

AirAsia X: Long-haul aspiration and reality

AIRASIA X's mission is: "to further solidify our position as the global leader in long-haul, low-cost aviation and create the first global multi-hub low-cost carrier network." So far however it has failed to find a profitable operating model and has reported heavy losses for the past three years. The stock price has been in continuous decline since the company was floated on the Bursa Malaysia in July 2013 at RM1.25, trading at RM0.25 at the end of February 2016.

AirAsia X was established in 2007 as part of the AirAsia Group, and is based at Kuala Lumpur, at the low cost terminal KLIA2 which was opened in 2014. It currently flies to 18 destinations in Asia (Sapporo, Tokyo, Osaka, Seoul, Busan, Taipei, Xian, Beijing, Hangzhou, Chengdu, Shanghai, Colombo and Kathmandu), Australia (Sydney, Melbourne, Perth, and Gold Coast) and the Middle East (Jeddah). It operates a core fleet of 26 A330-300s, each configured with 12 Premium Flatbeds and 365 Economy seats. Average sector length is about 4,800km or 5.5 flying hours per sector.

Towards the end of 2015 the airline declared in a presentation to analysts that its turnaround plan had started to bear fruit and that the airline was on its way to profitability. Indeed, fourth quarter results for 2015 were promising, even taking into account that this is the peak travel period for the carrier — pre-tax profit of RM151.6m on revenues of RM853m compared to a loss of RM168.5m on revenues of RM816.8m in the previous year.

Nevertheless, AirAsia X remains very unprofitable — unaudited results released at the end of February showed a loss for 2015 of RM360.2m

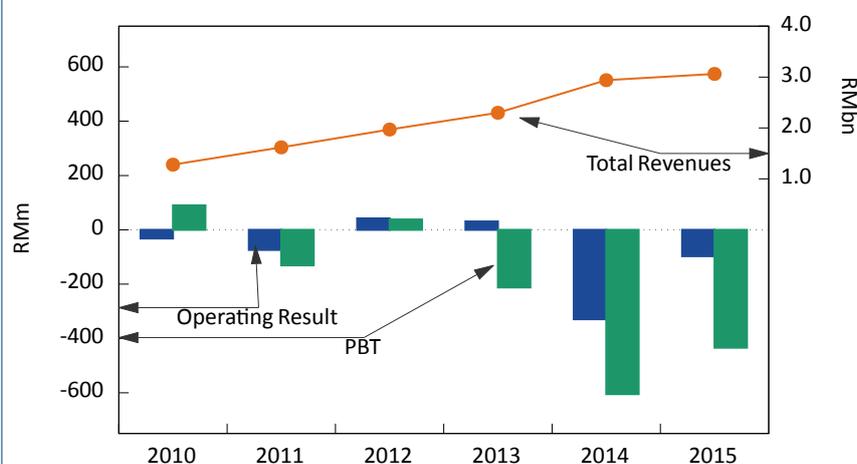
(\$86m) at the PBT level on revenues of RM3.06bn (\$728m), representing a margin of -14.2%, which was somewhat better than the -20.6% margin recorded in 2014. Results from the parent company, AirAsia Berhad (the Malaysia-based A320 operations plus equity accounting for the various overseas associates), were also not particularly brilliant — a pretax profit of RM215m (\$51m), representing a 3.4% margin on revenues of RM6.3bn (\$1.5bn). The operating result actually was strong at RM1.09bn, but there were heavy losses from all of the associates.

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Despite net proceeds of RM391m from a rights issue last summer, AirAsia X's balance sheet remains weak. Long-term debt as at December 2015 was RM1.4bn and net current liabilities totalled RM1.2bn; Non-current assets totalled RM3.2bn, leaving book equity of RM621m, but its

AIRASIA X FINANCIALS



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assets include RM520m of deferred tax assets, which only become useful when/if the airlines starts to make substantial profits.

Erratic route development

It is impossible to identify which, if any, of its routes AirAsia X is making money on. However, the regional breakdown provided by the company shows that on the two major route regions AirAsia X made huge losses, loss margins at the PBT level of -33.2% on North Asia and -25% on Australia, relying on an ill-defined “others” profit margin of 43% to bring the overall system to a loss of -14.2%.

AirAsia X’s network evolution is summarised in the maps on the facing page. In its early years the airline attempted to build a European network, operating to London and Paris, but after suffering heavy losses AirAsia X was forced to abandon this operation in 2013. It appears to have been unable to find a niche between the

Middle East super-connectors capturing price-sensitive traffic on Malaysia-UK routes on the one side and flag carriers, BA and MAS, filtering off premium traffic on the other. AirAsia X then concentrated on a major expansion into Australia, Japan, South Korea and China, again suffering major losses as it came up against low cost competition in the form of Jetstar (see pages 8-13) and “irrational competition from industry peers”, by which it meant that MAS, despite, its *de facto* bankrupt state, was not cutting capacity as rapidly as it should have.

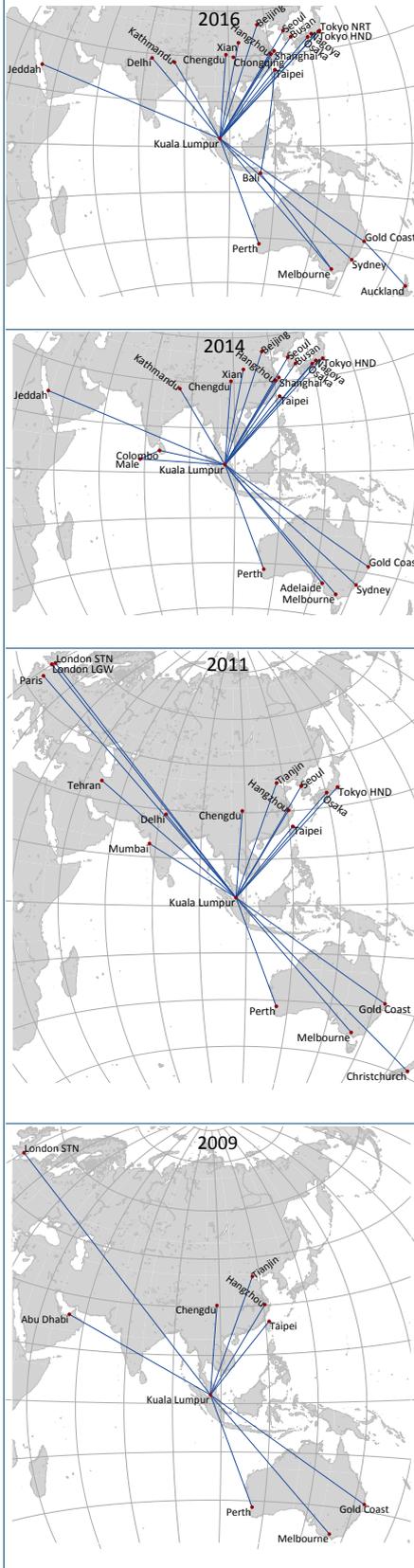
Although the core Malaysian operation was deeply problematic the airline persisted with its strategy of setting up long-haul associate carriers alongside the short haul associates in Indonesia and Thailand. IAAX and TAAX’s results are not included in those of AirAsia X bhd but they made a combined net loss of \$31m in the first three quarters of 2015.

