Issue no. 212
December 2015

A super-normal 2016

IATA HAS brought us tidings of comfort and joy. Well, not quite; but its end-year industry outlook is the most positive ever. The global airline industry is expected to produce profits of around $36bn in 2016, a net margin of 5.1%. The EBIT margin continues its steady rise since the depth of the recession in 2012, reaching a record rate of 8.2% in 2016.

The economic background is described as "uneven but rising", certainly not the surging conditions of pre-2008 but a perhaps more sustainable 2.5-2.7% annual growth in global GDP, according to the IMF's November Economic Outlook.

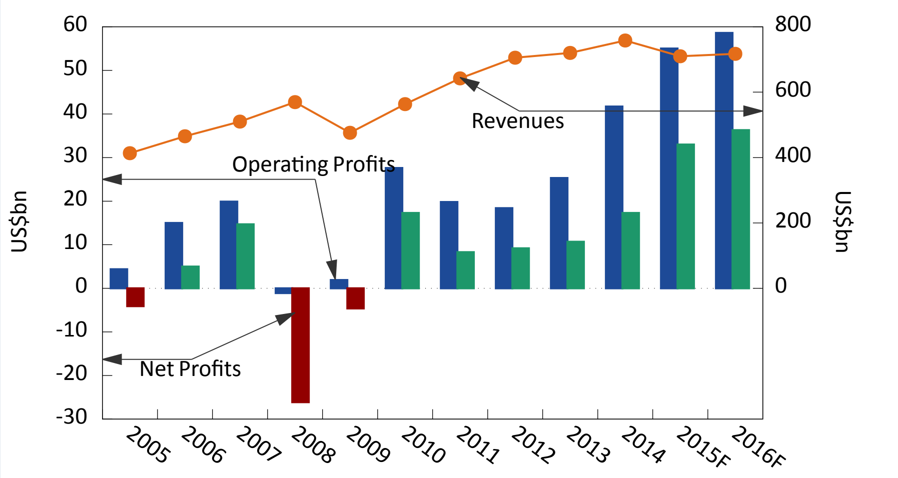
Oil prices, however, are the key driver, and recent developments make IATA's forecast look conservative. Its assumption is for a 2016 average crude price of $55/barrel (compared to a peak annual average of $112/bbl two years ago). By late December the crude price had slumped to $36/bbl. Oil market analysts are as bearish as airline analysts are bullish: OPEC has given up on production limits, the US has moved towards self-sufficiency, China has slowed down, Iran is about to re-emerge as a major exporter and Russia has to keep its volumes up to obtain foreign currency. Future purchase options are being traded at around $25/bbl, a few as low as $15/bbl.

IATA's analysis of the impact of the oil price on airline profitability is also surprisingly muted. Between 2015 and 2016 operating profit goes up by just $4bn whereas the airlines' fuel expense falls by $46bn. This is despite the fact that almost all the adverse hedging positions (where airlines predicted and fixed future fuel deliveries at prices above the actual price) have been wound down.

Passenger yields are forecast to decline by 5% in 2016 but volumes are forecast to grow by 6.9%. The cargo business continues to deteriorate, but the major reason for the 2016 operating profit outcome is IATA's expectation of a substantial surge in non-fuel operating costs. It is not clear why IATA thinks this will happen.

In any case, assuming away unforeseen negativities (always dangerous in the airline industry) the year

INDUSTRY FINANCIAL DATA



Source: IATA

This issue includes

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.

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ISSN 2041-4021 (Online)

SUMMARY IATA FINANCIALS ($bn)

	2015 Est	2016 F	% Change
Pax Revenue	525	533	1.5%
Cargo Revenue	52	51	-2.7%
Others	133	133	0.3%
Total Revenue	**710**	**717**	**1.0%**
Fuel Cost	180	135	-25.0%
Other Op. Costs	475	523	10.1%
Total Op. Cost	655	658	0.5%
EBIT	**55**	**59**	**6.5%**

Source: IATA

2016 should be either a good one or a very good one.

One possible negative is that low oil prices will extend the operating life of older aircraft which, combined with increased new aircraft production rates, will lead to overcapacity in the short/medium term. However, in this regard, a December report by Deutsche Bank — *2016 Outlook for the OEMs* — paints a positive picture.

DB set out to compare current production plans for OEMs against global capacity demand — modelling seats delivered into the airline system, annual retirements and changes in parked fleet. One of the key assumptions is the pace of annual retirements: the historical average retirement age since 1970 has been 23 years. Applying this retirement age to the current fleet shows that a material rise in narrowbody retirements is due around 2018-20, reflecting the age profile of aircraft delivered in the 1995-97 upcycle. This increase in retirements from 2018 aligns well with Airbus' plans to raise A320 production rates from 2018 from 52 to 60 per month and with Boeing's likely response of raising 737 rates to match Airbus.

Returning to IATA, it is evident that there are marked divergences in profitability by region.

- ✈ **North America** now accounts for 53% of total operating profits; the operating profit margin is set to remain at about 2015's 14.3% in 2016, which seems a bit pessimistic given the degree of consolidation in this market and the very tight capacity situation — unless airline managements are starting to worry about a consumer backlash.
- ✈ **Europe**'s 2015 margin of 5.3% is expected to improve to 6.4% in 2016; the regional results are the sum of contrasting individual airline performances, notably IAG vs Air France; the leading LCCs seem to be in a strong position to exploit falling fuel prices and boost their profitability, so the IATA prediction implies continuing struggles for most of the Legacies.
- ✈ For **Asia/Pacific** an EBIT margin improvement from 6.6% to 6.9% is forecast by IATA; while underlying demand conditions should remain strong, multi-airline competition characterises the main city-pairs which, along with the incursion of LCCs into new markets, may curtail increases in profitability.
- ✈ **Middle East** airlines, perhaps sur-

prisingly, are only expected to produce a 2.9% EBIT margin in 2015, reflecting the fact that only Emirates is truly profitable; the EBIT margin is predicted to increase marginally to 3.2% in 2016.

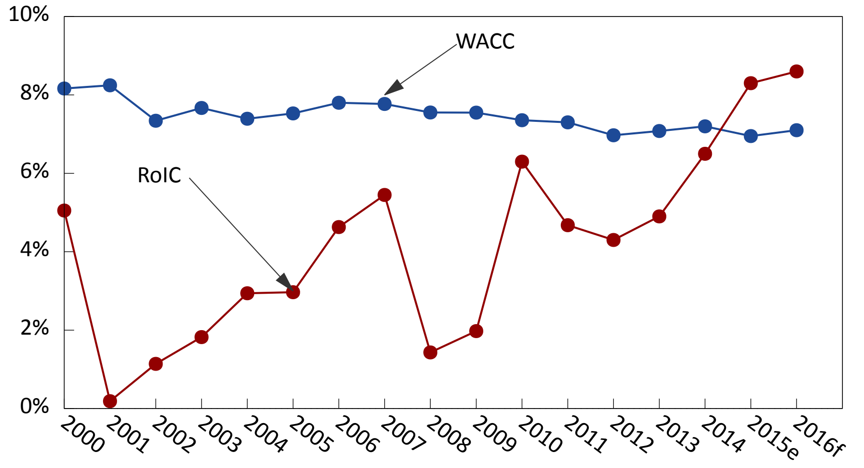
✈ **South American** super growth, particularly in Brazil, has evaporated and the fortunes of the leading carriers have been reversed; nevertheless, 2015's minuscule 1.3% EBIT margin is forecast to improve to 3.2% in 2016.

✈ **Africa**'s operating loss margin of -1.7% in 2015 may go to break-even in 2016; with such a contrast in efficiency between the leading national carriers — Ethiopian and SAA — plus the huge as yet unfilled LCC market, the losses simply reflect the frustrated potential of the continent.

Overall, for IATA, other airline trade bodies and many industry commentators something deeply disconcerting has happened: after decades of financial self-flagellation over the airline industry's poor performance, the sector has become "normal". With ROIC exceeding WACC, the industry has stopped destroying capital — see chart above. (The "abnormal" interpretation of the airline business has always seemed a bit parochial as many, probably most, industries complain of over-capacity and too thin margins, while some high-profile and dynamic sectors are much more adept than airlines when it comes to destroying capital — investment banking and the 2008 financial crisis or IT and the dotcom boom and bust, for example).

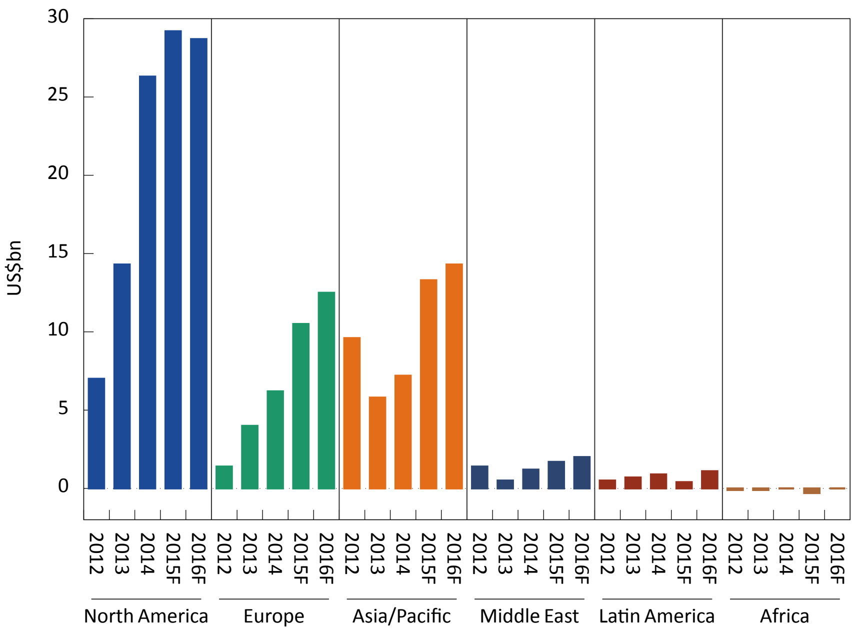
Interestingly, IATA has compared the US airline EBIT with leading companies in other sectors. US airlines with their 14% margin are now firmly in the mid-range of leading US corporations, well above Boeing's 7% but still dwarfed by Apple's 30%. European comparisons are (even) more difficult to make but the European airlines' 6% exceeds that of all but one of the top largest corporations including Airbus (Siemens is the exception with 10%). So the airlines might be becoming "super-normal".

