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European majors: Triple Peaks

NEARLY ten years on from the peak of the last cycle, the major European network carriers are finally producing healthy returns. In the depths of the downturn following the global financial crisis, each of the top three groups put in place plans to return to a sustainable level of profitability by 2015. Things don't always work to plan, but finally in 2017 IAG delivered a return on invested capital of over 16% (above its 15% through-the-cycle target) and the Lufthansa Group its highest ever result with an operating profit of €3bn and return on capital of 11.6%. Even Air France-KLM managed to achieve an operating profit of €1.5bn, a margin of 5.8% and a nominal return on capital of 11%. What now?

This issue includes

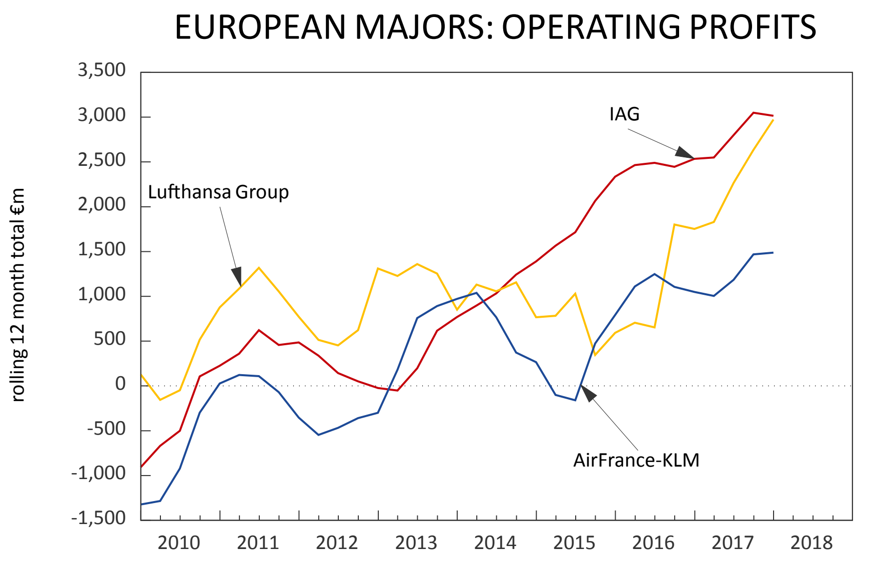
In the last few weeks each of the European major network groups — IAG, Lufthansa Group and Air France-KLM — published results for 2017 showing a strong improvement in returns. If there is a common thread it is: the three major players' mainline carriers — British Airways, Air France and Lufthansa — maintained what is referred to as capacity discipline, while pushing growth to lower cost subsidiaries; unit revenues rose faster than unit costs across each of their subsidiary airlines; margins improved; there was a long anticipated recovery in cargo operations; and all have embraced the latest industry fad of starting long haul low cost operations.

IAG — leading the pack

IAG — incorporating British Airways, Iberia, Aer Lingus and Vueling — saw revenues grow by a modest 2% to €23bn and adjusted operating profits increase by 19% to €3bn. This was on the back of a 2.6% growth in total capacity, a 3.8% increase in passenger demand and unit revenues up by 1.8% in constant currency terms against a unit cost decline of 0.2% on a similar basis. Underlying net profit improved by 13% to €2.2bn.

IAG is the smallest of the three majors in terms of revenues and total traffic, but it is the most profitable. At the group level it achieved an operating margin of 13% — with margins of over 14% registered at the Anglo-Saxon entities of British Airways and Aer Lingus.

At BA capacity was up by only 0.7%, traffic grew by 1.5%, unit revenues increased by 6.4% against a unit cost growth of 4.7%. The airline registered an operating profit of £1.5bn up by 19%. Following Sterling devaluation in the wake of the Brexit



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EUROPEAN MAJORS: 2017 RESULTS BY AIRLINE

	Revenues			Operating Profit			Margin	
€m	**2017**	**2016**	**pct chg**	**2017**	**2016**	**pct chg**	**2017**	**2016**
IAG	**22,972**	**22,567**	**1.8%**	**3,015**	**2,535**	**18.9%**	**13.1%**	**11.2%**
BA	13,987	14,075	-0.6%	2,000	1,812	10.4%	14.3%	12.9%
BA†	*12,269*	*11,443*	*7.2%*	*1,754*	*1,473*	*19.1%*		
Iberia	4,851	4,586	5.8%	376	271	38.7%	7.8%	5.9%
Aer Lingus	1,859	1,766	5.3%	269	233	15.5%	14.5%	13.2%
Vueling	2,125	2,065	2.9%	188	60	213.3%	8.8%	2.9%
Air France-KLM	**25,781**	**24,844**	**3.8%**	**1,488**	**1,049**	**41.8%**	**5.8%**	**4.2%**
Air France	15,892	15,500	2.5%	588	372	58.1%	3.7%	2.4%
KLM	10,341	9,870	4.8%	910	681	33.6%	8.8%	6.9%
Transavia	1,436	1,218	17.9%	81		nm	5.6%	0.0%
Lufthansa Group	**35,579**	**31,660**	**12.4%**	**2,973**	**1,752**	**69.7%**	**8.4%**	**5.5%**
Lufthansa	16,441	15,409	6.7%	1,627	1,135	43.3%	9.9%	7.4%
Swiss	4,727	4,471	5.7%	542	414	30.9%	11.5%	9.3%
Austrian	2,358	2,153	9.5%	94	58	62.1%	4.0%	2.7%
Eurowings	4,041	2,060	96.2%	94	-104	nm	2.3%	-5.0%

Note: † underlying Sterling performance

vote, in Euro terms operating profits only grew by 10%. The group states that it achieved a return on invested capital of 16% — possibly one of the best in its history.

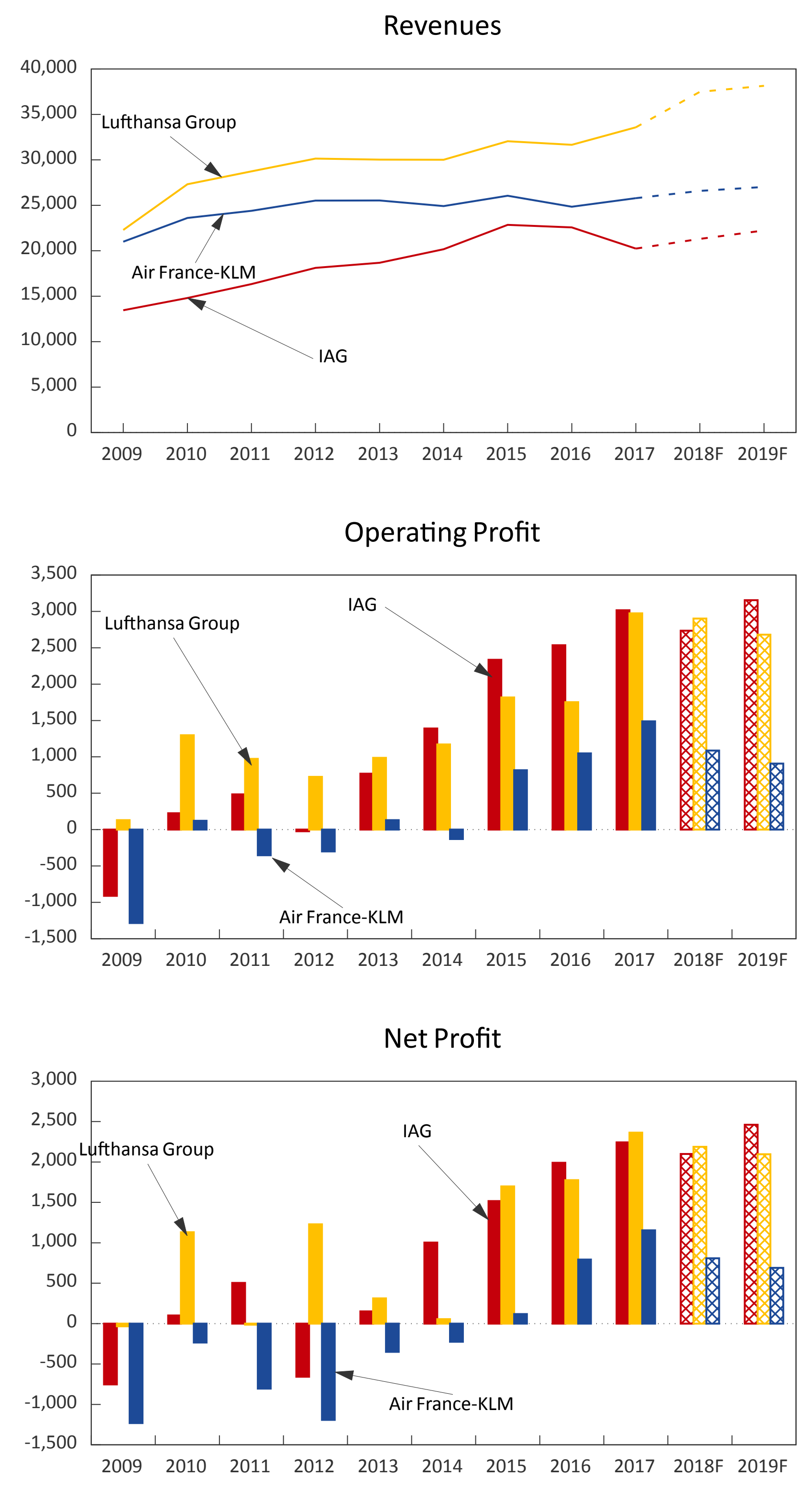
Iberia saw capacity growth of 2%, traffic growth of 4.8%, unit revenues up by 3.5% but unit cost increases limited to 1.4%. As a result revenues improved by 6% and operating profits jumped by 40% to €376m. RoIC came in at 12.2%, a tad below the group target of 15% but above the previous year level.

Aer Lingus continues to perform extraordinarily: for British Airways it could be said to be providing at Dublin the third Heathrow runway. Capacity and traffic was up by 12% in the year as it continues its expansion on the Atlantic. Unit revenues were down by 6% but unit costs fell faster at 7%. Revenues were up by 5% and operating profits by 15%. The airline achieved a 23% return on invested capital.

Vueling should perhaps have been doing better. But it had some severe operational problems in 2016, and in 2017 went into recovery mode. It increased capacity by 1.5%, demand by 3.8%, unit revenues by 1.5% and cut unit costs by 4.8%. Revenues were up by 3% to €2.1bn and operating profits touched €188m, triple the level of the previous year. Its RoIC of 13% for the year is also below the group targets.

There were no real details on the new long haul low cost operation — Level, currently operated under the Iberia AOC — but the management have stated that it is already profitable (ex start-up costs), and project that it will get to IAG's RoIC target of 15% "by maturity". This is no doubt a response to the first-mover Norwegian in the fear that LHLCCs will actually work. It started with two high density A330s (293 economy and 21 premium economy seats) out of Barcelona to Buenos Aires, Oakland and Punta Cana last summer and carried more than 155,000 passengers in its first seven months — it also has the advantage of potential feed from Vueling at Barcelona. It will add three more aircraft in 2018 and a new base at Paris Orly (using the group's Open-Skies AOC) opening routes to Guadeloupe, and Montréal in July; Newark

EUROPEAN MAJORS: FINANCIAL RESULTS (€m)



Source: Company reports, Aviation Strategy analysis, forecasts Bernstein.

and Martinique in September. The group plans to increase the fleet to at least 15 aircraft by 2022.

On outlook, management was quietly positive. It is looking to increase group capacity by nearly 7% in 2018 — +3% at BA, +9.7% at Aer Lingus, +7.5% at Iberia and +12.5% at Vueling — and expects operating profits in 2018 to "show an increase year on year".

