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Air India: The necessity of privatisation

AIR INDIA is the great aviation dinosaur of Asia. Its privatisation, or indeed disappearance, would boost the Indian airline industry and potentially position India as a rival to China as an expansionist aviation centre.

Prime Minister Narenda Modi appears to have committed to selling off the flag-carrier, a move which he hopes will enhance his reputation as a radical economic reformer. In August his cabinet approved the concept of some form of privatisation for Air India, either fully or partially; 2018 has been mooted as the target date, which may be optimistic. The Civil Aviation Ministry had been asked to prepare a plan for the sale, while the National Institution for Transforming India, or Niti Aayog, an influential government policy advisory group chaired by Modi, will make its own recommendations.

Opposition to the privatisation from vested interests is intense. The powerful unions, 15 in total, are of course resisting fiercely and protesting loudly, as are the manager with jobs for life. The company employs about 20,000 people directly, 40,000 In total including contractors. The government is in the process of drawing up voluntary severance packages for about 15,000, in the hope of quietening the protests.

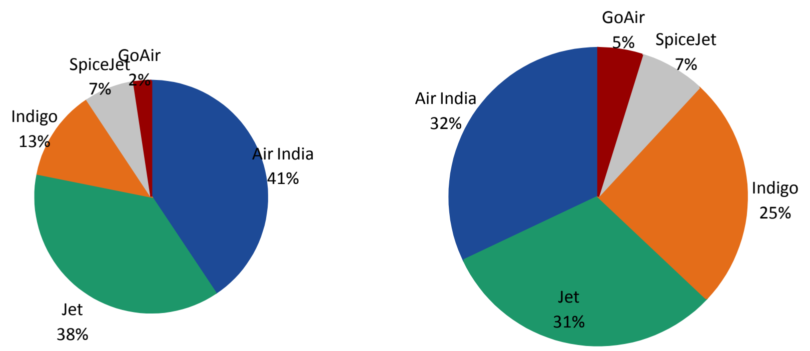
With 112 aircraft in its fleet, Air India employs about 360 staff per unit, roughly four times the ratio of staff to aircraft as at western Legacy carriers. However, that comparison is not entirely fair: in India, large companies are socially obliged to take on numerous auxiliary staff, security guards etc, at a few rupees a day. Even SpiceJet, operating a pure LCC model, has more than 100 staff per aircraft, compared, say, to Ryanair's 32.

India's vibrant press has carried many articles enthusiastically supporting or virulently condemning the proposed privatisation. Proponents point to the $3.6bn of equity infusion and $3bn of other loans that the airline has absorbed over the past five years and regard it as the ultimate symbol of the sclerotic public sector. Opponents recall the glory days of the Maharajah, as the flag-carrier used to be called, and warn about

INDIA: AIRLINE REVENUES

2010: Air India and Jet dominate with 78% of $6.6bn revenues

2016: Air India and Jet still account for 63% of $11.1bn revenues



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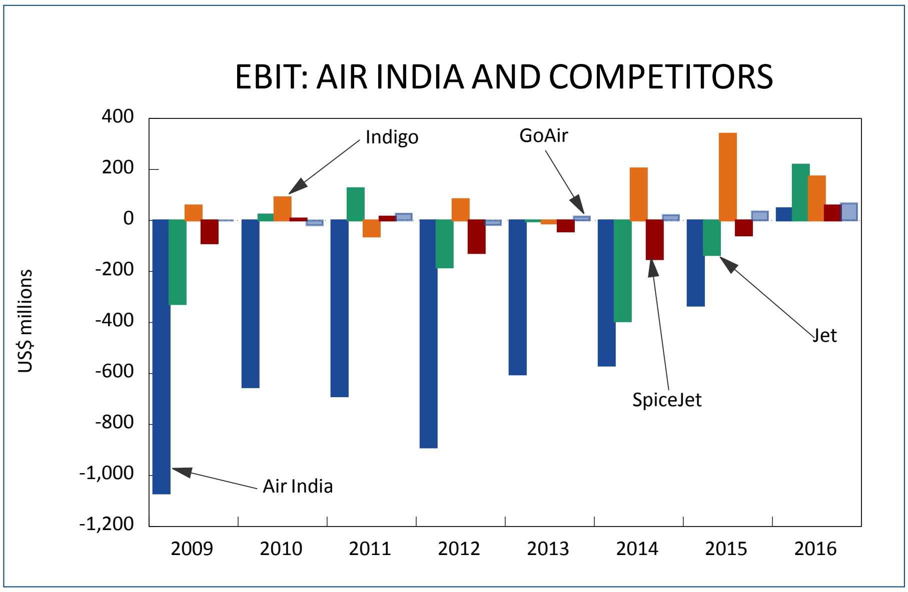
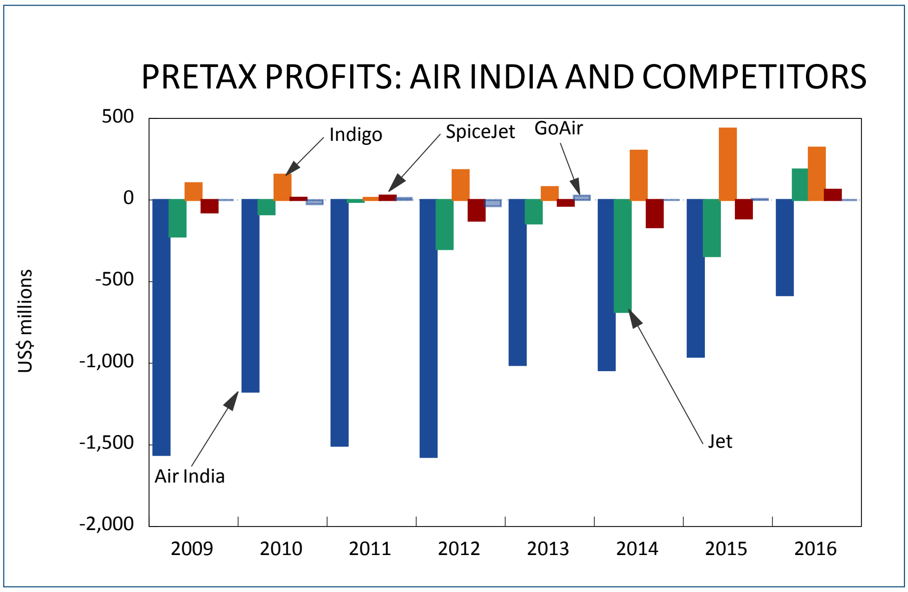


corrupt purchases of state assets by oligarchs.

Earlier this year it seemed that there were some positive signs for Air India. In April It provisionally reported an operating profit of $50m (1% margin on revenues) for FY2016 and a net loss of $583m (-16%), which was an improvement on the accumulated EBIT loss during 2009-15 of $4.8bn (-23%) and accumulated net loss of $8.8bn (-42%). Air India is like Alitalia, but on an Indian scale.

Unfortunately for Air India, the Comptroller and Auditor General (CAG) published a 220-page review — "Turnaround Plan and Financial Restructuring Plan of Air India Limited" shortly afterwards, covering the performance of the airline during FY2012-FY2016, the first five years of a plan that is supposed to run up to 2031. One of the findings was that Air India has probably underestimated its operating losses during 2012-2015 by almost $1bn, which must raise a question about the reliability of the 2016 EBIT number.



AIR INDIA: ROUTE PERFORMANCE

	Number of routes served 2016		
	International	Domestic	Total
Not covering variable costs	5	31	36
Covering variable but not total costs	56	113	169
Covering total costs	7	10	17
Total	68	154	222

Three levels of depression

The CAG report is depressing on several levels. Firstly, it reveals an unreconstructed company with little or no commercial direction. In analysing the performance of Air India relative to the turnaround plan (TAP), the CAG observed the following, among many other items:

- ✈ The company received the approximate amount of new equity promised by the state in 2012 — $3.6bn — but such were the continuing cashflow problems, short-term loans escalated to $2.2bn by 2015, adding to the long-term debt of approximately $5bn at the end of March 2015.
- ✈ Consequently, finance and interest charges were 83% higher than the TAP target of $400m.
- ✈ The 2016 total revenue target of $3.9bn was missed by 19%.
- ✈ Target staff costs of $420m were missed by 12%, as almost none of the modest labour reform plans, including a voluntary redundancy scheme, were implemented.
- ✈ Flying crew are still being accommodated in five-star hotels.
- ✈ The company has a vast property portfolio but the planned sale of asset didn't take place — only two sales were completed over the five-year period.
- ✈ There were numerous fleet deployment problems: the delay with the introduction 787s was not Air India's fault, but the purchase of 777-200LRs proved very uneconomic, resulting in a book loss of $110m when five units were sold to Etihad.
- ✈ Aircraft utilisation was pretty awful: the planned daily hours for the 777-300 fleet was 14, the actual 11.8; for the A320 fleet, 12.3 hours, actual 6.4. Management attribute this to long out-of-service periods due to inadequate stocks of spares, which resulted in parts cannibalisation, exacerbated by credit-holds from the suppliers.
- ✈ On time performance target for 2016 was 90%, the outcome 78%.

The CAG provided some interesting data on route profitability which is summarised in this table on this page. Only 8% of routes operated were profitable (covered total costs) and 16% did not cover even variable costs. This implies that in its current structure Air India not only cannot grow out of its financial crisis, it cannot shrink out of it either. Cut the routes operated at variable loss level, and their associated fixed costs will be redistributed on to the other routes which will move some of the few profitable routes into losses.