THE "NEW NORMAL" FOR THE AIRLINE INDUSTRY?



Source: IATA

AIRLINE EBIT BY REGION



Source: IATA

Norwegian Air Shuttle set for long-haul sprint

AFTER a challenging 2014 Norwegian Air Shuttle has bounced back strongly in 2015, with a return to quarterly profitability in July-September and the winning of a UK Air Operator's Certificate in November. As a result, Europe's third-largest LCC now looks set to concentrate on the long-haul expansion that is its key strategy priority.

As we pointed out last year (see *Aviation Strategy,* December 2014), 2015 was a critical year for norwegian, having plunged into the red in 2014 for the first time in eight years and with plans to become the first European LCC to build up a significant long-haul operation hitting significant problems.

Those challenges appear to have been overcome. In the first nine months of 2015 norwegian reported a 15% rise in revenue to NOK 17.2bn (€2bn), based on a 7.1% rise in passengers carried to 19.6m. RPKs in the Q1-Q3 period rose by 12.4%, ahead of a 5% increase in ASKs and resulting in load factor rising by a substantial 5.7 percentage points to 86.7%.

That capacity growth is relatively small historically for norwegian — its average ASK CAGR was 35% from 2004 to 2014 (see chart on the next page) — and a sign that the airline saw 2015 as a year of consolidation as it added just four aircraft and instead concentrated on eliminating the negative gap between unit revenue and cost.

The capacity rise that did occur in 2015 was largely on international routes, and as a result international revenue rose by 18.1% in the first three-quarters of 2015, compared with a 4.1% increase for domestic routes. Domestic revenue as a proportion of all revenue fell from 22.7% in Q1-Q3 2014 to 20.6% in Q1-Q3 2015.

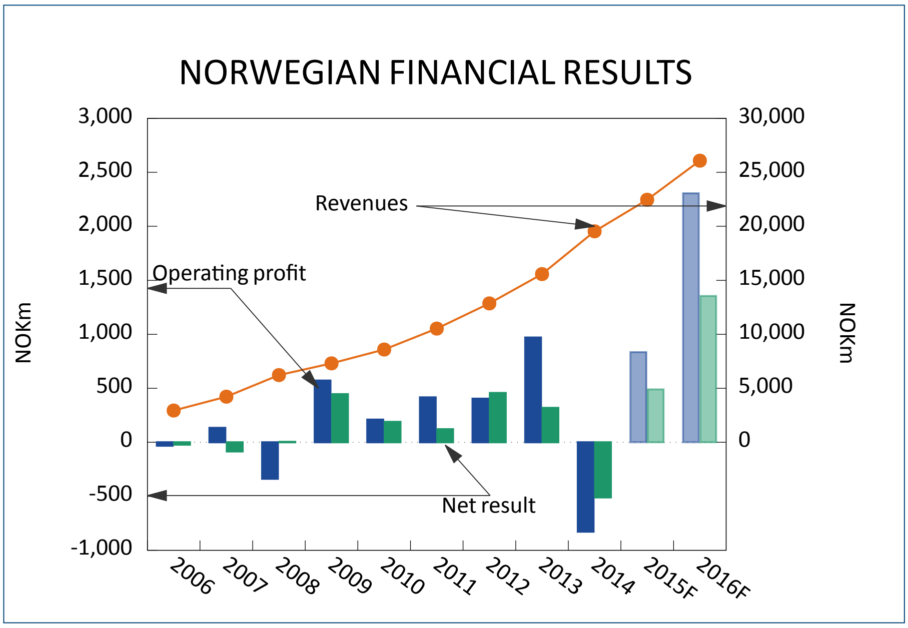
In the January-September period norwegian posted an EBIT of NOK 980.5m (€111.2m), considerably better than the EBIT loss of NOK 328.4m (€40m) in the same period of 2014, while at the net level norwegian turned a loss of NOK 91.4m (€11m) in Q1-Q3 2014 into a NOK 619.5m (€70.3m) profit in January-September 2015.

That's an impressive turnaround and is thanks to a combination of rigorous cost control and significant improvement in unit revenue (the latter partly due to the increasing importance of profitable long-haul routes).

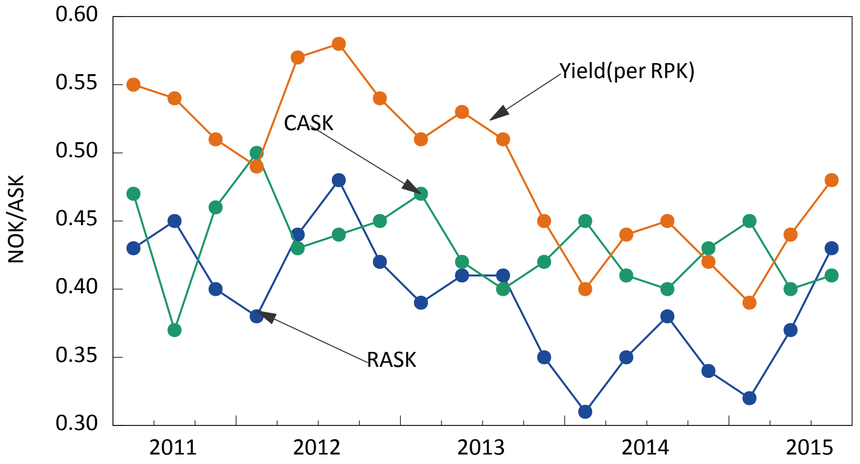
As can be seen in the chart on the facing page, unit costs rose from NOK 0.40 in the third quarter of 2014 to NOK 0.41 in July-September 2015; although fuel costs fell 22% year-on-year in the third quarter, this effect wasn't enough to completely negate other cost increases, including a depreciation of the NOK against both the Euro and the Dollar.

Unit revenue, however, rose from NOK 0.38 in Q3 2014 to a NOK 0.43 in Q3 2015, thanks to higher yield (up by NOK 0.03 year-on-year), the significant increase in load factor and a 4% rise in ancillary revenue to NOK 129 (€14.6) per passenger. As a result of these factors, in the third quarter norwegian's unit revenue crossed its unit cost for the first time since July-September 2013.

Norwegian's improving fortunes over the last 12 months have been reflected in the share price (see graph on page 8). After a substantial fall from the second quarter of 2013 through to late 2014, the price has



NORWEGIAN UNIT REVENUES COSTS, AND YIELDS



recovered strongly since; the two largest shareholders (as at the end of the 3rd quarter 2015) remain HBK Invest (controlled by Bjørn Kjos, president & CEO of norwegian) with a 21% share, followed by Folketrygdfondet (which manages the Norwegian government's pension fund) with 8.5%.

But despite the significant improvement over the last 12 months, challenges remain for norwegian. The balance sheet situation is mixed. Cash and cash equivalents rose by more than 60% in a year to NOK 2.3bn (€0.3bn) as at the end of September 2015, but long-term debt increased by 74.3% over the year to September 30 2015, to reach NOK 14.3bn (€1.6bn). That was due to combination of a new bond issue of NOK 1bn, a tap issue of NOK 425m and substantial new borrowings to finance new aircraft.

Fleet expansion

Norwegian's network currently comprises 434 routes to 130 destinations across 39 countries, served by a 99-strong fleet with an average age of under four and a half years, comprising 91 737-800s and eight 787-800s.

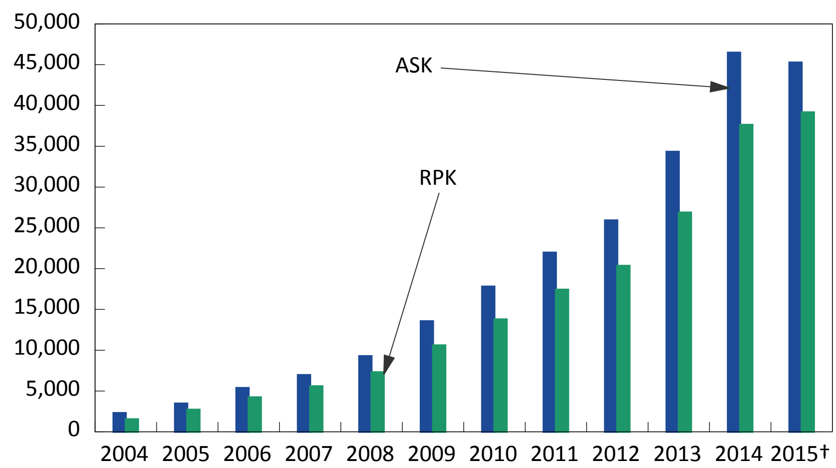
Though fleet expansion essentially paused in 2015, it will gather pace in 2016 and beyond. Eleven aircraft joined the fleet in 2015 — 10 737-800s and one 787-800 — though seven leased aircraft were returned (including the last of the airline's 737-300s) and so the net increase was only four units.

Through 2016 Norwegian will receive 25 aircraft, comprising 17 new 737-800s (which will enable it to return six leased aircraft of the same model); four A320neos (which will be leased out) and four leased 787-900s.

Altogether the airline has 256 aircraft on outstanding firm order. For short-haul 37 737-800s are still to be delivered, and they will be joined by 100 A320neos from 2016 onwards. On long-haul, in October 2015 Norwegian placed a firm order for 19 787-9s (plus options for another 10 aircraft), worth more than $5 billion at list prices, with deliveries starting in 2017. Norwegian currently operates eight 787-8s, and another new 11 787-9s will arrive through lease deals in 2016 onwards (not shown in the table on the following page), which will result in a long-haul fleet of 38 aircraft by 2020.