AIRASIA X: RESULTS BY REGION

		Results (RMm)			Margins		
		2013	2014	2015	2013	2014	2015
North Asia	Revenues	1,147	1,409	1,470			
	EBITDAR	176	191	235	15.3%	13.6%	16.0%
	PBT	(83)	(263)	(488)	-7.2%	-18.7%	-33.2%
Australia	Revenues	903	1,048	927			
	EBITDAR	94	(1)	177	10.4%	-0.1%	19.1%
	PBT	(113)	(369)	(232)	-12.5%	-35.2%	-25.0%
Others	Revenues	256	478	665			
	EBITDAR	67	153	413	26.2%	32.0%	62.1%
	PBT	(14)	26	286	-5.5%	5.4%	43.0%
Total	Revenues	2,306	2,935	3,062			
	EBITDAR	337	343	825	14.6%	11.7%	26.9%
	PBT	(210)	(606)	(434)	-9.1%	-20.6%	-14.2%

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AIRASIA X ROUTE DEVELOPMENT



As part of what it describes as “strategic capacity management”, AirAsia X in 2015 closed down routes to Tokyo Narita, Nagoya and Adelaide, and downsized Colombo and Chongqing to A320s. Frequencies were cut on Sydney, Melbourne, Perth, Gold Coast and Hangzhou. On the other hand, it launched Sapporo and announced the re-launch of Delhi for February 2016. New Zealand, dropped in 2012, was reinstated, this time as a tag to Auckland from the Gold Coast.

Overall seat capacity was reduced by 6% between 2014 and 2015 but passengers carried fell by 15% from 5.15m to 4.85m with the result that load factor dropped from 82% to 75% — a serious deterioration especially for an LCC, though the company was able to report a 83% load factor for the fourth quarter, up from 81% in the same period of 2014.

A fundamental issue for AirAsia X appears to be establishing a core of profitable routes on which it can base its expansion. This has been a pre-requisite for the successful short-haul LCCs — they didn’t just succeed because of their lower costs but also because they had defensible niches (Southwest’s monopoly on intra-Texas services is the classic example). Finding such a niche in long-haul markets characterised by multi-airline competition is proving very difficult.

There has been speculation about AirAsia taking over AirAsia X to assure connecting traffic for its short-haul LCCs — a sort of reversal of the European network model where loss-making short haul feed is required for the long-haul network.

Still an LCC?

It could be argued that LCC strategy is coming to resemble more that of

a network/legacy carrier than that of an LCC.

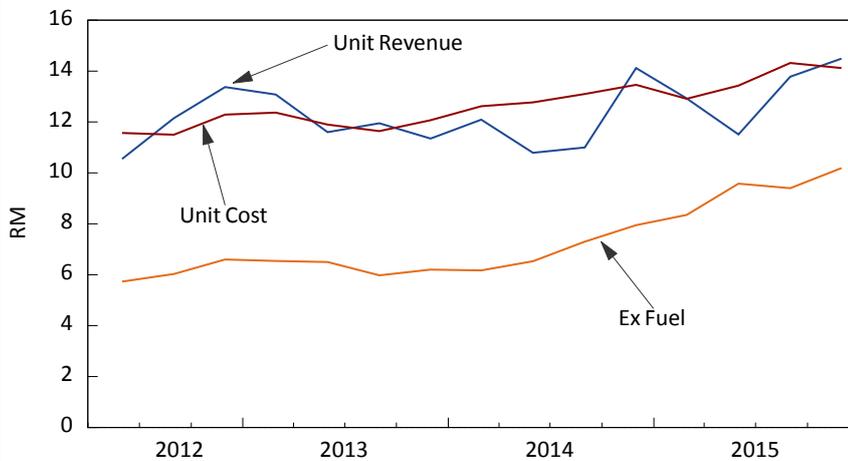
Looking at the make-up of AirAsia X’s revenues, the airline is relying more and more on traditional long-haul charter as it cuts back its scheduled network — RM422m or 14% of its revenues came from charters compared to 6% in 2014. Perhaps more significant is the amount of revenue generated from leasing A330s out to other parts of AirAsia X — in 2015 this accounted for RM275m or 9% of revenues, and the increase in this income source between 2014 and 2015, RM185m, was just about equivalent to the reduction in PBT losses between the two years.

Capacity restraint with the aim of increasing yields and reducing capex is at the core of the strategy. Last year the airline cancelled 12 A330s which had been due for delivery during 2016-18, leaving two remaining A330neos on order for 2016 which will probably go to Indonesia AirAsia X and Thai AirAsia X, so the core airline will have no growth for the next two years. There are still 55 A330-900neos on order but the delivery schedule is being pushed further and further out: the first two A330neos are now slated for late 2018, then 5-8 per year up to 2026.

There was a surge in yields in the third quarter of last year, particularly on China and Australia, which seems to have been sustained into the fourth quarter, but the airline is also facing cost pressure. Particularly worrying is the upward trend in unit costs excluding fuel, up 30% in the fourth quarter compared to the same period in 2014. This is largely due to the steep devaluation of the Ringgit versus the US dollar, which has impacted A330 rentals. With no growth in the system it will be difficult for AirAsia X to manage its unit costs;

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AIRASIA X: UNIT REVENUE AND COST TRENDS



lution might be to grow outside the Malaysian base market, though Indonesia and Thailand are proving to be problematic markets, not least for regulatory reasons. The future at least partly depends on MAS itself; if its turnaround does not work out by 2017-18, the Malaysian government might well conclude that it would be a good idea for a merger to take place. This could create an MAS3.0 brand which could be politically acceptable as the MAS name would be retained, but the management of the new hybrid carrier would pass to AirAsia. Maybe the best solution for both sets of shareholders?

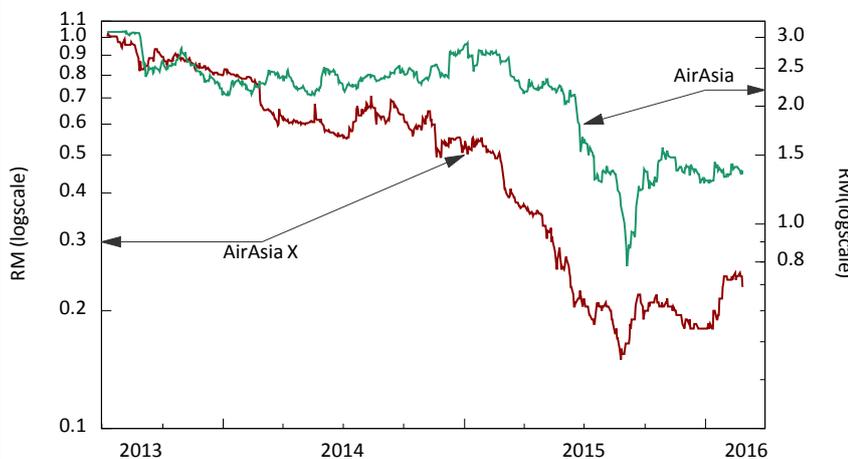
rather it plans to focus on improving yields by concentrating sales in stronger currency markets like Australia.