Moreover, the CAG report revealed that the large majority of Air India's losses — nearly 70% — can be attributed to the international sector rather than to the domestic market where liberalisation has helped introduce a wave of LCCs. All international segments were loss making, the worst being North America, and the performance of new routes has been dire — of the four international routes launched by Air India since 2012 only one (Delhi-Birmingham) has covered variable costs.

Air India seems to have no competitive response to the rise of the superconnectors and retains a bilateral mentality, regarding sixth freedom traffic as being somehow unfair. The report focused on the growth of Emirates' and Etihad's operations to India: between 2012 and 2016 their combined traffic to India grew by 68% from 5.2m to 8.7m passengers, with sixth freedom flows accounting for three quarters of the increase.

The second depressing aspect is that the CAG, after making some devastating points about Air India's failures, came up with a series of innocuous recommendations for the airline:

- ✈ Reassess funds required;
- ✈ Progress monetisation, ie sell property assets;
- ✈ Lease more A320s and improve utilisation;
- ✈ Concentrate on covering total costs rather than variable costs;
- ✈ Harmonise and rationalise labour relations;
- ✈ Implement IT systems; and
- ✈ Consider restricting bilateral rights for foreign carriers

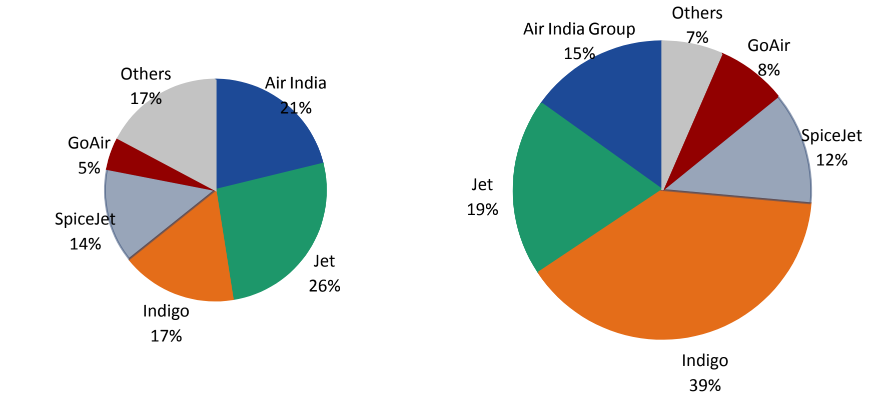
This list reflects control-economy thinking, and references the official government myth that the airline can again be made "world class", but does nothing to address Air India's fundamental problem. The company cannot be reformed by government diktat. The principal, if unexpressed, corporate aim of Air India, like the worst of state-owned carriers throughout the world, is not commercial; it is to maintain the status-quo and resist change for as long as possible.

On a similar theme, the report constantly refers back to recommendations made by management consultants back in 2012, in this case SH&E, and how the recommendations were, unsurprisingly, ignored. However wise the consultants' advice was, it could no nothing to change the culture of the company; indeed, using consultants in this way is often a way to abrogate political and/or managerial responsibility, to postpone difficult but necessary decisions.

INDIA: DOMESTIC CAPACITY

2010: Air India has 21% of 69m seat domestic market, Jet is largest carrier with 26%

2016: Market nearly doubled to 127m seats, Air India share down to 15%, Indigo up to 39%



The third level on which the CAG report is depressing is that it views the Indian aviation industry as being Air India-centric, referring to other Indian airlines in the context of negative competitive conditions for the flag-carrier. Perhaps this is inevitable given CAG's government position, but it ignores the impact of Air India in blocking the progress of India's dynamic new entrants (some of which, Kingfisher most prominently, have failed, but so what?).

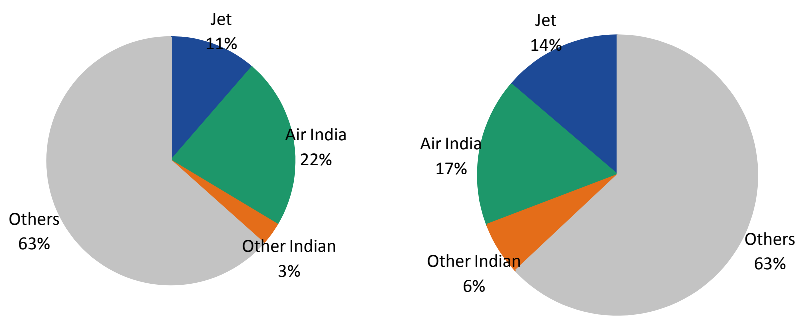
Over the past ten years the domestic passenger market has grown at an average of 17% pa while the international market has increased by about 9% pa, driven by India's strong GDP expansion and more specifically fast-growing disposable incomes among the country's urban "middle-class", by some definitions 20% of the total 1.3bn population. The country now has 58 cities with a population of more than 1m (compared with 38 in Europe).

The manufacturers consider India to be a key area of passenger traffic growth over the next two decades; in its Current Market Outlook for 2016–2035, Boeing states that India and China are "the main engines of growth" for the Asia region, whose share of world GDP is projected to rise from 31% in 2016 to 39% by 2035. Airbus's Global Market Forecast for 2016-2035 predicts that the Indian sub-continent (ISC) will account for five of the 20 fastest growing traffic flows over the next 20 years: ISC-China, ISC-Asia emerging countries, ISC-Japan , and ISC-Asia advanced countries and intra-ISC.

INDIA: INTERNATIONAL CAPACITY

2010: Air India largest international carrier with 22% of 48m seat market, Jet has 11%

2016: Air India still largest carrier but share down to 17% of 69m international market, Indian new entrants have just 6%



As the pie charts on the current page indicate, Air India's physical position had diminished over the period 2010-2016, with its share of seats in the (greatly expanded) domestic market down from 21% to 15%, losing out to the new LCCs while its international share has fallen from 22% to 17%, mostly because of the superconnectors.

However, Air India still accounts for 32% of Indian airline revenues compared to 42% in 2010 (based on an analysis of the five main carriers that have reported financials over this period). This is, in effect, revenue that has been generated on a subsidised basis.

The charts of EBIT on page 2 and PBT vividly illustrate the huge unprofitability of Air India over this period as well as the poor financial performance of the rest of the Indian airlines (Indigo excepted) for most of this period. The impact of Air India's presence on the other airlines' results is unquantifiable but it will have been significant: the perennial problem of barriers to exit in an aviation market as it moves from regulated to deregulated, but still retains a politically powerful, state-owned flag-carrier.

AIR INDIA FLEET

	In service	On order
A319/320	39	
A320/321neo	28	6
747-400	4	
777-200/300 ER/LR	15	3
787-8	26	1
Total	112	10

Returning to the privatisation, we suspect, without having any particular local insight, that the process will not be completed next year, but may take several attempts, the first being a futile attempt to find an airline willing to take over Air India. The government seems to have ruled out a foreign carrier, so that leaves Indigo and Jet Airways.

Indigo has expressed interest but only in taking over part the international network rather than part of the airline itself. Jet itself has gone through a severe loss-making phase from which it is emerging, but it is the obvious candidate to benefit from Air India's privatisation or exit. Its strategy will probably change as the influence of Etihad, its part-owner, diminishes and it attempts to deepen links with Air France/KLM (specifically the KLM arm) which may also entail an equity infusion from Delta. Its SkyTeam partners will surely resist any pressure put on Jet to "assist" the Air India privatisation. SpiceJet, GoAir and others all have international growth plans, especially to the Middle East (*Aviation Strategy*, May 2017).

Ultimate privatisation

Unless there is a miraculous turnaround at Air India, the ultimate privatisation solution may be something along the "Olympic model", which is a political strategy:

- ✈ Make the decision that, instead of pumping taxpayers' money for ever into the company, it would be better to offer a one-off generous redundancy payment to all employees, priced to remove union opposition.
- ✈ Air India has an advantage in that it owns extensive property in Delhi and Mumbai that could be liquidated to provide funds.
- ✈ Structure the privatisation as a sale of Air India's core assets — slots at congested airports, route rights and brand — that's all.
- ✈ If really necessary, add some conditions about maintaining some services.
- ✈ Offer the bidders the option to take on other Air India assets — aircraft, staff, IT systems, MRO facilities, etc — but do not oblige them to purchase.
- ✈ Run a transparent sales process.

Etihad: a gulf between ambition and reality

HUNTER strategies don't work. Publicly-owned SAir Group (aka Swissair), following this plan in the 1990s, succumbed in the early noughties from an inability to repatriate (non-existent) cash from its associate investments in the wake of the Sept 11 atrocities — notwithstanding its poor choice of investments. Etihad, with a far wealthier shareholder, has struggled to convince that a series of minority investments in similarly dross airlines would be viable way to pursue its ambitions to be a major global airline. It viewed its strategy as a way to catch up with its close neighbours Emirates and Qatar in exploiting its similar geographical position in the Gulf to access sixth freedom flows.

The shareholder has obviously lost confidence: it has decided not to continue to fund Air Berlin and has walked away from attempts to recapitalise Alitalia. Both carriers have fallen into administration and are subject to sale in whole or in part. It apparently has sold its stake in Etihad Regional (formerly Darwin Airlines). It has also parted company with James Hogan and James Rigley, respectively CEO and CFO of Etihad, engineers of the growth of the company since 2006, and supposed architects of the strategy. Where does Etihad go now?