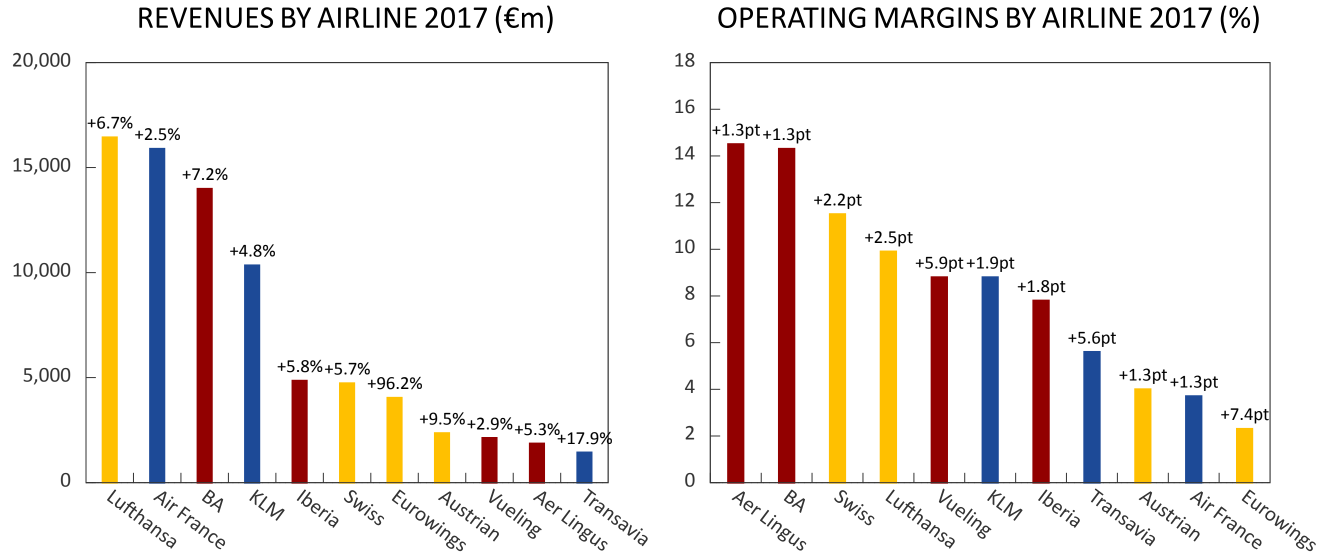
Lufthansa Group — best ever results

2017 was a transformational year for the Lufthansa Group. Firstly, they acquired majority control of Brussels Airlines, which added 5% to the revenue base, and consolidated it in the Group financial accounts from January. Secondly, a wet-lease deal for 30 A320s with the failing Air Berlin, and then its subsequent bankruptcy gave a significant boost to the Eurowings operation.

Total capacity in 2018 grew by 12.7% (and 19% in Europe), demand by 15%, unit revenues by 1% while unit costs fell by 1.6%. Total revenues increased by 12% in the year and underlying operating profits jumped by 70% to €3.0bn — reflecting a group margin of 8.4% and a return on capital of 11.6%.

This operating profit improvement was felt across all the subsidiaries. Lufthansa itself saw operating results increase by 43% to €1.6bn, Swiss by 31% to €542m and Austrian by 62% to €94m, while the cargo operation rebounded into profitability with operating profits of €242m and a margin of nearly 10%. "Point-to-Point Airlines" (which includes Eurowings, Brussels and SunExpress, its joint venture with THY) saw revenues double to €4bn and reversed prior year losses of over €100m to an operating profit of €94m

EUROPEAN INTRA-GROUP ANALYSIS



Source: Company Reports. Note: British Airways revenue percentage change in pounds sterling.

in 2017.

Another milestone in 2017 was the conclusion of a long term collective agreement with the Vereinigung Cockpit union, which among other things agreed to a 15% "structural" reduction in flight crew costs at Lufthansa mainline, the move to a defined contribution pension scheme and — importantly — the removal of previous restrictions on growth at "lower cost" units.

Meanwhile, the competitive landscape in Lufthansa's teutophonic home territory has changed dramatically with the demise of Air Berlin. easyJet has become the largest operator at Berlin, having acquired the Air Berlin operations at Tegel — and is even starting to operate domestic flights on the main trunk routes. Niki Lauda has reacquired Air Berlin's Vienna-based Niki (which Lufthansa had wanted to acquire but was denied by the competition authorities) with 15 A320s, rebranded it as Laudamotion and brought in Ryanair as an initial 25% (and potential 75%) investor.

Lufthansa was allowed by the competition authorities to acquire Luftfahrtgesellschaft Walter — Air Berlin's "lower cost" regional subsidiary — which it incorporated into Eurowings at the beginning of January. It is through Eurowings that it clearly sees growth potential.

The fleet in operation has grown from 80 in 2015 to 152 at the end of last year, with plans to build to over 210 by 2019. Eurowings is not exactly low cost — its unit costs of 7.8€¢/ASK are some 50% higher than easyJet's (on a slightly higher stage length) and more than double those of Ryanair — although the group plans to be able to reduce underlying unit costs by 5% a year over the next three years. It doesn't exactly adhere to the low cost KISS principal either: it has a series of AOCs, multiple aircraft types — complicated by Q400s from the LGW acquisition — and multiple arrangements to provide lift through wet-leases (including from Laudamotion).

It is difficult to see what Lufthansa's ultimate plan is. The stated aim is to make Eurowings the number one point-to-point airline in its German speaking home countries. It could be a way of transferring its own high costs into a slightly lower cost platform. It may be that it wants to emulate the way that Qantas has developed Jetstar as a long term attempt to show the unions who runs the airline. It could even be a viable second brand that does not cannibalise traffic from the mainline operations.

On outlook for 2018, management were more sanguine than their counterparts at IAG. They expect total group capacity to rise by 9.5% in 2018, with the network airlines growing by 5% and Eurowings by over 30% (half of which comes from Air Berlin' failure), unit revenues to be stable, ex-fuel unit costs to fall by 1-2% but a €700m increase in the fuel bill. Operating profits they expect to be slightly down. For cultural and local legal reasons Lufthansa tends to be conservative on earnings outlook, this means they realistically expect profits to increase a bit.

Air France-KLM — recovering

It has been a long process, but Air France-KLM finally in 2017 produced a reasonable level of profitability, although it is still a long way behind its peers. During the year, revenues grew by 4% to €25.8bn and adjusted operating profits jumped by 42% to €1.5bn (a 6% margin) — finally exceeding the operating result at the peak of the last cycle in 2007-08. Underlying net profits came in at €1.2bn, although a charge relating to the derecognition of KLM flight crew pension plans pushed published net results to a €274m loss. Total group capacity was up by 2.4% and unit revenues by 1.4% while unit costs fell by 0.3%.

As for results by carrier, Air France saw total revenues up by 2.5% to €15.9bn and operating profits up by 58% to €588m — still a paltry 3.7% margin — while the smaller KLM continued to outperform with a 5% growth in revenues to €10.3bn and a 34% jump in operating profits to €910 — a respectable margin of 9% and nearly twice the absolute amount generated by the French flag carrier.

Transavia continues to grow rapidly and increased capacity by 11%, demand by 12%, unit revenues by nearly 7% while unit costs increased by only 0.7%. As a result total revenues improved by 18% and the operation leaped into profit delivering an operating margin of 5.6%.

The Group made significant further progress in reducing balance sheet risk. The ratio of adjusted net debt (which includes a capitalisation of off-balance sheet operating leases) to EBITDAR has fallen from 5.7 times at the end of 2011 to 2.1x at the end of 2017 (the debt/equity ratio has been virtually meaningless). This was helped last year by operating free cash flow of €0.7bn, soft call exercise of a €500m convertible bond, and an equity infusion of €747m from Delta and China Eastern (each taking 10% and acquiring a seat on the board). Net debt fell in 2017 by around €2bn to €1.7bn. Air France-KLM will be adopting FRS16 (on the treatment of leases, which will bring operating leases onto the balance sheet) from the beginning of 2018, a year earlier than necessary, which ironically seems to be set to reduce adjusted net debt by a further €2bn.

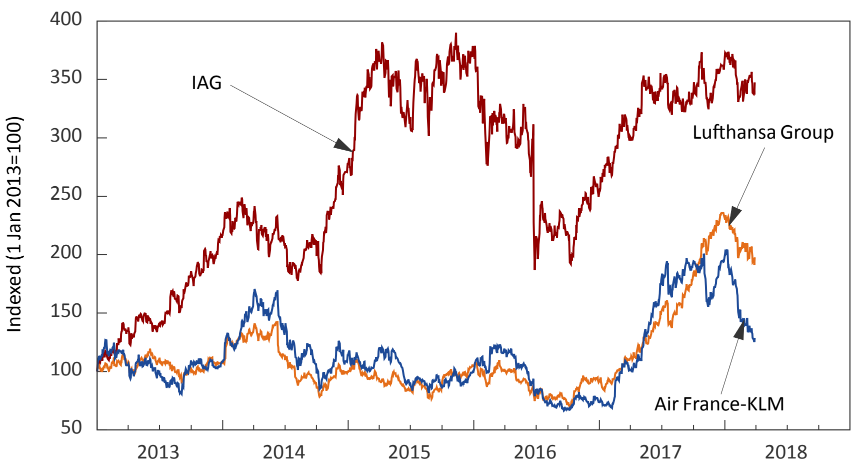
The equity infusion from Delta and China Eastern was sort of necessary to allow Air France-KLM to buy a 31% stake in Virgin Atlantic from Richard Branson for £220m and fuse the two trans Atlantic joint ventures — although how this will survive Brexit is puzzling. All this has helped to double equity on the balance sheet to €3bn.

Air France has also set up a new carrier branded as low cost called Joon (supposedly to appeal to the young). It started operations from Roissy CDG in December on short haul leisure routes and plans to start long haul operations wet-leasing aircraft from the Air France mainline. Its growth is limited by agreement with the company's unions, is unlikely to be truly low cost, and will probably be a poor answer to the competitive threats from Norwegian, Primera, French Blue and Level.

Meanwhile, industrial relations at Air France, have taken a turn for the worse (if possible) with strikes planned over the Easter period. Ten of its plethora of unions (pilots: SNPL, Spaf, Alter; cabin crew: SNPNC, Unsa-PNC, CFTC, SNGAF; and ground staff: CGT, FO and SUD) said: "We are hardening our movements" in the face of management who is "giving no concrete response" to "our demands" (for a 6% increase in salaries), and is "standing firm and seeking division".

The management offered little guidance on the outlook for the current year, save that early signs showed a continuation of a positive trend, that the network carriers would increase capacity by 3-4% and Transavia twice as fast, and that underlying unit costs were expected to fall by 1-2%. They expect to outline a new medium term plan and new financial targets on the publication of the first quarter results.

EUROPEAN NETWORK CARRIERS: SHARE PRICES



Wizz defies Brexit and Ryanair

ON A COMPARISON of European LCC shares, Wizz has markedly outperformed its three low cost rivals in recent months. Investors clearly believe in its ULCC model and growth prospects for Central East Europe (CEE).

The share price performance has also to be seen in the context of the decision by its original investors, Indigo Partners (see *Aviation Strategy*, February 2018) to cash in their 18.7% stake in June 2017, raising about €260m in the process, although they retained convertible shares and notes that could entitle them to an additional 24.3m shares in Wizz (the current float is 73m shares).

The similarities to Ryanair are an obvious attraction. Wizz's unit costs in the third quarter of FY2018 were 3.23€¢ per ASK (2.29¢ ex-fuel), roughly equal to those of Ryanair at a similar average stage length. Like Ryanair, and unlike say easyJet, Wizz's top management is wedded to core low cost principles; József Váradi, the CEO, has been there since the start in 2004, during which time Wizz, from its Budapest headquarters, has seen off its local LCC rival SkyEurope and the Hungarian flag-carrier Malév.

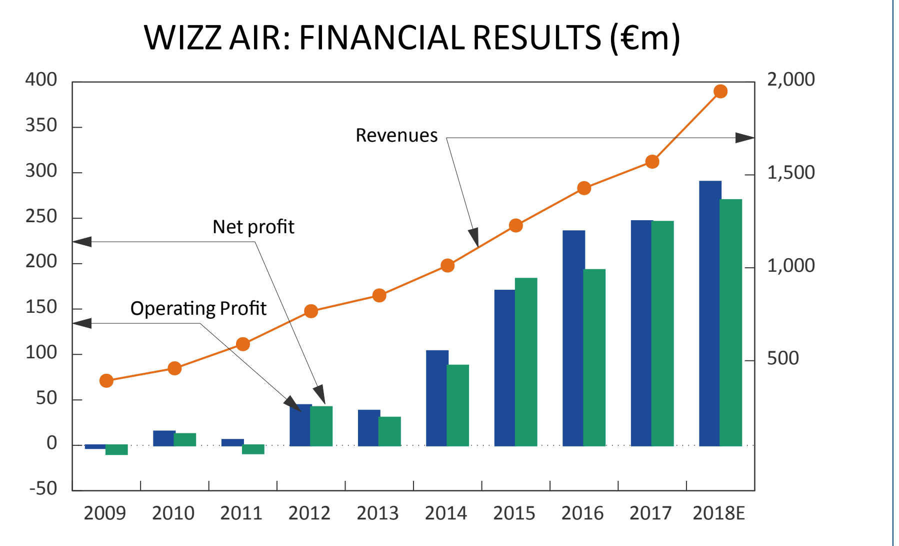
There are major differences with Ryanair as well, particularly in the scale of operations — Wizz operates a fleet of 92 A320/321s while Ryanair has 420 737-800s. Ryanair's revenue, estimated at €7.1bn for FY2018 is nearly four times that of Wizz, €1.9bn for FY2018, Wizz profitability is not quite at Ryanair's level — an EBIT margin of about 15% against 23%. Despite the recent price movements, Wizz's stockmarket capitalisation — €2.8bn — is dwarfed by Ryanair's €18.7bn.

