Ryanair and easyJet: which is the better model?

FINANCIAL market perceptions of Europe's two largest low cost carriers have changed dramatically in the last three years. easyJet was on a roll from 2012 to 2015 significantly outperforming Ryanair to reach a peak market capitalisation in May of that year of nearly £7bn. Four years on from its inclusion in the FTSE 100, its market cap has halved from the peak and the shares are under threat of relegation from the index.

Ryanair meanwhile has seen its share price steadily rise, more than trebling from below €4 in 2012 and now boasts a market capitalisation of €16bn. Does this start to reflect Michael O'Leary's mantra that the "lowest-cost provider [in a commodity market] will always win"?

One of the reasons behind the disparity in performance is that Ryanair has been playing catch-up. Europe's largest ULCC had been somewhat surprised by the effectiveness of easyJet's product innovations (notably the introduction of allocated seating in 2012) and its moves "up-market" into targeting business demand.

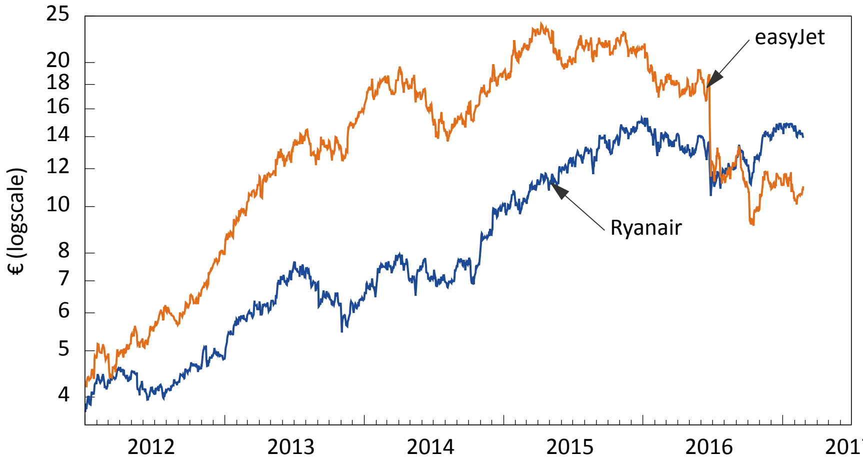
From 2014 Ryanair initiated its "Always Getting Better" strategy — which involved allocated seating, free extra bag, lower hold-bag fees, removal of extreme penalties, and a revamped website. It also started adding services into "primary" airports.

At the same time it ratcheted up its growth rate. As shown in the chart on page ?? Ryanair has built its run-rate of the introduction of capacity from 2%pa through much of 2014 up to 12% for the twelve months to Jan 2017. The rate of increase in the number of passengers booked has grown considerably faster, peaking at 17.5% for the year to end March 2016. As a consequence it has seen significant increases in load factor — registering an astounding 94% for the twelve months ending Jan 2017 (up by 12 percentage points in the last three years) with 118m passengers up by 15% year on year.

easyJet has also increased its rate of growth over the period but only by a few percentage points from 3%pa to 7%pa for the twelve months ended January. Its load factors are also up but by only 2pts, and in recent months the rolling twelve month increase in booked passengers has not kept pace with the increase in seat capacity. Over the last year it carried 75m pax (up by 6.9%) at a load factor of 91.5%.

One major feature of Ryanair's expansion in the last three years has

EUROPE'S TOP 2 LCCs: SHARE PRICE PERFORMANCE



Published by Aviation Strategy Ltd

Aviation Strategy

ISSN 2041-4021 (Online)

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

Publisher:

Keith McMullan
James Halstead

Editorial Team

Keith McMullan
kgm@aviationstrategy.aero

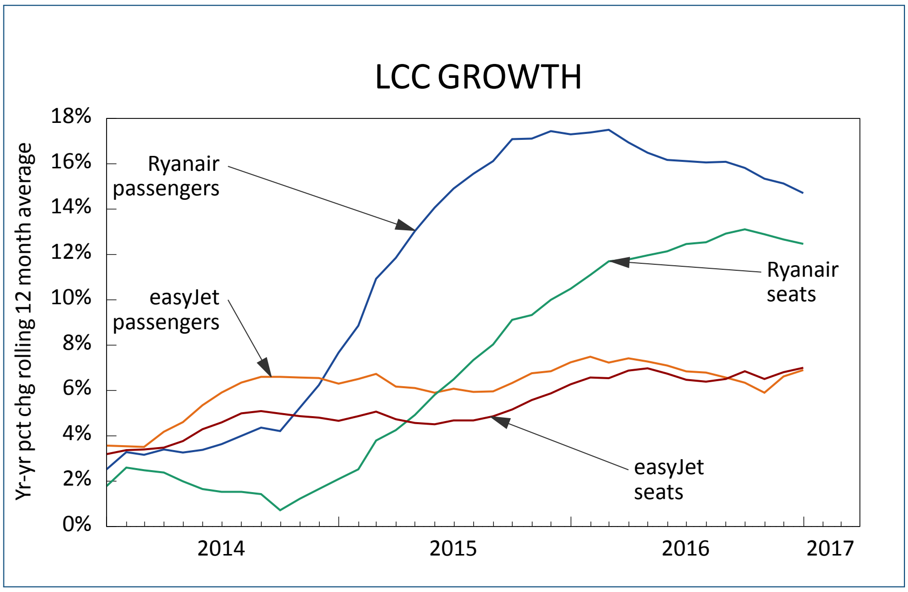
James Halstead
jch@aviationstrategy.aero

Tel: +44(0)207-490-4453
Fax: +44(0)207-504-8298

Subscriptions:

info@aviationstrategy.aero

Aviation Strategy Ltd
Registered No: 8511732 (England)
Registered Office:
137-149 Goswell Rd
London EC1V 7ET
VAT No: GB 162 7100 38
ISSN 2041-4021 (Online)



been to increase off-season capacity at a significantly faster rate, flattening seasonality and no doubt increasing aircraft utilisation. The winter period capacity for the current financial year looks set to be only 14% lower than the summer's had been. Three years ago it had been 30% lower. In contrast easyJet has maintained winter capacity at around 20% below that of the summer.

Fleet orders

Both carriers continue to target growth at a rate that is well above average. Ryanair should end March 2017 with 383 737-800s in its fleet. It has a further 93 of the type on order, to be delivered over the next two years, and 100 737 MAX-8s (+100 options) for delivery from 2019. By 2024 it is planning a fleet of 585 aircraft. It is currently targeting capacity growth of around 9-10% pa for the next two years.

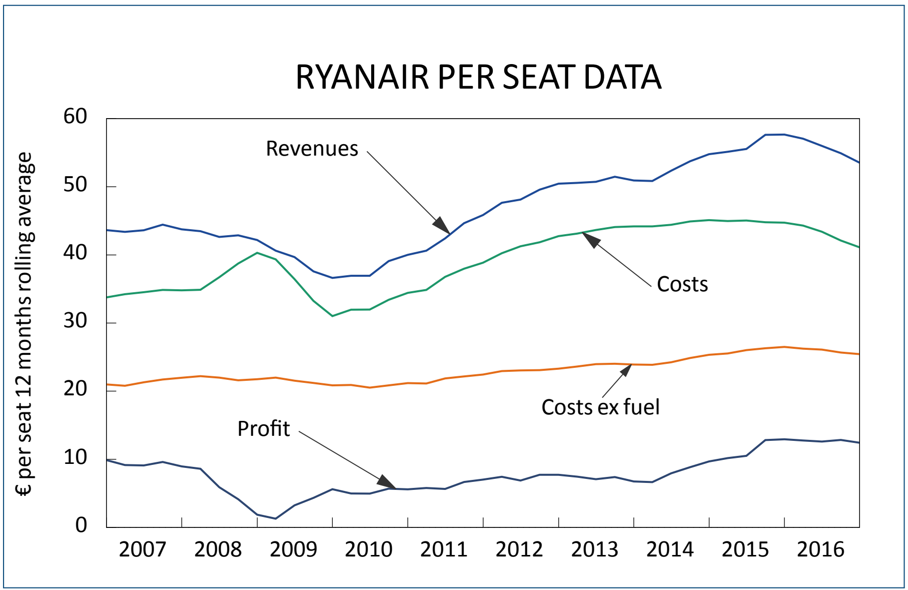
easyJet meanwhile has a fleet of 264 A319s and A320s with orders for 32 A320ceos and 130 A320neos (+100 options). It currently seems to be planning to have 358 aircraft in its fleet by Sept 2021, and also looks set to increase capacity by around 9% a year in the medium term.

Brexit

A second major reason behind the disparity in the financial markets' sentiment towards the two results from the British referendum vote to leave the EU. This itself has two significant effects: financial and economic disruption from the sudden fall in the sterling exchange rate; and regulatory uncertainty.

easyJet was hit hardest: its share price dropped by 40% in the immediate aftermath of the result of the referendum and has since trended down. In contrast, while Ryanair's share price also initially dropped by 30%, it has since recovered to pre-referendum levels.

Both carriers are heavily dependent on travel to and from the UK. Of easyJet's overall capacity 53% originates or is destined for British airports, while 30% of Ryanair's capacity involves routes to, from and within the country. easyJet as a UK based airline is naturally more dependent on cash inflows in Sterling, but in its first quarter interim management statement in January highlighted that it expected the foreign exchange impact



would lead to a worse-than-expected £105m adverse result on profits for the current financial year to September 2017.

The regulatory aspect is a problem for both carriers, and the resolution depends entirely on how Britain approaches negotiations with the EU for access to the single aviation market when it exits the Union in two years time (for a full discussion on the problem see *Aviation Strategy* September 2016). The subject is apparently relatively high on the political agenda.

The worst case scenario would be that the UK goes back to bilateral relations with each of the EU28 and EEA countries. If that were so, UK based airlines would no longer be viewed as "European" airlines and may have to prove majority UK ownership and control to be able to fly within the UK. At the same time, UK airlines would not be able to fly between points in other countries in the EEA, while non-UK airlines may not be able to access routes into the UK from countries other than their country of registration.

easyJet is in the process of identifying where else in Europe to establish a "European" AOC — and according to press reports sees Portugal and Austria as possible targets. (It already has a long established Swiss AOC for its operations out of Geneva.) In this process it possibly has an advantage in that founder Stelios with a 44% stake in the company has dual UK and Cypriot citizenship.

