — mostly from asset impairment charges than the effects of the coronavirus pandemic. This will more than wipe out shareholders' funds, it stated, and as a result its shares are to be delisted when the annual accounts are published. Within a few days, creditors had requested bankruptcy proceedings against six of Hainan Airlines Group's regional carriers: Air Changan, Fuzhou Airlines, Grand China Air, GX Airlines, Lucky Air and Urumqi.

According to an article in Chinese financial magazine *Caixin*, the government-appointed team working at HNA Group expects that at least 500 of HNA Group's 2,300 companies will end up in bankruptcy restructuring.

A grey rhino

HNA Group was a massive "Grey Rhino" — a metaphor for something large and obvious charging to a disastrous end which you tend to ignore, a term coined by the US policy analyst Michele Wucher, roughly the opposite of the unforeseeable Black Swan

Its failure is undoubtedly a deep

HAINAN AIRLINES GROUP FLEET PROFILE

	737-800	737MAX	A319	A320	A321	A330	A350	787	ERJ190	Gulfstream	Total
Hainan Airlines	136	11				33	2	38			**220**
Capital Airlines			16	37	21	11				3	**88**
Urumqi Air	15								52		**67**
Lucky Air	10	21	1	13		5					**50**
Tianjin Airlines				37	2	6					**45**
China West			4	31	3						**38**
GX Airlines				10					17		**27**
Fuzhou Airlines	14	2									**16**
Air Chang'An	11										**11**
Air Guilin			3	8							**11**
Suparna Airlines	9							2			**11**
Deer Jet			1	1				1			**3**
Grand China Air	3										**3**
China Xinhua Airlines	1										**1**
Shanxi Airlines	1										**1**
Total	**200**	**34**	**25**	**137**	**26**	**55**	**2**	**41**	**69**	**3**	**592**
Parked	*5*	*34*	*10*	*31*	*5*	*19*	*2*	*24*	*37*	*3*	*170*
On Order		11		4	1	2	2	4			49

Note: † order total include five ARJ21 and 20 Comac C919

embarassment, especially for the Hainan Provincial Government, for whom the original core of HNA — the airline and airport — is strategically important. This is particularly pertinent as the island of Hainan is moving towards becoming a free trade port.

The master plan to make the region China's largest free trade area was published in June 2020 and drafted into law at the beginning of 2021. It initially targets certain preferred industries with a second phase from 2025 allowing all goods (not on a restricted list) to be tariff free.

With this end in view, there was a rather complex restructuring of the relationship between Hainan Meilan Airport and listed HNA Infrastructure in 2020 which saw a transfer of airport assets and change of shareholding. Among other things, one result was a five-fold increase in the share price.

Reports suggest that the Hainan government is eager for Hainan Airlines to remain independent, with *Reuters* reporting that it is seen by the Hainan authorities as being attractive to new investors. The intention apparently is for airline management to spend this year negotiating to bring in strategic investors.

LESSOR EXPOSURE TO HNA AIRLINES GROUP

	737	787	A320	A330	A350	RJ	Total
BoComm Leasing	25	2	9			5	41
Avolon	6	7	19	5	2		39
GECAS	30	1	7				38
Changjiang Leasing	15		19				34
CDB Aviation	8			11			19
SMBC Aviation Capital	10		8				18
Aviation Capital Group	10	1	6				17
BOC Aviation	9	1	7				17
AerCap	2	2	3	6	2		15
Minsheng	2		10	2			14
China Everbright	13						13
Other (32)	36	5	38	6		9	94
Total	**166**	**19**	**126**	**30**	**4**	**14**	**359**