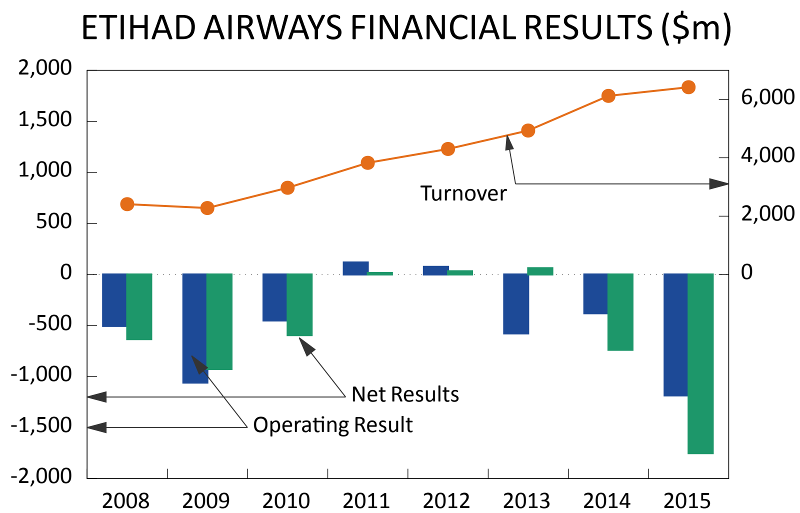
As a private company Etihad provides little reliable financial or operational information. In July Etihad Aviation Group announced an annual loss for 2016 of $1.86bn on $8.4bn of revenues.

The Group stated: "The core airline business achieved steady passenger revenues of $4.9 billion and 79% load factors while carrying a record 18.5 million passengers. Available seat kilometres (ASKs) increased by 9%. Yields fell 8% amid market capacity pressures and the tough global economic climate, but this was partially offset by an 11% reduction in unit costs."

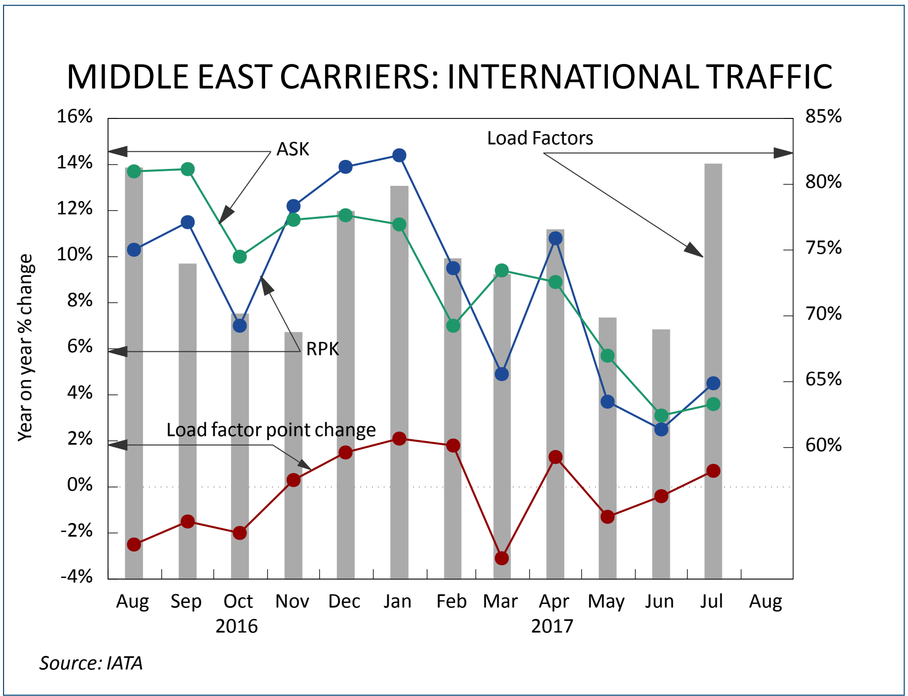
It went on to say: "Total impairments of $1.9 billion included a US$1.06 billion charge on aircraft, reflecting lower market values and the early phase out of certain aircraft types. There was also a $808 million charge on certain assets and financial exposures to equity partners, mainly related to Alitalia and Air Berlin."

However, for some reason, it does file accounts (for the airline alone) in Singapore. The results for the year to Dec 2015 were filed in July this year. We present a chart of an analysis of these results below, and they do not make happy reading.

Nominally the airline appears to present a net profit of $103m for 2015 on revenues of $6.4bn. However this includes a recognition of book profits of $1.9bn on the sale of various subsidiaries (including its cargo operations and its own frequent flier programme Etihad Guest) to Etihad Aviation Group (the holding company). It also transferred its investment holding company (which included its investment in Alitalia) but as this transaction was not deemed to be of commercial value did not recognise a book gain through the P&L account. In the year it registered a $(442)m share of associates' net losses. Excluding asset sale gains underlying operating losses reached $(1.2)bn with $(1.75)bn at the net level — roughly $100 for each passenger carried.



Note: Airline only. Operating results exclude gains on asset sales. Source: Annual reports filed at ACRA Singapore.



Taking the comments from the group results statement for 2016 it is possible that the airline's underlying operating losses could have been reduced from those in 2015; and increased associate losses from Alitalia and Air Berlin may even have been offset by profits from Jet Airways and Virgin Australia. However, it is likely that Abu Dhabi will have had yet again to inject another billion or two into the aviation group to keep it running.

A troubled region

Geopolitical risks — ever present in the region — have taken a toll in the past year. Not only has the relatively low oil price depressed income for the oil states, but has had a negative impact on point-to-point O&D demand.

The US earlier this year suddenly tried to impose a ban on travel from certain Muslim countries, and then prohibited the carriage of laptops in aircraft cabins from certain airports (since rescinded).

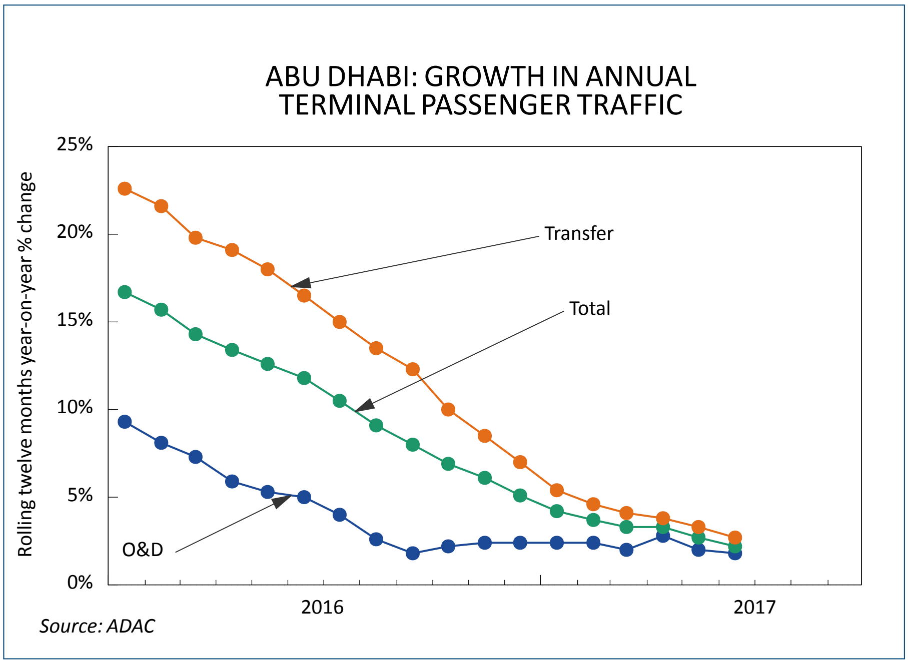
International air traffic demand through the Middle East has shown a sudden drop in growth rates. While capacity and traffic in the region had been increasing by around 12% during 2016, by July 2017 this growth rate had slumped to a mere 4% (see chart on the current page).

The problem is regional. Emirates — the progenitor of the superconnector strategy and the largest airline in the world ranked by international traffic — announced an 80% fall in profits for the year to end March 2017, its first decline in profitability for five years. Qatar has been broadsided by sanctions from its fellow Arab nations.

Etihad doesn't publish monthly traffic statistics — but the Abu Dhabi Airport does. Etihad accounts for 75% of the total throughput at Abu Dhabi and has obviously been reining back on its growth. As shown in the chart on this page, traffic growth through the airport has slumped dramatically. On a twelve-month rolling total basis, growth rates have gone from the high mid teens in early 2016 to 4% in July 2017.

Something has got to give. The airline has 122 aircraft in service and orders for 173 between 2017 and 2025 (see table on the next page). The company is due to retire its A340s this year, but if growth remains subdued the future orders must surely be in doubt.

Meanwhile should we anticipate that Etihad may now be looking to dispose of its investments in Virgin Australia and Jet Airways? Both last year returned a profit. But Virgin Aus-



ETIHAD AIRLINE ASSOCIATES

	Equity Stake	Book Value ($m) 2014	Book Value ($m) 2015	Current Market Value ($m)
Air Berlin	29.2%	252		13
Air Seychelles	40.0%	19	17	
Jet Airways	24.0%	307	293	249
Air Serbia	49.0%	77	47	
Virgin Australia	25.1%	240	212	314
Alitalia	49.0%	543		
Darwin†	33.3%			
Total		**1,438**	**569**	**576**

Source: Etihad Airline accounts 2015. Note: † Apparently sold July 2017

tralia is increasing ties with shareholder HNA at the expense of Etihad (boasting that a major reason for turning a profit in the year to June 2017 was closing a route to Abu Dhabi) while Jet is getting closer to Air France-KLM and Delta, developing joint routes through Heathrow with the SkyTeam joint venture, with Delta rumoured to be interested in a 25% stake.