The other element in AirAsia X's strategy is driving connections with the rest of the AirAsia network. Currently about 56% of its passengers are connecting — 29% self-connecting and 27% paying fees for the "Fly-thru" product. Fly-thru facilitates transfers for both International to International and Domestic to International

at KLIA2, with through-baggage services. Minimum connecting time is 90 minutes though the maximum can be 18 hours. The aim is increase Fly-Thru passengers by 10% a year, hopefully avoiding the yield dilution effects of a connecting hub operation.

Looking forward, AirAsia X development is looking less like that of an LCC and more like, well, MAS. MAS's strategy is now to focus capacity on the Asia-Pacific, maintaining competitive pressure on AirAsia X. One so-

AIRASIA X SHARE PRICE PERFORMANCE



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Air France-KLM: Temporary Reprieve

S EVEN years on from the global financial crisis and Air France-KLM has finally produced a full year net income worth writing home about. For the year ended December 2015 the franco-dutch group announced net income of €118m up from a loss of €(225)m in the prior year on revenues up by 4.6% to €26.1bn. Operating profits came in at €816m (against a €(129)m loss). More importantly it is the first year since 2008 that Air France itself has managed to generate a full year operating profit.

Both Air France and KLM fell into operating loss in the year ended March 2009 in the wake of the full impact of the crisis and the oil price hike. In the following years KLM was able to produce operating profits (albeit at low margins) but Air France persistently generated losses at this level (see chart below). However in 2015 Air France published an operating result of €462m representing a near 3% margin on revenues while KLM returned €384m (a 4% margin).

The group figures for the year are admittedly distorted by comparisons with a strike-torn period in 2014 (the pilots' strike in that year is estimated to have cost the group some €425m at the operating level), inflated by non-current items such as the profits on sale of shares in Amadeus of €218m, sale of Heathrow slots (six previously-leased daily slot pairs to cash-rich partner Delta) for €230m, and deflated by unrealised currency losses of €(360)m, accounting treatment of the change in value of the hedging portfolio of €(225)m and re-

structuring costs of €(159)m. As this is all so confusing, the group helps us by stating that on an "adjusted basis" the net result would have been €220m up from a €(540)m loss in the prior year.

The headline numbers show revenues up by 4.6% to €26.1bn on the back of a 2% increase in seat capacity, a 3% growth in passenger demand (and a half point improvement in load factor to 85.1%), and a 3% nominal increase in passenger unit revenues. Total operating expenses increased by 3.4% helped by a near 7% (or €500m) fall in fuel costs to €6.2bn despite a 2.8% increase in staff costs. Unit costs (in the passenger network division) fell by 2% in nominal terms.

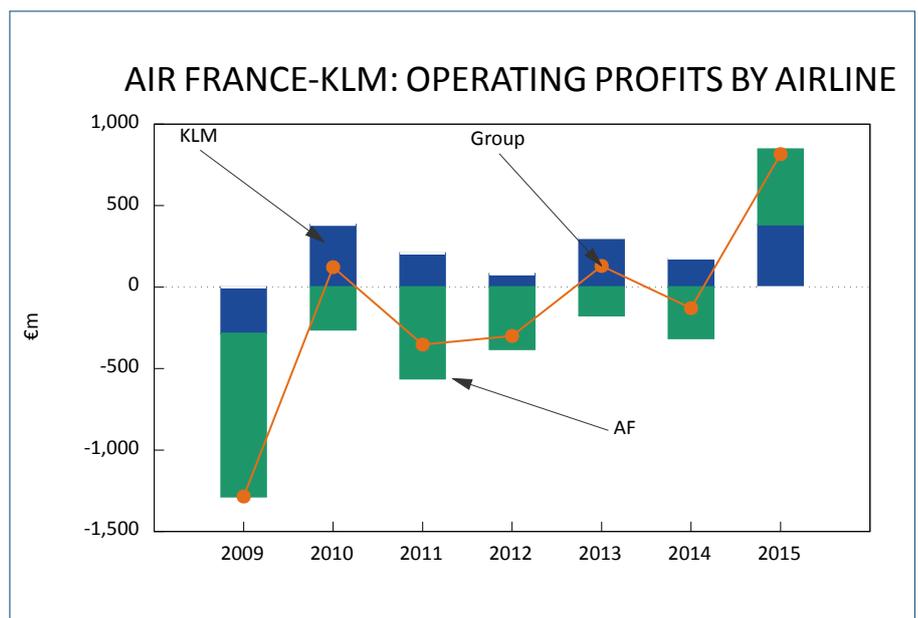
Two major macro-economic developments worked against the company in the year: foreign exchange movements and fuel.

➔ The Air France-KLM group is effectively cash flow negative in dollars and the rise in the value of the

greenback last year had a negative impact on the results. Overall 26% of revenues are generated but 36% of costs are expensed in US Dollars or dollar-related currencies. As the dollar has appreciated over the last two years the group encountered cash flow "losses" in 2015 equivalent to €178m.

➔ Although the average market price of jet kerosene fell by nearly 50% in the year (from \$908/tonne to \$527/tonne) which implies a €3bn fall in the fuel bill, the increase in the value of the dollar exchange rate and the level of group fuel hedging at out-of-the-market prices each wiped out €2.5bn of the potential saving. The management states that for the year as a whole it recovered 30% of the fall in the fuel price (or conversely gave away 70%) but that in the second half of the year recovered 60% of the decline through pricing.

The Group has marginally

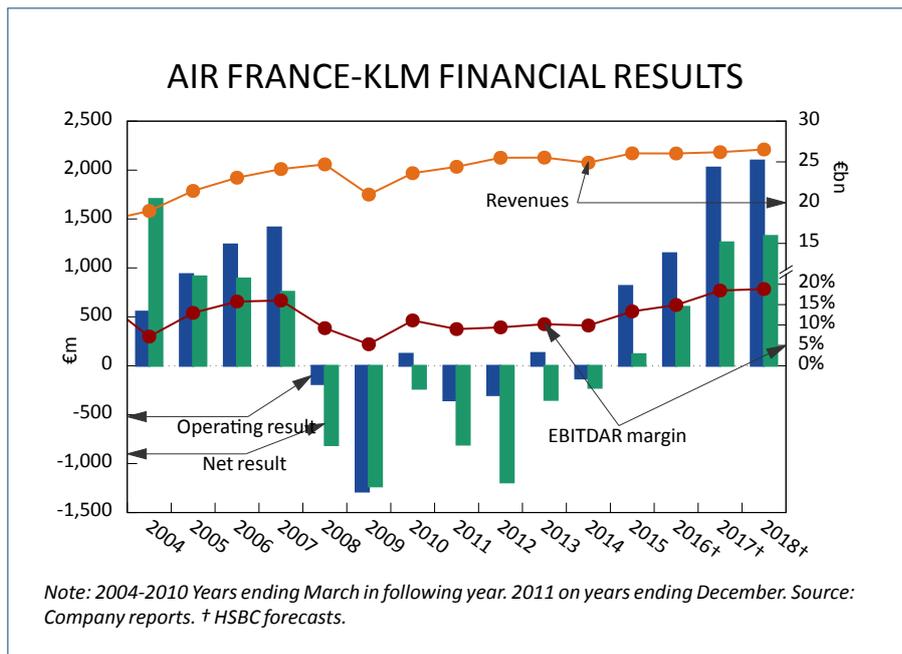


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changed its segment reporting structure. In light of its ambition to grow its LCC subsidiary Transavia it has renamed its passenger division to "Passenger Network" and separately reports results from the low cost carrier.