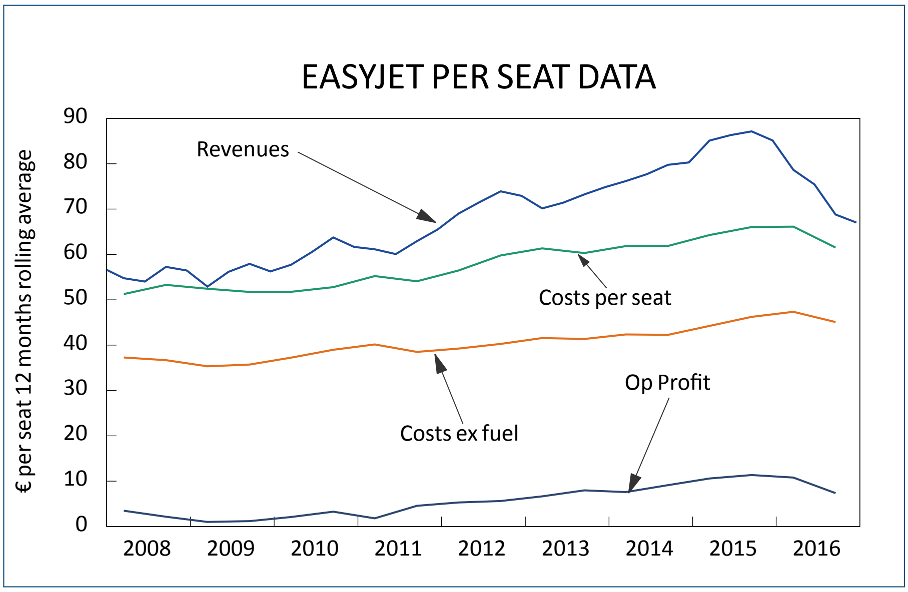
Ryanair in turn may need to apply for a UK based AOC to continue flying domestically and routes out of the UK to non-Irish destinations. However, its treatment as an EU airline (ie one that is substantially owned and operated by EU nationals) may also come under question: not only does it have a sizeable number of US investors, but also its UK share ownership is significant. It may also have to start introducing a process to disenfranchise non-EU shareholders.

Cost differentials

How sustainable is Ryanair's cost advantage? In its latest investor presentation the company puts its non-fuel unit costs at €28 per passenger, slightly down on the prior year period. This is in comparison with easyJet at €55 per pax. Two cost categories account for €20 of the difference: staff costs; and airport and handling costs. Two others, ownership and maintenance, and sales and marketing account for the remainder.

✈ Employment

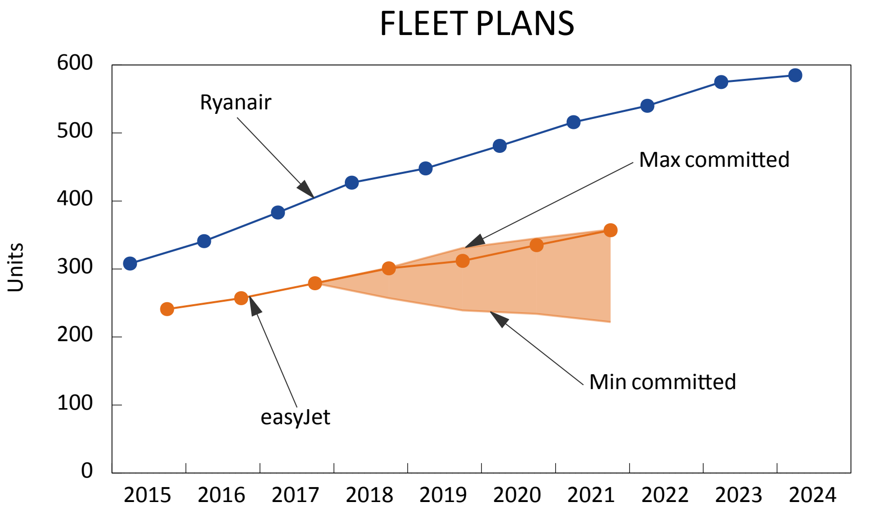
easyJet and Ryanair operate different employment practices. Ryanair operates a mixture of contract and outsourced quasi-self-employed arrangements all designed to minimise tax and social costs, and maximise flexibility. It is still largely non-unionised, although the Ryanair Pilot Group which claims to represent more than 50% of Ryanair's pilots has



been striving to be recognised by the company since its formation in 2012.

easyJet in contrast has taken a more traditional approach. It accepted union representation over ten years ago (with pilots represented by the UK's BALPA, Germany's Vereinigung Cockpit, France's SNPL, Italy's ANPAC and Swiss ALPA all under the umbrella of the European Cockpit Association), and offers local employment contracts which, for example, allows it to operate in France. (Ryanair closed its base in Marseilles in 2010 when the French Authorities tried to force it to employ pilots under French contracts.)

How long Ryanair will be able to keep the cabin crew differential is unclear. Last summer various Ryanair bases in Germany were raided as part of an investigation into possible tax fraud arising from the status of its pilot employment practices — or what Vereinigung Cockpit, who seems to be trying to recruit from the Ryanair corpus, refers to as "bogus self-employment". As Ryanair expands its operations in Germany this may become more of a problem.



Source: company presentations

✈ Airport charges

It should be no surprise that easyJet's airport and handling charges are a higher proportion of total costs than those of Ryanair. easyJet has taken the decision strategically to attack legacy carriers head on with operations in expensive airports and those less effectively able to ensure quick turnarounds — Paris Roissy Charles de Gaulle and Paris Orly for example combined account for 5% of its operations. Its main base at London Gatwick — accounting for 12% of total capacity — has more expensive landing charges than Ryanair's London base in Stansted (which accounts for 9% of Ryanair's operations). But it is also able to generate higher yields.

Ryanair however has been developing services at primary airports. As part of the AGB strategy it recognised that easyJet *had* been able to generate higher revenues at higher cost airports and *still* be competitive. Having gone into Brussels Zaventem in 2014 (Brussels Charleroi is still the company's fifth largest base with 2.7% of capacity), Madrid, Rome Fiumicino, and Athens Spata, it will start a base at Frankfurt am Main in March, with only two aircraft but directly in Lufthansa's home base.

This move into more mainstream airports will undoubtedly increase costs (but should also have a positive impact on revenues). However, Ryanair now operates from 85 bases and covers over 200 airports (half of which it describes as "primary"), and the establishment of routes into primary airports will have a marginal impact rather than represent systemic change.

✈ Ownership costs

Another main difference between the two carriers relate to aircraft size. Ryanair operates its 737-800s with 186 seats, easyJet has a mixture of 156 seat A319s and 180/186 seat A320s. easyJet is retrofitting the older A320s to the higher seat density, while some of the new A320 deliveries are replacing older A319s, and its average aircraft size is likely to increase from around 165 in 2016 to around 175 by 2019. Ryanair's 737 MAX-8s will come with a higher capacity of 197 seats, but its average aircraft size is probably only going to increase to 190 seats per aircraft by 2024.

Conclusions?

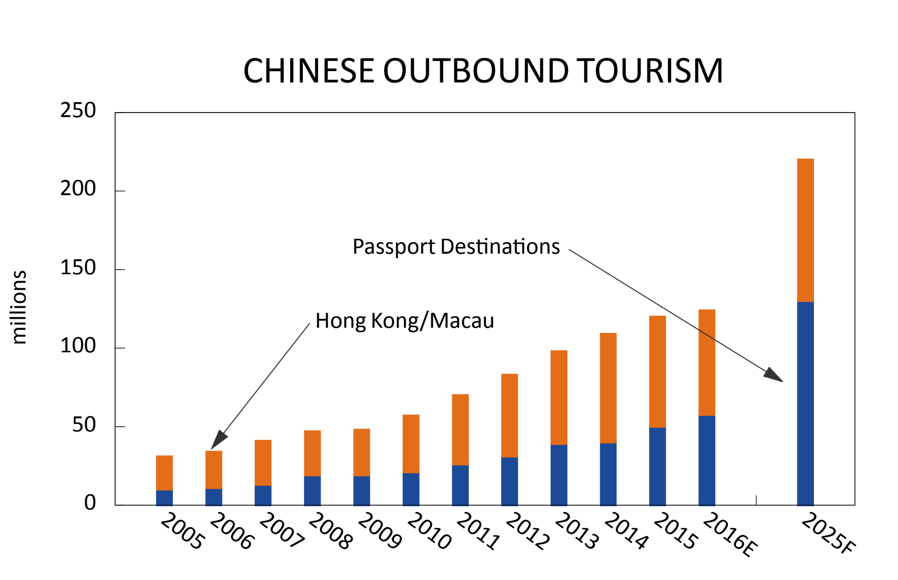
As both expand strongly over the next few years, faster than may be warranted by economics, there is likely to be continual downward pressure on pricing. But the endgame is not yet a battle between the two.

They are similar, but have differing models. Ryanair can move into easyJet markets (and exit if it doesn't work) but easyJet can't get close to Ryanair's cost level. Ryanair has also shown that while not necessarily being an innovator it always learns; and is showing a successful strategy as a second mover or late adaptor.

Chinese tourism in an uncertain world

ONE OF the major driving forces behind global air traffic growth in the next ten years will be an expected surge in Chinese outbound tourism. With political changes in the US and Europe making continuing globalisation a little more uncertain, a review of the fundamentals affecting Chinese travel might be useful.

Final 2016 Chinese tourist statistics are expected to show an apparent marked slowdown in the rate of growth. Based on first half numbers, the annual outbound tourism total will be around 124m, an increase of only 3% on 2015, in contrast to the norm of 15% pa over the past five years. However, the main reason for the disappointing 2016 outcome was a sharp fall in visits to Hong Kong and Macau, largely because the PRC authorities imposed access restrictions for residents of the neighbouring city of Shenzhen. Travel from China to the rest of the world was as robust as ever with an estimated 16% increase, according to COTRI (China Outbound Tourism Research Institute).



As summarised in the chart above, travel to "passport" countries has been growing faster than that to Hong Kong and Macau (though those two autonomous regions still account for 58% of the total; add in Taiwan and the total for Greater China goes to 62%).