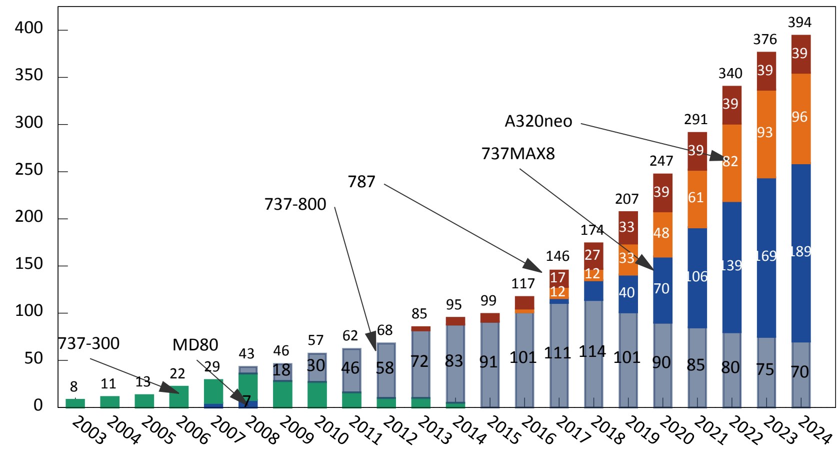
Norwegian began operating 787-8s (configured with 32 seats in Premium Economy and 259 in Economy) in May 2013, and the impending 787-9s will have 344 seats, with 35 in premium and 309 in economy. The split is an acknowledgement that premium revenue is a key component of the long-haul revenue mix — and a vital one in ensuring profitability. While even the 787-9s will have fewer seats

RAPID GROWTH OF NORWEGIAN



Note † Jan-Nov

NORWEGIAN FLEET DEVELOPMENT



Source: Company reports, Ascend
Note: 737MAX8 includes 92 options for possible delivery 2020-2024

than, say, AirAsiaX's 20-strong fleet A330-300s (which have 377 seats), they have triple the number of premium seats (AirAsiaX's have 12 premium seats). There are also 100 189-seat 737 MAX 8s on firm order, arriving from mid-2017 onwards.

Long-haul ambition

That's a lot of new capacity being added, and quickly; by end of 2017 the fleet will rise to 146 aircraft, comprising 112 737-800s, 17 787-800s, 12 A320neos and five 737 MAX 8s.

Long-haul growth is the number one priority for the airline — in 2016 norwegian is planning a 12% rise in short-haul ASKs and a 40% increase in long-haul, and that type of relative growth will become the norm for the next few years. However, while norwegian's average sector length continues to rise — in the first three-quarters of 2015 it increased 5.7% to 1,413km –and the airline says long-haul has reached a "critical mass" that delivers profits, it should be noted that long-haul currently accounts for around a quarter of all ASKs and just 6% of passengers carried.

That will change as the new long-haul aircraft arrive. Kjos says that the 787s will be operated "everywhere", as "there is a lot of the world that we haven't even started with", while the 737 MAX 8s will connect smaller European cities to long-haul destinations, many of which will be smaller cities on the US's Atlantic coast according to norwegian's plans.

That's presuming the long-running delay in getting US regulatory approval for an application made back in February 2014 for a foreign air carrier permit for Irish subsidiary Norwegian Air International (NAI) is finally resolved. The saga clearly infuriates norwegian, and Kjos has been scathing in his criticism of how competitors have reacted to Norwegian's long-haul expansion, saying that "the three major airline alliances and their employee unions have spread slanderous allegations about norwegian in an attempt to stop Norwegian's EU-based subsidiary from obtaining its lawful US foreign air carrier permit. Allegations such as 'flag of convenience', 'race to the bottom' and 'social dumping' have frequently been featured in the media, and the reason is obvious: fear of competition".

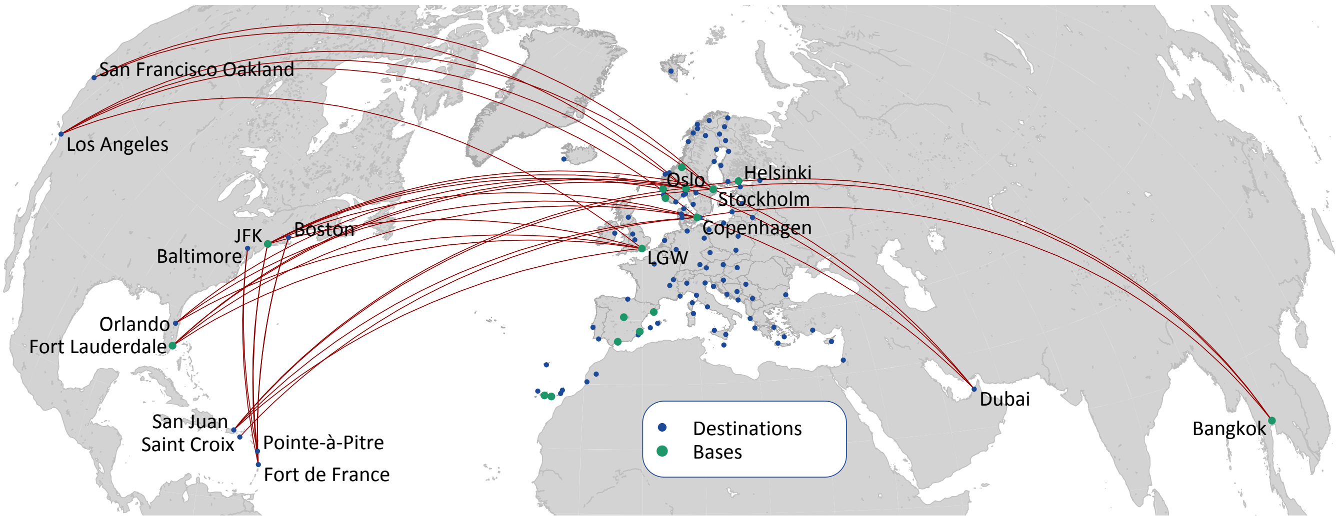
However, a US permit is just one part of norwegian's long-haul plan. After a lengthy process norwegian won a UK Air Operator's Certificate (AOC) in November, and this creates significant new opportunities for an airline that currently operates from Manchester, Birmingham and Edinburgh, and — most importantly — is already the third-largest carrier at London Gatwick, where it carried 3.9m passengers over the last 12 months to 39 destinations.

Specifically, the UK AOC opens up access (via the UK's bilateral traffic rights) to a number of potential new markets in Asia, Africa and South America, and operations will begin under the license in the first quarter of 2016 via an entity called 'Norwegian UK'. Currently norwegian has 10 aircraft based at Gatwick, with 130 pi-

NORWEGIAN FLEET

	In Service	Orders	Options
A320neo		100	50
737-800	91	37	6
737 MAX 8		100	100
787-8	8		
787-9		19	10
Total	**99**	**256**	**166**

NORWEGIAN LONG HAUL NETWORK



lots and 300 cabin crew working from that location, and all these assets will expand fast as the airline grows its network considerably over the next few years. A Gatwick-Puerto Rico service was launched only in November and a new route to Boston out of Gatwick will commence in May 2016, with more long-haul routes being added once the 737 MAX 8s start arriving in 2017.

Strategic logic

The Gatwick expansion is a key part of norwegian's three-part strategy for long haul — the first was the launch of Scandinavia to North America services, which was started in 2013 and now comprises routes from Oslo, Stockholm and Copenhagen to Dubai, Bangkok, San Francisco Oakland, Los Angeles, Las Vegas, New York, Orlando, Fort Lauderdale, St Croix in the US Virgin Islands and San Juan in Puerto Rico. Nothing if not innovative, norwegian is treating Bangkok, JFK, Fort Lauderdale as aircraft bases; and it has also added routes respectively from Boston, JFK and Baltimore to Point-à-Pitre (Guadaloupe) and Fort de France (Martinique) — both of which being French *départements d'outre-mer*, are effectively in the EU. Gatwick is the second phase (norwegian already operates from there to Fort Lauderdale, Los Angeles, New York JFK and San Juan) and this will be followed by expansion of routes from other European cities direct to Asia.

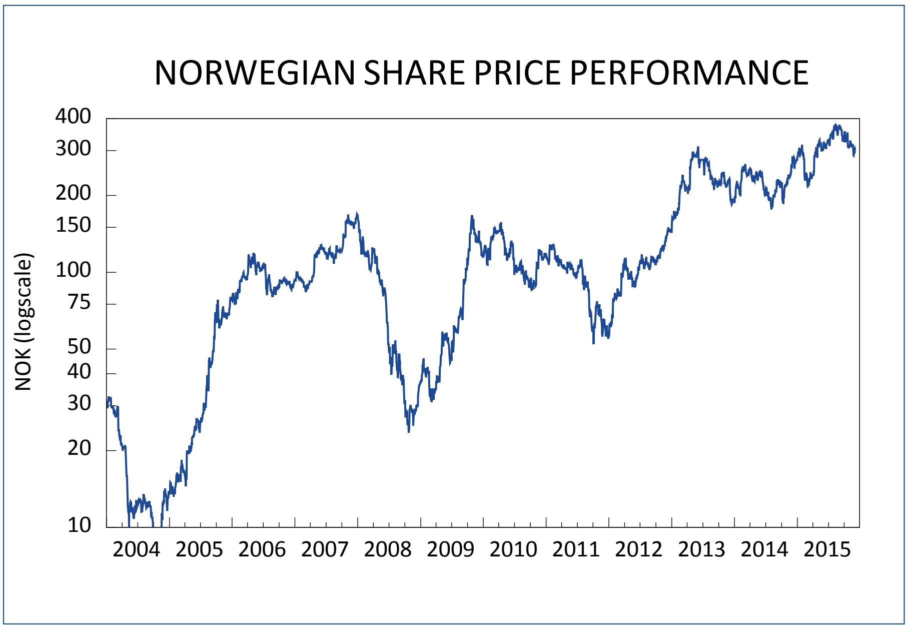
The more efficient new long-haul aircraft are also a key component in norwegian's ongoing efforts to cut costs. Unfortunately, norwegian gives little or no split in its financials between short- and long-haul, so it's difficult to compare its cost position on long-haul operations with LCC competitors such as AirAsiaX or legacy carriers such as SAS.

However, the overall position is clear — Norwegian's unit costs so far in 2015 are averaging NOK 0.42, and the airline wants ideally to reduce that all the way down to NOK 0.25, which would be comparable to Ryanair's. Realistically though, that will never happen given its high-cost Scandinavian locations, and hence the push to build up its presence at bases outside of the Nordic region — and most particularly Gatwick.

In the third quarter of 2015 norwegian had a 40% market share (in terms of passengers carried) at Oslo, 23% at Stockholm Arlanda, 17% at Copenhagen and 12% at Helsinki. The Gatwick share currently stands at 9%, which is impressive given that norwegian's base was only launched there as recently as 2013 — and that figure will only rise as its Gatwick operation is expanded further.