Still, Michael O'Leary might just be regretting his throw-away remark of several years ago: when asked about rumours about a Ryanair bid for Wizz, he said he wouldn't pay €1 for the airline.

As the map on the facing page illustrates, Ryanair and Wizz bases overlap everywhere in the CEE; they are the two main competitors. Wizz's own analysis puts itself at 39% of the LCC CEE market, Ryanair at 32%, easyJet at 6% and others (Norwegian, Pegasus, Flydubai, Vueling, Volotea, etc) at 23%. Significantly, Wizz places itself as the number one operator out of nine of 13 CEE countries.

Vienna is the latest battleground. Wizz selected Vienna as a new base earlier this year, claiming an investment of €265m, which presumably refers to the cost of the three based A321s, and adding 17 new routes in 2018. Ryanair has just agreed to buy an initial 25% stake in Vienna-based Laudamotion, formed out of insolvent carrier Niki, previously part of Air Berlin, which will eventually rise to 75%. The declared investment in a base which is expected to operate 30 aircraft in three years time appears modest — €100m in total. Intriguingly, Ryanair says that one of the benefits of Laudamotion is that it will will provide it with essential experience of Airbus operations.

Underpinning Wizz's ultra low cost structure is its CEE location. Although it has to compete for pilots at international rates, being able to base its aircraft in low cost country brings down most other labour and overhead-related costs. At the end of FY 2017 the majority of its aircraft — 45 out of 87 at the end of FY 2017 — were based in Poland and Romania, and the rest in other CEE countries, with the exception of one A320 at



WIZZ AIR ROUTE MAP

London Luton. GDP per capita in Poland and Romania is €9,800 and €7,500 respectively compared to €33,000 in the UK.

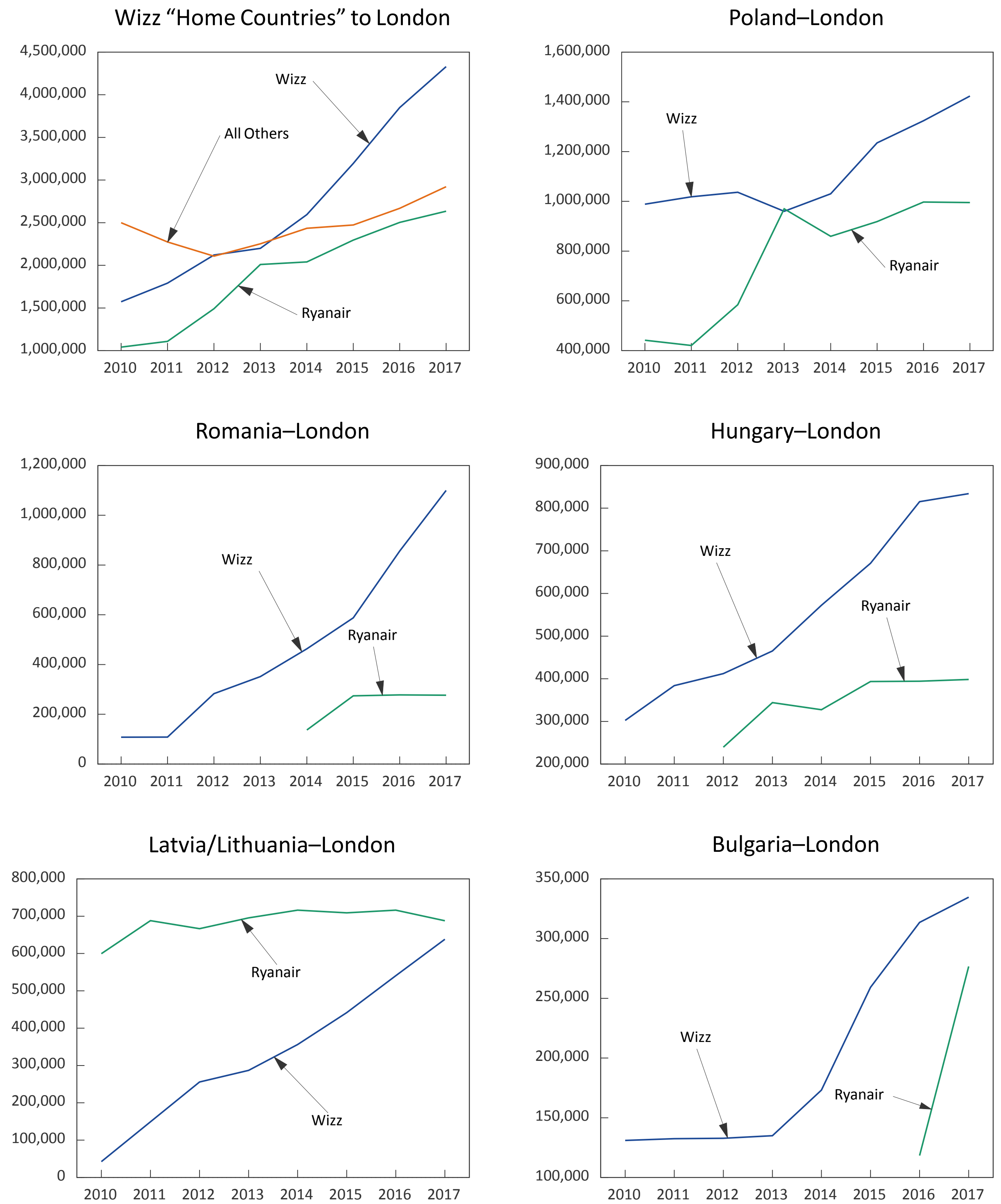
However, over the past year Wizz has been rapidly building up its Luton base. Having purchased all of Monarch's slots, following that airline's bankruptcy, it has allocated eight A320/A231s to this airport from where it operates to 47 destinations. Wizz's own estimate of its investment at Luton is €690m, again presumably including based-aircraft purchase prices.

Back in October Wizz Air UK, a fully owned subsidiary, applied to the CAA for a UK Air Operator's Certificate and Operating Licence to be used alongside its existing Hungarian licences in the post-Brexit world (it also holds a Ukrainian licence). The UK licences were expected by this March but do not seem to have been delivered as yet; resolving nationality/ownership issues proving tricky.

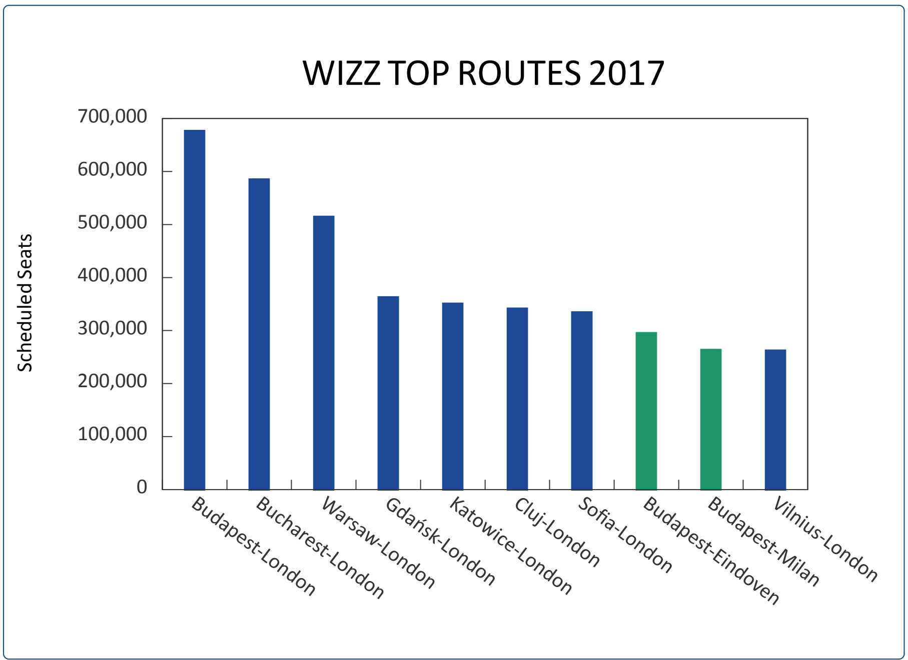
A shift in balance to high cost bases like London and Vienna will put pressure on costs, but Wizz's other cost driver is its fleet policy. Growing at 20%-plus a year, Wizz fleet development is centred on the 239-seat A321neo, gradually replacing 180-seat A320s.

Wizz's orderbook is impressive — a total of 281 aircraft — 8 A320ceos, 72 A320neos, 17 A321ceos and 184 A321neos. By the end of FY2020 the fleet will comprise 127 units, up from 92 at present, and over half the seat capacity will be from A321s. In its investor presentations, Wizz costs the latest A321neo order (146 units at the Dubai airshow in October) at $17.2bn, or $118m per unit. Given Indigo Partners' purchasing power, we would expect a 40-50% discount off this valuation, which seems to be

WIZZ AIR: CORE ROUTES CAPACITY TO LONDON



Notes: Based on 2017 schedules. London = all airports. Poland = Warsaw (Chopin and Modlin), Gdańsk, Katowice, Poznan. Romania = Bucharest, Cluj. Hungary = Budapest, Debrecen. Bulgaria = Sofia. Lithuania = Vilnius, Kaunas. Latvia = Riga



based on list prices.

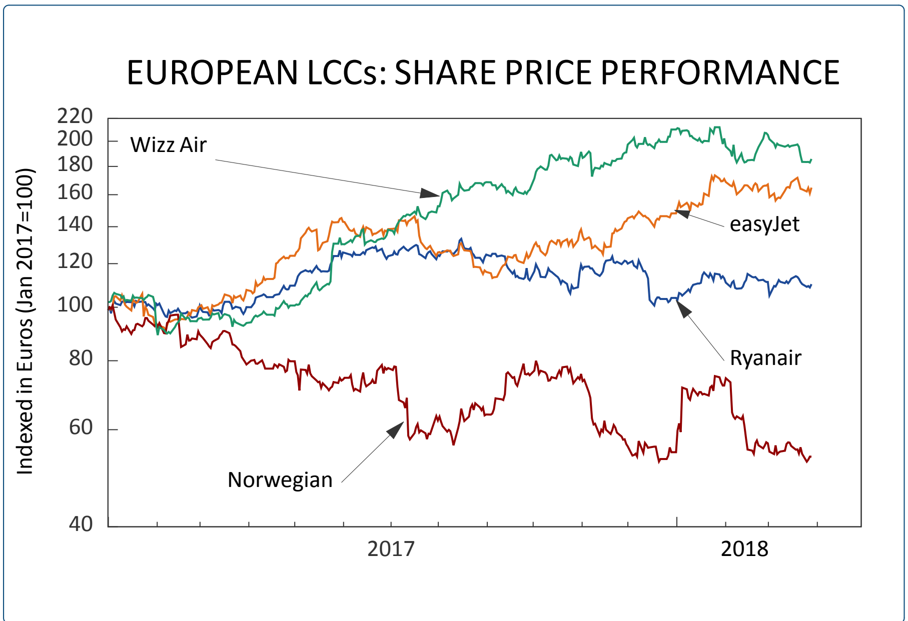
Wizz's growth story is its base in Central/ East Europe (CEE) — relatively immature economies, but with GDP growth rates of around 4% pa, at least double those of Western European countries. Wizz highlights the difference in propensity to travel — 0.4 flights per person in the CEE against 1.8 flights per person in the West.

However, Wizzair's core business is linking the CEE with the UK. As the chart above shows, eight of Wizzair's top ten routes are from CEE capitals or major cities to the UK, to London specifically. And this brings up the horrible question of Brexit.