Abu Dhabi has a further dilemma. Hailed as the deal of the year in 2015/16 Etihad raised $1.2bn debt in the capital markets through a complex special purpose vehicle EA Partners; with the proceeds used to enter into debt obligations with it and its airline investments: Etihad Airways, its subsidiary, Etihad Airport Services, Alitalia, Air Berlin, Jet Airways, Air Serbia and Air Seychelles. There was no cross-default provision and it appears that none of the partners are legally obliged to support each other in the event of one of them defaulting. The bonds seem to have been rated and priced on the assumption that there would be some sovereign support.

On the announcement of Alitalia's fall into administration, Fitch lowered its rating on the bonds to virtual junk status, pursuaded not to lower it further disclosing that Etihad had agreed to repay a portion of the bonds on behalf of Alitalia if the Italian airline ended up defaulting. Amusingly EA Partners was unaware of the agreement. With the failure of Air Berlin, the moral exposure has increased.

ETIHAD FLEET

	In Service	Deliveries 2017-2025
A320	35	26
A330	24	
A340	7	
A350		62
A380	10	
787	12	59
777	24	25
A330-200F	5	
777-200F	5	1
Total	**122**	**173**

Source: Company reports

Unravelling the Empire

What are the options? All seem fraught with difficulties.

✈ Merger with one of the other superconnectors. THY is not an option. Qatar does not seem a realistic option as the UAE is one of those that has ostracised its neighbour. That leaves exploring links with the far larger Emirates — where there may be some strategic rationale to create a dual-hub network à la Air France-KLM. As in *that* merger, however, there would be significant political issues, this time complicated by the relationships, rivalries and relative wealth of the ruling Al Maktoum and Al Nahyan cousins.

✈ Divest its stakes in Jet, Virgin Australia (and Air Serbia and Air Seychelles). These would no doubt be distressed sales.

✈ Cancel its aircraft orders. This would possibly destroy relationships with Airbus and Boeing — and undermine its attempts to counter the arguments of unfair subsidies by the American Open and Fair Skies campaign.

✈ Full Government bailout. This too would create an aeropolitical nightmare.

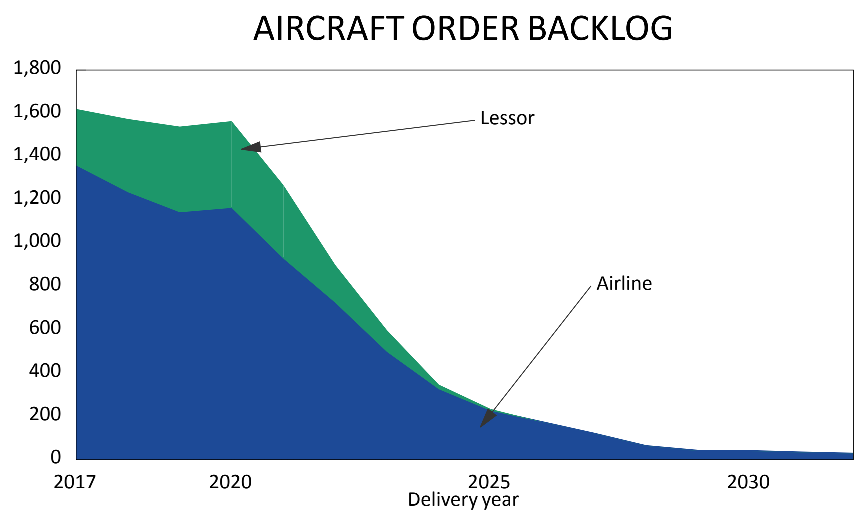
Operating leasing: Still healthy, mostly

THE OPERATING leasing industry still seems on target to reach 50% control of the global jet fleet by the early 2020s. Operating lessors generally appear to financially healthy. What could go wrong?

Interest rates will almost certainly rise in the near future but probably not by enough to significantly close the gap between finance costs and leases rates.

Various major airlines are under pressure — Air Berlin, Etihad, Alitalia, Qatar, Air India are covered in this issue of *Aviation Strategy* — and surplus aircraft will have to be recycled, probably depressing second-hand prices for some types. Airlines like Norwegian which placed mega-orders in part for leasing purposes are having to reconsider their strategy.

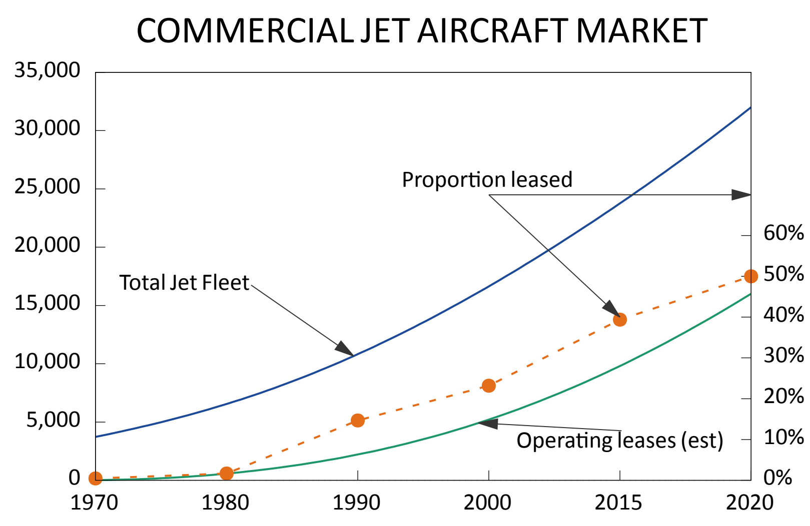
Global GDP growth looks fine, and IATA's mid-year estimate of industry ROIC in 2017 shows it to be close to its historic high, around 9%, but aircraft deliveries are also at a 10-year high, around 1,850. Net profit forecasts indicate some softening in markets: North American airlines net profit for 2017 is expected to be $15.4bn, down 7% on 2016; Europe, $7.4bn, down 14%,; Asia/Pacific, $7.4bn, down 9%; Middle East, $0.4m, down 63%. Any forecast is clouded by increasing political uncertainty — particularly in the UK, the US, Russia, the Middle East and Northeast Asia.



Source: Ascend, Boeing, Airbus, Aviation Strategy

Fuel prices are up 30% on a year ago, but this is good for those lessors that have paid premium prices for new fuel-efficient types.

So the market outlook is reasonable. But the lessors are exposed — as the chart above shows, peak deliveries to the lessors are scheduled over the next 4-5 years.



Source: Airline Monitor, Boeing, Airbus, Aviation Strategy

Annual Survey

Aviation Strategy's annual survey of lessors with a portfolio of more than 100 owned or managed jet aircraft (see table on the following page) show a total fleet of 6,569 aircraft — some 72 aircraft higher than last year (see *Aviation Strategy,* October 2016).

The Big Two (GECAS and AerCap) continue to trim their portfolios, and as a result their share of the 100+ lessor fleet has fallen again, to 37.3% (compared with 45.6% as of three years ago). That's also partly due to continued strong growth from other

MAJOR LESSORS

			Orders			
Company	**Total portfolio**	**Change**	**Boeing**	**Airbus**	**Total**	**Change**
GECAS	1,340	-110	185	208	**393**	143
AerCap	1,110	-92	130	198	**328**	-34
Avolon	574	330	76	107	**183**	50
SMBC Aviation Capital	452	-3	93	110	**203**	1
BBAM	405	-3				
Dubai Aerospace Enterprise	306	240		15	**15**	15
BOC Aviation	297	32	87	83	**170**	-41
ICBC Leasing	278	9	17	40	**57**	7
Air Lease Corporation	268	-10	175	196	**371**	-4
ACG	265		85	65	**150**	51
BCC	210	35				
Macquarie AirFinance	206	-7				
Aircastle	203	24				
ORIX Aviation	200	30				
CDB Leasing	200	70	44		**44**	18
Apollo Aviation Group	135					
Jackson Square Aviation	120					
Total	**6,569**	**545**	**892**	**1,022**	**1,914**	**206**

Note: This table includes jet lessors with at least 100 owned or managed aircraft; we exclude entities set up solely to manage the leasing activities of a specific airline. † from 12 months ago

lessors, with Avolon sweeping into third place in the lessor table through adding 330 aircraft after acquiring CIT Aerospace.

The other notable move is Dubai Aerospace Enterprise's purchase of AWAS, which boosted its jet portfolio by 240 aircraft and propelled it into sixth place in the lessor table. Among the rest, the biggest growers over the last 12 months were CDB Leasing (adding 70 aircraft), BCC (35), BOC Aviation (32) and Orix Aviation (30).

Two new entries this year are Jackson Square Aviation and Apollo Aviation Group, who both topped the 100 jet aircraft level required for inclusion. Falling out of the table this survey are Connecticut-based SkyWorks Leasing and Tokyo-based MC Aviation Partners, both of whose portfolios have dipped under 100 jet aircraft.

In terms of firm orders, GECAS added more than 140 new aircraft to its order book over the last 12 months, returning it to the top of the outstanding lessor order table and overtaking both Air Lease Corporation and AerCap.