The growth rate for "passport" countries, according to an authoritative study by Goldman Sachs (December 2015), will average 10%pa to 2015 while that for Hong Kong/Macau will be just 2.5%pa. This will bring the Chinese outbound total to 220m tourists by 2025; this eclipses the 18m for Japan today, and widely surpasses the US total of 68m in 2015.

As for the forecast split between destinations, Goldman's (necessarily tentative) forecast is shown left. Apart from Hong Kong/Macau all destinations will double with travel to Japan growing most strongly (the recent explosion of Chinese visits suggest that that prediction is too low, unless hotel capacity acts as a brake). Europe is seen as a much more important destination than the US or Australia, reflecting the attraction of antiquities and the importance of photographs of the Eiffel Tower in the background

The overall forecast may prove

CHINESE OUTBOUND TOURISTS (millions)

	2015	2025	Change
Hong Kong/Macau	68.0	86.4	27%
Taiwan (RoC)	4.1	9.2	124%
S. Korea	5.9	14.1	139%
Japan	5.0	16.0	220%
ASEAN	12.0	35.0	192%
Australia	1.0	2.0	100%
Europe	10.0	22.5	125%
US	2.2	5.0	127%
Other	11.8	29.8	153%
Total	120	220	83%

Source: Goldman Sachs

conservative. At the 2017 Davos Forum, the Chinese president Xi Jinping alluded to 700m trips outside Greater China over the next five years. This is more than double the Goldman forecast for "passport" countries. With a population of 1.4 billion, small changes in leisure activity translate into large numbers of Chinese.

To a large extent the Chinese government controls the level of tourism through the issue of passports and visas. Currently only 4%, about 55m, of the Chinese population hold a passport (for comparison, about 35% of US citizens and 85% of UK citizens have passports). In line with the development of the fairly affluent "urban middle" passport ownership in China should grow to 12% by 2025, or about 150m.

The UK policy towards Chinese visas has been complicated, with Willie Walsh expressing IAG's frustration on several occasions. The basic problem is that Chinese visitors wishing to do the grand European tour need two visas — one for the Schengen area and another for the UK. This was partly solved in 2015 through the introduction of a joint visa application process which avoided duplication of paperwork, and by the introduction of multiple-visit two-year visas in early 2016.

Since then things have got more complicated again when the Schengen visa went biometric. This meant that every potential Chinese tourist physically has to turn up at a visa application centre to be finger-printed.

Although Chinese spending in the UK may in the short term be boosted by the sharp depreciation of sterling which was the result of the Brexit vote, in the longer term Brexit inevitably adds uncertainty.. There may be import duties between the UK and the rest of Europe, and border crossings will probably be slower. There is also the possibility of a Le Pen victory of the French presidential elections, and the implementation of further border controls.

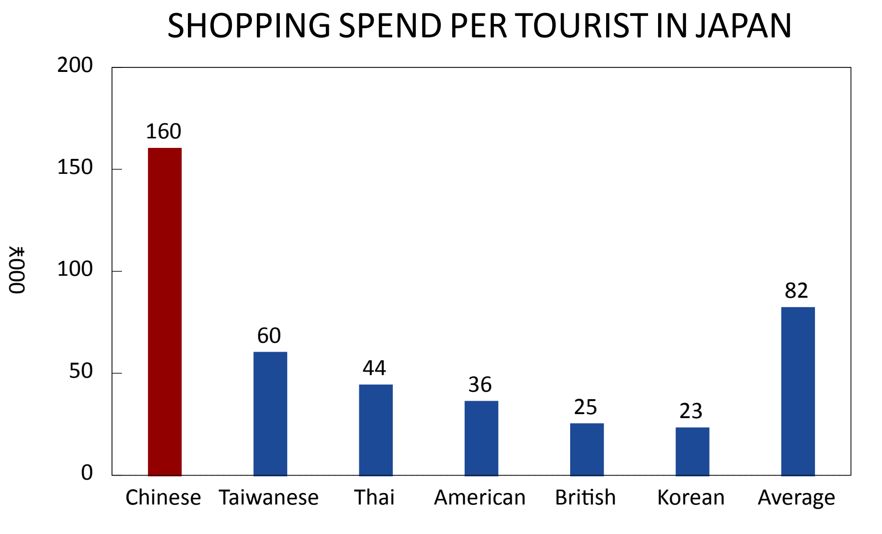
Facilitating Chinese tourism to Europe is becoming a new policy issue to be addressed probably outside the established EU framework. One suggestion is for a bilateral British-French visa which would give access to the two cities, Paris and London, where the Chinese predominantly want to go.

As for US, who knows in the current climate? The US is supposed to be one of the fastest growing markets for Chinese tourism, and encouraging Chinese tourism makes emminent economic sense — it is in effect an American export and would help somewhat in closing the balance of payments. But China is being lambasted as a "currency manipulator", and tariff barriers seem to be threatened by the Trump administration. Incoherent aspects of the new immigration policy appear to morph into crude anti-foreigner rhetoric, totally at odds with traditional American hospitality.

Canada is almost as large a destination for Chinese tourism as the US, but this a markedly different market. Apart from the liberal attitude of the Canadian government, the west coast of Canada has a very substantial Chinese population and strong economic links both with Hong Kong and the PRC.

Moreover, the Chinese are champion shoppers, snapping up quality goods at at least 20% below domestic prices (which should raise a query about whether the remninbi really is undervalued). The snapshot of tourist spending on goods, not hotels or travel, in Japan (see graph below) shows the Chinese clearly outdoing their Asian, American and British counterparties. The ongoing privatisation of Japanese regional airports — an important element of "Abenomics", the Japanese anti-deflation strategy — probably depends on both increasing volumes of Chinese visitors and their propensity to spend in airport shops.

There are also demographic and social changes in process. The traditional impression of Chinese tourist is



Source: Japan Tourism Agency 2015

of coachloads of middle-aged/slightly elderly people being shuffled from historic site to shopping mall. But already two thirds of outbound travellers are millennials (15-35 years old). This cohort, according to travel surveys, is more interested in "fun" — sports, eating out, staying in the same place for enough time to relax, and repeat visits to attractive resorts. 28% of the "urban middle" possess a passport. In other words, the Chinese tourist is becoming more like his Western equivalent.

Goldman focuses on the 74m of Chinese who will graduate from college over the next ten years as being the core driver of Chinese tourism, seeing them as being internationally minded and relatively sophisticated in their leisure tastes. The size of the total outbound market in financial terms depends on GDP growth and probably more importantly on demographic/social evolution, but the minimum estimate is $450bn by 2025. Then there is the inbound tourism market — in volume terms roughly as large as the outbound market and potentially larger in financial terms.

Chinese Big Three: 2016 update

The CAAC has just produced another series of epic results for the Chinese aviation industry — total passenger traffic volume in 2016 was up by 11.8% to 488m, 436m "domestic" (which includes 10m to Greater China: Hong Kong. Macau and Taiwan) and 52m international. International expanded by 22.7%, domestic by 10.7%.

The economic background appears to be remaining strong. 2016 GDP growth was 6.7%, which is down on the 10%-plus levels of a few years ago but the authenticity of those super-growth rates has been questioned, and the conclusion is that they were almost certainly inflated. Looking forward the Chinese government is targeting 6.5-7.0%pa GDP growth, with an increasing focus on domestic consumption.

Recent developments at the Big Three — Air China, China Eastern and China Southern, which together account for about three quarter of the Chinese industry are reviewed below.

The economic background appears to be remaining strong. 2016 GDP growth was 6.7%, which is down on the 10%-plus levels of a few years ago but the authenticity of those super-growth rates has been questioned, and the conclusion is that they were almost certainly inflated. Looking forward the Chinese government is targeting 6.5-7.0%pa GDP growth, with an increasing focus on domestic consumption.

Recent developments at the Big Three — Air China, China Eastern and China Southern, which together account for about three quarters of the Chinese industry are reviewed below.

Air China

China's flag carrier is based in Beijing and operates more than 360 routes to around 180 destinations in 40 countries, of which 108 are domestic. Altogether the Air China Group employs more than 50,000, of which the majority work at the mainline.

In the first three-quarters of 2016, revenue at the Air China Group rose 3.7% to RMB85.4bn (US$12.7bn), based on a 4% rise in passengers carried to 44.4m. Operating profit increased 21.2% in the period to RMB9.6bn ($1.4bn) and net profit was up by 15.1% to RMB7.2bn ($1.1bn). In January-September 2016 the overall Air China group saw total ASK growth of 9.3% beaten by RPK growth of 9.8%, leading to a 0.37% rise in passenger load factor, to 80.9%.

For the mainline Air China, ASKs and RPKs both rose by 8.2% over Q1-Q3 2016 with load factor static at 80.5%. Air China has the highest proportion of international traffic of all the Big Three, and this share grew in the first three-quarters of 2016 as international RPKs rose by an impressive 17.1%, substantially ahead of traffic growth on domestic routes (2%), and on regional routes (defined as Hong Kong, Macau and Taiwan, and where traffic fell 5.2% year-on-year).

Air China is still ahead of its Big Three competitors in terms of international traffic. International RPKs as a proportion of all RPKs grew to 34.8% in 2016 (compared with 33.9% at China Eastern and 28.2% at China Southern). This has risen from a proportion of international traffic at Air China of 31.0% just two years previously, (when China

Eastern had a 27.4% international share and China Southern a 20.9% share) as Air China pursues a strategy of prioritising international growth and increasing load factor on — and utilisation of — its widebody aircraft.

Digging deeper into the numbers, that international growth varied considerably by region. In 2016 traffic to/from Europe increased by 5.5%, but this was behind growth of 16.1% to North America and 19.3% to Japan and Korea — and significantly behind a 43.6% rise in traffic to south-east Asia and other regions.