The UK has benefited from a remarkable wave of immigrants, mostly skilled, from the CEE, initially Poland plus the Czech Republic and the Baltic states, then latterly Romania and Bulgaria. There are estimated to be almost one million Polish residents in the UK, and Polish is the second most widely spoken language. Their residency rights are, hopefully, to be protected under the Brexit deal, but it appears inevitable that this inflow will change into an outflow (if nothing else, the depreciation of sterling has reduced the incentive to working in the UK). VFR trips could increase for the remaining population, perhaps stabilising traffic flows.

This is going to be a big challenge for Wizz, but it is a very resilient company. To get an idea of its competitiveness we have looked at capacity trends on Wizz's main routes from the CEE to the UK, comparing trends with Ryanair on these routes UK (these routes are all to London from Wizz, and do not cover the total country-pair traffic volumes).

Overall, Wizz comes out very well. This market has grown by 10% pa during 2010-17, and Wizz has increased its share from 31% to 44%, while Ryanair has gone from 20% to 27%, and all the others have dropped from 49% to 30%. In the key Polish market, Wizz and Ryanair matched capacity almost exactly in 2013, since when Wizz has surged ahead. It also leads Ryanair in the new CEE markets of Romanian and Bulgaria, as well as its home country, Hungary.



LATAM: New competitive landscape, New business models

After several tough years and an impressive restructuring of its fleet and order/lease commitments, LATAM Airlines Group is seeing profits bounce back as Brazil's economy recovers and air travel demand growth accelerates throughout Latin America.

LATAM is looking to grow its Brazil domestic ASKs for the first time since 2011. 2018 could also be an interesting year in international markets because of the likely implementation of the Brazil-US open skies regime, to be followed by the development of LATAM's planned JBAs (Joint Business Agreements) with American and IAG from early 2019.

But will LATAM ever get back to the double-digit operating margins of the past, given intensified competition from LCCs. Is LATAM's new lower-cost business model in Chile, Peru, Colombia, Argentina, Brazil and Ecuador the right strategy to deal with the upstarts? Is there a real risk of losing premium market share?

Impressive restructuring

LATAM Airlines Group was created when Chile's LAN completed its cross-border acquisition of Brazil's TAM in June 2012. Unluckily, the closing of the merger coincided with a dramatic slowing of economic and air traffic growth in Brazil, a weakening of many Latin American currencies and the onset of a multi-year cargo slump.

In 2014 Brazil slid into its worst recession in decades and the region's economic problems worsened. Airlines saw a further weakening of demand, plummeting unit revenues and yields, currency devaluations and massive foreign exchange losses. LATAM was hit hard by the slump in cargo, historically one of LAN's key strengths.

It was ironic that the very reason LAN wanted TAM — the huge Brazilian market — turned into one of its biggest problems. The merged entity had heavy exposure to Brazil's domestic market: 36.5% of its total ASKs in 2012.

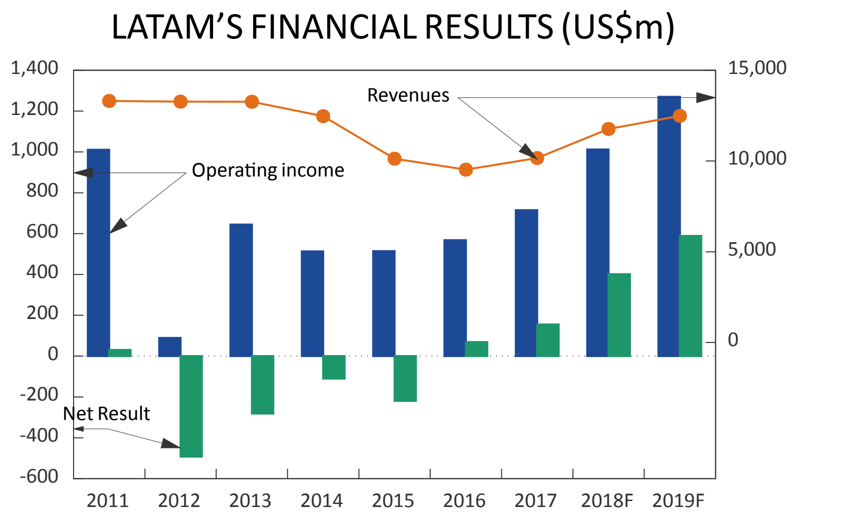
LAN had been consistently profitable up to and including 2011, earning double-digit operating margins and solid net profits since the mid-2000s. But the merger and Latin America's economic woes led to LATAM incurring net losses totalling $1.1bn in 2012-2015.

However, LATAM continued to report operating profits in the low-single digits even in the toughest years. 2016 saw a slightly higher 6% operating margin and, as the currencies had stabilised, a modest net profit. The airline's management had taken a number of effective actions to deal with the challenges.

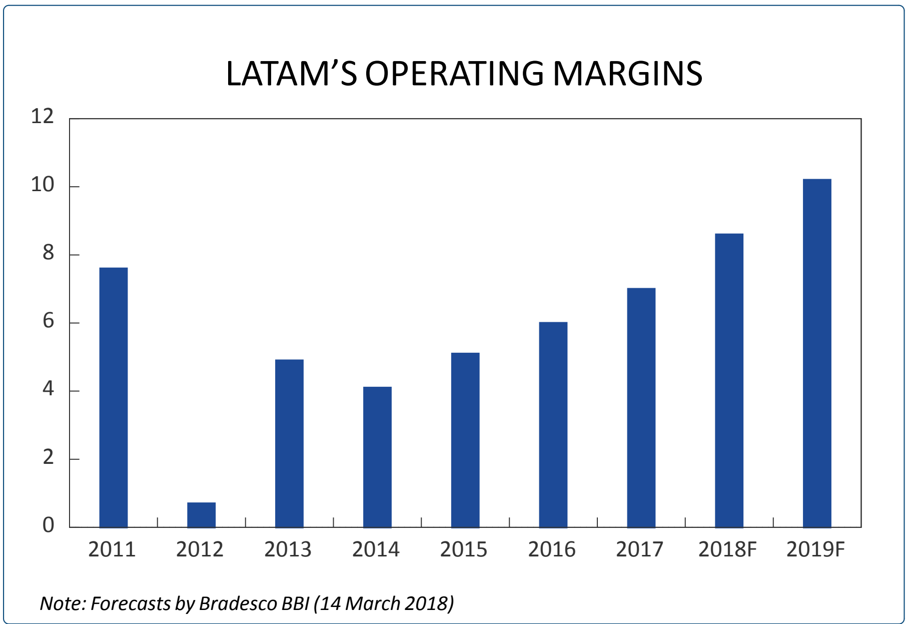
First, LATAM implemented what may have been the sharpest cost reductions of recent times among global carriers. It even achieved a 20% headcount reduction in the three years to December 2017.

Second, LATAM responded to Brazil's crisis by implementing the sharpest capacity cuts in the industry. TAM's domestic ASKs contracted by 25% between 2012 and 2017, reducing LATAM's exposure to Brazil's domestic market by ten points to 26.5% of its total ASKs.

Third, LATAM downsized its fleet quite drastically in the past couple of years and eliminated as much as $2.6bn from previously planned fleet spending in 2016-2017.



Source: Company reports and Bradesco BBI.
Notes: Forecasts by Bradesco BBI (14 March 2018). 2011 and 2012 are pro forma figures (LAN and TAM merged in June 2012).



Fourth, LATAM found new ways to maintain liquidity. In December 2016 it received a $600m cash injection by selling a 10% equity stake to **one**world partner Qatar Airways, which boosted its cash position from 15% to well over 20% of LTM revenues. LATAM was also able to pass two A350s to its partner on 6-12 month leases.

LATAM's operating revenues fell from $13.3bn in 2013 to $9.5bn in 2016 — a 28% contraction. Although revenues rose by 6.7% to $10.3bn last year, they were still 23% below the 2013 level.

Profit recovery at last

2017 was a recovery year for LATAM as Latin America's economies began to turn around, Brazil officially emerged from recession (Q2), currencies stabilised and industry capacity discipline prevailed in key markets. LATAM's operating profit improved by 26% and accounted for 7% of revenues, while net profit more than doubled to $155.3m. Those were respectable results in a year when the LATAM's average unhedged fuel price increased by 17.5% and its operating fleet shrank by 22 units.

The main themes were, first, a robust unit revenue recovery across all the business units. System RASK rose by 5.3% and system capacity by 2.3%. All the regions had load factors in the mid-80s.

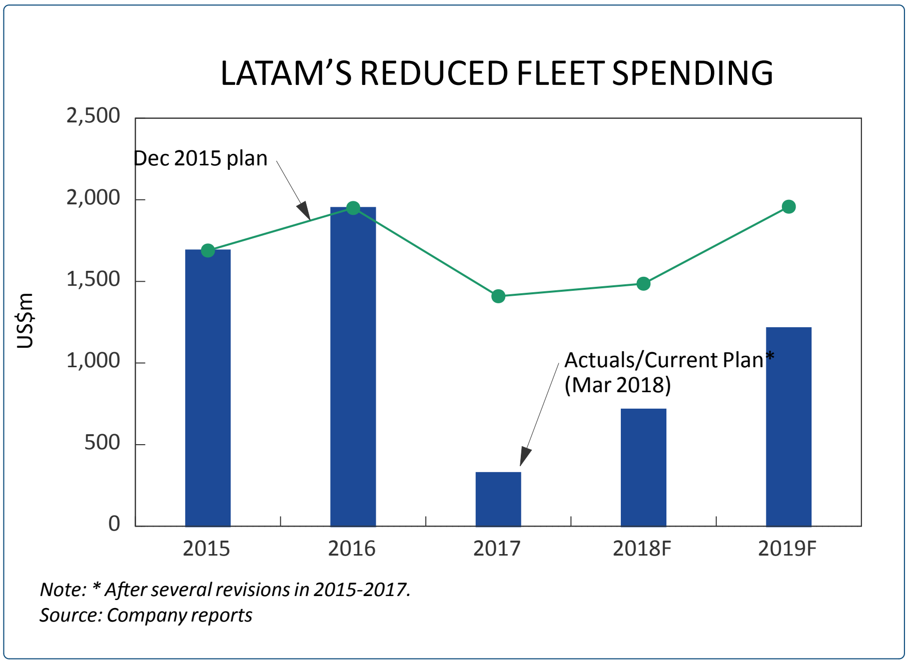
Second, the international segment, which accounts for just over half of LATAM's total passenger revenue, became the new high-flyer. This segment saw a strong pricing environment in Q4, with a recovery in international travel out of Brazil, especially to the US and Europe.

Third, the cargo segment improved, which is important for LATAM because cargo still accounts for 12.2% of its total revenue and the fleet still includes 10 freighters. Cargo unit revenues rose by 13.1% in Q4. The management noted that for the first time since 2011, cargo markets were "showing signs of equilibrium between exports and imports markets, allowing us to maximise our network profitability".

Fourth, costs remained under control. Despite substantial aircraft redelivery expenses, LATAM's ex-fuel CASK rose by only 1.6% in Q4.

Last year LATAM's focus shifted from restructuring to implementing strategic initiatives. The main one was a new lower-cost business model for LATAM's six domestic markets (discussed below).

2017 also saw a corporate reorganisation. In line with global airline industry trends, LATAM introduced a "simpler, more efficient and functional" senior management



LATAM'S FLEET PLAN

			2015	2016	2017	2018E	2019E
Passenger aircraft	narrowbody	A319-100	50	48	46	46	46
		A320-200	154	146	126	119	114
		A320neo		2	4	10	14
		A321-200	36	47	47	49	50
		A321neo				2	5
		Total narrowbody	**240**	**243**	**223**	**226**	**229**
	widebody	A330-200	10				
		767-300	38	37	36	35	35
		A350-900	1	7	5	9	13
		777-300ER	10	10	10	8	5
		787-8	10	10	10	10	10
		787-9	7	12	14	14	16
		Total widebody	**76**	**76**	**75**	**76**	**79**
Cargo aircraft		777-200F	3	2	2		
		767-300F	8	8	8	10	10
		Total cargo	**11**	**10**	**10**	**10**	**10**
		TOTAL OPERATING FLEET	**327**	**329**	**308**	**312**	**318**
Aircraft leased out		A320-200			5	5	5
		A350-900			2		
		777-200F	1				
		767-300F	3	3	1		
		Total subleases	**4**	**3**	**8**	**5**	**5**
		TOTAL FLEET	**331**	**332**	**316**	**317**	**323**

Source: LATAM Airlines Group

structure. The group now focuses on four main areas that form the basis of the business strategy — customers, revenue, operations/fleet and finance — with the heads reporting directly to CEO Enrique Cueto.