Thanks to that, the Big Two now account for 37.7% of the total outstanding orders from lessors with 100+ aircraft, compared with 33.5% as of 12 months ago. Among the other lessors, the big net order increasers were ACG, with 51 extra orders, and Avolon, with 50.

Over the following pages *Aviation Strategy* profiles the leading lessors — which we define as owning or managing more than 100 jet aircraft — in descending order of portfolio size.

General Electric Capital Aviation Services (GECAS)

GECAS is headquartered in Dublin and operates 25 other offices around the world, with total employees of around 575.

The lessor has trimmed its owned and managed aircraft portfolio by around 110 aircraft over the last 12 months, to 1,340 today — some 500+ lower than the portfolio it had six years ago.

However, this is likely to be the "low-point" of the portfolio, as at this year's Paris air show GECAS announced a flurry of new narrowbody orders, which helped to increase the outstanding order book by 143 aircraft in a year. It now stands at 393, comprising 185 Boeing aircraft (170 737 MAXs, five 737-800s and 10 787-10s) and 208 Airbus units (176 A320neos and 32 A321neos).

The average age of the fleet is around eight years, and 63% of the jet portfolio by value is represented by narrowbodies, with widebodies accounting for 30% and cargo 7%.

GECAS's portfolio is placed with

264 customers around the world. After Europe overtook the US last year to become GECAS's most important market, this year Asia has come top of the pile, with Asian customers accounting for 27% of the lessor's fleet by value, ahead of Europe with 23% and North America with 22%. Compared with 10 years ago, when 38% of the portfolio by value was placed in North America, this represents a significant diversification of business; indeed 56% of the fleet in 2017 was placed in what GECAS calls "high growth regions", compared with 40% in 2007.

AerCap

AerCap continues to reduce its portfolio, falling from 1,202 a year ago to 1,110 today (of which 998 are owned and 112 managed).

Thanks to disposals, the average age of the owned fleet is also falling; it currently stands at 7.3 years, as at mid-year. In the second quarter of 2017 AerCap acquired 11 aircraft and sold 24, the latter with an average age of 16 years.

The majority of the owned fleet continues to comprise narrowbodies, including 421 A320 family aircraft and 290 737NG, although AerCap also has 90 A330s, 56 777s and 49 787s.

AerCap is based in Dublin and has a presence in Amsterdam, Los Angeles, Shannon, Miami, Singapore, Shanghai, Abu Dhabi, Seattle and Toulouse. Its fleet is placed with 200 customers in 80 countries.

In the second quarter of 2017 AerCap ordered 30 787-9s. and its total outstanding firm orders now stands at 198 Airbus aircraft (144 A320neos, 44 A321neos and 10 A350-900s) and 130 Boeing models (100 737 MAX 8s and 30 787-9s), which overall is 34 orders less than it had a year ago.

Avolon

A subsidiary of China's Bohai Leasing (part of the Chinese conglomerate HNA Group), Avolon leapfrogged into third position in the leasing chart when it completed the $10.8bn purchase of CIT Aerospace from the giant US bank holding company CIT Group in April this year (and therefore achieving its "medium-term objective" of becoming a Top Three lessor — which some analysts previously scoffed at).

With the absorption of the CIT fleet, Avolon's owned and managed portfolio has therefore jumped from 244.to 574 aircraft over the last 12 months. The 560 owned aircraft have an average age of 4.9 years (as of end June 2017), which is slightly older than the 3.5 average a year ago thanks to the older age profile of the CIT fleet.

The owned portfolio is skewed towards narrowbodies, with 253 A320 family ceos and neos, and 165 737s, though it also has 58 A330s and 13 787s. The newly-enlarged fleet is placed with 151 airlines in 64 countries.

Avolon's headquarters is in Dublin, with other offices in Connecticut, Dubai, Shanghai, Singapore and Hong Kong.

At the Paris air show Avolon signed an MOU for 75 737 MAXs, valued at $8.4bn at list prices, but in terms of confirmed orders Avolon now has 183 aircraft on outstanding order — 57 737 MAXs, 19 787-9s, 66 A320neos, one A321neo, 30 A330-900s and 10 A350-900s.

SMBC Aviation Capital

SMBC Aviation Capital is part of the Sumitomo Mitsui Banking Corporation and based in Dublin, with other offices in New York, Miami, Toulouse, Amsterdam, Tokyo, Hong Kong, Beijing, Shanghai and Singapore.

SMBC's portfolio has remained virtually flat year-on-year, and totals 452 aircraft, of which 280 are owned and 172 managed. All but 10 of the owned fleet are narrowbodies, including 152 A320 family aircraft and 118 737-800s.

SMBC's outstanding order book has remained virtually static over the last 12 months, and comprises 90 737 MAXs, three 737-800s and 110 A320neos.

BBAM

BBAM's portfolio has also stayed essentially the same over the last 12 months, with 405 managed aircraft that include 168 737s, 131 A320 family aircraft, 39 777s and 29 787s. They are leased to more than 200 airlines in more than 50 countries.

BBAM's 120 employees work at a headquarters in San Francisco and offices in New York, Santiago, London, Dublin, Zurich, Singapore and Tokyo. BBAM has no outstanding orders, and it obstinately remains the only Top 10 lessor not to have any.

Dubai Aerospace Enterprise

Dubai Aerospace Enterprise (DAE) completed the acquisition of AWAS from private equity house Terra Firma and the Canada Pension Plan Investment Board in late August this year, fending off competition from a host of potential Chinese investors.

With the addition of the 240-strong AWAS fleet to DAE's existing portfolio, the combined jet fleet comprises an estimated 306 owned and managed aircraft, comprising a mix of narrowbodies and widebodies, and which are placed with 117 airline customers in 57 countries.

Based in Dubai, DAE now operates offices in Dublin, Singapore, Miami, Bellevue and New York, though its order book stands at just 15 aircraft, all of which are A320ceos.

BOC Aviation

BOC Aviation increased its portfolio by 32 units in 12 months, to reach 297 owned and managed aircraft. Of these 261 are owned and 36 are managed, and the owned portion includes 127 A320 family aircraft, 91 737NGs, 21 777-300ERs and 12 A330s.

The portfolio has an average of just over three years, which is a reduction from 12 months ago as the lessor sold 19 older aircraft in the first half of 2017; as a result, no aircraft older than 10 years remain in the owned portion of the fleet. The portfolio has a net book value of $12.1bn, and it is placed with 65 airlines in 34 countries.

With its headquarters in Singapore and with other offices in Dublin, London, New York and Tianjin, BOC Aviation is majority-owned by the Bank of China.

It has 170 aircraft on outstanding order (41 less than last year) — 61 737 MAX 8s, 22 737-800s, four 787-9s. nine A320ceos, 46 A320neos, eight A321ceos, 17 A321neos, one A330-300 and two A330-900s. In August this year BOC firmed up a MoU agreed at the Paris air show for 10 737 MAX 10s, though this has not yet filtered through in Boeing's official order list.

ICBC Leasing

ICBC Leasing has increased its portfolio by nine aircraft in the last 12 months, to 278 today. The majority of these are narrowbodies, including 137 A320s family aircraft and 90 737s, although it also has 23 777s.

ICBC Leasing is based in Beijing and has other offices in Tianjin and Dublin, and is owned by the Industrial and Commercial Bank of China.

It has almost 50 customers spread across the globe, although the majority of these are in the Asia/Pacific region. Unsurprisingly, China is its single largest market, with a roll-call of 14 customers that includes the "Big Three" of Air China, China Eastern and China Southern.

The lessor has outstanding orders for 57 aircraft — two A320ceos, 36 A320neos, two A321neos, 15 737-800s and two 737 MAX 8s.

Air Lease Corporation

For the first time Air Lease Corporation has contracted its portfolio, reducing the owned and managed fleet to 268 aircraft (compared with 278 a year ago); in the second quarter of 2017 ALC sold 17 aircraft, raising net proceeds of $334m.

Of these, 240 are owned and 48 are managed. The owned fleet has an average age of 3.6 years (as of end June 2017) and includes 107 737NGs, 80 A320 family aircraft, 25 777s. 21 A330s and six 787s.

ALC is based in Los Angeles and Dublin and its portfolio is placed with 88 airlines in 54 countries. By total net book value ($12.7bn), the largest market for ALC remains the Asia/Pacific region, at 46.3% (with 21.4% alone coming from Chinese customers), followed by Europe with 32.5% and the Middle East and Africa with 8.3%.

Though it has fallen marginally, at 371 aircraft ALC still has an immense order book, which comprises 130 737 MAXs, 20 787-9s, 25 787-10s, one A320ceo, 22 A320neos, one A321ceo, 118 A321neos, 25 A330-900s, 20 A350-900s and nine A350-1000s.

Aviation Capital Group

Aviation Capital Group's portfolio has remained steady over the last 12 months at an estimated 265 owned or managed aircraft. The majority of the portfolio are narrowbodies, and the fleet is placed with more than 100 airlines in around 46 countries.

ACG is a subsidiary of US insurance group Pacific Life, and is based in Newport Beach, California, with other offices in Dublin, Santiago, Seattle, Beijing, Shanghai and Singapore.

In June this year ACG became the launch customer for the 737 MAX 10, placing an MOU for 10 units of the model. It's official orderbook stands at 150 (51 higher than a year earlier) — 80 737-MAXs, five 787-9s, one A320ceo, 47 A320neos, three A321ceos and 14 A321neos.