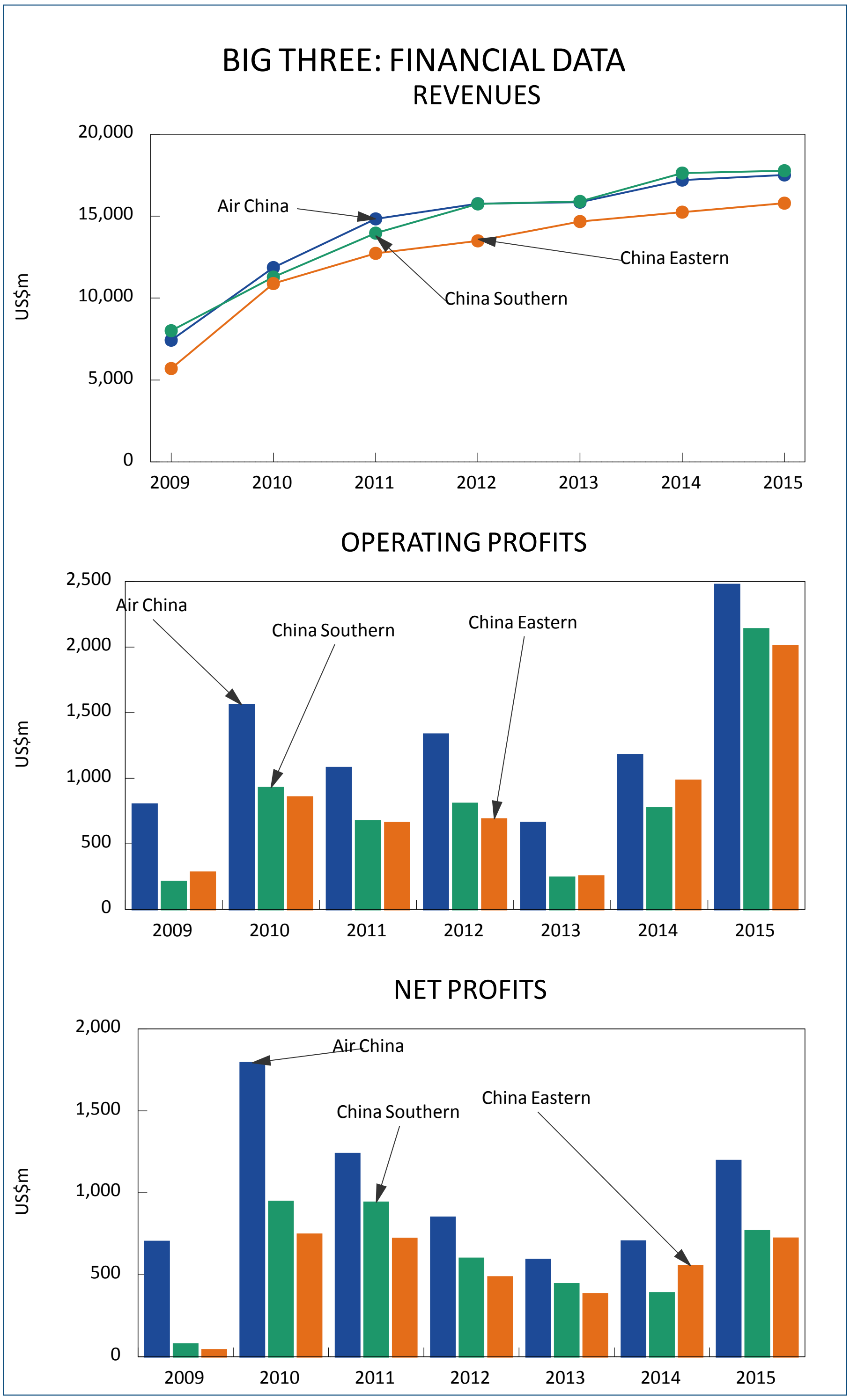
Air China's mainline fleet has expanded significantly over the last few years, from just over 300 aircraft in 2014 to 379 today (of which just under 40% are owned outright) — though this is still the smallest mainline fleet among the Big Three.

That mainline fleet includes 145 737s, 133 A320 family aircraft, 55 A330s, 29 777s, 10 747s and seven 787s. They have an average age of around six and a half years, with 33 A319s having the oldest age profile (just under 11 years), followed by the 747s (eight years — though has reduced significantly, from an average age of more than 18 years in 2014 as new 747-8s have joined the fleet). If subsidiaries such as Air China Cargo, Shenzhen Airlines and Air Macau are included, the Air China group fleet comprises more than 600 aircraft.

On firm order at the mainline are 162 aircraft, comprising 66 737-800s, 33 A320neos, 15 A320-200s, 10 A350-900s, 10 A330-300s, eight 787-9s and 20 Comac C919s. These orders will both expand the fleet and replace ageing aircraft.

Air China's international strength is underpinned by its dominance at Beijing, a key benefit of being the nation's flag carrier. Other advantages of its favoured status have included being merged with much stronger domestic airlines (than have been government-mandated for China Southern and China Eastern), and being awarded a huge amount of official government travel.

The airline has also been building up hub operations at Chengdu and Shanghai, the former primarily as a domestic hub and the latter as both a domestic and international gateway, with a focus on increased frequencies on trunk routes and better connectivity and transit capabilities.



Air China is continuing its strategic partnership with Cathay Pacific Airways (in which it has a 29.9% stake, while Cathay has a 20.1% stake in Air China), though its most notable alliance development in 2016 was the conclusion of two years' negotiations with fellow Star member Lufthansa, the result of which is a joint venture between the two on routes linking China and Germany, which will go into effect in summer 2017.

China Southern

Guangzhou-based China Southern operates to 208 destinations in 40 countries, of which 125 are domestic. The group employs around 90,000, of which just under 70,000 work at the mainline, and it's still the largest of the Big Three — whether measured in terms of its fleet, traffic or revenue. As well as its prime operation at Guangzhou, China Southern has developed domestic hubs at Chongqing (in the south-west of China) and Ürümqi (in the north-east), and an international hub at Beijing, in competition against the flag carrier.

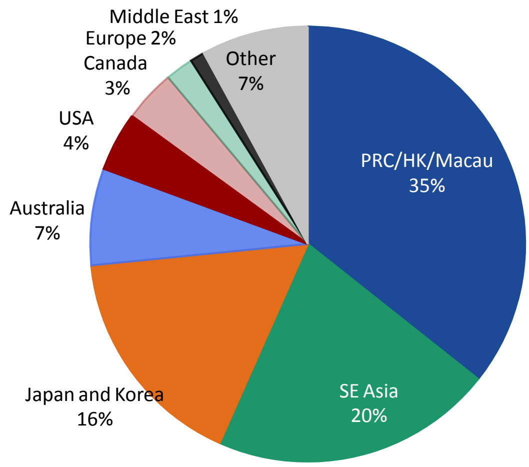
China Southern is still China's leading domestic airline by far, with 70.3% of its RPKs in 2016 coming from domestic traffic (compared with 63.5% at China Eastern and 61.5% at Air China over the same period).

However, that percentage has fallen from the 77.2% proportion of domestic traffic China Southern had two years ago, as the carrier has been prioritising international expansion (particularly to Europe and North America). Last year ASKs grew by 22.8% on international routes (with RPKs growing by 22.7%), compared with just a 4.4% capacity increase domestically (4.5% RPK growth) and a 12% fall in regional ASKs (with a 12.6% decline is RPKs).

In the first three-quarters of 2016

AIR CHINA: ROUTE MAP

BIG THREE: INTERNATIONAL SEAT CAPACITY BY DESTINATION



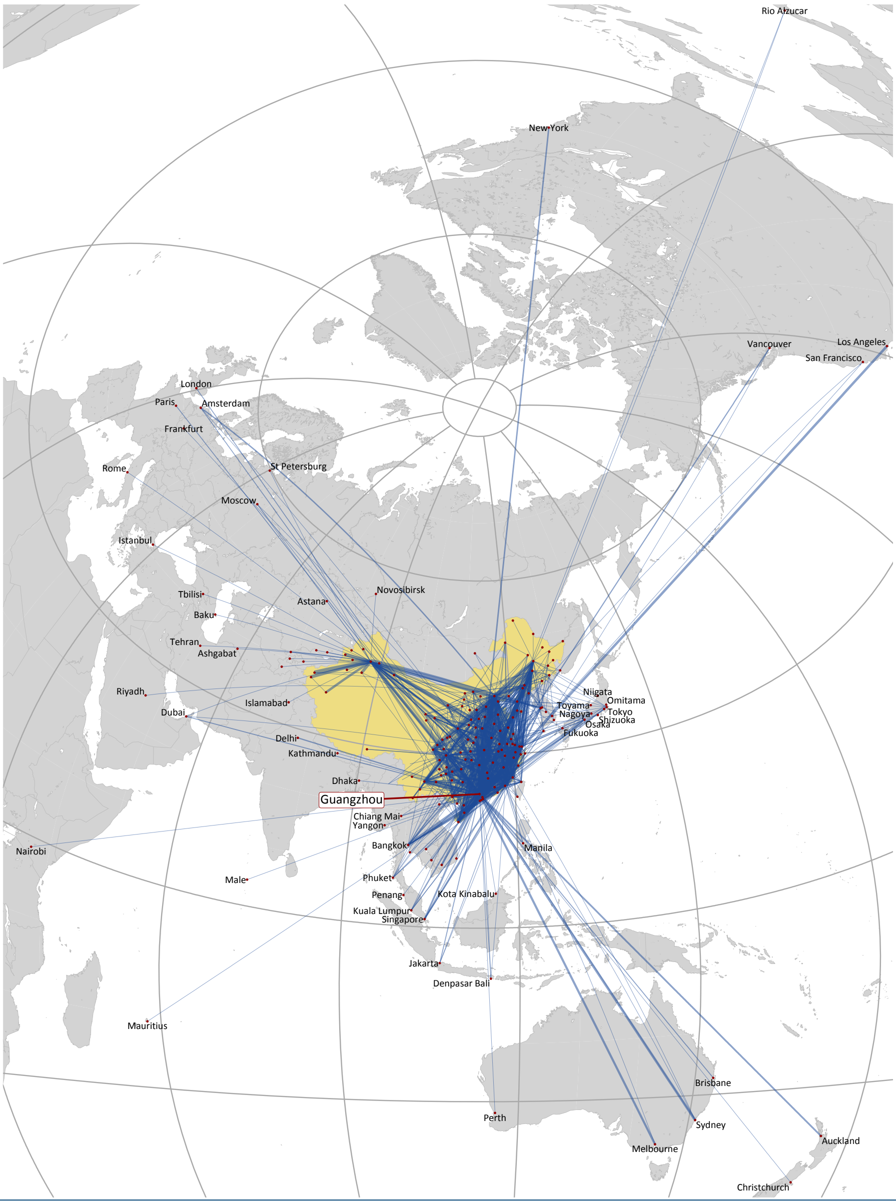
China Southern's revenue rose just 1.5% year-on-year to RMB86.7bn ($12.9bn) thanks to a 2.9% rise in passengers carried in the period to 85.6m. In the January-September 2016 period China Southern's ASKs growth of 8.1% was not quite matched by RPK growth of 7.5%, resulting in a 0.46% fall in passenger load factor, to 80.6%.