Furthermore in the passenger network division it is providing more detail of estimated operating profitability by type of operation (see table below). In the year to end December 2015 the group estimates that the long haul operations of the passenger network generated operating results of €1.14bn up from €740m in the prior year period; the hub operations at CDG and AMS losses of €(230)m down from losses of €(320)m and that European point-to-point services generated losses of €(70)m as against €(120)m.

Transavia, in line with the company's Transform 2020 plan, is the only airline operation in the group to see growth. Overall capacity was up by 5%, but 25% in Transavia France,



with total passenger numbers rising 9% to around 11m (up from 6m in 2011). The company has been repositioning itself in the Netherlands with charter flying down by 13% and scheduled capacity up by 17% year on year. It boasts a unit cost not too dissimilar from that of easyJet, but

with unit revenues below unit costs it again lost €35m at the operating level (a -3% margin).

Meanwhile it has made its first move out of its home markets, bravely establishing a base in Munich from March 2016 (using the Dutch Transavia AOC and *not* that of Transavia France) — a broadsword attack against Lufthansa that is either a brilliant strategic move or will attract aggressive competitive reaction as the German carrier tries to build its own low cost operation. The group has plans to continue strong expansion, building the core fleet from the current 53 737s to over 65 by 2017 by which time it expects to break even.

Among the other divisions, MRO (which benefits overall from dollar strength) and catering did reasonably well in the year respectively generating profits of €214m up by €40m year over year and €37m against €18m.

However, cargo operations suffered an increase in losses to €(245)m. The group is trying desperately to restructure the freight business, and has been disposing

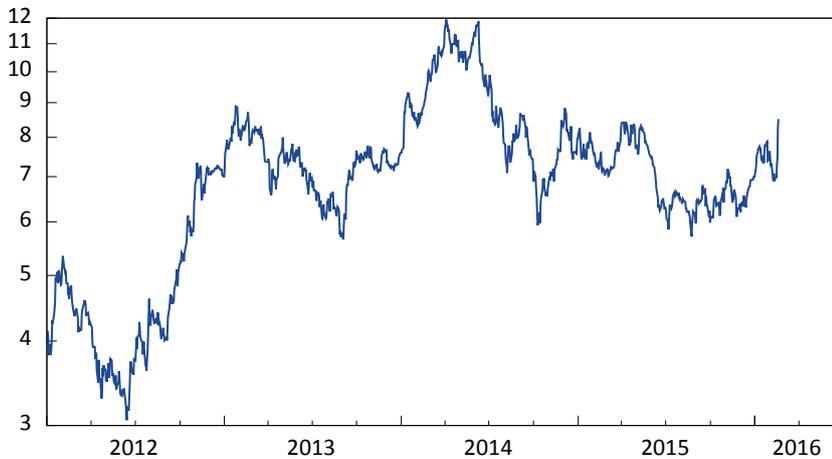
AIR FRANCE-KLM OPERATING RESULTS BY DIVISION

		€m	2013	2014	2015
Passenger Network	Long Haul		800	740	1,140
	Hub-feed		(400)	(320)	(230)
	European point-to-point		(220)	(120)	(70)
			174	289†	842
	Transavia		(23)	(36)	(35)
Cargo	Full freighter		(101)	(97)	(42)
	Belly-hold		(101)	(91)	(203)
			(202)	(188)†	(245)
	Maintenance		159	196†	214
	Catering		24	18	37
	Total Group		130	296	816

Notes. Split of Passenger Network profits are company estimates.

†2014 excludes estimated impact of strikes: Passenger network €(383)m, Cargo €(24)m, MRO €(22)m.

AIR FRANCE-KLM SHARE PRICE PERFORMANCE



of its full freighter fleet. In 2015 it reduced full-freight flying by a quarter (five freighters were phased out during the year) and total freight capacity fell by 6%. With continued weakness in the sector, no pricing power in what is a commodity business, and many competitors pricing at marginal rates or, being unhedged, fully benefitting from the fall in the fuel price, unit revenues fell by 13% on a "like-for-like" basis.

The losses on the full freight operation are stated to have halved to €(42m), implying that losses on belly-hold operations more than doubled to €(203)m (a large part of these losses no-doubt relate to the method of accounting for belly-hold capacity). The group will have reduced its full freight fleet to five units by mid 2016 and is targeting break even on the freighter operation by 2017.

On the balance sheet the group reduced net debt further (under its definition) to €4.3bn down €1bn over the year, equivalent to 3.3x EBITDAR. The net asset value on the balance sheet went positive to the tune of €225m (although this is flattered by a €600m perpetual loan and goodwill and intangibles of €1.25bn). It is prob-

ably embarrassing to recall that the NAV at the end of March 2008 stood at over €10bn.

What now?

This is one year of profit, and many elements of the group's operations appear to be going in the right direction. But the group has a long way to go to get to achieve competitiveness. Unlike the other two major network carriers in Europe it is still making heavy losses on short haul European operations.

Two of the major elements of the company's "Perform 2020" plan (see *Aviation Strategy*, September 2014) have yet to be put fully in action: negotiation of productivity agreements with the troublesome Air France unions; and a firm footing for an annual 1.5% reduction in controllable unit costs.

A renewed offer of negotiations for productivity improvements posed in January, which would have allowed a resumption of growth from 2017, seems to have been rejected out of hand (with strike threats). Recently, however, Air France won an appeal in the courts which appears to have confirmed the right of the Air France

CEO Frédéric Gagey to make strategic decisions — the pilots' union had apparently suggested that these should be overturned if less senior managers or other staff disagreed. (This surely could only happen in France.) Meanwhile, at the end of February, the Air France management started discussing with the works' council another round of 1,600 voluntary redundancies, primarily among ground staff.

At the results meeting the management did not give a huge amount of guidance, but plans continued capacity "discipline" with network airline capacity growth of around 1-1.5%, (down at Air France and up at KLM) and points to its fuel bill falling €1.5bn to €4.7bn with non-fuel unit costs down by 1%. The key for this year will be how much of the fuel benefit it gives away to passengers.

At the time of the results, group CEO Alexandre de Juniac stated "our position relative to our main rivals hasn't changed. We still need to ask for additional reforms if we want to bridge the gap in competitiveness, if we want to lower costs and be able to buy planes, hire workers and grow in a sustainable manner". The fear maybe is that they will not now be able to convince the unions quite how far those reforms have to go. From the unions' perspective, the upturn in financial performance justifies their protectionist stance.



Jetstar: the future of Qantas?

THE JETSTAR group of LCCs posted impressive results in the last financial year and it's now a key part of Qantas's brand strategy, both in Asian domestic and long-haul markets. With Jetstar's long-haul fleet now comprising 787s, how important will the LCC be to the Qantas group's international expansion over the next few years?

The Jetstar group of LCCs currently consists of four airlines — Melbourne-based Jetstar Airways, Singapore's Jetstar Asia Airways, Vietnam-based Jetstar Pacific Airlines, and Jetstar Japan. All of them are well-established; Jetstar is the largest low-cost airline in Australia/New Zealand and Japan, and the second-largest in Vietnam and Singapore.