New domestic business model

The new domestic business model, implemented during 2017, aims to make LATAM more competitive with ULCCs in short-haul operations, achieve sustainable margins, and stimulate demand. When announcing the plans in November 2016, management said that it was projecting 50% growth in domestic leisure passengers in South America in 2017-2020 and that the new business model would "maintain LATAM's position as a key player in the growth of air traffic in the region".

The aim was to "get as close as possible" to ULCC cost levels, with the target being a cost gap of 10-15%. The management felt that LATAM could compensate for such a gap with higher unit revenues, because of better connectivity and an attractive FFP.

The new model is remarkable in its scope: it covers nearly 76% of the group's passengers, making it much larger than the lower-cost units introduced by airlines in other regions.

As well as offering fares up 20% lower than previously offered, the fare structure enables passengers to personalise their travel experience and only pay for services they require. There are four branded fares with predefined features. The options cover items such as first and second checked bags, preferred seating, same-day flight changes and different accrued FFP mileage.

LATAM Brazil has just introduced in-flight Wi-Fi on its domestic and regional narrowbody fleet and expects to complete the rollout by mid-2019. After that the offering will be gradually extended to other LATAM Group markets.

The plan was to achieve the cost reduction through lower distribution costs (increasing online sales to 80%), higher aircraft utilisation and higher load factors. There were no changes to seat configuration.

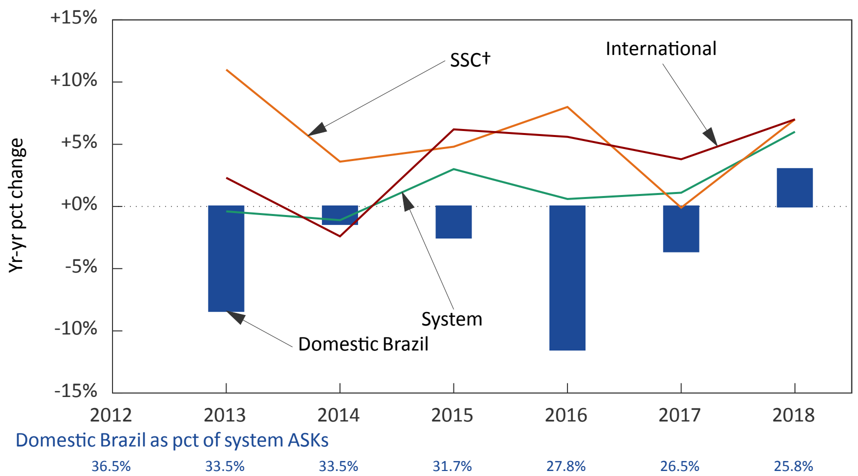
LATAM has reported positive initial results. In Q317 the uptake for the branded fares was 36%, bringing in $25m additional revenue. Separately, LATAM's ancillary revenue per passenger rose by 28% in 2017, mainly from the sale of checked bags, preferred seats and same-day flight changes.

Some analysts feel that the lower-cost domestic model could lead to LATAM losing premium or corporate travel market share, especially in Brazil, which is a business-oriented market with no ULCCs. But LATAM executives said in mid-March that there had not been any material changes in the passenger mix in Brazil.

LATAM may avoid such effects because, even with the lower-cost model, it has sought to improve the passenger experience. For example, domestic flights now offer an innovative, free wireless entertainment system. And, thanks to the new *Mercado LATAM* buy-on-board service, a corporate passenger can now have a better quality meal on LATAM's domestic flights.

But in international operations LATAM continues to focus heavily on premium traffic and improve product quality. A widebody cabin retrofit involving the 777s and 767s is planned

LATAM'S CAPACITY REDUCTION
IN BRAZIL'S DOMESTIC MARKET



Notes: 2018: Mid-points of LATAM's forecast ranges. †SSC = Spanish speaking countries (Chile, Peru, Argentina, Colombia, Ecuador). Source: Company reports

in the next two years. LATAM was recently named "five-star global airline 2018" by Apex for its in-flight experience. It is one of only 15 airlines to receive IATA's Fast Travel Platinum certification (think large numbers of airport self-service kiosks).

Network and JBA plans

Ultimately, though, it is LATAM's size, formidable route network and leading FFP that will help it compete with LCCs.

In terms of passengers (67m in 2017), LATAM is roughly twice the size of the next regional competitor (Gol). Its FFP has 30m-plus members, compared to Gol's 13m. Its network includes around 137 destinations in 24 countries, domestic operations in six countries and three hubs that provide links to other world regions (Santiago, São Paulo/Guarulhos and Lima).

According to a recent company presentation, LATAM is the largest carrier in both Chile and Peru, with domestic market shares of 71% and 58%, respectively, in 2017. It is number two in the other four countries, with 33% of the domestic market in Brazil and 18-28% of the market in Colombia, Argentina and Ecuador.

In terms of international shares, LATAM is number one within South America, accounting for almost half (47%) of the region's ASKs. It is number one on South America-Asia Pacific routes (45%), number two to North America/Caribbean (19%) and number three to Europe (13%).

Maintaining network leadership is important for LATAM. In 2017 it launched as many as 30 new routes, with the focus being to improve regional connectivity from hubs.

This year the focus has shifted to increasing connectivity with Europe and North America. The new city additions include Rome, Lisbon and Boston, to be served from São Paulo with convenient connections with Chile and other parts of South America.

LATAM's focus has shifted partly because of the progress made in securing regulatory approvals for its planned JBAs with IAG and American. Brazil's CADE approved the JBAs last year and the airlines now only need the blessing of the Chilean and US regulators.

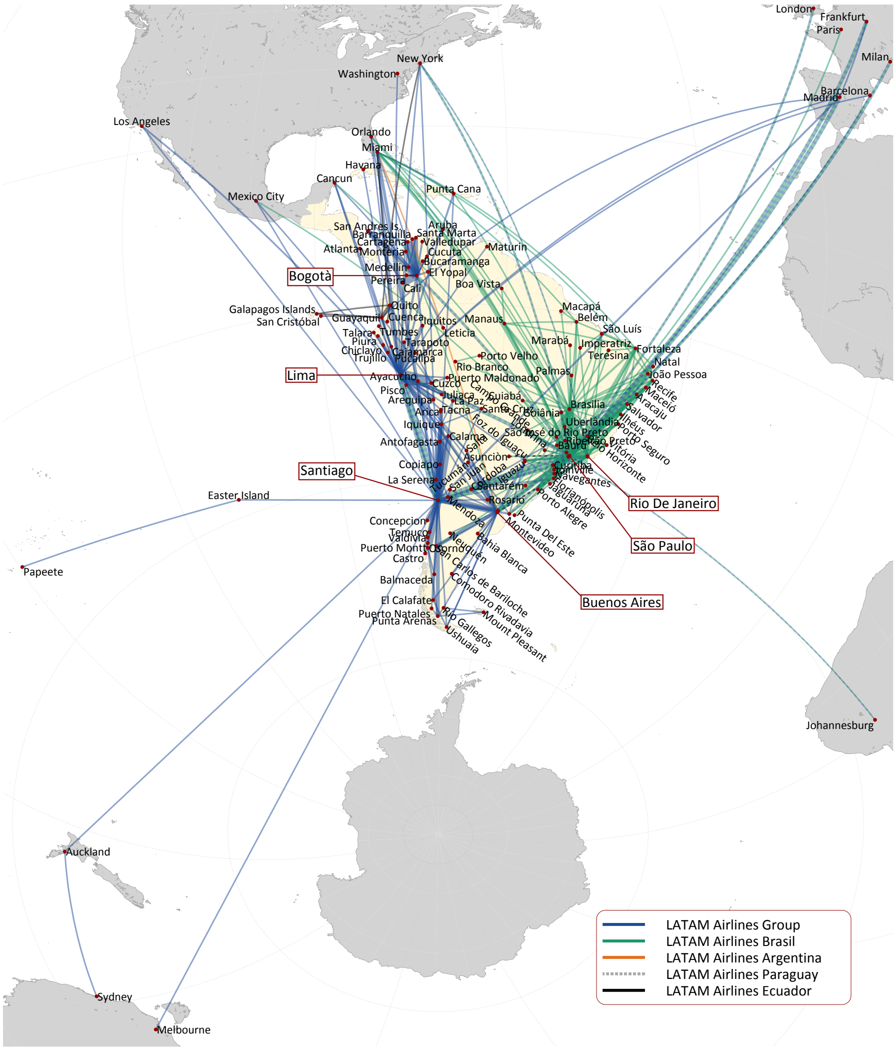
On March 7 Brazil's senate approved the Brazil-US open skies agreement that was originally signed in 2011. The open skies deal is a precondition for the US DOT's approval of the LATAM-American JBA, which was signed in January 2016. The open skies deal still needs to be signed into law by President Michel Temer, but that should be a mere formality. LATAM also expects to receive the Chilean approvals this year. The EU does not require open skies for JBA approvals. (Brazil reportedly terminated its open skies talks with the EU in December because of lack of progress.)

LATAM now expects to start implementing the JBAs with its partners in early 2019. The two agreements will give it access to a global network of over 420 destinations, so the initial benefits alone could be substantial.

However, LATAM's Brazilian competitors can be expected to follow suit with their own immunised JVs with US carriers: Gol/Delta, Azul/United and Avianca Brasil/United. There could also be more JVs with European carriers.

Interestingly, the Azul-TAP and Gol-Air France-KLM partnerships have already had some negative impact on LATAM's network plans. In December LATAM suspended its hub project in Brazil's Northeast, reportedly because it felt that a hub there was no longer viable following Gol's decision to develop a new joint hub with Air France-KLM in Fortaleza and Azul's announcement that it would strengthen its Recife hub. The Gol hub will kick off in May when KLM and Air France's Joon start flying to Fortaleza from Amsterdam and Paris.

LATAM AIRLINES ROUTE NETWORK



Balance sheet repair

As a result of the earlier restructuring efforts, in 2017 LATAM had the lowest fleet obligations in its history. The lease-adjusted fleet capex was $326m — all of it operating leases — compared with earlier fleet spending typically in the $1.5-3bn range.

Because of the reduced capex, improved operating results and multiple refinancings, LATAM has been able to make headway in repairing its balance sheet. Free cash flow rose from $549m in 2016 to $1.4bn in 2017. Adjusted net debt/EBITDAR declined from 5.3x to 4.5x. Adjusted net debt fell from $11.1bn to $10.3bn. Liquidity remained healthy at $2.1bn (20.3% of LTM revenues).

The refinancings improved LATAM's debt profile, extending maturities and reducing the average cost of debt. LATAM was able to pay down or refinance some of its expensive TAM legacy bonds. It also took advantage of good market opportunities to issue new unsecured debt at very low interest rates.

Deleveraging remains a priority for the group and the target is to reduce the leverage ratio below 4x by 2019. However, the management commented recently that regaining investment-grade credit ratings was no longer considered imperative. LATAM had lost LAN's long-held investment-grade credit ratings immediately after the merger, essentially because of TAM' high debt levels.

LATAM's fleet commitments remain modest — $714m in 2018 and $1.2bn in 2019. Under the current plan, the next two years will see almost twice as many new deliveries as returns. The operating fleet is slated to grow from last year's 307 to 316 at year-end 2018 and 322 at year-end 2019. It will be mainly narrowbody growth: more A320neos and (from this year) A321neos. On the widebody side, LATAM is taking more A350-900s and two more 787-9s, while reducing 767-300 numbers.

Prospects

LATAM expects to achieve an operating margin in the 7.5% to 9.5% range this year, up from last year's 7%. It expects the demand environment to continue improving, so it is stepping up system capacity growth from 1% in 2017 to 5-7% in 2018. Domestic Brazil ASKs are projected to grow by 2-4%.

To take advantage of the rebound in cargo, LATAM has potentially two additional 767-300Fs available in 2018 (one returning from a sublease and one converted from a passenger aircraft). However, LATAM's strategy has not changed in that the main focus is on filling bellyhold capacity. Cargo ATKs are projected to increase by a very modest 1-3% in 2018.