At the operating level profits rose 30.9% in Q1-Q3 2016 to RMB6,995m ($1,043m), and at the net level profits increased by 30.4% to RMB7,535m ($1,124m).

Whether at a mainline or group level, China Southern has the largest fleet of any of the Big Three carriers. The mainline operates a fleet of 521 aircraft, comprising 247 A320 family, 167 737s, 38 A330s, 25 757s, 10 787s, seven 757s, five A380s, two 747s and 20 ERJ-190s. They have an average age of just over seven years, with the oldest aircraft being the 757s, which has an average age of more than 18 years and which reportedly are being sold back to Boeing. With subsidiaries, the China Southern group has a fleet of more than 700 aircraft.

On order at the mainline are 183 aircraft: 98 A320neos, 27 A320-200s, 16 A330-300s, 12 787-9s, 10 A321s and 20 Comac C919s. The 787-9s were ordered in October 2016 and are worth around $3.2bn at list prices; China Southern was the launch customer for the 787, and the 10 787-8s in its fleet have operated successfully on long-haul routes from Guangzhou to destinations such as London, Rome, Vancouver and Christchurch. In January 2017 China Southern received the first of 24 A320neos being leased from AerCap, and which will be delivered over the period to 2019; in doing so China Southern became the first airline in China to operate the model.

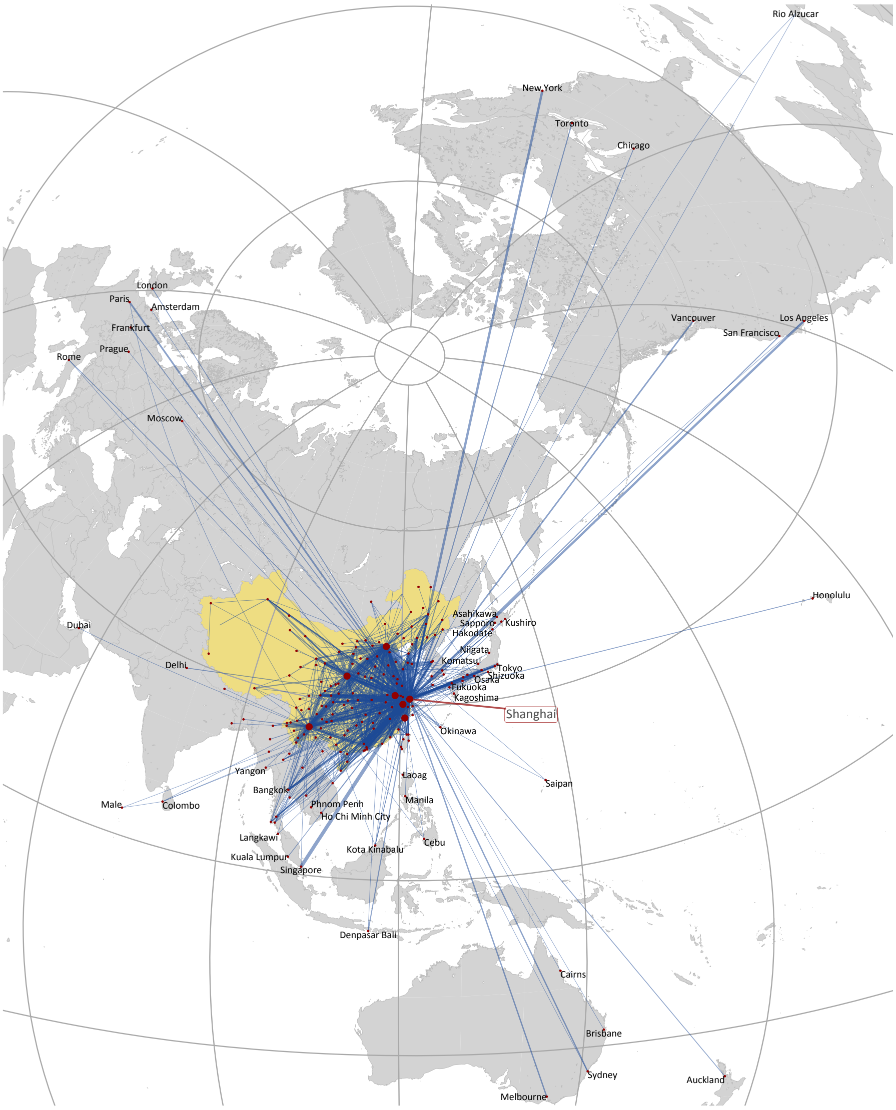
CHINA SOUTHERN: ROUTE MAP



Last year China Southern was reportedly interested in acquiring some of Air New Zealand's 25.9% stake in Virgin Australia, which would have helped protect China Southern's position as the largest carrier between China and Australia (it increased its flights to Australia by more than a third in 2016). Instead a 19.9% share was sold to Chinese conglomerate the Nanshan Group, which owns Qingdao Airlines, a small carrier based in the eastern Shandong province. More worryingly for China Southern, in 2016 the HNA Group (the owner of Hainan Airlines, the fourth largest carrier in China) acquired a 13% stake in Virgin Australia, which has subsequently risen to 19.9%.

Part of the SkyTeam alliance, China Southern has now turned its attention westwards, and is talking with Air Kyrgyzstan on a potential joint venture that would modernise

CHINA EASTERN: ROUTE MAP



the tiny carrier — though that deal is not exactly on the same scale as Virgin Australia.

China Eastern

China Eastern employs more than 72,000 at a group level and currently operates to 78 domestic and 61 foreign destinations.

In January to September last year China Eastern recorded a 4.8% rise in revenue to RMB75.4bn ($11.2bn), with passengers carried in the period rising 8.2% to 76.3m. In Q1-Q3 2016 capacity growth of 13.7% was outstripped by a 14.4% rise in traffic, leading to a 0.5% increase in load factor, to 81.7%. In the first three-quarters of 2016 China Eastern saw operating profits increase significantly — by 59.7% to RMB5.5bn ($0.8bn) — while net profit rose 24.7% to RMB7.3bn ($1.1bn).

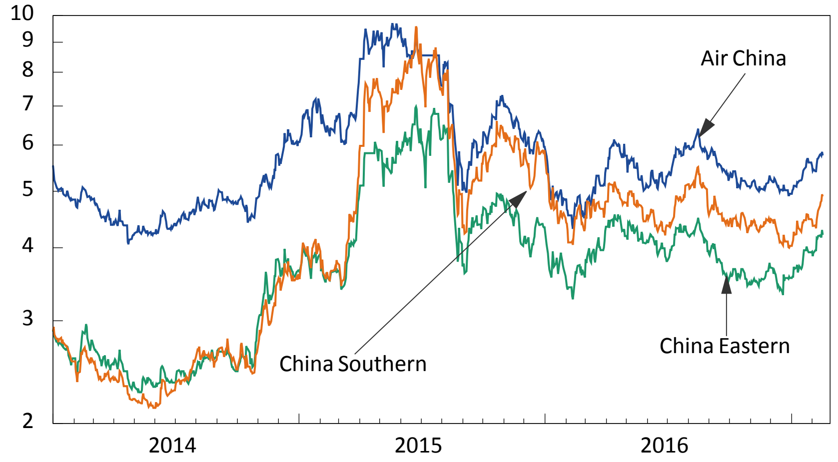
China Eastern's mainline fleet comprises 452 aircraft — 266 A320 family aircraft, 125 737s, 45 A330s and 16 777s. The overall group fleet is approaching 600 aircraft. The airline has significantly fewer models than its Big Three rivals, and that's the result of ruthless model pruning over the last few years. At under five and a half years, the mainline fleet has the youngest average fleet among the Big Three; the model with the eldest profile at China Eastern is the A320, with its 164 aircraft having an average age of less than seven years.

The mainline order book totals 228 — 70 A320neos, 59 A320-200s, 39 737-800s, 20 A350-900s, 15 787-9s, four 777-300ERs, one A321-200 and 20 Comac C919s. Last year China Eastern placed an order for 15 787-9s and 20 A350s that were worth more than $10bn at list prices, and due for delivery between 2018 and 2022. They will form the future backbone of China Eastern's long-haul fleet, and will gradually replace older A330s.

And whether it likes it or not, under a government mandate China Eastern is likely to become the launch customer for China's Comac C919 jet. The model is due to have initial test flights this year and be ready for delivery in late 2018 — although that delivery date has been pushed back repeatedly. And executives at China Eastern (and the other Big Three airlines) are likely to view the model as an unwanted distraction within their overall fleet modernisation plans.

In terms of financial results China Eastern is still the smallest of the Big Three, and in very simple terms that's a result of being an "all-rounder" — it has neither the domestic strength of China Southern nor the international network of Air China. In 2016 its share of the Big Three's combined mainline domestic capacity was 29%, and of international capacity 31.5%. But like its Big Three rivals, China Eastern faces intense competition domestically (leading to yield decline) and is

BIG THREE: SHARE PRICE PERFORMANCE (HKG)



prioritising international expansion, and in 2016 capacity grew by 28.8% on international routes (with RPKs growing by 29.6%), compared to just a 7% capacity increase domestically (8.2% RPK growth).

China Eastern is based at Shanghai (at both Hongqiao and Pudong airports) and has developed secondary domestic hubs at Kunming and Xi'an in the face of increasing competition at Shanghai from Air China and other carriers. In the first half of 2016 China Eastern's market share at its hub airports were 40.5% at Shanghai (both airports combined), 37.3% at Kunming and 28.2% at Xi'an.