The first carrier with the Jetstar brand was Jetstar Airways, which was launched as a low cost subsidiary of Qantas in 2003. Today it operates 71 aircraft, comprising 53 A320s, six A321s, 11 787-8s and a single Dash 8. The fleet has an average age of six years and operates to 19 domestic destinations and 14 internationally, in New Zealand, Japan, Singapore, China, Thailand, Indonesia, Fiji and the US. In its 2014/15 financial year (the 12 months ending June 30th 2015), Jetstar Airways carried 17.9m passengers, 4.3% up on the previous 12-month period.

Jetstar Japan is based at Narita and was launched in 2012 as a joint venture between Qantas and JAL, who each have a 47.5% "economic interest" in the carrier, though formally the equity is split 33.3% each

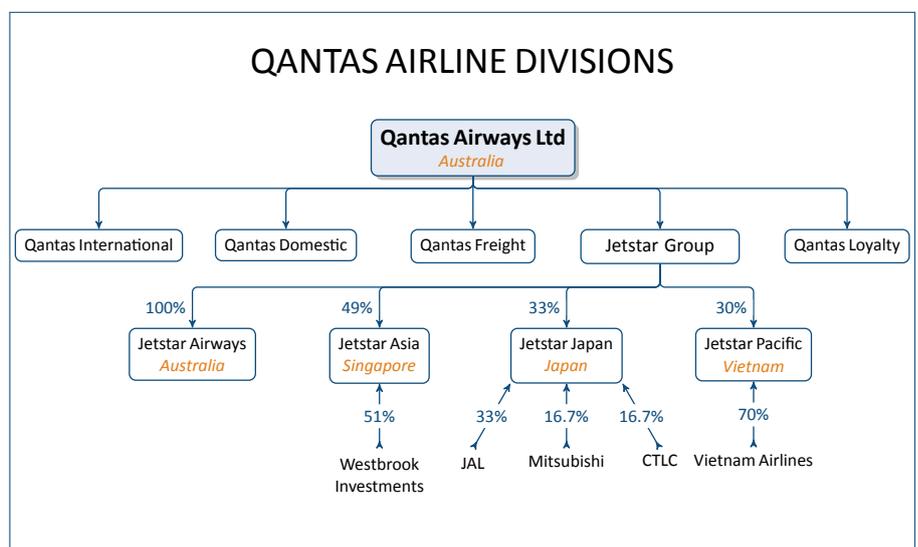
for Qantas and JAL (as this is the limit for foreign ownership in Japanese airlines), with Mitsubishi Corporation owning 16.7% and Century Tokyo Leasing Corporation another 16.7%. It operates to 11 domestic destinations and just two international ones — Hong Kong and Taipei (both started in the second half of 2015) — with 20 A320s that have an average age of just three years.

Jetstar Asia Airways was launched in 2004 before merging with rival Valuair in 2005. It operates 18 A320s (with an average age of six years) on 26 routes to 12 destinations throughout Asia. Via a holding group called Newstar Holdings, Qantas owns 49% of the airline with 51% belonging to Westbrook Investments, a company that is controlled by Singaporean businessman Dennis Choo, who also owns a major Singaporean travel agency. In the 2014/15 financial year the airline carried 4m passengers — actually a drop of 9,000 compared with 2013/14. But average stage

length rose during the year and ASKs increased by 6.8%, with load factor rising to 77.8% in FY 14/15.

Based in Ho Chi Minh City, Jetstar Pacific Airlines was formed in 1991 as Pacific Airlines, a cargo operator that was the first Vietnamese carrier to have a foreign investor. In the years after launch it had a colourful history, including nationalisation, before Qantas acquired an 18% stake in 2007, which has since risen to 30% (with the rest held by Vietnam Airlines). The airline changed its name to Jetstar in 2008 and today operates 10 A320s and two A321s (with an average age of nine years) to 17 destinations domestically and in China, Hong Kong, Thailand, Macau and Taiwan.

Altogether Jetstar's fleet currently stands at 121 aircraft, including 101 A320s, eight A321s, 11 787-8s and a single Dash-8. In terms of expansion, in August 2011 the Qantas group placed an order for 110 A320s (comprising 78 A320neos and 32 classic A320s), which according to



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Qantas “Jetstar has access to in order to facilitate its growth”. The first aircraft will arrive in the second half of 2016.

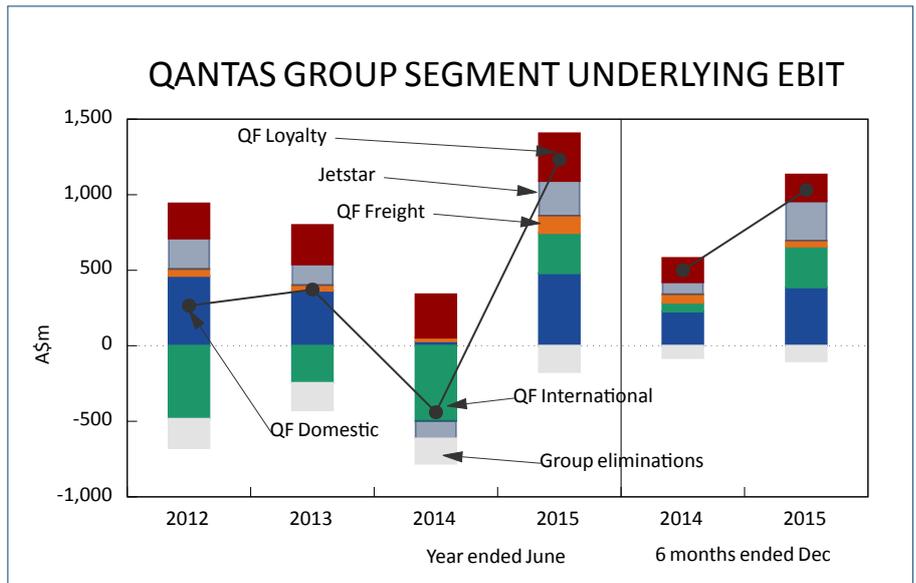
A turnaround

In FY 14/15 (ending June 30th), the Jetstar Group reported revenue of A\$3.5bn (€2.4bn), 7.5% up on FY 13/14 and based on a 3.3% rise in passengers carried to 21.8m, a 3.7% rise in Group ASKs and an increase in load factor from 77.9% to 79.9%. In the July 2014 to June 2015 period the Jetstar Group posted an underlying EBIT of A\$230m (€160m), significantly better than the A\$116m loss it posted in the previous financial year.

Qantas says the turnaround was due to:

- A 2% reduction in “controllable” unit cost at the overall Group level (chiefly excluding fuel and forex).
- Growth in yield on domestic Australian routes, thanks to better brand co-ordination with Qantas Domestic in what the group calls “stabilised market conditions”.
- New Zealand domestic routes breaking through into profitability.
- A turnaround at the Singaporean operation that improved its EBIT year-on-year substantially and broke into the black.
- The 787s driving better performance (both in terms of units cost and appeal to customers) at long-haul routes out of Australia’s Jetstar.
- Jetstar Pacific reporting a profit at the EBIT level in the second half of the financial year.
- Jetstar Japan “significantly improving” its unit revenue and cost position, helping it to reduce losses.