The guidance reflects expectations of continued economic recovery. Like Gol, LATAM is bullish on Brazil's outlook. The IMF is currently forecasting Brazil's GDP growth to accelerate to 1.9% in 2018 and 2.1% in 2019. The Latin America/Caribbean region is projected to see 1.9% and 2.6% growth in those years.

But there are challenges and risks. In February Fitch downgraded Brazil's credit ratings in part because of lack of progress in legislating reforms. Upcoming elections in 2018 in Brazil, Colombia and Mexico create political uncertainty.

Longer term, there is much untapped potential for demand growth in Latin America, boosted by surging disposable incomes and swelling ranks of middle classes.

LATAM is now leaner and more efficient, benefits from a unique market position and has promising new strategies. Yet, its profit margins remain lower than those of its Latin American peers. Gol and Azul, for example, are guiding operating margins of 13% and 11-13%, respectively, in 2018.

Some analysts think that the lagging margins reflect the growing competition from LCCs in LATAM's markets. First, there are the new entrants in the Spanish speaking countries. Viva Air Peru started operations in May 2017 as Peru's first LCC. Indigo Partners-backed JetSmart launched in July 2017 in Chile. Flybondi took to the air in January 2018 as Argentina's first ULCC, and Norwegian Air Argentina will follow suit this summer. Viva Air is reportedly looking at setting up its next unit in Ecuador. And those are just the most prominent of the numerous new or prospective LCC entrants.

LATAM believes that it is well-positioned to compete with LCCs in Chile because of its dominant market position, connectivity and leading FFP. Chile and Peru are "strategic markets" where LATAM is determined to keep its leadership position. But how will it affect profit margins?

Second, while there are no ULCCs in Brazil, there are signs of LATAM being outmanoeuvred by the nimbler established LCCs. Gol has improved its product and has consistently gained corporate market share.

Third, with the imminent implementation of US-Brazil open skies and the likely abolition of foreign ownership restrictions in Brazilian airlines, LATAM can expect much more competition on international routes and possibly even new Brazil-based LCCs.

In March Brazil's Congress approved a fast track for a bill that would abolish the current 20% foreign ownership limit on the voting stock of airlines. If the bill passes, Delta could increase its stake in Gol and the smaller carriers could tap their foreign minority owners for extra funds.

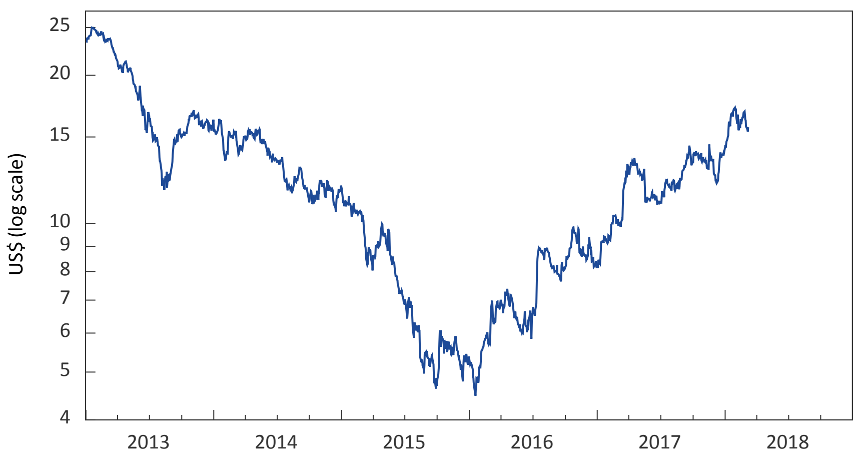
It could also be an opportunity for the Brazilian Amaro family to fully divest their stake in LATAM (currently 5% of total shares and 80% of LATAM Brazil's voting shares). Analysts have welcomed the Chilean Cueto family's moves to increase their control because they represent the old highly-regarded LAN management team.

Foreign airlines such as Norwegian, Virgin and AirAsia have reportedly approached the Brazilian government to discuss potential investments in Brazil. But Brazil has high barriers to LCC entry (high costs, lack of slots at desirable airports, etc) and is already highly competitive. Norwegian, though, is on course to fly to Brazil from Argentina and London.

It is not surprising that opinion is divided on LATAM's shares. In mid-March analysts' recommendations for the NYSE-listed ADRs included six buys, six neutrals and three underperforms. Bradesco analysts cited three reasons for their neutral rating on LATAM: potential to continue losing premium and corporate market share; growing competition from LCCs and ULCCs; and an unattractive valuation. However, Bradesco did raise their year-end price target by 23% because of the positive outlook for LATAM in 2018, reflecting strong international demand, improving profitability in Brazil and cargo business recovery.

By Heini Nuutinen

LATAM AIRLINES ADR SHARE PRICE PERFORMANCE



China's Big Three:
Update on their expansion story

WHILE the Big Three continue to dominate the Chinese aviation industry, their focus increasingly looks abroad — both to international routes and, now, to realising the benefits of investment from foreign carriers.

Domestically, traffic at Air China, China Southern and China Eastern has risen by a third in three years, and — so far — the steady growth in disposable income and the increasing propensity to travel overall within the country is more than enough to withstand the rising competition airlines face from High Speed Railways. China has almost 13,000 miles of HSR, and 1.5bn passengers travelled on trains in the country in 2016. The Civil Aviation Administration of China (CAAC) observes that HSR has halved the number of air passengers on routes under 500km, but China measures 3,250 miles east to west and 3,400 miles north to south, and aviation holds the advantages on longer internal routes.

On international routes; traffic has grown by 70% in three years, but against a backdrop of much stronger competition from rivals, whether domestic (eg Hainan Airlines) or foreign airlines, The Chinese carriers are also increasingly competing for sixth freedom traffic, connecting Europe-Australasia passengers over their hubs.

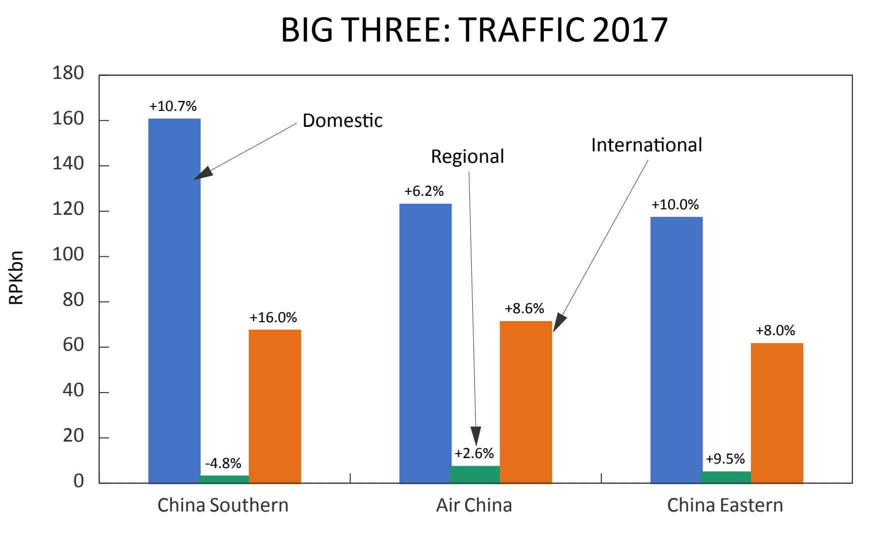
The airlines do not give any indication of geographical segment profitability, but a survey of the yields tentatively suggests the domestic market, where the CAAC regulates fares, may be the main profit generator. For example, China Southern's average yield per RPK in the first half of 2017 was RMB0.53 (US¢8.5) domestically, which compares with 8.2¢ for the US domestic market. On what it terms "regional routes" — to Hong Kong, Macau and Taiwan — yield looks lucrative at RMB0.79 (14.2¢). Its international yield was RMB0.37 (5.9¢), which compares to US Majors' 6.4¢ on the Pacific.

The CAAC is gradually deregulating fares on China's main domestic routes. Perhaps surprisingly, there is an expectation that this will increase yields as it will allow for the implementation of peak pricing.

The Big Three might be nervous about AirAsia's announcement in May 2017 that it is planning to launch a Chinese subsidiary in Zhengzhou in a joint venture with Everbright, a Chinese financial services conglomerate. Tony Fernandes, AirAsia Group CEO, says this is the first step in a plan to expand through China that will take five to ten years to complete.

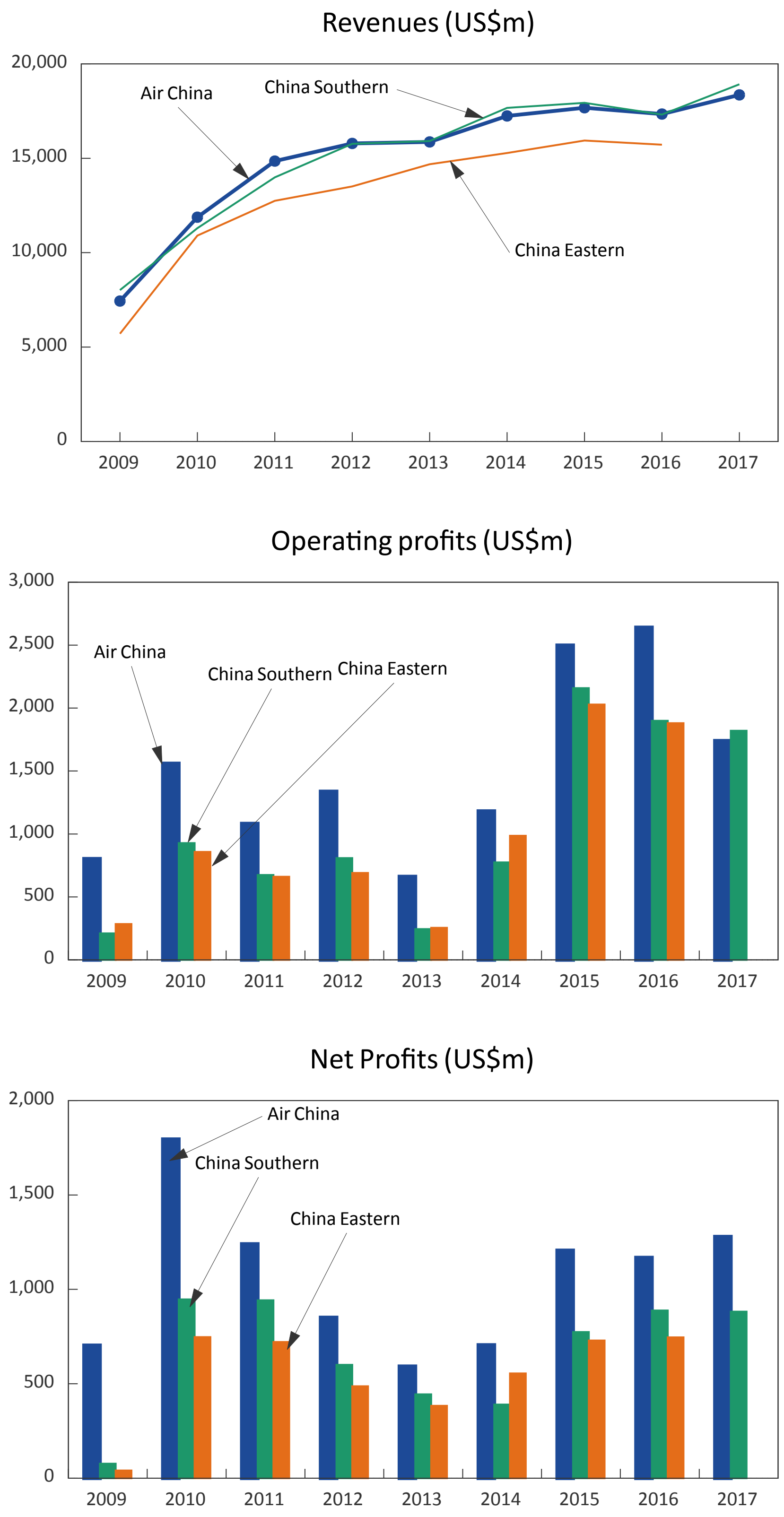
Zhengzhou (in the east of the country) is just outside the top 10 Chinese airports in terms of domestic passengers, although it is the fifth largest in terms of LCC capacity already thanks to the presence of China United Airlines, a subsidiary of China Eastern, and others such as Lucky Air and West Air. But the leading airline at the airport is China Southern, with a 22% seat share, and how it reacts to AirAsia will be an interesting test of the Big Three's tolerance to what will be a dangerous rival.