Boeing Capital Corporation

Based at Renton, Washington, Boeing Capital Corporation (BCC) is a lender of last resort finance for all types of Boeing equipment. After previously reducing commercial aircraft exposure, over the last 12 months, BCC's portfolio of fully- and partially-owned aircraft has increased — from 175 to an estimated 210 today.

As at the end of June 2017, the net value of BCC's portfolio's value was $3.9bn — slightly higher than the $3.8bn value as of 12 months previously (though that is substantially less than the portfolio value of $6.4bn as of eight years ago).

BCC release little details of the composition of its portfolio, although their website lists a small number of aircraft for sale with a variety of age profiles, ranging from an ancient 727 manufactured in 1970 to two 737-900ERs made in 1987.

Macquarie AirFinance

Macquarie AirFinance's portfolio has eased back by seven aircraft in 12 months, and now totals 206, all but two of which are owned. More than 90% of the portfolio is narrowbodies, including 114 A320 family aircraft and 75 737NGs, supplemented by a handful of widebodies, including nine A330s.

The portfolio is placed with 88 customers in 50 countries around the world, with the most important market continuing to be the Asia/Pacific region (where 73 aircraft are placed to customers such as AirAsia, Korean Air and Lion Air), followed by Europe (where 62 aircraft are placed) and the Americas (47).

Macquarie AirFinance is owned by finance giant Macquarie Group and is based in Dublin, with offices in London, Singapore and San Francisco. The lessor has no aircraft on firm order.

Aircastle

Aircastle's portfolio keeps on growing — with 24 aircraft added over the last 12 months — to stand at 203 now, of which 190 are owned.

The owned fleet has a net book value of $6.2bn and an average age of 8.3 years (as at the end of June 2017). It comprises 153 new generation narrowbodies, 31 new generation widebodies and six freighters. Aircastle specialises in slightly older aircraft that other lessors; in the first half of 2017 it sold 14 aircraft (with an average age of 12 years) and acquired 15 (also with an average age of 12)

Aircastle leases its portfolio to 71 airlines in 38 countries, and the Asia/Pacific region continues to be the lessor's largest market, accounting for 36% of total aircraft leased by net book value, ahead of the European market (27%), South America (19%) and the Middle East/Africa (10%). Europe, however, accounted for the majority of aircraft placed — 69, ahead of 56 units leased in the Asia/Pacific region.

Aircastle is based in Connecticut, with offices in Dublin and Singapore, and has no outstanding orders from Airbus or Boeing, although it expects to invest $1bn in the second-half of 2017 on acquiring second-hand aircraft.

ORIX Aviation

ORIX Aviation is a subsidiary of the Japanese financial services group Orix Corporation, and has a headquarters in Dublin and other offices in Hong Kong (opened in March 2017) and Japan.

Its owned and managed fleet has risen by 30 aircraft over the last 12 months, to 200 units today. The majority of the fleet is narrowbodies, and they are placed with 75 airline clients around the world, such as Vueling and Ryanair in Europe, and Hainan and Lion Air in the Asia/Pacific region. There are no aircraft on outstanding order.

CDB Leasing

CDB Leasing is based in Shenzhen and Dublin, and is part of the China Development Bank. It leases a wide range of industrial equipment, and over the last 12 months has expanded its aviation portfolio significantly, by an estimated jet 70 aircraft to 200, and with an average age of less than five years. They are placed with 41 customers across 22 countries — mostly in the Asia/Pacific region.

CDB appointed a new CEO — Peter Change — in January 2017, and he says "our new vision is to propel CDB Aviation into a formidable global aviation leasing platform".

Its official outstanding order book stands at 44 aircraft, comprising 30 737-MAXs and 14 737-800s. However, at the Paris air show CDB signed an MoU for 46 737 MAXs and eight 787-9s, plus 45 A320neo family aircraft, comprising 30 A320s and 15 A321s. At the same time, it said it would convert an outstanding order for six 737 MAX-8s into 737 MAX-10s.

Apollo Aviation Group

The Apollo Aviation Group is based in Miami, Dublin and Singapore, and specialises in older aircraft. The lessor was launched back in 2002 but has raised significant amounts of debt and equity over the last three years to fund expansion.

Its portfolio has grown above the 100 level over the last 12 months, and enters our table with a portfolio of 135 aircraft. They have an average age of under 15 years and primarily comprise narrowbodies, although the lessor also has 17 A330s. They are placed with more than 60 airlines globally, although most of its business is within Europe.

Jackson Square Aviation

Based in San Francisco and with other offices in Dublin, Toulouse, Singapore, Beijing and Lima, Jackson Square Aviation is owned by the Mitsubishi UFJ Lease & Finance Company.

Its jet portfolio broke through the 100 level over the last 12 months, to stand at an estimated 120 aircraft today, of which more than 100 are narrowbodies. These aircraft are placed with 49 airlines in 25 countries.

Azul: Now on a clear path to increased profitability?

AZUL LINHAS Aéreas Brasileiras, Brazil's third largest carrier, completed a $400m-plus IPO in April and improved profitability in Q1 and Q2. All of that was achieved against a still-weak economic backdrop in Brazil. Is Azul now set to go from strength to strength as Brazil's GDP growth accelerates and as the airline up-gauges from E-jets to A320neos?

São Paulo-based Azul was created by airline visionary David Neeleman (also a founder or co-founder of Morris Air, WestJet and JetBlue). It adopted a business model that was unusual but tailor-made for the Brazilian market: providing affordable, high-quality, JetBlue-style service in regional markets throughout Brazil with a fleet of E190/195s and ATR72s.

While Gol brought cheap air travel for the masses in Brazil, Azul in turn has sought to make sure that even the smallest communities have air service. As a result, it carries significant volumes of business traffic. Azul accounts for 30% of the total corporate travel revenues in Brazil, compared to its 18.1% share of domestic RPKs (see table on the next page).

Azul has been able to continue to grow rapidly in part because it is the only carrier on 72% of its routes. In 2012 it acquired TRIP, which was one of South America's largest regional carriers with a 64-strong fleet. Its formidable domestic position was the basis for launching long-haul operations to the US with leased A330s in 2014, followed by A330 flights to Europe (São Paulo-Lisbon) in 2016.

After marginal operating profits in 2011 and 2012, Azul promisingly attained 7-9% EBIT margins in 2013 and 2014. The outlook was bright enough for the carrier to file for an IPO (its third attempt) at the end of 2014 (*Aviation Strategy*, December 2014).

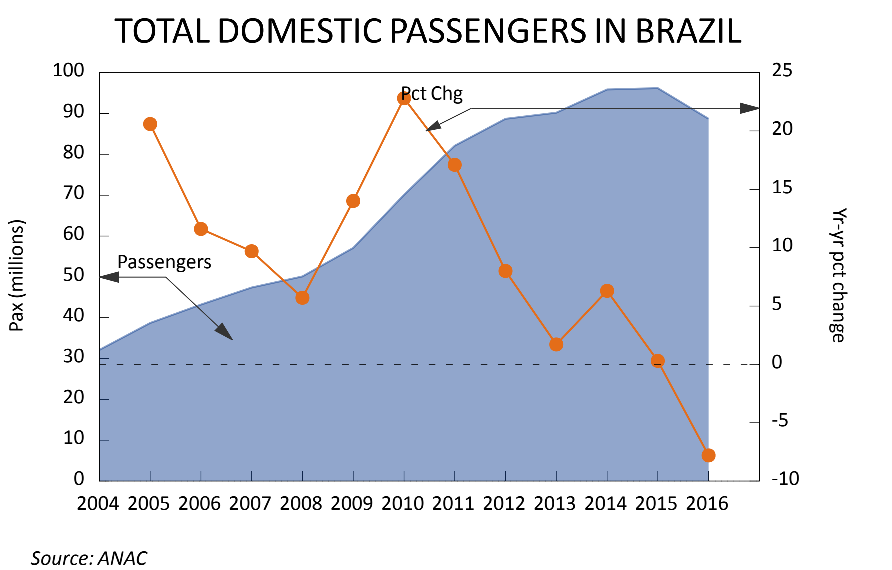
But in early 2015 the Real began to depreciate sharply and Brazil slide into its worst recession on record. Those developments scuppered the IPO plans and led Azul to report a modest R$168m operating loss and a horrendous R$1.1bn pretax loss for 2015.

In the past two years the country has also seen unprecedented political turmoil and uncertainty resulting from wide-scale corruption probes focused on the state-owned oil company and the lengthy process that led to the impeachment of former President Dilma Rousseff in August 2016.

Business travel demand and yields in Brazil declined sharply in 2015 and 2016. Domestic passenger numbers, which had tripled in the preceding decade (from 32m in 2004 to 96m in 2014), grew by only 0.3% in 2015 and fell by 7.8% last year (to 88.7m).

Azul was hit especially hard because the bulk of its operations are domestic and because it relies heavily on corporate traffic (65% of its total). Also, with an all-regional domestic fleet, Azul had no flexibility to move aircraft from the hard-hit short haul business markets to larger and more resilient long-haul leisure markets, such as those linking the southern cities with the tropical northeast (something that Gol was able to do with its 737s).