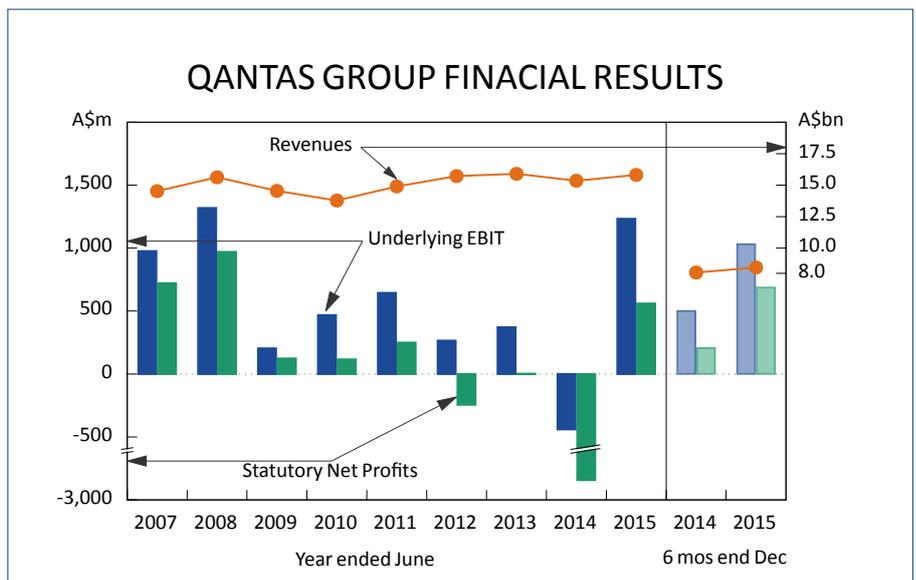
This recovery continued in the first half of FY 2016. For the six months ended December 2015 revenues were up by 8% to A\$1.9bn with a 4% growth in capacity, 7% increase



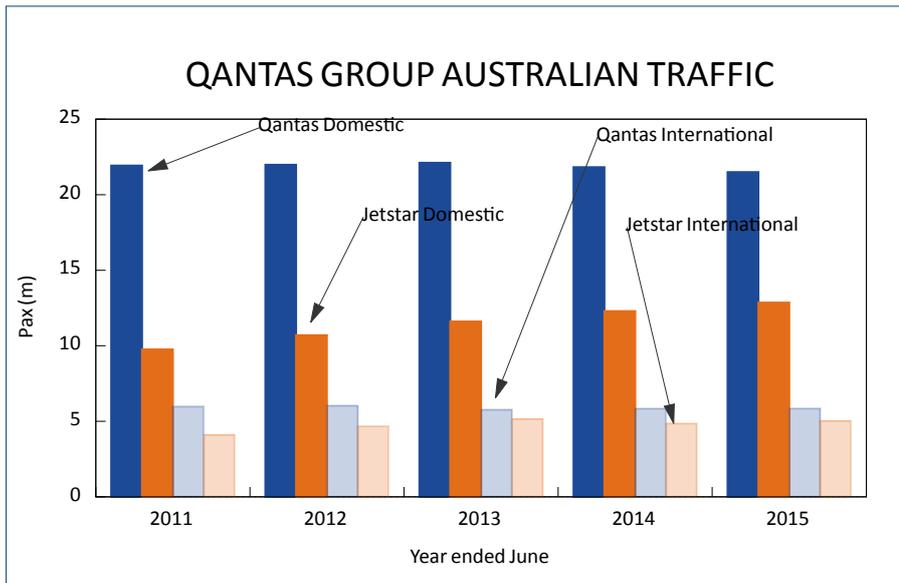
in demand and a 2 point increase in load factor to 82.2%. Unit revenues on domestic Australian routes were up by 10% year on year compounding the benefit from the falling fuel price; and the group generated a record underlying operating profit of A\$262m up from A\$81m in the prior year period — a margin of nearly 14% — despite an estimated A\$23m impact from Indonesian volcanic eruptions. Even Jetstar Japan was profitable for the first time.

At the core of the turnaround is Jetstar’s implementation of a so-

called ‘Lowest seat cost’ programme, part of a bigger cost-cutting effort called “Qantas Transformation”. For example, the Jetstar operation in Australia has reduced its controllable unit costs at a CAGR of more than 2% since FY 07/08, and this trend is likely to continue thanks to the transition of the long-haul fleet to 787s (completed in September 2015). The first of the model arrived in November 2013 (making Jetstar the first Asian LCC to operate 787s) and they have replaced ageing A330s that were sent back to parent Qantas.



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The 787s have 335 seats, are configured with two cabins (economy and business) and have transformed the economics on Jetstar's international routes. In addition, on short-haul A320neos will be introduced to Jetstar Airways from 2017, which will achieve a 15% reduction in average fuel consumption compared with the classic A320s.

Jetstar's focus in the current financial year is specific to each of the four airlines, but for the biggest carrier — Australia's Jetstar Airways — one goal is better utilisation of A320s on domestic routes, where Qantas believes its Jetstar subsidiary has already built a substantial network advantage over other domestic Australian LCCs (in particular, Tigerair Australia) based on higher frequencies in every domestic airport it operates at. For long-haul, the aim is to strengthen its brand in key markets (thanks to the new 787s), and more tightly integrate its strategy with that of its parent Qantas.

Long-haul strategy

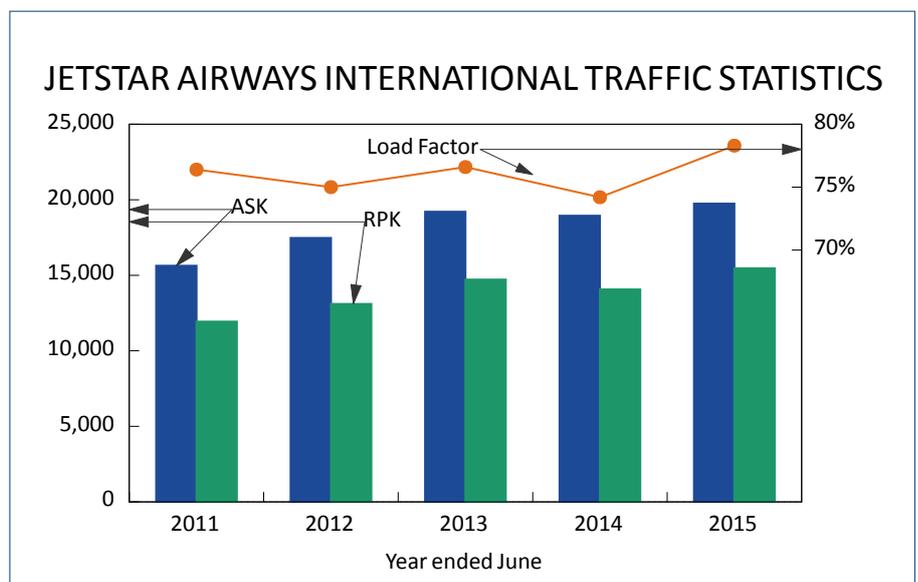
Qantas has been restructuring its own problematic long-haul operation for a while, partly by closing

loss-making routes (such as Sydney to Frankfurt) and postponing or cancelling aircraft orders. These long-haul changes have been part of a fundamental restructuring of the company under Qantas CEO Alan Joyce (appointed to the position in 2008; he had previously been CEO of Jetstar Airways since 2003) that took six years to complete — with international being a particular focus over the last three years.