As ever, perhaps the most significant external impact on the Big Three comes from state policy. In January this year the government said it would ease rules restricting foreign ownership of airlines — although it made clear this would not apply to



Note: Regional = Hong Kong, Macau and Taiwan

BIG 3 FINANCIAL DATA



the Big Three, which will still have to be controlled by state-owned shareholders. Nevertheless, the three biggest airlines in China have now all pulled in minority investments from foreign airlines, and these are likely to be just the first step to greater links with non-Chinese carriers over the coming years — both in terms of equity and operational partnerships.

Air China

Based in Beijing, China's flag carrier operates to 193 destinations (more than 100 of which are domestic) in 35 countries. The group fleet — which also includes Air China Cargo, Shenzhen Airlines, Shandong Airlines and Air Macau — continues to grow, and today stands at 718 aircraft, with the mainline operating 402 of those,

As well as its continued dominance at Beijing — perhaps the key benefit of being the nation's flag carrier — Air China also operates hubs at Chengdu, Shanghai and, now, Shenzhen. Shenzhen's Bao'an International airport is seen by the group as vital for building up traffic from the south of the country and is the home of subsidiary Shenzhen Airlines. That carrier operates a fleet of 180 aircraft on more than 220 domestic and international routes, and to encourage regional feed parent Air China launched a non-stop 787-9 route between Shenzhen and Los Angeles in December 2017.

In the January to September period of 2017, revenue at the Air China Group rose an impressive 8.8% to RMB93.0bn (US$13.7bn), thanks in part to a 4.2% rise in passengers carried at the mainline to 46.2m. At the operating level, profit rose by 27.7% in the period, to RMB12.3bn ($1.8bn), while net profit increased by 18.6% to RMB9.6bn ($1.4bn). In the first three-quarters of 2017 the Air China group recorded total RPK growth of 5.6%, ahead of a 5.2% rise in ASKs and resulting in a 0.3% rise in passenger load factor, to 81.2%.

Internationally, capacity grew by 7.0% in January to September 2017 and traffic was up by 7.3%, but there was huge variation by region. The fastest growing market was routes to Europe, where traffic grew by 10.6%, and which accounted for 36.8% of all international traffic at Air China in the period. But traffic on routes to Korea and Japan fell by 12.1%, in a market that now represents just 8.7% of Air China's international RPKs.

Air China is still the largest of the

AIR CHINA ROUTE NETWORK

AIR CHINA GROUP FLEET

	In service						On order
	Air China	Shandong	Shenzhen	Air Macau	Others†	Total	
747-400	3					3	
747-8i	7					7	
777	30					30	
787	11					11	4
A330	30		1			31	3
A350	29					29	10
737NG	138	112	85		13	348	2
737 Max 8							8
A320 family	139		88	17		244	2
C919							5
ARJ21							10
747-400F‡	3					3	
757-200F‡	4					4	
777-200F‡	8					8	
Total fleet	**402**	**112**	**174**	**17**	**13**	**718**	**44**

Note: † includes Dalian Air and Air China Inner Mongolia. ‡ Air China Cargo

Big Three in terms of international traffic, both absolutely and relatively — see chart on page 16. International RPKs accounted for 35.3% of all its traffic in 2017, compared with 33.5% at China Eastern and 29.2% at China Southern. Air China has been prioritising international traffic for decades, and over the last three years its proportion of international traffic has risen 4.3 percentage points. However, the others are catching up steadily — China Eastern's international proportion rose 6.1% in three years, and China Southern by 8.3%. Or put another way, Air China's share of all international traffic at the Big Three is now just 35.6%, compared with 40.8% in 2014 — and if this trend continues Air China will be overtaken by China Southern in terms of international traffic in the next few years.

Air China is working hard to prevent that. It was the first of the Big Three to forge close links with a non-mainland airline, and now has a 29.9% stake in Cathay Pacific Airways (while Cathay has a 20.1% stake in Air China). That strategic partnership continues to deepen — the two operate a joint venture cargo operation Air China Cargo using Cathay's extensive expertise in the area. However Air China is also a member of the Star Alliance (while Cathay is in **one**world) and in 2016 signed a joint venture agreement with Lufthansa. In December 2017 Air China and Star signed a deal to transfer all the alliance's flights and operations into the same terminal at Beijing airport, to enable it to become a key hub for Star.

China Southern

China Southern is based in Guangzhou and operates to more than 200 destinations in 40 countries, of which around 130 are domestic. It has the largest fleet of the Big Three, with 761 aircraft at the group level (which includes a 163-strong fleet at Xiamen Airlines) and 550 at the mainline. As well as Guangzhou, China Southern operates hubs at Beijing, Shanghai, Chongqing (in the south-west of China) and Urumqi (in the north-east).

In the first three-quarters of 2017 China Southern's revenue increased by 10.9% to RMB96.1bn ($14.1bn), based on a 9.6% rise in passengers carried to 93.9m. An 11.5% rise in RPKs over the January-September 2017 period comfortably beat a 9.5% increase in ASKs, resulting in a 1.7% rise in passenger load factor, to 82.2%. Operating profit rose 33.0% in the January-September 2017 period to RMB9,251m ($1.4bn), while net profit increased by 9.0% to RMB8,210m ($1.2bn).

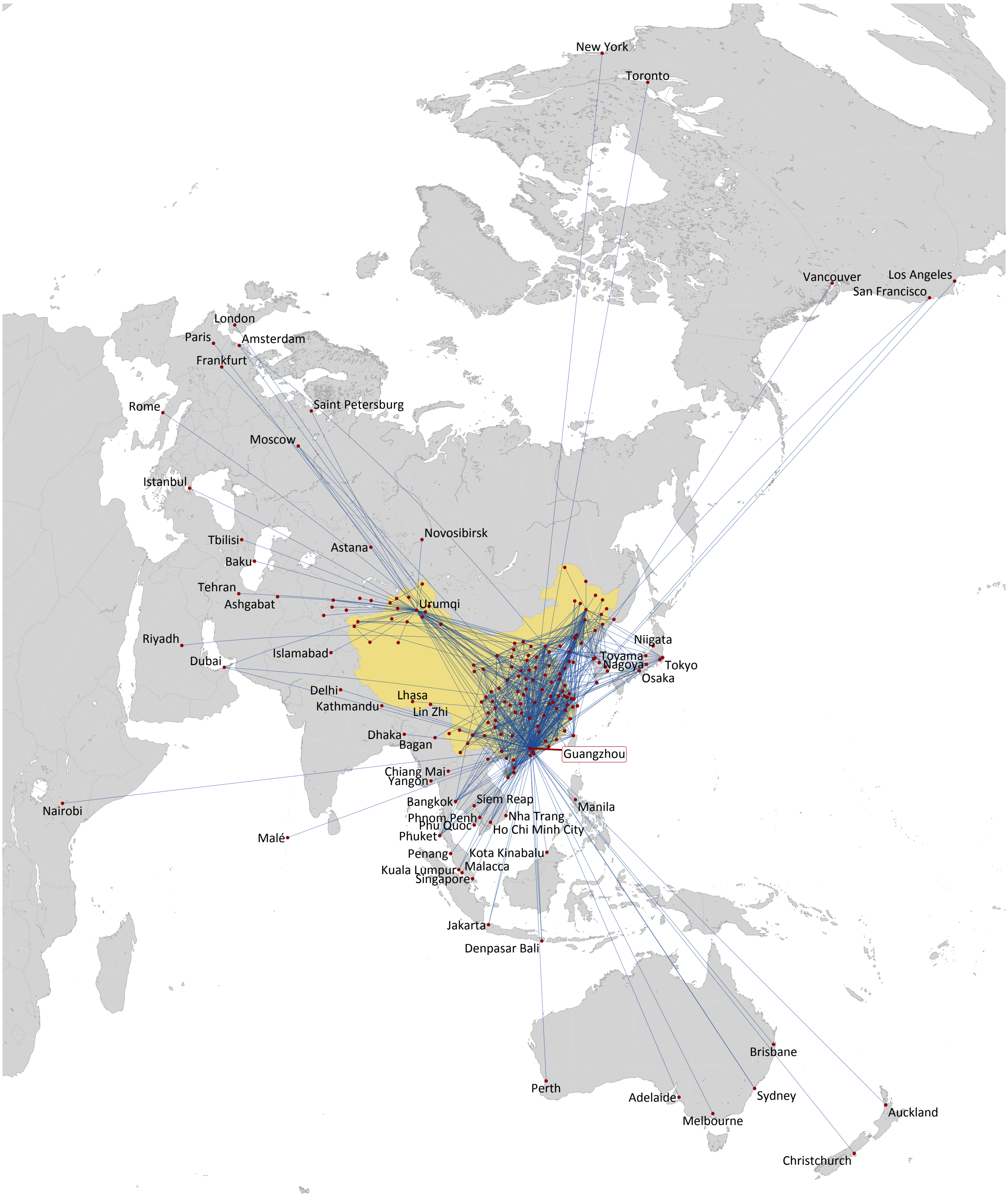
China Southern is still the largest of the Big Three in terms of fleet and overall traffic. Crucially, China Southern remains far and away the country's leading domestic airline, ac-

CHINA SOUTHERN AIR HOLDING: GROUP FLEET

	In service						On order
	China Southern	Xiamen	Heibei	Chongqing	Others†	Total	
777	12					12	
787	10	10				20	22
A330	43					43	7
A350							20
A380	5					5	
737NG	175	143	16		8	342	64‡
757	6	4				10	
A320ceo	255			17		272	21§
C919							5
E190	20		6			26	1
ARJ21							50
747-400F	2					2	
777-200F	12					12	
Total	**540**	**157**	**22**	**17**	**8**	**744**	**190**

Notes: † Includes Jiangxi Airlines and Henan Airlines. ‡ including 50 737 Max 8. § including 8 A321neo

CHINA SOUTHERN ROUTE NETWORK



counting for 40.1% of domestic traffic among the Big Three (in terms of RPKs) in 2017 — a share that has remained constant over the last few years. Almost 70% of its RPKs in 2017 came from domestic routes (compared with 63.9% at China Eastern and 61.1% at Air China).

China Southern has also been growing rapidly internationally, though its strategy through 2018 is to rein in international route expansion somewhat, instead prioritising increased frequencies to the most profitable routes on its existing network.

As can be seen in the chart on page 16, the reduction in Air China's lead over China Southern in terms of international traffic is helping the latter catch up with the flag carrier in terms of net profits. In 2010 the net profit lead of Air China over China Southern was a substantial US$846m; by 2015 this was down to $428m and in 2016 it fell to $280m.

Key to closing the gap permanently is China Southern's external strategy, and in August 2017 American Airlines bought a 2.8% stake in China Southern for US$200m.

For American, the move was a riposte to Delta's acquisition of a 3.6% stake in China Eastern in 2015 for $450m, but for China Southern this opens a critical partnership given that outbound traffic from China to the US doubled over the 2010-2015 period. American operates from Chicago, Dallas-Fort Worth and Los Angeles to Beijing and Shanghai, while China Southern has routes to Los Angeles, San Francisco and New York.

Following that equity deal, China Southern signed a codeshare deal with American in January this year, giving American passengers access to all the destinations served in China by the carrier, and — crucially — providing Chinese passengers access to around 80 destinations from Los Angeles, San Francisco and New York.

Further cooperation in other areas is expected to follow through 2018 and beyond, but the contradiction of China Southern being part of SkyTeam while American is part of **one**world can't last forever, and there is speculation the Chinese airline may flip between the two alliances sooner rather than later.

China Eastern

Based at Shanghai (at both Hongqiao and Pudong airports) and secondary hubs at Beijing, Kunming, Xi'an and Qingdao, China Eastern operates to more than 215 destinations. The China Eastern group (which includes Shanghai Airlines and China United) has a 618-strong fleet, and the mainline has 489 aircraft.

In the first half of last year China Eastern saw revenue rise 8.3% to RMB53.2bn ($7.7bn), with passengers carried in the period rising 9.2% to 53.3m. In January to June 2017 traffic growth of 10.1% was just ahead of capacity growth of 9.6%%, leading to a 0.4% increase in passenger load factor, to 80.9%. However, in H1 2017 China Eastern experienced an 11.3% rise in operating costs, ahead of revenue growth and leading to an 11.6% fall in operating profit year-on-year, to RMB6.3bn ($0.9bn). This was due primarily to a 45% rise in fuel costs year-on-year — a hefty RMB3.8bn ($0.6bn) increase. However, at a net level China Eastern recorded a 34.4% improvement in profits, to RMB4.3bn, thanks partly to a RMB2bn exchange rate gain compared with the first half of 2016.