But China Eastern is also counter-attacking Air China through the continued growth of LCC subsidiary China United Airlines, which is based at Beijing's Nanyuan airport and operates eight 737-700s and 25 737-800s to around 20 domestic airports — and which is reported to be very profitable.

Delta holds a 3.6% stake in China Eastern and the two carriers have been trying to improve connectivity between their networks. China Eastern is also endeavouring to increase ties with other SkyTeam members. For example, in July last year, it agreed a joint venture with Air France-KLM, which includes codesharing on each other's Amsterdam-Shanghai Pudong services. China Eastern is also looking outside the alliance for further revenue-enhancing opportunities, and in August 2016 signed a codesharing agreement with British Airways on internal Chinese and UK flights.

Delta: Building a "durable" business model

In recent years, Delta has beaten its US legacy carrier peers handsomely on all financial fronts, be it profit margins, ROIC, debt reduction or returning capital to shareholders. Its financial metrics rank among the top 10% of S&P industrials and it now has investment grade credit ratings. Yet, Delta's stock market valuation suggests that investors still view it as a relatively risky proposition.

At Delta's mid-December investor day, its top executives argued that Delta's share price should be 90-130% higher than the current level (around $50) if it was valued at multiples of what they called "high quality industrial transports" or HQITs (nine US companies, including FedEx and UPS).

The valuation gap exists because many investors still view airlines as highly cyclical and prone to damaging price wars. They remember the sector's pre-2010 capacity expansion, market share battles and decade-long financial losses.

It does not help that Delta, like its peers, has seen unit revenues fall every month since November 2014. Delta is seeing steep labour cost escalation just as fuel prices are on the upturn, and its profits are expected to decline in 2017.

This is a theme that is playing out across the industry. Cost increases are outweighing improving unit revenue trends, resulting in margin deterioration. IATA predicted in December that North American carriers would see their aggregate net profit fall by 11% to $18.1bn in 2017.

Investor perception has improved, though, as US airline profits have surged in the past two years following sector consolidation and Chapter 11 restructurings. Evidence of that includes the gradual broadening of US airlines' investor base and the return to the sector of high-profile firms such as Warren Buffett's Berkshire Hathaway.

Delta's key message at the investor day was that, despite the 2017 challenges, the past two years' strong margins, returns and cash flows are sustainable in the long term.

The presentation focused on three themes: the importance of unit revenue growth, the sustainability of current performance thanks to various strategies, and Delta's ability to achieve its long-term targets.

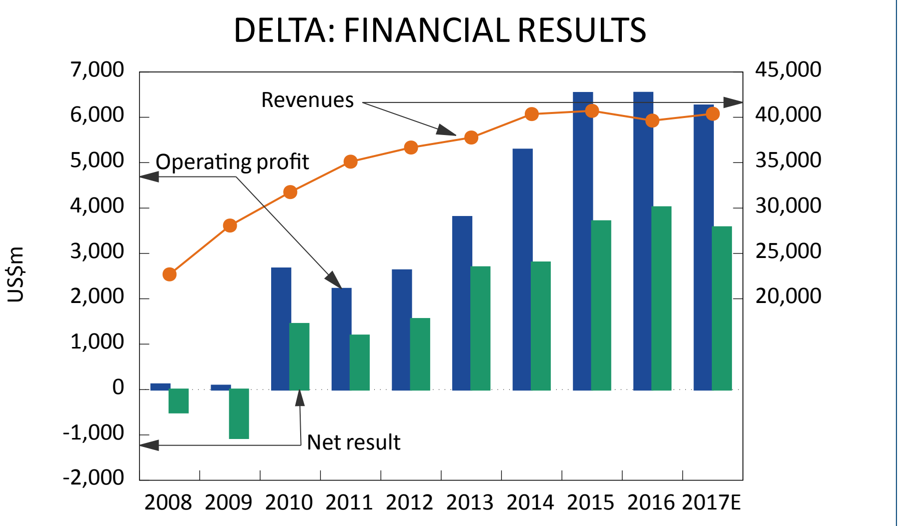
Importantly, Delta is on the verge of returning to PRASM growth — expected in the first quarter of 2017. To ensure the trend continues, Delta is capping this year's system capacity growth at 1%. CEO Ed Bastian said that strict capacity discipline would continue "until we get our margins back to where they need to be".

The management talked about building a "durable" business model with the help of more diversified revenue streams, greater productivity and a solid investment-grade balance sheet.

They stressed the importance of maintaining a strong brand, with "best-in-class customer satisfaction and highly engaged employees".

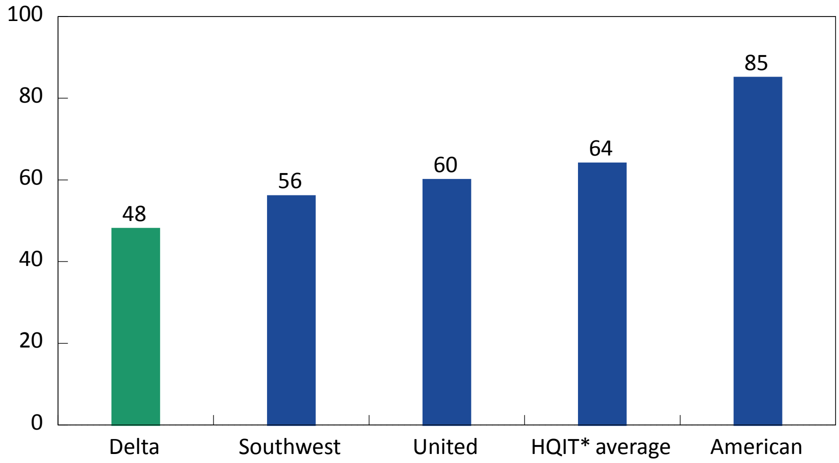
And disciplined capital investment is also important, because it enables long-term earnings growth without burdening the business with high leverage.

Delta is portraying 2017 as a "transition year", during which it will get its unit revenues "back in line" to offset the cost pressures. It remains committed to a long-term operating margin target of 17-19%.



Note: 2017 figures are analysts' consensus estimates as of January 2, 2017

CAPITAL SPENDING AS % OF OPERATING CASH FLOW



*Notes: Capex as % of OCF for last 2 years ended Sept 2016. *HQIT = High quality industrial transports (CHRW, CSX, EXPD, FDX, KSU, NSC, R, UNP and UPS). Data from Factset. Source: Delta presentation*

However, to keep things in perspective, Delta is still projecting a healthy 15-16% operating margin for 2017 — only 1-2 points below the long-term target range.

The pertinent question is whether 15-16% margins become the new normal in a higher fuel cost environment or Delta will be able to tweak the margins back up with the help of new revenue initiatives.

Delta is a leader in segmentation and ancillary revenue strategies. What's next for the branded fares? Could Delta soon be perceived as an Amazon-type, one-stop shop for every kind of travel need?

Another interesting question is where Delta will make its next foreign airline investments. Delta has big plans with Aeromexico in 2017 and something in the works with Korean Air. How will it develop those partnerships? And how exactly is Delta sharing best practices with its partners?

Returning to positive PRASM

US airline investors have been obsessed with the unit revenue metric since the spring of 2015. Although airline managements feel that it is more appropriate to focus on profit margins, the new labour and fuel cost pressures have meant that suddenly everybody is intensely focused on PRASM. CEO Ed Bastian calls it Delta's "number one financial priority".

Delta had expected its system PRASM trend to turn positive in mid-2016, but that did not happen because low fuel prices, a stronger dollar, geopolitical shocks and domestic competition exerted further pressure on yields. In particular, domestic business yields remained extremely soft.

But, strangely enough, immediately after the US presidential election air travel demand picked up and business travel yields improved dramatically. Delta reported flat system PRASM for December, which was better than expected.

Delta's planned 1% system ASM growth this year will be made up of 2% growth domestically and a 1.5% decline internationally.

Latin America was Delta's first region to see PRASM growth in Q3 2016. The turnaround was led by Brazil, which continues to see high-double digit unit revenue increases. This year's planned 1% Latin ASM growth targets the relatively healthy Mexican and Caribbean markets while returning capacity to Brazil.

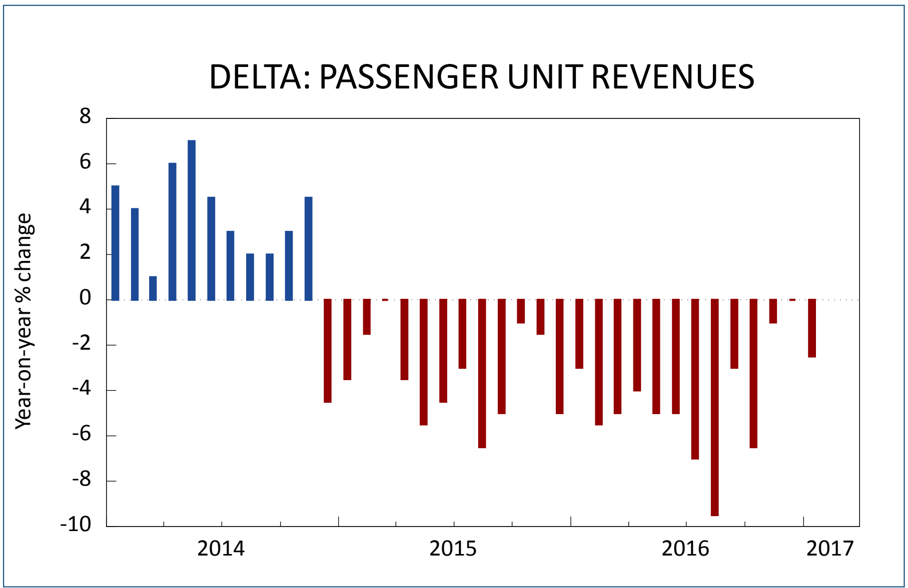
The Pacific entity remains a challenge because of excess industry capacity, though Delta believes that PRASM there will turn positive by the summer. The plan is to reduce Pacific capacity by 6% in 2017 and to rely more on airline partners in China and Korea.

Delta's Tokyo operations continue to see structural change. Less than 50% of the carrier's Asian services are now via Tokyo, compared to 100% 7-8 years ago; and the operation is split between the two Tokyo airports. Delta hopes eventually to focus all of those operations on Haneda, which may be possible with further Haneda liberalisation in the run-up to the 2020 Tokyo Olympics.