Azul did, however, take decisive action, removing 34 aircraft from its fleet in 2016. As a result (after some new deliveries), the fleet shrank by 15%, from 144 to 123 aircraft. While



Source: ANAC

BRAZILIAN AIRLINES' DOMESTIC MARKET SHARES

	% of total domestic RPKs	
	June 2017	June 2013
TAM	32.7%	39.7%
Gol	35.2%	36.0%
Azul		12.8%
TRIP		3.9%
Azul+TRIP	18.1%	16.7%
Avianca Brasil	13.4%	6.9%
Others	0.5%	0.7%
TOTAL	**100%**	**100%**

Source: ANAC

most of the aircraft were either returned upon lease expiry or sold, Azul found a further way to get rid of excess aircraft: pass them to new strategic partners. TAP Portugal received 17 aircraft from Azul in late 2015 and during 2016 (mainly ATR-72s and E190s but also one A330). Hainan, in turn, has been the recipient of all five of Azul's A350-900 lease commitments. Azul was originally due to take those aircraft from ILFC starting in March 2017.

Despite the recession, Azul was also successful in raising funds for operations and for growth as its IPO was repeatedly delayed. In 2013 it secured an investment totalling R$240m from three prominent financial or private equity firms in the US and Brazil — Fidelity Investments, Peterson Partners and Bozano Investimentos.

Azul also sold equity stakes to foreign airlines. Those efforts brought in US$100m from United in 2015 (for a 5% economic stake) and US$450m from HNA's unit Hainan in 2016 (for a 24% stake). Interestingly, Azul used part of the Hainan funds to make an investment in TAP Portugal, acquiring €90m of bonds that are convertible into up to 41.25% of TAP's economic interest.

Those ownership links have given Azul an eclectic mix of global airline partners. There is also developing commercial cooperation with JetBlue. It will be interesting to see how those relationships evolve and benefit Azul in the longer term.

Azul returned to profitability in 2016, reporting a respectable R$344m (US$100m) operating profit (5.2% of revenues) and a small R$17.7m pretax profit. The reasons for the turnaround: Azul's exemplary response to the crisis, the Brazilian currency's appreciation against the US dollar, deeper industry capacity cuts in the domestic market, and the start of demand and yield recovery in the international market in the second half of the year.

Currency shifts were the key. In 2014-2015 when oil prices fell sharply, Brazil's airlines didn't benefit much as the real plummeted against the US dollar (by as much as 42% in 2015), causing the airlines' dollar denominated costs to soar. Last year, however, the exchange rate trends reversed while also oil prices remained low. The Brazilian Real was one of the world's best-performing currencies in 2016.

A320neo impact

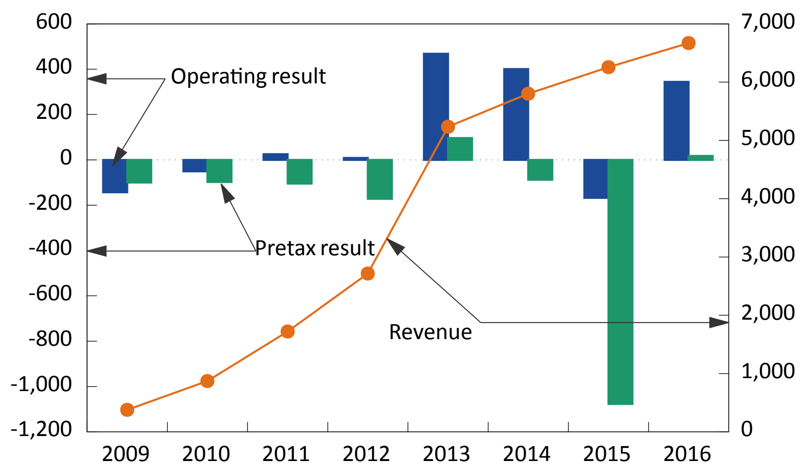
This year has seen Azul's financial results improve significantly. In Q1 the airline had an operating profit of R$205m (up from R$7m a year earlier) or 11% of revenues (up from 0.4%). Net profit was R$55m, contrasting with a year-earlier loss of R$67m.

In Q2 — the seasonally weakest period for airlines in Brazil — Azul's operating profit rose from R$1.3m to R$105m and the margin from 0.1% to 6.1%. Net loss was reduced from R$120m to R$34m. The improvement came despite brisk 18% capacity growth.

While Azul is benefiting from positive revenue trends, the biggest improvements have been on the cost side. In the second quarter, Azul's ex-fuel unit costs declined by 8.1%.

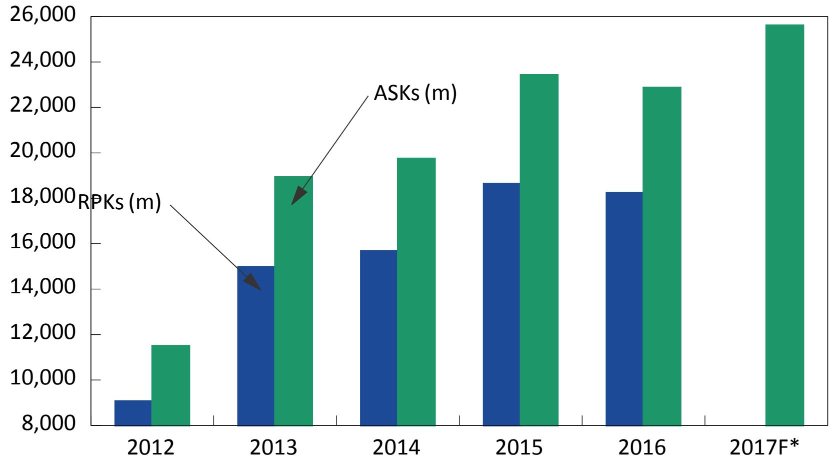
Some of the unit cost reduction was because of ASK growth, but the main driver was Azul's new up-gauging strategy — introducing

AZUL'S FINANCIAL RESULTS (R$m)



Source: Azul's IPO Prospectus (April 2017) and earlier SEC filings

AZUL'S PASSENGER TRAFFIC AND CAPACITY



174-seat A320neos to replace 118-seat E195s on the longest domestic routes. Not only does the A320neo offer 29% lower CASK than the E195, Azul also has been able to operate the A320neos 14.2 hours per day, well above its systemwide average daily utilisation of 10.2 hours.

Although the A320neo unit revenues are also lower, Azul is seeing a much lesser RASK reduction than the 29% CASK reduction.

And there are network benefits. In the latest quarterly call, the management talked about the A320neos "widening the pipes" on the domestic trunk routes, increasing connectivity throughout the network. Azul needed a larger aircraft for such routes. The A320s are freeing the E195s to high-frequency business markets, to which they are more suited.

Azul is seeing strong margin expansion on the routes that the A320neos currently serve. The type will account for much of the 11-13% ASK growth and a 3.5-5.5% ex-fuel CASK reduction projected for 2017. Flight departures are expected to increase by only 1-2%.

Azul has only operated the A320neo since December 2016 and had only eight in the fleet in mid-August. But the type is already materially boosting the system operating margin, which the airline currently expects to roughly double this year, to 9-11%.

The positive effects will continue as deliveries of the 2014 order for 63 A320neos (35 directly from Airbus and 28 via lessors) are scheduled through to 2023. Azul expects to have 11 A320neos in the fleet by the end of 2017 and 20 by year-end 2018. At the end of this year the type will account for about 20% of total ASKs.

Margin expansion strategy

Upgauging with A320neos was only one of several "pillars" of Azul's margin expansion strategy Azul executives discussed on the IPO roadshow. The other pillars are: expanding TudoAzul FFP, developing ancillary revenues and benefiting from Brazil's economic recovery.

Management sees the rapidly growing TudoAzul FFP as a key asset, with significant revenue generating potential. Founded in 2009 and wholly owned by Azul, the programme had 7.6m members in June (up 18.4% in LTM) and gross billings of R$708.7m last year (up 34% on 2015) from sales to banking partners and direct sales to members.

In addition to expanding Azul Cargo and Azul Viagens (both very promising areas), Azul expects checked bag fees and other product unbundling initiatives to become an important source of ancillary revenue from 2018 onwards. Azul was the first carrier in Brazil to implement checked baggage fees (on June 1) following the resolution of court cases that challenged ANAC's December 2016 ruling that airlines could charge for checked bags. Gol and TAM followed suit in late June.

Azul kept things simple: offering

AZUL: FLEET PLAN

	Number of aircraft at year-end								
	2012	2013	2014	2015	2016	2017	2018	2019	2020
E2								2	8
E-Jets	69	78	81	88	74	69	69	69	64
ATRs	49	55	52	49	39	35	35	38	40
A320neo					5	10	17	25	35
A330			5	7	5	7	7	7	7
TOTAL	**118**	**133**	**138**	**144**	**123**	**121**	**128**	**141**	**154**

Note: Operating fleet, excluding aircraft that are leased out.
Source: Azul's IPO Prospectus (April 2017)

BRAZILIAN AIRLINES' INTERNATIONAL MARKET SHARES

	% of total international RPKs	
	June 2017	June 2016
TAM	78.7%	81.1%
Azul	12.2%	7.4%
GOL	8.6%	11.5%
Avianca Brasil	0.5%	0.1%
Total	**100%**	**100%**

Source: ANAC

two fare types, one with no checked baggage and one with a 23kg baggage allowance. The latter costs R$30 more online and R$50 more at the airport. The airline said in August that there had been little negative feedback and that a high percentage of travellers were buying the baggage upgrades.

Azul executives said that the bag fees were "just the start of unbundling as you see in the US and Europe". The airline is now exploring the "typical things that come with unbundling", such as seat assignments.