Gatwick will see growth both in long-haul (with the 787-9s earmarked to be used on routes there to "higher-demand" destinations) and short-haul, because while Norwegian warns of "strong competition" on European short-haul it's clear that London is a cheaper location to operate short-haul from than Scandinavia.

The direction of travel is clear. A three-month dispute with 700 Scandinavian-based pilots kicked off earlier this year when Norwegian



initiated a move to bring salaries and benefits of employees there in line with those employed at its UK and Spanish bases. This culminated in an 11-day strike organised by the Norwegian Pilots' Union in February and March that halted flights within Scandinavia — and which cost the airline NOK 350m (€40m) — but in the end a deal was agreed in which pilots accepted employment across different subsidiaries in exchange for three-year guarantees on job security.

How much Norwegian will be able to build up short-haul out of Gatwick (and connect in to its long-haul routes there) rather than at higher cost Scandinavian airports will be critical for the airline, and will go a long way to answering the question as to how many of its huge short-haul aircraft order book it will actually operate.

Norwegian plans to lease out short-haul aircraft it can't operate profitably, and already a deal has been signed by its leasing subsidiary — Irish-based Arctic Aviation Assets — to lease 12 A320neos arriving in 2016 and 2017 to HK Express. How many more A320neos arriving in 2018 onwards — plus older 737NGs that will be replaced by 737 MAX 8s — will have to be leased out is unknown yet, but aircraft lessors will be praying that Norwegian will be successful over the next few years and not have to dump a considerable portfolio of aircraft onto the global leasing market.

Spring Airlines: International expansion, e-commerce and succession

After ten years of consistent profitability, Spring Airlines, self-branded as "China's first low cost airline", achieved a successful IPO, floating 100 million shares in Shanghai Securities Exchange in January 2015 at CN¥18.16 per share. The shares, which were aimed at institutional and individual investors, were 150 times over-subscribed. Since then Spring Airlines' share performance has been more robust than that of the Chinese stockmarket in general.

After soaring to CN¥70 by mid year, the stock held relatively firm as the stockmarket crashed and now stands at CN¥63. This price still values the carrier at CN¥50.4bn (US$7.6bn) with an historic p/e of 39, a rating that would normally indicate strong growth prospects.

Spring Airlines' circulating shares, which account for one quarter of the company's total equity are held quite tightly. Among the largest investors are funds run by Chinese Social Insurance, China Securities Finance Company, Bank of China, Industrial and Commercial Bank of China and China Construction Bank.

The airline's financial performance appears impressive. Over the three year period 2012-14, it achieved an average net profit margin of 11.4%, an RoI of 14.3% and an RoE of 31.3%, according to Reuters. Its latest interim results, for the third quarter of 2015, show a very good performance defying setbacks in the Chinese economy: revenue at CN¥2.37bn ($355.5m), up 11% on a year ago, net profits at CN¥583m ($87.5m), up 51%.

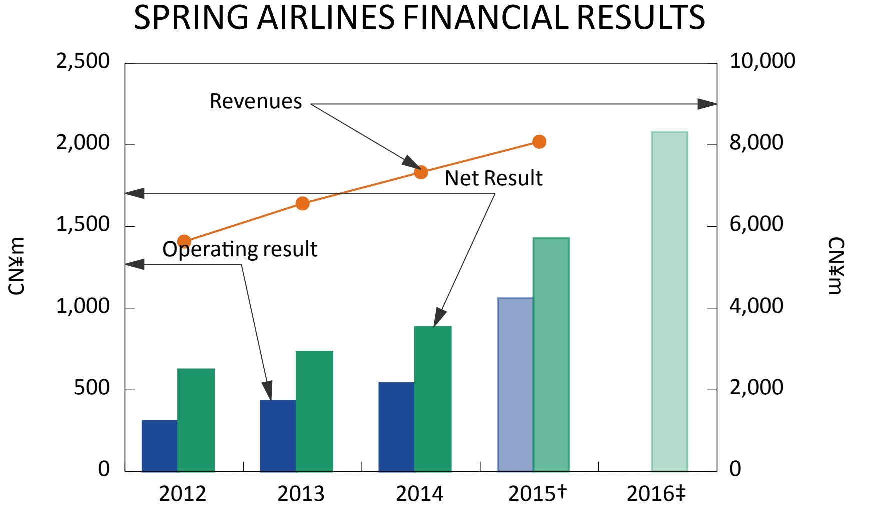
A concern, however, among investors and local observers relates to the importance of regional subsidies to the airline. In 2014 when the company recorded a net profit of CN¥657.4m, subsidies from China's local governments totalled CN¥615.4m. The subsidy from governments in 2012 and 2013 was CN¥503.5m and CN¥522.2m, respectively. The company's annual net profits in these years were roughly at the same level. This implies that, without this support, the company could hardly make a profit from the airline business.

Spring always stresses that it has adopted Ryanair's business model whereby remote airports and their local governments support air services for essential regional development purposes, but the question remains as to how much and how long the authorities can finance the airline's operations, in particular considering their deteriorating fiscal situation. The company's 2014 annual report admits that expiry or termination of the financial agreements with local governments is a significant risk to the company.

Another concern is that China's emerging new LCCs will surely compete with Spring Airlines for the subsidies as well as its market share. So far, more than ten new LCCs, such as Jiuyuan Airlines and 9Air, have been set up in China. Some traditional carriers, such as West Air which is a subsidiary of Hainan Airline Group, are transforming into an LCC-type model.

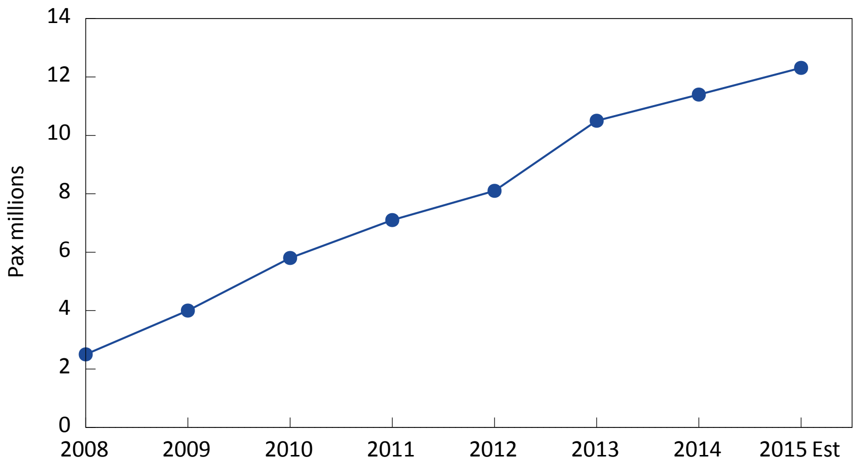
Strong growth plans

Spring's passenger volumes have grown at a compound rate of 25% pa since 2008, with the 2015 total estimated at about 12.3m, but this is still modest by European or Indian LCC standards. However, it now plans



Notes: † Rolling twelve months to Sep 2015. ‡ Consensus forecasts.

SPRING: TRAFFIC DEVELOPMENT



to expand its fleet of 57 A320s aggressively. With the funds from the IPO the company paid back commercial loans for aircraft purchases and made significant pre-delivery payments to Airbus. In November the company announced an agreement to buy 45 A320neos plus 15 A321neos, subject to government approval.

Immediate plans are to add 12, 14 and 14 A320s in 2016, 2017 and 2018, respectively. The airline's aim is that, by the end of 2018 it will be operating 100 A320s (and be carrying about 20m passengers).

The company adopts an aircraft acquisition policy which combines aircraft purchase, aircraft finance lease and operating lease. This allows it to maintain a young fleet of only 3.4 years old, with low aircraft maintenance cost (only 5% of total operating costs in 2014) plus guarantee high level of aircraft despatch reliability. According to a government report published at the end of 2013, which appeared to endorse the LCC model for China, Spring's aircraft utilisation of 11.4 hour a day on average compares very well with the overall Chinese industry's 9.2 hours.

SPRING: FLEET PLANS

	In service	On order
Spring Airlines		
A320	57	3
A320neo		45
A321neo		15
Spring Japan		
737-800	3	2

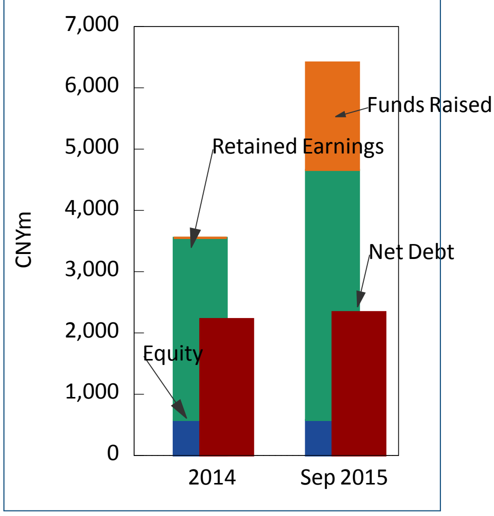
International expansion

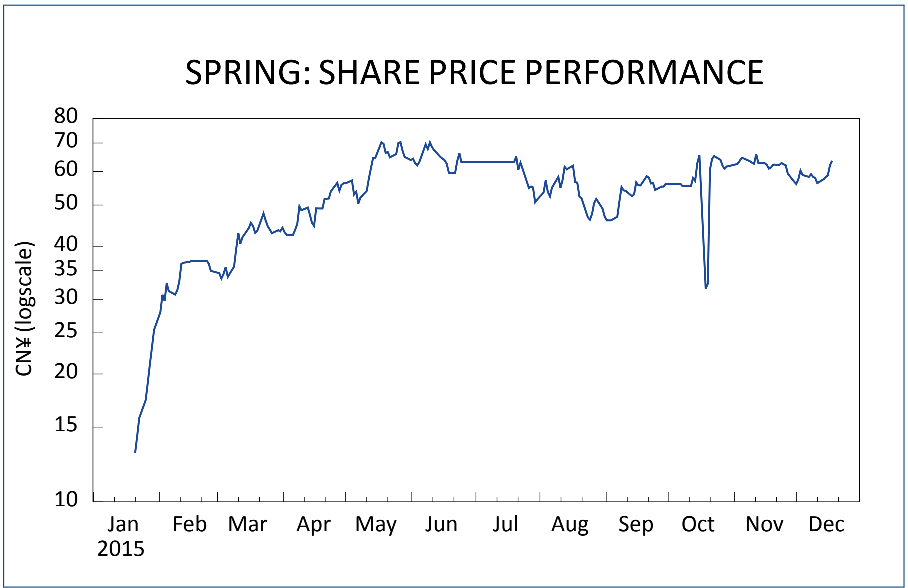
Spring's network expansion focus has recently been on routes to neighbouring countries. In 2014 the airline's international revenue grew by 63% compared 2013, reaching CN¥947.7m and accounting for 14% of total revenue. With a population of 3.7 billion with a four-hour flight range of its Shanghai base, in particular in Northeast Asia where LCCs are far from being mature, the airline is striving to turn Chinese citizens' aspiration for foreign travel into real cash. The airline's prime focus is Japan, the favourite destination for richer tourists. Despite a certain political hostility between the two countries' governments, Japan's local authorities provide subsidies to the airline in return for bringing in Chinese tourists.