The transatlantic revenue environment also is difficult because of continued currency headwinds, demand issues and industry capacity growth by LCCs and the super-connectors. It is a tough winter in a highly seasonal market.

Delta was earlier believed to be considering specific moves to counter the growing LCC threat on US-Europe routes, but at the investor day the executives merely made the point that the LCC effects were "probably the least impactful to the Atlantic in the short run", with currency movements and demand being more relevant issues. However, Delta subsequently disclosed in early January that it would introduce its Basic Economy (a domestic fare type targeting LCCs) to all international markets, including the transatlantic, during the second half of 2017.

Delta is expecting robust US-originating summer demand to



Europe due to exchange rate developments. It is keeping its transatlantic capacity roughly flat in 2017, relying more on its European hub partners and hoping to capitalise on a strong summer.

The transatlantic remains Delta's most profitable international region. It has been able to sustain a "15% all-in margin" on US-Europe routes even in the current environment, in large part thanks to strong airline partnerships that have given it hubs in London, Paris, Amsterdam and Rome.

Delta believes that the Pacific, its least profitable region, will also achieve a modest profit in 2017. The Latin region is in the middle, performing quite well with low-double digit profit margins.

Customer experience matters

Delta achieves a revenue premium to the industry. By its estimate, its PRASM was 109% of the industry average in 2016, up from 97% in 2005.

Delta attributes the revenue premium to being "more and more appreciated" by its customers. One way to measure that is the Net Promoter Score (NPS), a simple metric that asks passengers: "Do you prefer us or not?" Delta's domestic NPS surged to an industry-leading 40.2% in 2016. "Higher NPSs are highly correlated to higher revenue production and higher profits", Delta executives noted.

Operational integrity and friendly/engaged employees are among the top criteria influencing customer perception of an airline. At Delta, both operational performance and employee satisfaction are at all-time highs. The latter reflects an industry-leading profit-sharing programme (which paid out $1bn for 2016) and a policy to maintain industry-leading or top-tier pay rates.

Product improvements are important. Delta strives to offer products and services that customers value and want to purchase. IdeaWorks recently named it one of the world's top five airline revenue innovators for 2016.

The IdeaWorks report noted that Delta had broken ranks with its peers by "investing a healthy $50m of the revenue windfall from bag fees to actually improve service for the customer". Delta now attaches RFID tags to all checked bags so that passengers can track the whereabouts of their bags via a mobile app.

Delta says that it has initiatives in place for 2017 and beyond to sustain and improve the domestic revenue premium. On the product front, it has introduced Branded Snacks and is experimenting bringing food back to the main cabin in some transcontinental markets.

This year's highlight will be the introduction of the A350-900 and a new all-suite international business class product on the Pacific, where Delta currently has a relatively low NPS score.

Other customer-friendly fleet moves include replacing MD-88s with new A321s and 737-900ERs, reducing reliance on 50-seat regional jets and ordering the CSeries (from 2018).

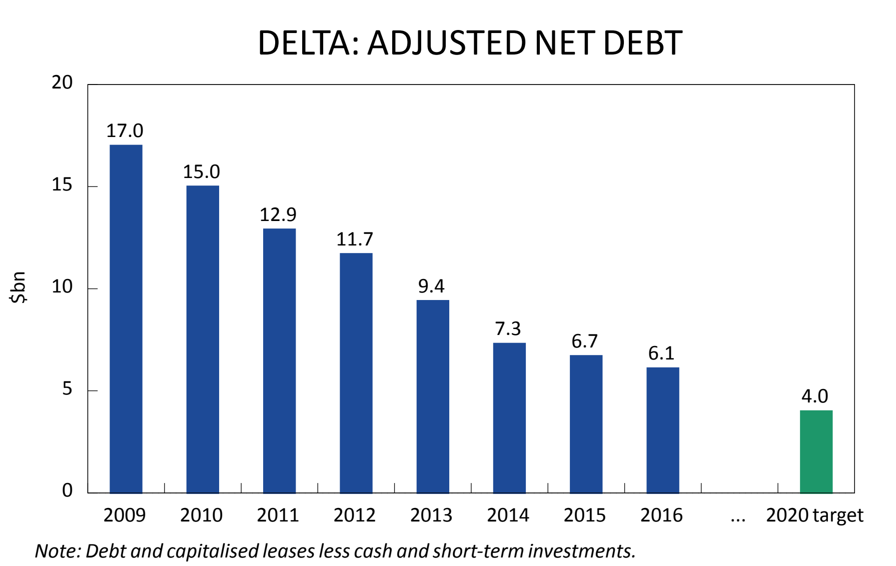
Projects in the works to improve the airport experience include a $10bn redevelopment project at LaGuardia (mostly funded by local authorities), consolidating two terminals at LAX (for easy international-domestic transfers) and new flagship Sky Clubs in Seattle and Atlanta.

Maintaining lead in segmentation

Delta pioneered Basic Economy in 2014 — a domestic no-frills fare type that American and United, too, are introducing this year (see the November 2016 and December 2016 issues of *Aviation Strategy*).

But Delta is determined to maintain its lead in segmentation. First, it plans to complete the domestic roll-out of its Basic Economy by mid-2017 (currently only available in 40% of US markets). Delta expects to have a competitive advantage at least over United's Basic Economy, which is somewhat more restrictive.

Second, Delta is introducing a



new fare type: Premium Select. As a result, it now offers five products in the domestic market: First Class, Premium Select, Comfort+, Main Cabin and Basic Economy.

Third, there is scope to improve distribution; the different classes of service are not yet available in all distribution networks. Fourth, there is scope to improve revenue management.

Delta's so-called branded fare revenues have increased from $900m in 2014 to $1.4bn in 2016 and are projected to grow to $2.7bn in 2019. There are many new initiatives in the pipeline as Delta believes that it is "in the early innings of this kind of customer segmentation and that this will deliver significant shareholder value over the next 3-5 years".

Airline JVs and investments

Delta is unique in the US for its post-2010 strategy of acquiring minority equity stakes in airlines around the world as part of long-term commercial alliances or immunised joint ventures. In addition to the continued development of the transatlantic JV with Air France-KLM and Alitalia, Delta has acquired equity stakes in Aeromexico (August 2011), GOL (December 2011), Virgin Atlantic (June 2013) and China Eastern (July 2015).

The strategy, which was discussed in depth in the Jan/Feb 2016 issue of *Aviation Strategy*, fits in with Delta's goal of achieving cost effective and capital-efficient growth. Alliances help it gain access to major markets, build a geographically balanced network and diversify revenues — strategies that reduce business risk. And, as the transatlantic JVs have demonstrated, there can be healthy profit contributions. But getting the deals in place can be a slow and frustrating process.

In December Delta received the US DOT's final approvals for its planned investment and immunised JV with Aeromexico. It was a long and contentious process, in large part because of Aeromexico's dominant position in slot-constrained Mexico City. In the end Delta agreed to conditions that it had initially labelled as "unprecedented" and "unwarranted".

Delta and Aeromexico are required to divest 24 daily slots at Mexico City and four at JFK (the latter was originally six, a minor concession on the DOT's part), which will be allocated to LCCs. The grant of ATI is limited to five years.

Delta launched its planned cash tender offer for an additional 32% of Aeromexico's capital stock on 13 February. If fully taken up, the deal will increase Delta's ownership stake to 49% (it currently owns 17%, which includes a 4.1% stake, options and Delta pension trust holdings). As an interesting twist, Delta increased the offer price from 43.59 to 53.00 Mexican pesos, to share the benefit of the peso's sharp decline against the dollar since Donald Trump was elected president. At the 13 February exchange rate, the deal represented a $590m investment for Delta, down from $700m originally.

Delta and Aeromexico expect to implement their planned immunised $1.5bn JV in the second quarter. A more liberalised US-Mexico ASA became effective in August 2016, and the two countries are believed to be working to achieve a full open skies regime.

The slot divestitures seem well worth it because of the potential long-term benefits of the JV, which include becoming the number one airline system on US-Mexico routes and gaining access to a large, relatively underdeveloped domestic marketplace (125m population).

Delta views Aeromexico as a potentially highly lucrative investment. There is scope for joint purchasing and procurement and an opportunity to "bring some of the Delta technology and best practices to Mexico".

Then again, there is robust and growing competition from LCCs, both domestically in Mexico (where LCCs have 60%-plus of the market) and on the US-Mexico routes. The competitive scene is one reason why Aeromexico's operating margins remain in single digits.

But Delta also sees an opportunity to learn from Aeromexico, especially about best practices in social media and how to cater for a young demographic. Apparently Aeromexico is "well ahead" of Delta in the use of technology, innovation and digital enhancement in providing for the millennial generation.

One of Delta's big focuses for 2017 is building its longstanding but hitherto slow-to-develop relationship with Korean Air (see *Aviation Strategy* Dec 2016). At the investor day, Delta executives talked about building Seoul Incheon into a great Northeast Asian hub. Korean Air's new facilities there will allow the two airlines to have "world-class connectivity". The executives hinted that there would soon be announcements about "Korean and Delta becoming much closer in the future".

Delta says that while it still has an "evolving landscape of relationships" in Asia, the partnerships already cover the top five cities in the region that account for 70% of US-Asia traffic. Delta has a 3.2% equity stake in China Eastern and a commercial alliance also with China Southern. A new immunised JV with Virgin Australia has given Delta a strong position in the US-Australia market.

Delta has a strong relationship with GOL that has helped the Brazilian LCC complete a successful restructuring during Brazil's turbulence. In July 2015 Delta participated in GOL's rights offering to the tune of $56m, which increased its ownership stake to 9%. Delta also guaranteed $300m in GOL loans secured by GOL's shares in its publicly listed SMILES loyalty programme. In early February Delta agreed to provide a new $50m, four-year loan to GOL to help strengthen its partner's cash position in Brazil's upcoming low season in Q2.

Disappointingly, Delta and GOL have not been able to file for ATI for their codeshare relationship because Brazil has not yet ratified the US-Brazil open skies regime that was supposed to take effect in October 2015.

But Delta has always viewed the GOL investment as being for the longer term. It has worked closely with GOL and believes that its partner is now in a good position, as Brazil's economy turns around and starts growing again.