China Eastern is still the smallest of the Big Three but is eager to develop its secondary hub operation at Beijing, better to challenge Air China. In particular, it threatens Air China through its investment in LCC subsidiary China United, the only commercial carrier based at Beijing's Nanyuan airport. It operates eight 737-700s and 31 737-800s to around 20 domestic destinations, but it is due to start international services imminently.

Domestically China Eastern's expansion is constrained by a lack of slots at its hub airports, which forces the airline into increasing routes out of second- and third-tier airports, plus putting widebody aircraft onto trunk routes such as Shanghai-Beijing.

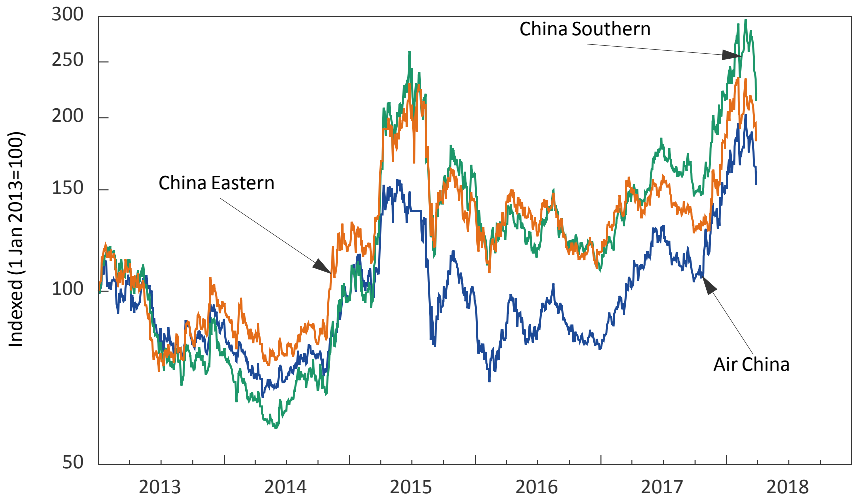
CHINA EASTERN GROUP FLEET

	In service				On order
	China Eastern	Shanghai	China United	Total	
767		5		5	
777	20			20	
787					15
A330	51	6		57	9
A350					20
737NG	123	81	37	241	15‡
A320 family	286			286	1
C919					5
ARJ21					5
747-400F†	3			3	
777F†	6			6	
Total Fleet	**489**	**92**	**37**	**618**	**70**

Note: † China Cargo Airlines. ‡ includes 7 737 Max 8s.

CHINA EASTERN ROUTE NETWORK

SHARE PRICE PERFORMANCE (HKG)



The priority for its major hubs is international services, and in the first half of 2017 the airline's capacity on routes to North America (its largest market, accounting for 29% of all international capacity) grew by 14.6% year-on-year, and on routes to Europe (accounting for 16.3% of international ASKs) by 34.1%. However, these longer routes are lower yielding compared with shorter international routes to markets such Japan and South Korea, both of which suffered reductions in traffic in the first half of 2017.

Its other international lever is the SkyTeam alliance, and China Eastern talks about building a "golden triangle" network that connects China, America and Europe after it bought a 10% stake in Air France-KLM for US$439m in July 2017 (while Delta has a 3.6% stake in China Eastern and 10% in Air France-KLM).

In July last year China Eastern also launched an upgraded marketing partnership with Air France-KLM, building on the existing codesharing between the two airlines, but this "golden triangle" will need to be developed if China Eastern is to catch up with its Big Three rivals.

Chinese expansion: the next disruption?

PETER Bellew — erstwhile CEO for a short time of Malaysia Airlines, and now back at Ryanair — commented at the AAPA annual meeting eighteen months ago that the development on tourism outbound from China reminded him of the excitement of the explosion in European tourism to the Mediterranean in the 1970s: lack of infrastructure meant building and operating hotels; poor local controls led to hastily constructed facilities and the delights of such as the Costa del Sol; but the growth led to huge opportunities.

The following chart and table are the results of detailed analysis that arose from a recent project we at *Aviation Strategy* produced looking at the markets in Asia. Various other commentators have noted the way that the Chinese carriers have increased the number of destinations they serve outside the country as outbound tourism has been developing. In this analysis we have looked at the growth in the number of seats.

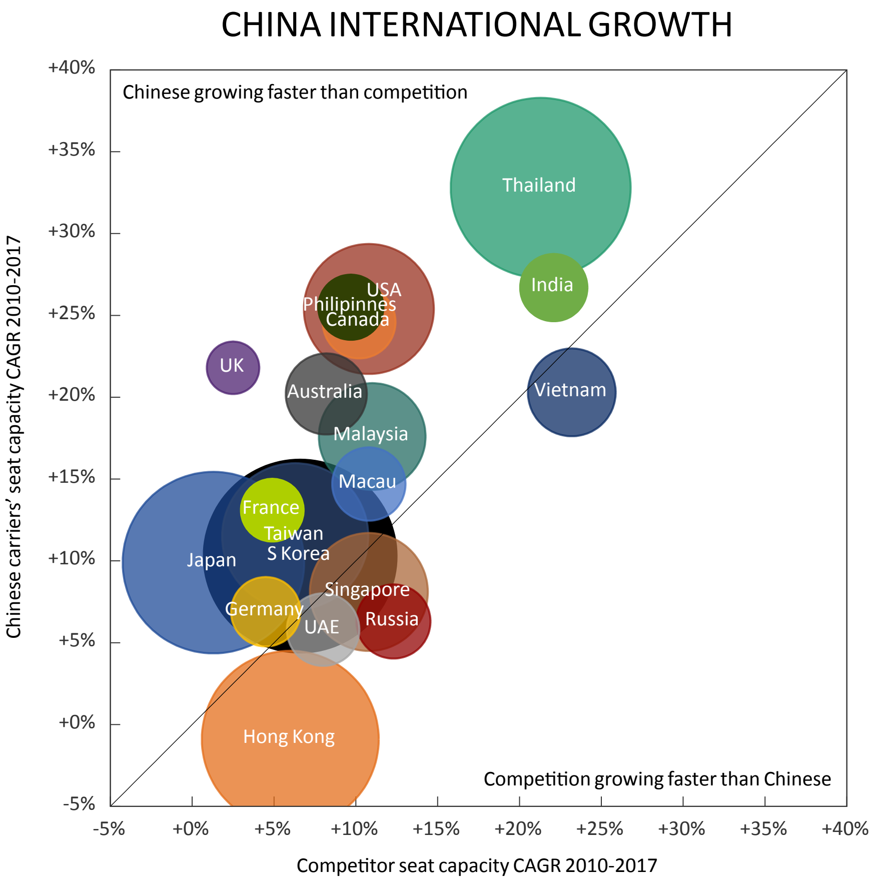
The growth has been astounding. The largest outbound route in 2010 was to Hong Kong. In part this was a surrogate for transition to other parts of Greater China — notably Taiwan. Since then the Chinese state has relaxed restrictions on cross-straits travel and the Hong Kong-China route has only seen growth of a compound 4% — most of it left to Cathay to feed its hub — while routes from mainland China to Taiwan have grown by an annual compound 9% in the intervening years.

Now the two largest routes are to South Korea and Japan. In each case the market has grown by a reasonable 8% a year — but Chinese carriers have increased operations by a compound 10% a year.

More extraordinary has been the growth in services between China and Thailand. Between 2010 and 2017 the total number of seats scheduled has grown by an annual average rate of 27%. Within this the Chinese carriers have increased capacity by an average 33% and this route is now the third largest by total seat capacity.

What is a bit strange is that, despite this huge growth on International routes, how few routes are dominated or led by the Chinese carriers; China Eastern has a 22% share on the routes to Japan, 38% to Myanmar and 31% to India. China Southern has a lead position on routes to Australia with 34% of the capacity, 29% to Cambodia and 35% to New Zealand.

As they continue to grow this will change.



Note: area of bubbles directly related to total seat capacity 2017.

CHINA INTERNATIONAL CAPACITY FLOWS: TOP 30 COUNTRY PAIRS

Rank 2017	Between China and	Seats 2017 (m)	CAGR 2010-2017		Top Players 2017								
			Total Market	Chinese	#1	share	growth	#2	share	growth	#3	share	growth
1 (2)	S Korea	22.2	8%	10%	Korean	22%	5%	Asiana	21%	3%	China Eastern	15%	9%
2 (3)	Japan	19.7	7%	10%	China Eastern	22%	7%	All Nippon	18%	5%	Air China	16%	3%
3 (6)	Thailand	19.3	27%	33%	Thai AirAsia	11%	39%	Thai Airways	11%	7%	China Southern	10%	25%
4 (1)	Hong Kong	18.7	4%	-1%	Cathay Dragonair	46%	4%	Hong Kong AL	18%	23%	China Eastern	10%	-2%
5 (4)	Taiwan	12.8	9%	12%	China Airlines	18%	9%	EVA	15%	9%	China Eastern	12%	11%
6 (7)	USA	10.1	18%	25%	United	20%	10%	Air China	19%	18%	China Eastern	16%	21%
7 (5)	Singapore	8.3	10%	8%	SIA	26%	2%	Scoot	14%	∞	China Eastern	11%	3%
8 (8)	Malaysia	6.8	12%	18%	AirAsia	30%	14%	AirAsia X	27%	15%	Malaysia AL	12%	-2%
9 (15)	Vietnam	4.6	22%	20%	Vietnam AL	39%	21%	China Southern	28%	19%	China Eastern	8%	∞
10 (14)	Australia	3.9	19%	20%	China Southern	34%	20%	China Eastern	24%	18%	Air China	16%	10%
11 (11)	Russia	3.3	10%	6%	Aeroflot	44%	17%	S7 Airlines	12%	15%	China Southern	11%	14%
12 (12)	Macau	3.2	12%	15%	Air Macau	62%	11%	Xiamen AL	13%	22%	China Eastern	8%	47%
13 (16)	Canada	3.2	17%	25%	Air Canada	41%	10%	China Eastern	19%	20%	Air China	14%	10%
14 (10)	UAE	3.1	7%	6%	Emirates	56%	5%	Etihad	19%	26%	China Southern	11%	4%
15 (9)	Germany	2.9	6%	7%	Lufthansa	49%	4%	Air China	38%	7%	China Eastern	6%	0%
16 (20)	Indonesia	2.7	24%	27%	Garuda	36%	18%	Xiamen AL	15%	∞	Lion	15%	∞
17 (18)	Philippines	2.5	17%	26%	Philippine AL	27%	9%	Xiamen AL	20%	133%	China Southern	14%	6%
18 (13)	France	2.4	9%	13%	Air France	48%	5%	Air China	23%	16%	China Eastern	19%	12%
19 (24)	Cambodia	2.0	29%	23%	China Southern	29%	18%	China Eastern	18%	36%	Angkor Air	16%	∞
20 (19)	UK	1.7	11%	22%	BA	26%	5%	Air China	24%	12%	China Southern	14%	∞
21 (17)	Netherlands	1.3	5%	13%	KLM	61%	2%	China Southern	26%	7%	China Eastern	7%	∞
22 (22)	Qatar	1.2	14%	∞	Qatar	100%	14%						
23 (32)	New Zealand	1.1	32%	∞	China Southern	35%	∞	ANZ	21%	6%	China Eastern	15%	∞
24 (29)	Myanmar	1.0	26%	25%	China Eastern	38%	23%	Air China	16%	12%	Hebei AL	12%	∞
25 (25)	Italy	1.0	18%	16%	Air China	52%	7%	China Eastern	17%	∞	Hainan	13%	∞
26 (21)	India	1.0	9%	14%	China Eastern	31%	10%	China Southern	25%	16%	Air China	24%	13%
27 (–)	Ethiopia	0.9	na	na	Ethiopian	100%	∞						
28 (26)	Turkey	0.8	14%	∞	THY	97%	14%	China Southern	2%	∞			
29 (23)	Finland	0.6	7%	∞	Finnair	100%	7%						
30 (27)	Kazakhstan	0.6	10%	6%	Air Astana	63%	12%	China Southern	23%	2%	Hainan	6%	19%

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