The strategy of growing Japan to the second most important market after the Chinese domestic market, however, has encountered political barriers. Spring Airlines, jointly with Japanese investors, set up a Japan-based airline — Spring Airlines Japan — two years ago in a hope that the Japan-registered airline would gain traffic rights to operate between Japan and China. Spring's share in the joint venture is 33%, for which it has so far invested CN¥222m, while the Japanese travel agency JTB and Japanese financial institutions hold the remainder. But Japan's Civil Aviation Authority has been reluctant to grant these rights and so Spring Japan has been constrained to operations within Japan's domestic market, which are limited (the airline has three 737-800s) and unprofitable. However, it is reported that international service from Tokyo Narita to Wuhan and Chongqing will start up in February 2016.

SPRING:

BALANCE SHEET





e-commerce

Another element of Spring's strategy is to commercialise the airline's support functions. Its Aircraft Maintenance & Engineering Department is selling services to third parties, hoping to turn a cost centre to a profit centre. The company has also decided to offer its in-house IT systems, such as the maintenance & engineering information system and despatch system, to any buyers whether they are competitors or not. Two aviation IT companies were set up in June this year, one focusing on developing software, the other for marketing and selling. So far, five of China's start-up airlines have purchased these systems.

The management team believes in the "Internet of Everything" and adapting the Internet to specific Chinese demands. Spring bought the domain ch.com and merged springairlines.com into it; the change of website name was because springairlines.com was difficult and time-consuming for the majority of Chinese passengers to remember and input. The airline now offers everything in the ch.com website, from selecting seats, hiring cars to applying for credit cards from Chinese banks. This is significantly different from China's legacy airlines and the other new LCCs, which have yet to do e-commerce.

Revenue generated from e-commerce, the company's "ancillary revenue", is around CN¥33 per passenger or CN¥350m in total, most of which is profit. So the equivalent of over half of the airline's net profit is generated by e-commerce.

Threats

Despite the successful IPO, the airline faces various threats beyond the subsidy issue and the Spring Japan problem.

The first is the company's ageing management team. The company heavily relies on Mr. Wang Zhenghua, the founder and Chairman of Spring Airlines and Spring Travel Group, who is 73 years old now. Mr. Wang forged the two companies' strategies in every detail from the very beginning, and still oversees their daily operation. Without him Spring would not have existed. The problem is that he is getting older. Can his hand-picked successors, including the current CEO, Ms. Zhang Xiuzhi, and his elder son, Mr. Wang Yu, the current Vice President of Spring Travel Group, take the companies to the next level?

The second is logistical — a lack of qualified pilots and in particular, a lack of mature and capable captains. CAAC requires any flight crew must contain a Chinese pilot to address the air traffic controllers' Chinese language barrier. This means Spring Airlines is not able to fulfill its cockpit crewing from foreign sources. Over the past ten years China has imported more than 100 mainline aircraft every year. With the continuous expansion of China's fleet, a shortage of more than 1,000 pilots is foreseen. With Spring taking its scheduled A320s deliveries over the next three years, it will require at least 120 new pilots, which is a problem in China.

The third challenge is retaining its experienced staff members. With Venture Capital backing, China's new generation LCCs are able to offer better salary packages to Spring Airlines' key staff executives, captains and IT experts. Following the IPO no key staff have left the company, but maybe because they hold restricted shares, which are not sellable for three years. The question is, once they are entitled to sell the shares, will they continue to stay with the company?

Despite the successful IPO and all these efforts and strategic moves, it remains to be seen whether the airline can continue to be the front-runner in the potentially huge Chinese LCC sector. The key to its long term success would appear to be whether it can achieve a LCC-type profit margin from transporting passengers and from e-commerce rather than from relying on the government subsidies.

By Yong Qiu

Airport Pipeline: A Round-the-world tour

At this year's Global Airport Development (GAD) conference in Amsterdam, there was a session outlining a pipeline of possible airport transaction deals expected round the world. The potential deals were presented in three categories: green to show those likely in the next eighteen months; yellow those probable in the next three years; and red those possible but uncertain (highlighted on the map above). We reproduce the pertinent points here.

The *likely* transactions, some of which are already in process:

✈ **France:** following the success of the partial sale of Toulouse in 2015 (which according to the delegates at GAD was voted *the* deal of the year), both Nice Côte d'Azur and Lyon St Exupéry are shortly expected to be opened to concession investments, despite (in the case of Nice) significant local political opposition.

✈ **Lithuania:** the airports are up for sale to outside investors on a concession basis, despite the lack of a national or base carrier and notwithstanding the proximity to and competition with airports in Latvia.

✈ In the **UK,** GIP is in the process of eliciting bids for its investment in London City airport. It bought the stake in 2006 for an estimated £750m when the airport handled 2mppa. Now with a throughput of double that, and despite the constraints as a city centre STOLPORT and restrictions on expansion and growth, the sale prices rumoured suggest a valuation to EBITDA of heady proportions.

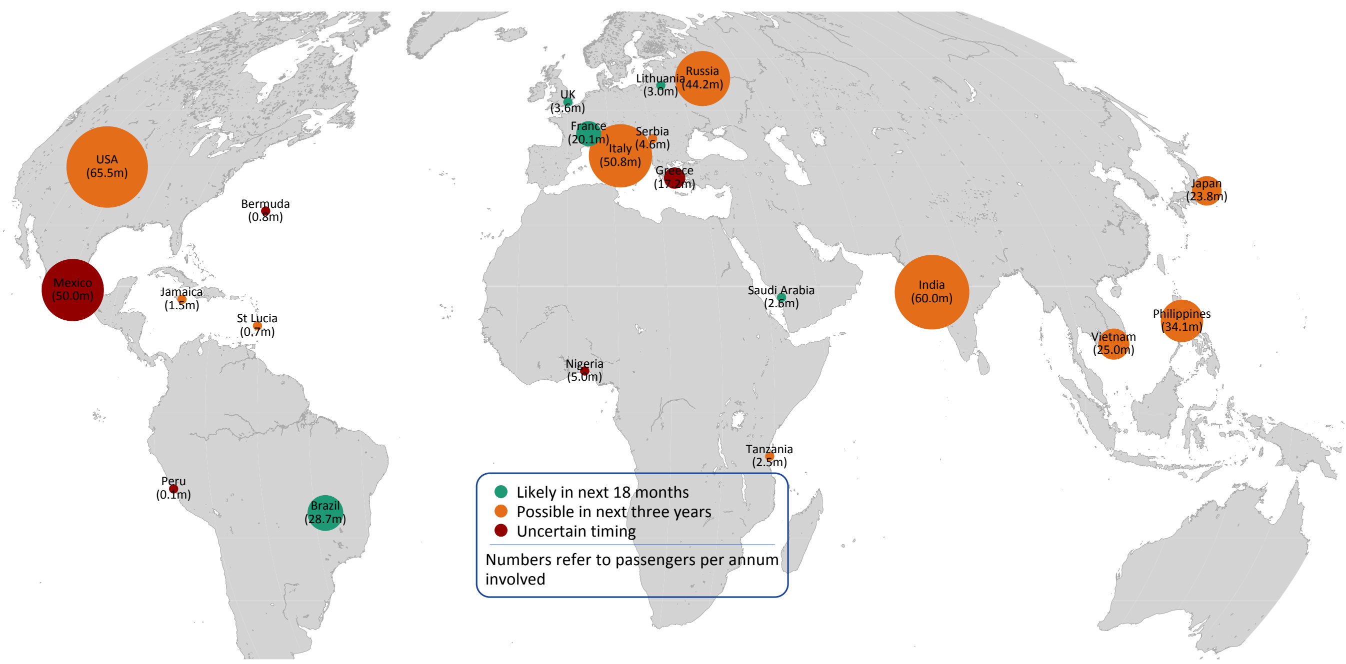
✈ **Brazil** is expected to start its third round of airport concession sales. The first attracted bids of atmospheric proportions. Given the somewhat weaker economic environment in the country it may not be so this time.