In the 2014/15 financial year Qantas International realised "more than A\$400m of transformation benefits",

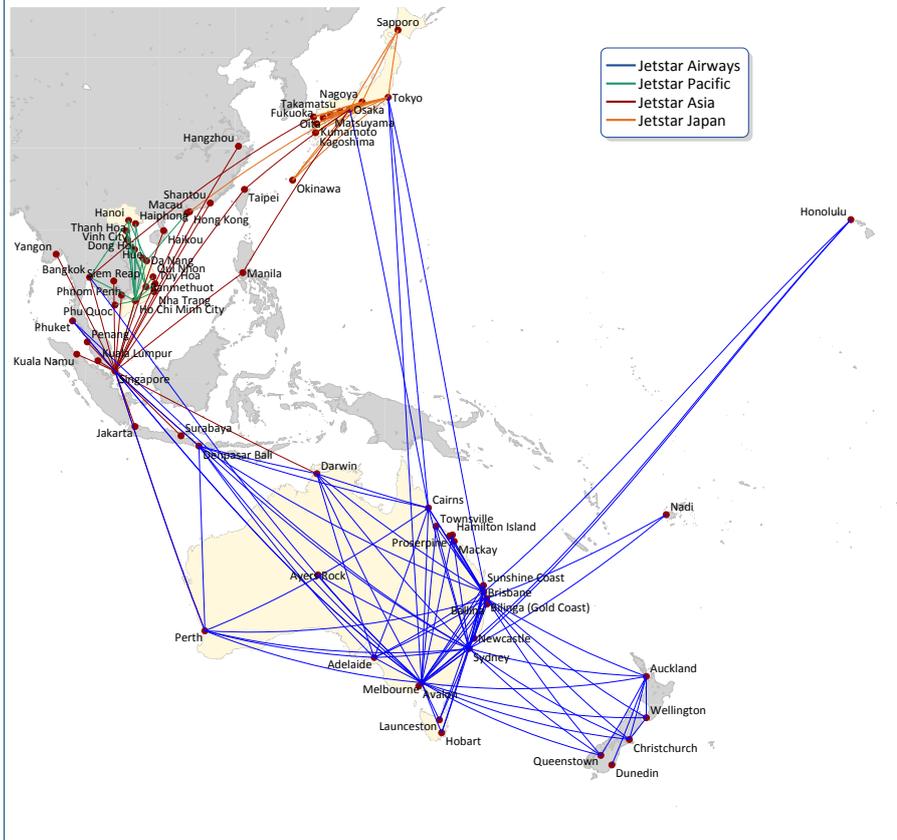
says the company, also thanks partly to better aircraft utilisation and new pay and conditions with long-haul pilots that has deliver productivity gains of around 30%. There is even evidence that Qantas may have gone too far in trimming its long-haul operation. Last summer — just a few months after completing a 5,000 reduction in its workforce — Qantas had to offer crews working on its international flights incentives to work on their days off following a shortage of staff for new long-haul routes.

Nevertheless, Qantas's international operations recorded underlying EBIT of A\$267m in FY 14/15, compared with a A\$497m loss in FY 13/14 — which was its first profit since 2008. However, part of the reason for was this was the significant fall in fuel prices as well as a lessening of competition on long-haul routes to and from Australia, the latter due partly to the weakening Australian economy and Dollar. As Joyce puts it, "the international environment that we have now is very different from the environment that we had two, three years ago. We are not going to be seeing the sort of situation we've had where we've got [up to] 10% ca-



Aviation Strategy

JETSTAR GROUP ROUTE NETWORKS



point to 83.3%. Underlying operating profits more than trebled to A\$270m.

Looking forward, Qantas's plans for long-haul are based partly around the replacement of its 747-400 fleet with 787-9s, of which it has eight on order. They will start arriving at Qantas International from the end of 2017, and a fleet of 45 is possible in the long-term if it exercises all its options and purchase rights.

In the short-term the majority of international expansion will be through the adding of new frequencies to existing destinations, and while there will be new routes that expansion will be selective. In the current year it is reallocating aircraft "in response to shifting demand": broadening its US network through its alliance with American on the Pacific (and re-opening a route to SFO last December), while putting additional services into Asia (particularly Japan, Hong Kong, Singapore and Manila).

capacity growth into the international market, and the currency is one of the big drivers of that — Australia is much less attractive place for foreign carriers to put aircraft".

Meanwhile this recovery also

continued into the current financial year. For the six months to December 2015 revenues at QF International were up by 7.5% to A\$2.95bn with capacity growth of 6.5% and an improvement in load factors of 1

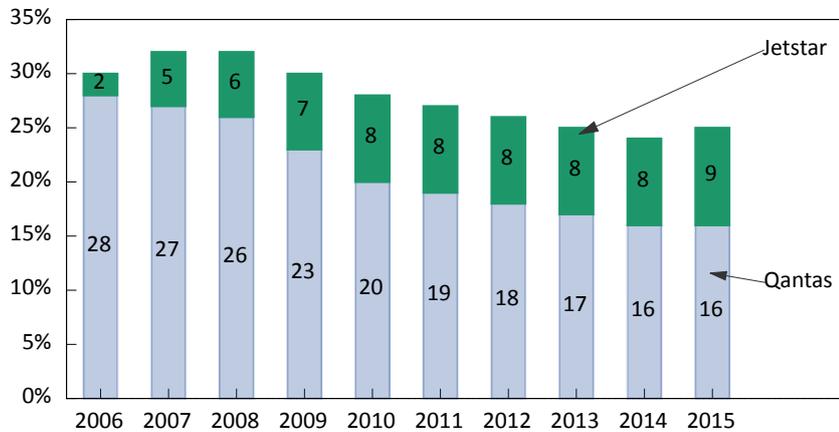
However once the 787-9s arrive this will allow Qantas International to expand on longer, thinner routes, with the smaller, more efficient aircraft enabling profitability on routes to destinations that it has previously tried and failed to make profitable in

QANTAS GROUP FLEET

	Qantas		Jetstar Group				Total	Orders	
	Qantas	QantasLink	Jetstar	Jetstar Asia	Jetstar Japan	Jetstar Pacific		2016-2020	2021-2026
717		18					18		
737-800	67						67		
747-400	13						13		
787			11				11	8	
A320			53	18	20	10	101	31	70
A321			6			2	8		
A330	28						28		
A380	12						12		8
Total	120	18	70	18	20	12	258	39	78

Aviation Strategy

**MARKET SHARES IN INTERNATIONAL MARKETS
TO/FROM AUSTRALIA**



the past — such as to Beijing. But Qantas is also eyeing new routes into US and Europe, and Joyce has cited Melbourne-Dallas (a great circle distance of 14,500km) as an example of a route where a 787-9 service could make economic sense.

Jetstar's role

Clearly Jetstar is an important part of Qantas's overall portfolio strategy, and what Qantas calls "dual brand co-ordination" has already "unlocked significant value". In Australia, the future is about building higher frequencies on long-haul destinations and leveraging the brand both ways — ie marketing campaigns that encourage even traffic flows on Jetstar routes, rather than relying on Australian travellers.