At some point Delta is likely to increase its ownership stake in GOL. In the short term it will be limited to a 20% stake. However, in mid-February there were reports that political consensus on eliminating the limit on foreign ownership in Brazilian airlines had finally been reached and that the federal government was close to issuing a provisional measure to start the process.

Delta believes that the Latin America region represents the greatest growth opportunity over the next five years. Late last year it was reported that Delta was one of three airlines to have submitted a bid for an equity stake in Avianca, which put out a call for a strategic partner in June 2016. However, in recent weeks Avianca has disclosed that it intends to pursue a "long-term, strategic commercial alliance" with its Star partner United, though the terms are yet to be negotiated.

In addition to making more opportunistic strategic investments in airlines, Delta is investing to manage the relationships better. Last year it set up an international group, with its own president and CFO, for that purpose. The key aim is to facilitate the sharing of best practices.

In November Delta implemented AIR4, an innovative technology platform that enabled Virgin Atlantic to be embedded into the Delta passenger service systems. It means that Delta now operates Virgin's reservations system. In addition to cost and scale benefits to Virgin, it results in a seamless customer experience. Delta says that the biggest challenge it faces with partnerships generally is that everyone is on a different "technology pace".

Delta has benefited enormously from the Virgin Atlantic relationship. The investment, which involved Delta buying SIA's 49% stake for $385m in 2013, was expected to achieve full cash payback by the end of 2016. The JV has fixed Delta's Heathrow access problem and made it a credible player in the important New York-London business travel market.

Interestingly, Delta has also learned a few things from Virgin Atlantic, including how to design airport lounges. President Glen Hauenstein explained: "Virgin has a club that is a reason to fly Virgin" and Delta wanted the same — a club that is a reason to fly Delta.

Labour cost pressures

At the beginning of December Delta's pilots ratified a new four-year contract, effective to the end of 2019, that provides for a cumulative 30% pay increase (18% retroactive increases for 2016 and annual increases thereafter) and retains profit-sharing. The deal ensures that Delta's pilots remain the best paid in the industry and has serious labour cost ramifications.

Delta took a $475m cost hit from the pilot deal in the fourth quarter, which included the full-year impact for 2016 and meant the carrier reporting an operating margin of 10.8% for Q4.

The additional pilot expense in 2017 will be around $490m, including a 3% annual increase at the beginning of January. Delta has also unilaterally decided to lift non-pilot employee pay by 6% in April 2017, which will add to the labour cost pressures this year.

The deal set a new higher bar for pilot pay in the US airline industry. It triggered an automatic pay increase for United's pilots. In November Southwest's pilots ratified a four-year contract that lifts pay by 29%.

The generous pay awards obviously reflect the industry's record-level earnings. But Delta has also long had a goal of maintaining industry-leading pay.

The good news is that Delta has now gone through its "labour reset", which means that labour cost increases in the next few years will be modest and predictable.

Also, Delta has identified productivity measures to mitigate some of this year's cost pressures, which also come from higher fuel prices, lower capacity growth and product/service investments. It expects to achieve $1.5bn of productivity savings in 2017, which will help limit the non-fuel CASM increase to 2-3%.

Over the longer term, Delta is committed to keeping annual non-fuel CASM growth at 2% or less. That may be a little on the ambitious side, especially if capacity growth remains at the 1% level.

Aircraft upgauging plays a key part in the productivity boosting efforts. Average seats per departure on the narrowbody fleet are projected to increase by 5% between 2016 and 2018 because of continuing 50-seat retirements and replacement of MD-88s with 180-190 seat A321s and 737-900s. On the widebody side, Delta says that replacing 747s with A350-900s and A330neos will bring it from the highest to lowest-cost producer on the Pacific.

Notably, in late December Delta reached agreement with Boeing to cancel an order for 18 787s, which it had assumed in 2008 as part of its merger with Northwest.

Durable business model

Delta had a multi-year head-start over United and American on the merger front, so it was able to reap the benefits of its 2008 merger with Northwest quickly and achieve strong profitability. In the past seven years, it has earned $17.4bn in aggregate net profits before special items, including a $4bn profit in 2016.

Last year's operating margin was 16.5%, up from 16.1% in 2015. Delta may have been the only US major carrier to achieve an increase in margins in 2016. Delta also believes that its margin contraction in 2017 will be less than that of competitors.

The other top US carriers, especially United, are striving to catch up with Delta's margins and other financial metrics. But Delta is obviously not going to stand still. It will be discussing its long-term plans and financial targets at its spring analyst meeting in May 2017.

The targets outlined by Delta in May 2016 for the 2016-2018 period are to achieve a 17-19% annual operating margin, deliver annual EPS

DELTA: FLEET PROFILE

	In Service					Commitments		
Aircraft Type	**Owned**	**Finance Lease**	**Operating Lease**	**Total**	***Average Age***	**Orders**	**Lease**	**Options**
717	3	13	75	91	*15.3*			
737	124		28	152	*9.0*	51	4	
747-400	3	4		7	*25.4*			
757	95	18	4	117	*18.8*			
767	81	4		85	*19.7*			
777	18			18	*11.8*			
A320	120	4	17	141	*16.7*	67		
A330	37		3	40	*9.4*	27		
A350-900						25		
CS100						75		50
MD-88	93	23		116	*26.4*			
MD-90	65			65	*19.9*			
Total	**639**	**66**	**127**	**832**	***17.0***	**245**	**4**	**50**

Source: Delta 10K 2016

growth of at least 15%, achieve a ROIC of at least 25% and generate annual operating cash flow of $8-9bn, of which $4.5-5.5bn would be free cash flow.

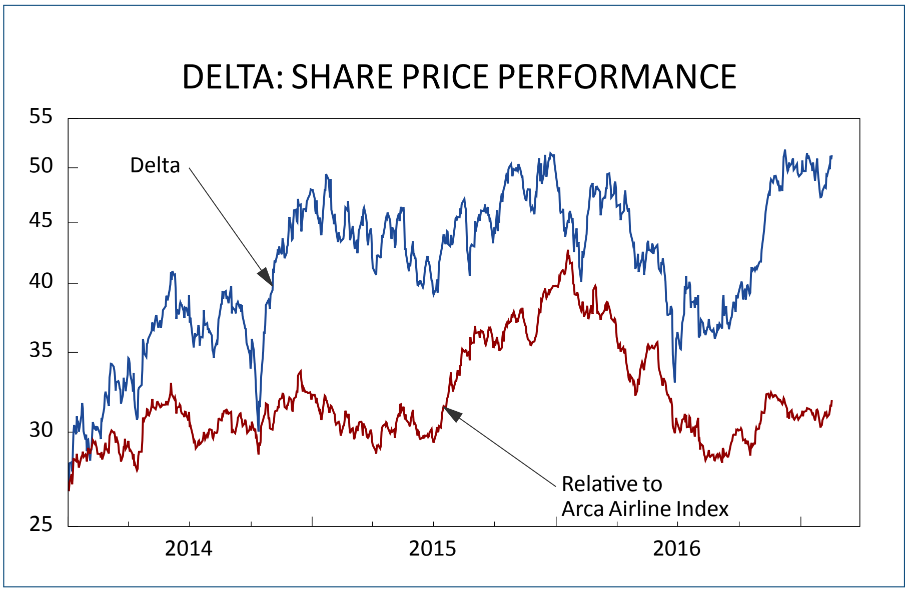
Delta's "balanced capital deployment" strategy means, first of all, reinvesting about 50% of operating cash flow in the business. It allows Delta to replace 30% of its mainline fleet in 2016-2020, fund strategic investments and continue to invest in technology.

Second, Delta continues to strengthen its balance sheet. Having reduced its adjusted net debt by almost $11bn since 2009, from $17bn to around $6bn, Delta has slowed the pace down as it nears the target and because interest rates have declined. The target is still $4bn, but the aim is to reach it in 2020, 2-3 years later than previously.

Delta's balance sheet progress has been recognised by the rating agencies. Moody's and Fitch upgraded it to investment grade in 2016 and S&P may well follow this year.

Third, Delta plans to return at least 70% of FCF to shareholders. It has now returned more than $7bn since 2013. In the future, the focus will shift more in favour of the dividend, which represents a long-term commitment to return cash to owners on a consistent basis. Delta's dividends have grown steadily since 2013 and now total $615m annually.

Delta plans to continue contributing $1.2bn a year to its pension plan up to 2020, which is expected to result in it being 80% funded. Conveniently, the debt reduction target and pension funding goals will be reached around the time when the airline becomes a full taxpayer in 2019, after using up its NOLs. The management noted that Delta should therefore be able to absorb cash taxes without adverse impact on shareholder returns.



By Heini Nuutinen
heini@theaviationeconomist.com

Subscription Form

Enter my Aviation Strategy subscription for: 1 year (10 issues – Jan/Feb and Jul/Aug are combined)

- UK: £475 + VAT
- EU: €610 + VAT (unless valid VAT number supplied)
- USA and Rest of world: US$780

starting with the ______________ issue.

❑ I enclose a Sterling or Euro cheque made payable to Aviation Strategy Ltd

❑ Please invoice me

❑ Please charge my Visa/Mastercard/American Express credit card £475+VAT

Card number ______________________ Expiry ________

Name on Card ______________________ CV2 ________

❑ I am sending a direct bank transfer of the the relevant sum net of all charges to Aviation Strategy's bank account:

Metro Bank Ltd, 1 Southampton Row, London WC1B 5HA
IBAN: GB04 MYMB 2305 8013 1203 74
Sort code: 23-05-80 Account no: 13120374
Swift: MYMBGB2L

Delivery Address

Name ______________________
Position ______________________
Company ______________________
e-mail ______________________
Telephone ______________________
VAT No ______________________

Invoice Address

Name ______________________
Position ______________________
Company ______________________
Address ______________________
____
____
Country ______________________
Postcode ______________________

DATA PROTECTION ACT

The information you provide wil be held on our database and may be used to keep you informed of our products and services or for selected third party mailings

PLEASE RETURN THIS FORM TO:

Aviation Strategy Ltd, Davina House, 137-149 Goswell Road
London EC1V 7ET, UK
e-mail:info@aviationstrategy.aero
Tel: +44(0)207-490-4453, Fax: +44(0)207-504-8298
VAT Registration No: GB 162 7100 38