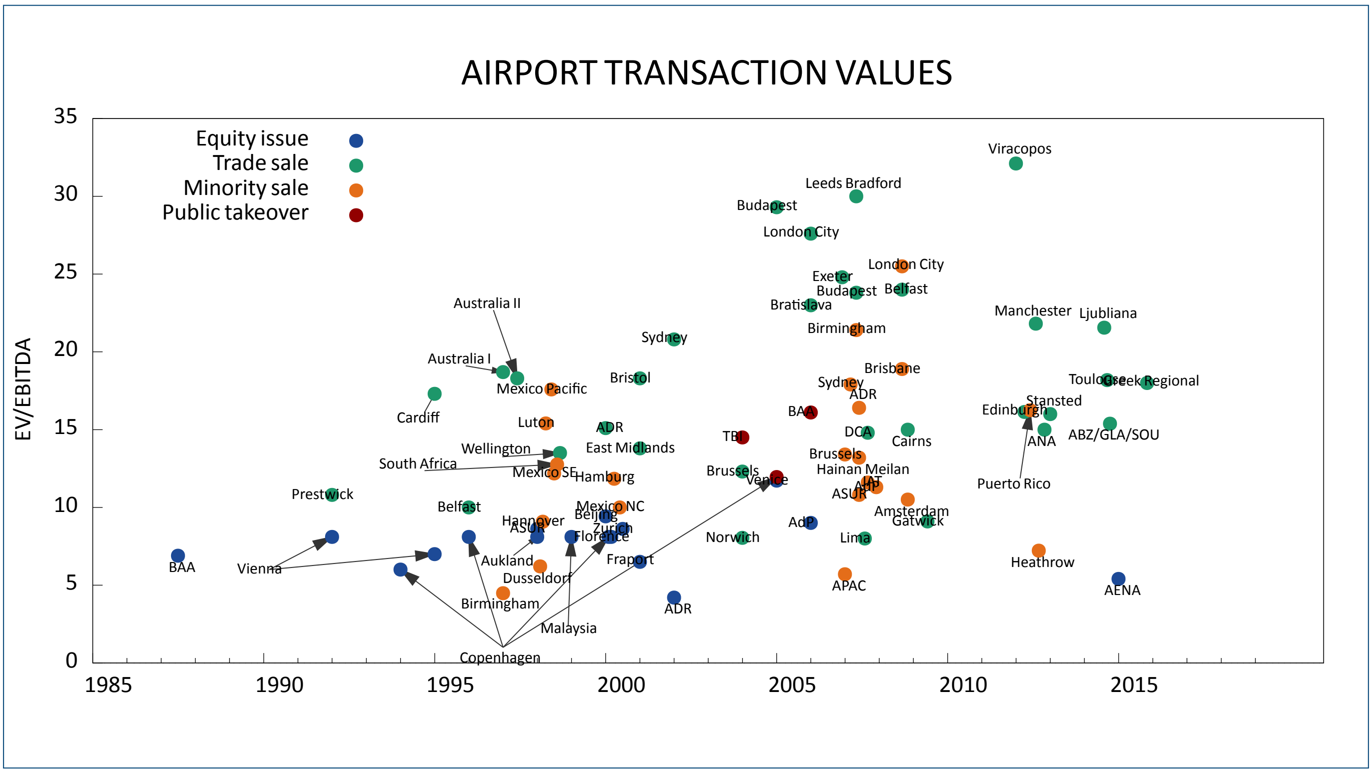
✈ At the smaller end of the scale **Saudi Arabia** is expected to conclude a PPP deal for Abha regional airport with a throughput of 2.6mppa.

The *possible* transactions in the next three years include:

✈ In the **USA:** a potential private involvement in development at LaGuardia, which once under way could lead to private redevelopment of Newark's Terminal A. Meanwhile potential bidders for a land sale and

AIRPORT TRANSACTIONS IN THE PIPELINE





retail development at Denver have apparently been identified. The US surprisingly perhaps has kept out of the trend towards airport privatisation — the only successful one being San Juan, with the attempts to sell Midway failing.

✈ In the **Caribbean** the World Bank is involved in various small projects to bring in private investors in Jamaica and St Lucia (while a similar project in Bermuda in North America, where the Government is currently reputed to be consulting with advisors, is a bit further away).

✈ In **India** there are plans for a new 60mppa airport in Mumbai in a PP transaction, while the next stage of airport privatisations are under discussion.

✈ In **Italy** there are ongoing sales expected of secondary airport stakes.

✈ In the **Philippines** there are plans for a medium term concession to upgrade Manila's Ninoy Aquino International Airport through a PPP deal covering a current throughput of 34mppa.

✈ **Russia** is looking (despite recent failed attempts) to consolidate the shareholding, merge and privatise Sheremetyevo and Vnukovo airports.

✈ In **Vietnam** there are plans for a PPP to build a new 25mppa airport to serve Ho Chi Minh City.

✈ **Serbia** is looking to privatise the airport in Belgrade (now a ˝hub˝ for the Etihad Equity Alliance) via a long term concession.

✈ **Japan** is expected to start the process for private concessions for other airports after the success of selling Kansai to a consortium of Vinci and Orix (the sole qualified bidders). It was a little surprising that no other Japanese institutions were interested in that deal and the Japanese Government must be hoping that better interest can be generated in the next round.

✈ Looking at more risky deals, there is a possibility that **Tanzania** will be offering a private concession for the airport in Dar es Salaam.

Longer term more uncertain deals include:

✈ **Greece:** a possible resumption of plans to privatise a majority stake in Athens Spata. Inspite of all the political upheaval in the past two years Fraport's bid to acquire the portfolio of Greek regional airports appears now to have been finalised at what seems to be an EV/EBITDA multiple of around 18 times (respectably in line with recent good airport transactions but may be a bit high for constrained island and regional airports).

✈ **Peru:** a handful of regional airports slated for sale

✈ **Nigeria:** a PPP concession expected for a new 5mppa airport to serve Lagos.

✈ **Mexico:** Government may seek PPP investment at some stage for redevelopment in Mexico City.

Virgin America: Back in the growth mode

After halting growth for three years, becoming consistently profitable and completing a successful IPO in November 2014, Virgin America is ready to start growing again. The award-winning San Francisco-based LCC began taking A320 deliveries again in the summer and is anticipating "low-to-mid teens" ASM growth in 2016.

The move makes sense. First, Virgin America is still a young airline. Eight years old, with a fleet of only 58 aircraft (at year-end 2015) and a network of 23 cities, it will benefit from economies of scale and from being able to offer its business customers a broader range of destinations.

Second, Virgin America has now proved that it can be financially successful. Since becoming modestly profitable in 2013, the airline has increased its earnings significantly and is now achieving operating margins similar to those of other US carriers.

Third, Virgin America is better positioned for growth now that it has a stronger balance sheet and can access lower-cost financing — both a result of the IPO.

Virgin America has continued to outperform the industry in terms of passenger unit revenues (PRASM), despite being heavily exposed to competitive hotspots such as Dallas and the New York transcon markets.

This suggests that Virgin America's blend of friendly, hip upscale service, high-tech offerings and competitive fares — always a huge hit in the marketplace — is gaining wider traction.

The PRASM outperformance also reflects success in finding a viable niche. Virgin America's product has been keenly embraced by the typical younger Silicon Valley business travellers. And its California strongholds — the Bay area and the LA Basin — are among the nation's most vibrant economies.

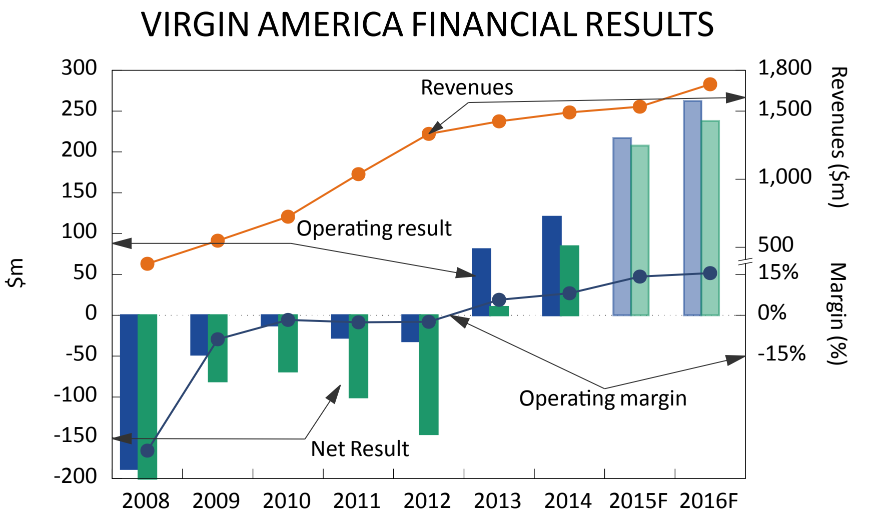
Next year's outlook is promising. Virgin America's leadership expects the RASM outperformance to continue, thanks to ancillary revenue growth and lucrative new markets such as Hawaii, while unit costs should benefit from the resumption of ASM growth.

But there is a wide divergence of opinion among analysts about Virgin America's prospects. The average recommendation on the stock is currently "hold", but there are as many "underperforms" as there are "strong buys".

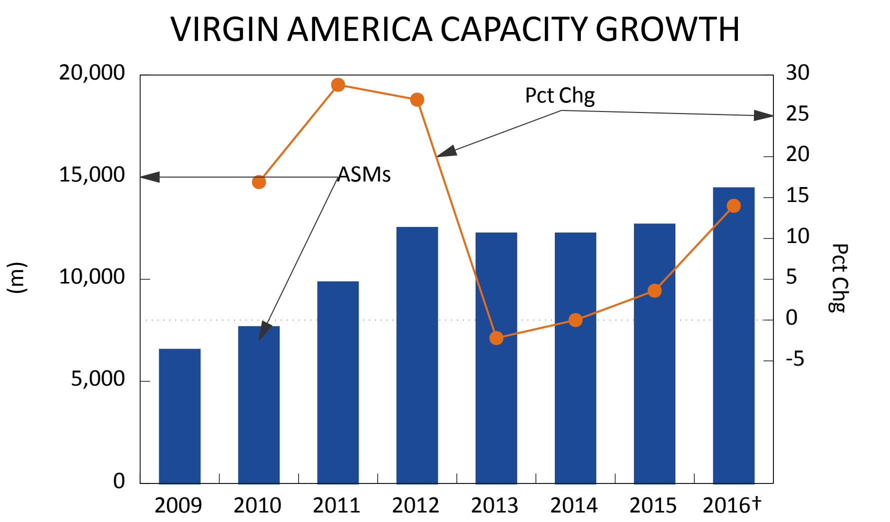
That may partly reflect Virgin America's unusual business model. It is not easy to understand the concept of an airline having "premium revenue generation with an LCC cost base", as Virgin America describes itself.

There are analysts who are impressed by Virgin America's strong recent track record. They may have flown the airline and understand why it is loved by the travelling public.

But some analysts remain concerned about the limited network that is heavily exposed to competition from both network carriers and ULCCs (even though so far Virgin America has fared well in highly competitive markets). The main long term concern is about the extent of the growth opportunities for that type of business model.



Note: 2015 and 2016 revenue and profit forecasts by Bank of America Merrill Lynch (November 3)



Note: 2016 forecast based on mid-point of Virgin America's current 13-15% ASM growth projection.

The long road to the IPO

Virgin America is still here because of the patience of its initial investors, which had to recapitalise the company several times in the seven-plus years before it was able to go public.

The airline had an exceptionally tough time getting started and becoming viable. First, its start was delayed by two years due to questions about its ownership and control structure, so Virgin America launched in August 2007 into a tough economic environment (the 2008 oil price surge, followed by the global recession).