The message Azul is sending to investors is that it is on a "clear path to increased profitability" and that it is well positioned to benefit from Brazil's economic recovery.

Brazil officially exited recession in the second quarter, when its GDP grew by 0.3% year-on-year. It followed a stronger than expected Q1, when GDP expanded by 1% over Q4 but still declined by 1.4% year-on-year. In July the IMF slightly raised its 2017 GDP growth forecast for Brazil to 0.3%.

But the recovery is still expected to be slow. The IMF actually revised down the 2018 growth forecast from 1.7% to 1.3%, citing "ongoing weakness in domestic demand and an increase in political and policy uncertainty". President Michel Temer has found it hard to push through his programme of comprehensive market reforms, and he has only a 5% public approval rating having been drawn into ever-expanding bribery scandals (though congress recently voted against a trial).

IPO benefits

After three attempts to launch an IPO in 2013-2014 that were scuppered by market conditions, Azul was finally able to go public in April 2017. It completed vastly oversubscribed local and international offerings totalling R$2bn (US$644m) and listed its shares in São Paulo and New York (NYSE). It was the first dual-listed IPO for a Brazilian company since 2009.

R$315m of the R$1,288m (US$406m) net proceeds collected by Azul were allocated for repaying debt coming due within 12 months and which carried a horrendously high weighted interest rate of "123% of the CDI rate", which itself was 14.9% at that time.

As a result of the IPO, Azul now has a relatively healthy balance sheet. At the end of June, cash and short-term investments amounted to R$1.5bn or 20.5% of LTM revenues, up from only R$417m (6.4% of revenues) in June 2016. Net debt was $1.4bn, down from R$3.3bn a year earlier. Adjusted net debt/EBITDAR fell from 8.8x to 4.5x. Shareholders' equity rose from R$364m negative to R$2.3bn positive.

The initial post-IPO debt reduction led to a saving of R$60m on financial expenses in the second quarter, and there is a good opportunity to further reduce interest costs through refinancings. In mid-May Azul had around R$1.7bn of expensive working capital debt with Brazilian banks. The management said that since the IPO they had received numerous refinancing offers and planned to "aggressively" tackle that debt this year. The process began in Q2 with the refinancing of a R$200m loan that resulted in a lower interest rate and an extended term.

In addition to having a stronger balance sheet, Azul benefits from being less exposed to foreign currencies than its peers. Only 46% of its debt is denominated in US dollars. In Q2 its dollar-denominated assets (cash in the US, cash deposits and maintenance reserves, TAP bond) exceeded the dollar liabilities by over R$500m. Being "long on the US dollar" is quite unique for a Latin American carrier.

Azul has successfully sold itself as a margin recovery and deleveraging story to global investors. The São Paulo-listed shares and NYSE-listed ADSs have performed well, increasing by 43-44% since the IPO. Analysts who cover Azul continue to recommend it as a buy or strong buy.

In mid-September Azul completed a US$362.3m follow-on global offering, in which some of the smaller shareholders cashed in more of their stakes. The sellers did not include

AZUL'S FIRM ORDERBOOK AT YEAR-END 2016

Type	Number	Schedule
E195/E2	33	From 2019
ATR	8	2019-2021
A320neo	58	2017-2023
A350	3	Transfer to Hainan expected
Total	**102**	

Source: IPO Prospectus (April 2017)

founder David Neeleman or the key strategic partners such as HNA or United, and the airline did not receive any proceeds.

Unusual ownership structure

Azul's post-IPO ownership structure is unusual. First, Neeleman holds 50.8% of the company's stock and 67% of voting rights. He continues to control all shareholder decisions, including the right to appoint the majority of the board of directors. Neeleman has made it clear in interviews that he did not like the way he was ousted from JetBlue by its board of directors after the New York-based carrier's poor response to a snowstorm in 2007.

Second, Neeleman has only a 6% economic interest in Azul. Having a controlling shareholder with considerably less economic interest in the results may potentially create a conflict of interest with other regular shareholders.

Third, as much as 37.1% of the economic interest in Azul is held by three current or former airlines. They include Hainan, the single largest holder of preferred stock with a 22% stake. Former shareholders of TRIP have an 11.3% economic interest, while United owns 3.8%.

Even though the IPO provided an exit opportunity for Azul's original investors, many have stayed onboard, including private equity firms Weston Presidio and TPG Growth. Such minority investors hold a combined 28% of the economic interest in Azul, with the remaining 29% accounted for by the new IPO shareholders.

The former shareholders of TRIP — the Chieppe and Caprioli families, which founded and owned the regional carrier prior to its acquisition by Azul — also hold the 33% of Azul's capital that is not owned by Neeleman. Those investors, along with strategic investors Hainan and United, have rights, including board representation, that are safeguarded by a post-IPO shareholders' agreement.

Azul has a prestigious board made up of experienced financial executives of big-name private equity firms and founders or senior executives of airlines in different parts of the world. The striking feature is that so much of it is inter-linked. Many of Azul's original investors were also investors in Neeleman's earlier ventures, such as Morris Air. Board director Michael Lazarus, co-founder of Weston Presidio, was also the founding chairman of JetBlue. Many of the top Azul executives, including the current CEO John Rodgerson who took up his position in July, originally came from JetBlue. The former CEO of Azul, Antonoaldo Neves, moved to join European partner TAP's board and is tipped to become TAP's next CEO. Board director Henri Courpron, formerly CEO of lessor ILFC, also sits on TAP's board. And so on.

Network and growth plans

Azul has the largest airline network in Brazil in terms of cities served (202) and daily departures. The airline covers all of Brazil and offers high frequencies in many markets, operating a hub-and-spoke network.

Azul's home base and main hub is at Viracopos Airport in the city of Campinas, just 50 minutes from downtown São Paulo. The airport has a brand new terminal (April 2016) with capacity of 25m passengers/year.

The airline operates a secondary hub at Belo Horizonte's Confins airport. It has also recently built a regional hub in Recife in Brazil's northeast, from which it currently serves 25 destinations, including Orlando in the US. Recife is the closest hub for direct flights to both Europe and the US.

The business model domestically is to stimulate demand by providing frequent and affordable air service to underserved markets. The result is that Azul is the sole carrier in 72% of its existing routes and the frequency leader on another 17% of routes.

A strong brand, superior offerings (leather seats, more legroom, free LiveTV) and customer focus all contribute to Azul achieving significantly higher unit revenues than other carriers. The PRASK premium, consistently high load factors, high efficiency and a competitive cost structure offset the poorer economics of smaller aircraft.

The strategically located hubs and the feed generated by the domestic network made going international an attractive option. Azul launched its first US services, linking the Campinas hub with Fort Lauderdale and Orlando with newly delivered A330-200s in December 2014. That was followed by Recife-Orlando flights in December 2016.

Azul made its European debut in June 2016 when it introduced four-per-week A330-200 flights on the Campinas-Lisbon route.

And most recently, in August Azul announced plans to expand the US network in December 2017 with two new routes: Belo Horizonte-Orlando and Belém-Fort Lauderdale. The latter is possible because of the availability of the A320neos.

Since Azul also plans to increase the frequencies on the US routes out of Campinas in December, it will be offering a total of 34 weekly flights to two US gateways from four cities in Brazil.

Azul has also added service to select destinations in South America, which it can serve with narrow-

AZUL: ROUTE NETWORK

body aircraft. From Porto Alegre it currently offers flights to Montevideo and Punta del Este in Uruguay; from Belém it serves Cayenne (French Guiana); and earlier this year it began serving Buenos Aires (Argentina) from Belo Horizonte.

The US and European services are feasible essentially because of strategic partnerships, including codeshares, with United and TAP, respectively. The latter was established in March 2016 and is highly beneficial to Azul because TAP is the number one European carrier to Brazil in terms of seats and flights and serves as many as 10 destinations in Brazil. Azul also gets feed from TAP's European network.

Azul's international growth spurt has meant that in 2016 international revenues accounted for 10.1% of its total revenues, up from 6.8% in 2015. Also, in the past year Azul has overtaken Gol as Brazil's second largest international airline (after TAM). In June 2017 Azul accounted for 12.2% of the total international RPKs by Brazilian carriers, compared to Gol's 8.6% share — a rough reversal of the year-earlier shares.

With the IPO behind it, profit margins recovering and Brazil's economic recovery slowly gathering strength, Azul is stepping up growth. In 2017 it expects ASKs to increase by 11-13%, mostly through the A320neo introductions. It will be adding the A320neos at a rate of about 6-8 per year.

However, Azul will also continue to grow in its traditional markets with smaller aircraft. The management said earlier this year that the airline could add 32 new cities over the next five years or so and that 30 of those would be cities where there is no airline service today. "That is really a huge part of our growth strategy going forward", Neeleman noted.

Over the next few years Azul will be going through a significant fleet transformation process in which it will replace older-generation aircraft with next-generation models, namely the A320neos and the E2s (the latter starting in 2019).

But Azul is really moving to operate multiple fleet types. The shortest and lowest-density routes will be flown by ATRs. The medium-haul, high-frequency business-oriented routes of less than two hours will be flown primarily by the E195s. The A320neos will operate on sectors longer than two hours.

The management estimates that for the route system today the A320neos would ideally account for 35-40% of ASKs, which means "a lot of margin expansion going forward".

On September 21, just as *Aviation Strategy* was going to press, Azul announced an order for five A330-900neos, which it will take on operating lease from Avolon. The aircraft will strengthen international flights to the US and Europe and allow Azul to "explore select new destinations".

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