In 2009 one of Virgin America's founding investors exercised an option to sell their stake back to the UK-based Virgin Group, which led to a new DOT enquiry about VA's US citizenship status. The airline lost about a year of growth. After a successful recapitalisation and DOT clearance, Virgin America staged its "second take-off" in January 2010.

The airline then embarked on a growth spurt, taking 25 new aircraft and more than doubling its ASMs over three years. But net losses only widened. From 2008 up to and including 1Q2013, VA recorded net losses totalling $651m.

Virgin America also found its progress impeded by difficulties in obtaining gates and slots at desirable airports. It needed large primary markets to be profitable because of its upscale service and desire to attract business traffic.

In late 2012 Virgin America realised that it was in no position to start taking deliveries in mid-2013 of the 60-aircraft A320/A320neo order placed in January 2011. It renegotiated the contract with Airbus and halted ASM growth.

The A320 orders were reduced from 30 to 10 and deliveries rescheduled from 2013-2016 to 2015-2016 (currently under way). The 30 A320neo positions were deferred by four years to 2020-2022.

Thanks to the immediate positive results from the no-growth strategy, Virgin America's investors agreed to another major financial restructuring in the spring of 2013. The shareholders wrote off $290m of the carrier's debt in return for future stock purchasing rights and provided an additional $75m of debt.

Virgin America's financial turnaround was a direct result of the late-2012 decision to halt ASM growth. The airline's capacity fell by 2.2% in 2013, remained flat in 2014 and has inched up only by around 3.6% this year.

At the same time, though, Virgin America was able to strengthen its presence in key markets. It was a major beneficiary of the American-US Airways slot and gate divestitures, which enabled it to access Dallas Love Field and expand service at New York LGA and Washington DCA in 2014.

The new expansion posed a risk in a year when Virgin America effectively had to go public or face extinction. The original investors are believed to have made it clear that they would not bail out the company again.

But Virgin America executed the 2014 expansion well. The financial impact was favourable because the airline culled less profitable flying to free assets for the new services, which were typically in higher-yield business markets.

Virgin America was very lucky in that market conditions turned favourable for airline IPOs in late 2014. Oil prices had fallen sharply and, as a result, US airlines were headed for record profits and their share prices were soaring.

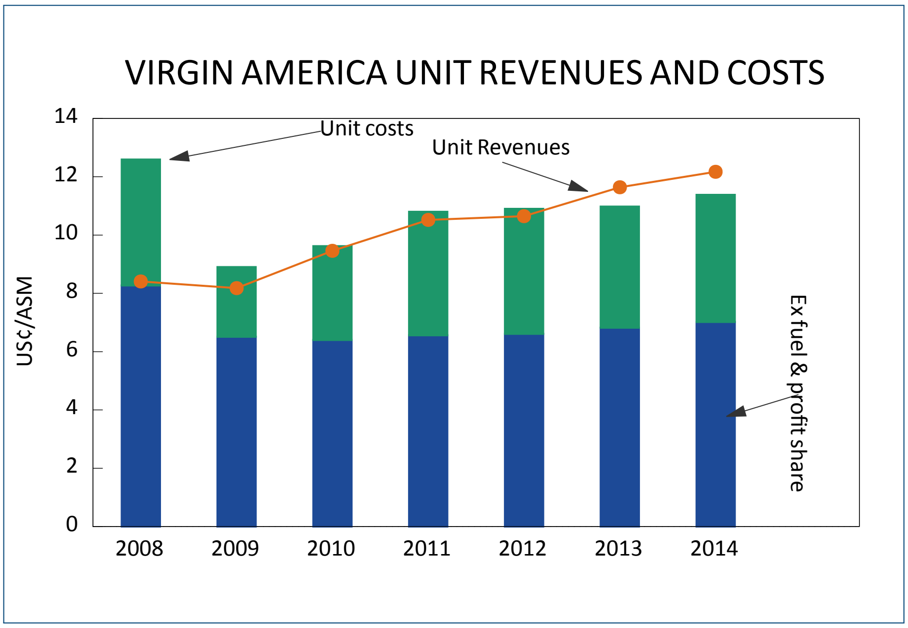
In its November 2014 IPO, Virgin America sold 13.3m shares to the public at $23 (at the higher end of the range), raising $307m and obtaining a listing on the NASDAQ. In a separate private placement, the controlling shareholders sold 2.3m shares to PAR Investment Partners for about $51m.

The IPO valued Virgin America at

$994m (43.3m total shares), though by the end of the first day of trading the share price had soared to $30, valuing the company at $1.3bn.

The shares have performed relatively well. The price peaked at around $45 in late 2014 and early 2015, then fell in line with the industry trend to bottom out below $30 in May-July and has since August hovered at the $35 level.

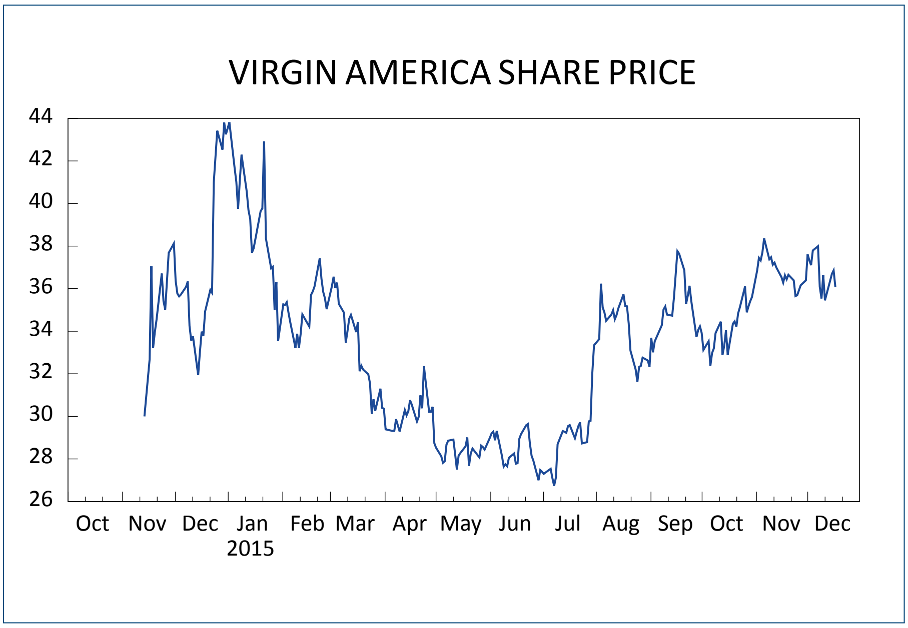
Importantly, the original backers have stayed on board. After the IPO, Cyrus Capital Partners and the Virgin Group held 35% and 33% stakes, respectively, though the latter is limited to 25% of the voting rights. There were no changes to VA's board.



But even more importantly, the IPO eliminated $690m of debt and boosted liquidity by $214m, giving Virgin America a decent balance sheet for growth.

Before the IPO, VA had $805m of total debt and a shareholders' deficit of $334m. At year-end 2014, total debt was $130m and shareholders' equity was $460m. The net debt/EBITDAR ratio improved from 6.2x before the IPO to 2.5x at the end of June. And unrestricted cash reserves in September stood at $512m — an ample 34% of LTM revenues.

Thanks to the IPO, the 10 A320s arriving from Airbus between mid-2015 and mid-2016 are Virgin America's first owned aircraft. The carrier has funded 80% of their acquisition costs with long-term bank debt facilities that have a weighted average interest rate of less than 5% — clearly a much better deal than leasing. Of course, Virgin America is likely to secure even lower interest rates when it starts tapping the debt capital markets for aircraft financing (EETCs).



Healthy profits at last

While Virgin America's revenue growth has been modest in the past two years, its profitability has improved significantly due to RASM outperformance, lower lease and interest costs and, of course, lower fuel prices. In 2014 operating margin rose to 8.1% and net profit surged to $84.4m. This year's operating margin is expected to be 14-15% and the net profit around $208m.

In recent quarters Virgin America has closed the operating margin gap with its peers. Its third-quarter operating margin of 18.2% was at the low end of the range for the top 10 US carriers. The other nine airlines had margins ranging between 18.4% and 28.5%.

After curtailing growth, Virgin America quickly went from industry-laggard to an industry leader in unit revenue growth. It has outperformed the industry on PRASM in all but one or two quarters in the past three years.

In addition to the benefits from tight capacity, the PRASM outperformance has reflected the growing popularity of Virgin America's product offering, success in capturing business and corporate traffic, and expansion in higher-yield markets.

At a recent investor conference, CEO David Cush presented DOT O&D Survey data that illustrated how well Virgin America fares when it competes head-to-head with other carriers. It has a significant unit revenue lead over other LCCs. In Q1 2015, in markets where it faced Spirit, Southwest and JetBlue, its weighted average PRASM was 190%, 125% and 116%, respectively, of the competitor's PRASM.

VA also does well in head-to-head competition against Delta: both had the same PRASM. Its PRASM was a little lower than United's, Alaska's and American's, but that was largely because the main competitive markets with those carriers were the JFK transcon routes.

The JFK transcon market has seen a major disruption in the past two years. Just about every other airline has put a new premium product there, and capacity has increased significantly. AAL and UAL now beat VA there in PRASM because they offer large first class cabins, lie-flat seats, etc.

But Virgin America has held onto its premium traffic and continues to make money on the JFK transcon routes. Its PRASM continues to exceed JetBlue's, despite the latter's new successful "Mint" premium product and a larger number of premium seats.

On the more "product-neutral" SFO/LAX-Boston routes, Virgin America achieved the second-highest PRASM in the market (after UAL's).

Virgin America anticipates strong ancillary revenue growth in 2016, in part thanks to upgrades to its Sabre system that make it possible to price ancillary products dynamically.

Virgin America has done a good job in controlling non-fuel costs, but this year ex-fuel CASM is spiking due to higher labour and maintenance costs and a reduction in average stage length. The airline is in the process of bringing its pay and benefits closer to the levels of other domestic carriers. In April pilot pay was increased by 15% and other groups' pay by 5-20%. But Virgin America has a highly productive workforce.

In June Virgin America's pilots voted to join ALPA, which was not surprising as VA was the only US carrier left with non-unionised pilots. The flight attendants unionised in late 2014. It will mean cost pressures in the longer term (initial contracts take 3-6 years to negotiate).

The management expects ex-fuel unit costs to decline in 2016 as ASM growth resumes and more aircraft are purchased rather than leased.

The low-cost, high-amenity model

CEO David Cush recently described Virgin America as being "like the legacy carriers on the revenue side". That means a high-quality product, a first class offering, corporate selling and distribution through the GDSs.

Cush has also said that Virgin America goes after legacy carriers' premium revenues. Up to 40% of its revenues are believed to come from business travellers. In late 2014 the airline reportedly had agreements with 37 of the top 100 corporations in the US.

However, Cush also always stresses that a low cost structure is the key thing in the foundation of the company. He has suggested that, with the exception of Spirit, Virgin America is the "purest low-cost model" among the US LCCs.

VA has a simple production model: a single fleet type, young and fuel efficient aircraft, point-to-point operations, extensive outsourcing and high labour productivity. The management has indicated that they plan to stick to every aspect of that simple model, meaning that there will not be a second fleet type at Virgin America.

The simple production model gives Virgin America a significant CASM advantage over the legacy carriers. VA estimates that its CASM is 30-40% lower than the domestic unit costs of the full-service legacies it competes with.

Virgin America also views its cost structure as being competitive with the other US LCCs, if an adjustment is made for the near-100% leased fleet. On that basis, VA is "in the middle of the pack", with CASM slightly higher than Southwest's but similar to JetBlue's.

Virgin America offers three classes of service — a premium in-flight experience that is consistent across the carrier's entire fleet and network. The main cabin product is still considered to be industry-leading and continues to sweep the awards.

The key components of the product are an excellent in-flight entertainment system, very comfortable seats and pleasant and friendly flight attendants. Having pioneered in-flight Wi-Fi, the airline has just introduced significantly faster satellite Wi-Fi on 10 A320s. The business model leverages the Virgin Group brand, which is about high quality and innovation.

Network and growth plans

In recent years, largely thanks to airline mergers, Virgin America has finally been able to access some of the country's largest business markets: Dallas Fort Worth (2010), Chicago O'Hare (2011), Philadelphia (2012), Washington DCA (2013), Newark (2013), LaGuardia (2014) and Dallas Love Field (2014); however, it has since pulled out of DFW and Philadelphia.

But, like other smaller carriers, Virgin America continues to face obstacles to further expansion at locations such as Chicago O'Hare and the New York airports.

Virgin America was able to add Dallas Love Field (DAL) as a mid-continent focus city after being allowed to purchase two gates from American-US Airways. It was a unique opportunity to access a slot and gate-constrained airport close to the city centre and benefit from the full expiration of the Wright Amendment restrictions on long-haul flights. VA transferred its services from DFW to DAL and launched flights to many business destinations.

The initial 12 months at DAL have been difficult because of Southwest's extremely rapid expansion. VA has seen high-teens RASM declines there, though it has held its own thanks to its premium offerings. It is the only carrier to offer three classes of service at DAL.

This autumn's highlight has been the launch of services to Hawaii, linking SFO with both Honolulu and Maui with daily flights using new ETOPS-equipped A320s. Virgin America is confident of its success in Hawaii because it has historically done well in such large, fragmented and highly competitive leisure markets. The Hawaii routes have yields similar to those in the New York transcon market but benefit from having primarily California-originating traffic (where VA's strength is). Hawaii is also counter-seasonal to the rest of VA's network.

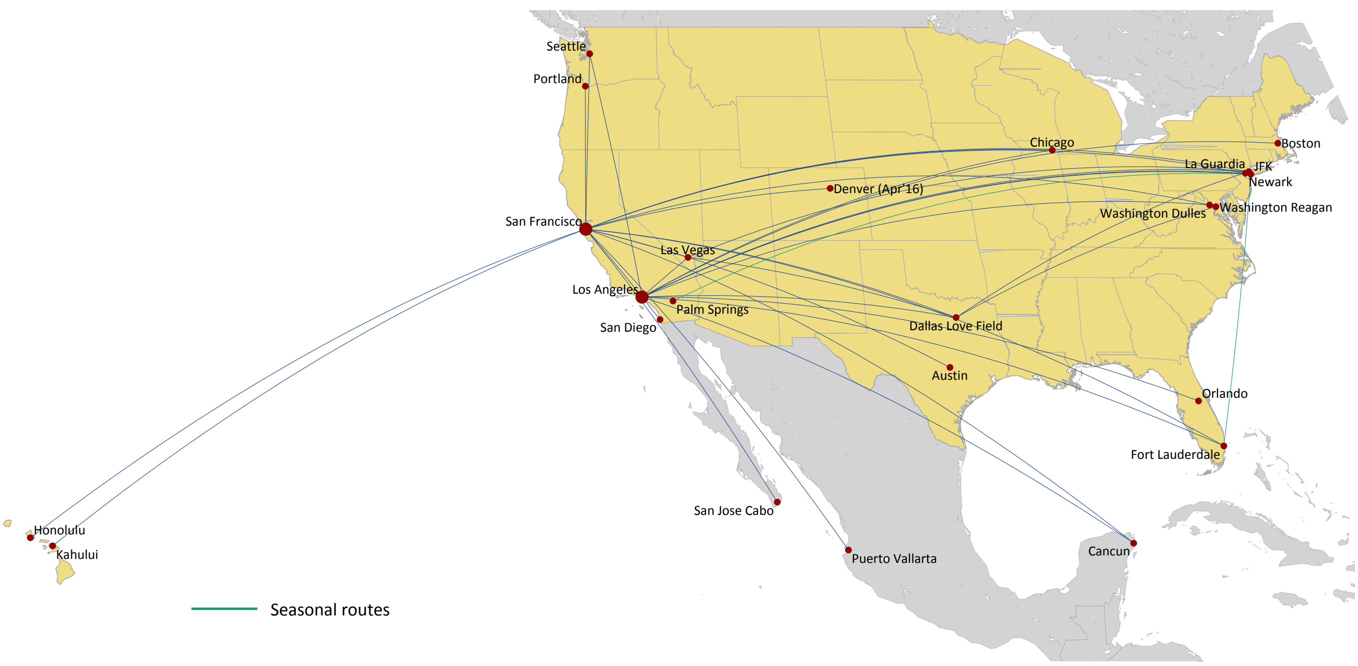
After the recent years' large-city additions, the management now feels that Virgin America has reached certain critical mass. As it expands further it can start reaping strong economies of scale and significant positive network effects.

The main thrust of VA's future growth strategy is, first, to continue to stick to large markets and to focus on the US for the time being (VA also serves Mexico).

Second, Virgin America will be looking to add more business destinations. The next such city is Denver, from March 2016. Denver is the largest market from SFO that VA does not currently serve, a high-tech centre and the most requested new destination by the carrier's corporate accounts.

Third, the airline feels that it has significant further growth opportuni-

VIRGIN AMERICA ROUTE MAP



ties in SFO and LAX. It still has only an 8-9% domestic market share out of its SFO home base and 5% out of LAX. Both are high-income areas where Virgin America has much brand recognition. Although after Denver it will have the 10 largest markets out of SFO covered, it does not yet serve 15 of the next 20 largest markets, with cities such as Orange County, Atlanta and Phoenix heading the list. The number of unserved large markets out of LAX is even greater.

Fourth, Virgin America can be expected to be quite disciplined about growth this time around. It wants to avoid the mistake it made in the pre-2013 days of having too much capacity in new or developing markets, which had a dire impact on profitability. The new limit is 10% of capacity in such markets, and growth decisions will have to meet strict ROIC criteria.

The company feels that a 10% long-term annual ASM growth rate will "optimise operational constraints, cost structure and revenue performance". Two thirds of the growth will be in existing markets and one third in new markets.

Virgin America is also likely to rely more on airline partnerships. It expects to raise the percentage of revenues from codeshare and interline relationships from the current 5% to "closer to 10%" over time.

After receiving the 10 A320s from Airbus by mid-2016 (five this year, five next year), which will give it a 63-strong fleet, Virgin America will have a four-year gap in deliveries from Airbus until the A320neos start arriving in 2020. So the airline has been looking to lease or purchase A320s to facilitate growth in 2017-2019. VA has a strong preference for new aircraft because it feels that used aircraft could introduce a lot of complexity into the operation.

In mid-December Virgin America announced that it had agreed to lease ten new A321neos from GECAS for delivery between 1Q2017 and 3Q2018. It will be among the first airlines globally to operate the variant powered by CFM's LEAP-1A engines. VA was able to secure early deliveries as the aircraft are part of the lessor's existing orderbook with Airbus. The larger A321neos (185 seats, 24% more than on VA's existing A320s) will help in efforts to keep unit costs low. The airline plans to operate them on the Hawaii and key transcon routes.

Virgin America's potential niche is clearly more limited than those of ULCCs like Spirit. But there would still appear to be lots of markets where its special brand, premium product and business model could work.

The airline believes that it is "in the middle of pack" in terms of pretax ROIC (18.8%) and intends to improve on that. But it would be perfectly okay for a young growth airline to lag its peers a little in terms of profit margins and ROIC.

By Heini Nuutinen
heini@theaviationeconomist.com

Freighter Values and Lease Rates

THE FOLLOWING tables reflect the current values (not "fair market") and lease rates for cargo aircraft. Figures are provided by The Aircraft Value Analysis Company (see below for contact details).

The values and rates reflect AVAC's opinion of the worth of the aircraft in the present market. In assessing current values, AVAC bases its calculations on many factors such as number of type in service, number on order and backlog, projected life span, build standard, specification etc. Lease rates are calculated independently of values and are all market based.

FREIGHTER VALUES (US$m)

	New	5 years old	10 years old	20 years old
A300-600RF			29.7	
A330F	87.7	72.8		
737-300QC				5.7
747-400M				17.5
747-400F		57.7	48.7	26.3
747-400ERF		59.3	50.7	
757-200PF				13.1
767-300F	53.4	44.00	34.6	15.8
777-200F	160	130.3		
MD-11C				8.2
MD-11F				11.9

FREIGHTER LEASE RATES (US$'000s/month)

	New	5 years old	10 years old	20 years old
A300-600RF			236	
A330F	724	614		
737-300QC				88
747-400M				217
747-400F		667	583	362
747-400ERF		686	605	
757-200PF				132
767-300F	330	319	288	214
777-200F	1332	1118		
MD-11C				135
MD-11F				194

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