There clearly will also be international growth (and China is one market that Jetstar will increase routes to), but given Qantas International's plans for expansion once the 787-9s arrive, it's probable that the significant difference in the relative growth rates between Jetstar Airways and Qantas International seen up until now will reduce.

Over the last few years (other

than FY 13/14) Jetstar Airways' international capacity has grown much faster than Qantas's international ASKs (see chart below). As a result — and as can be seen in the chart above — Qantas's share of the international market to/from Australia has fallen substantially in the last nine years, while Jetstar's share has remained stable. So while Jetstar's domestic passengers total in Australia is significantly lower than the passengers carried by Qantas domestically in 14/15 (12.9m versus

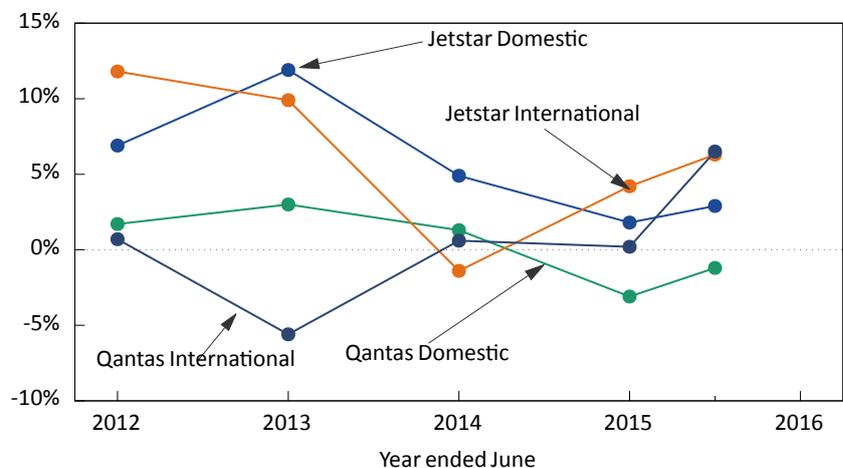
21.5m) — its international total of 5m to/from Australia is not far off Qantas's international passengers carried of 5.8m.

But Qantas International's market share is likely to rise in the future once the 787-9 expansion occurs, and so while Jetstar will also grow internationally, it will be on carefully targeted sectors.

Outside Australia, the strategy for Jetstar is to build strong "independent" airlines in partnership with local shareholders in key Asia/Pacific markets and with low levels of capex coming from Qantas. Markets defined as key are those that have high GDP per capita or high growth — and with low to medium LCC penetration. That definition clearly excludes Thailand, Malaysia, Indonesia and the Philippines (where AirAsia is dominant) but does include (other than the markets Jetstar is already in) countries such as China, Hong Kong, South Korea and Taiwan.

Qantas has long wanted to launch a Jetstar airline in Hong Kong, but efforts to gain an AOC that began back in 2012 have been thwarted at every turn, largely due to fierce objec-

YEAR ON YEAR CHANGE IN CAPACITY



QANTAS GROUP SHARE PRICE



tions by incumbent airlines Cathay Pacific, Dragonair, Hong Kong Airlines and Hong Kong Express. In June 2015 the latest attempt — made in partnership with China Eastern and a local investor — was turned down by the regulatory authorities, and in August Qantas said it was abandoning its attempt to launch Jetstar in Hong Kong, writing off the fledgling Jetstar Hong Kong business in its FY14/15 accounts at a cost of A\$21m (€15m).

With China tricky politically, South Korea and Taiwan are likely to be the focus of any attempt to launch a new subsidiary in the short-term, though Qantas believes there is still plenty of room for expansion at its existing Asian ventures.

Qantas wants to increase the fleet at the Vietnamese subsidiary, Jetstar Pacific Airlines, to 30 aircraft by 2020, but the market with the greatest potential appears to be Japan. While Qantas says Jetstar Japan has around a 60% share of the domestic Japanese LCC market, intense competition with other LCCs (which include Peach Aviation and Skymark Airlines) and a relatively high-cost environment has meant that Jetstar Japan has struggled to break even. Jetstar Japan is re-

ducing its losses, and the goal is to take an even firmer grip on the LCC market by increasing its fleet to 50 in the long-term. Joyce says that the LCC share of the total Japanese market is just 8%, so “this is a fantastic business in a market with significant future growth opportunities”.

The dual brand strategy

Qantas is unique in having successfully created a low cost subsidiary (originally perhaps as a union-bashing exercise) seemingly in direct competition with the legacy full service brand. However, the two brands are being increasingly closely coordinated with “dynamic management of capacity to optimise ... in a shifting demand environment”. Even the Jetstar Group’s Asian subsidiaries are pursuing a similar close coordination with the legacy partners in each respective country. And this certainly seems to have worked to generate superior returns in the current year.

For the six months to December the group announced a doubling in underlying operating profits to A\$1bn and pretax profits of A\$0.9bn up from A\$367m in the prior year period. As a consequence it reported an RoIC

on a twelve-month rolling basis of a stumping 22.8% (compared with its target through the cycle of 10%) and announced a A\$500m share buy back.

In the short term the group is emphasising that the Qantas and Jetstar brands provide product segmentation and superior margins: Qantas as a full service carrier concentrating on the high yield business oriented markets, maintaining network, frequency and product for a premium customer base; Jetstar with a leading low fares position in domestic and outbound Australian market and a strengthening panAsian portfolio.

In the longer run, it may be questioned whether they really need the two separate brands, whether the future of Qantas is in fact Jetstar.

Reminder

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Delta's empire building: strategic, economic and tax benefits?

DELTA is quite unique in the US industry for its post-2010 strategy of acquiring minority equity stakes in airlines around the world as part of long-term "exclusive" 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 Aeroméxico (August 2011), GOL (December 2011), Virgin Atlantic (June 2013) and China Eastern (July 2015).

Delta's investment activity on that front has intensified in recent months. In July, in addition to investing \$450m for a 3.6% stake in China Eastern, Delta helped out its cash-strapped partner GOL by participating in GOL's rights offering to the tune of \$56m, which increased its ownership stake in the Brazilian carrier to 9%. Delta also guaranteed \$300m in GOL loans secured by GOL's shares in its publicly listed SMILES loyalty programme.

In the summer, Delta also worked with the lessor Intrepid Aviation on a deal that would have given it an equity stake in Japan's Skymark Airlines, which needed a strategic partner to help it out of bankruptcy. But Delta lost that opportunity in August when Skymark's creditors voted in favour of an alternative plan backed by ANA.

In November, Delta disclosed that it was seeking to increase its stake in Aeroméxico from 4.1% to up to 49%, subject to regulatory approvals. In March 2015, Delta and Aeroméxico applied for antitrust immunity

(ATI) for a new \$1.5bn JV in the US-Mexico market, which is expected to be granted when an open skies agreement is implemented.

There have been some cases of minority cross-border investments providing significant economic benefits to the investing airline. Continental's 1998-2008 investment in Panama's Copa was such a deal. But the general thinking is that at least small minority ownership stakes tend not to offer many benefits. Many such investments have been either rescue deals or to take advantage of some rare opportunity.

In June, United spent \$100m to acquire a 5% stake in Brazil's Azul. That deal was widely expected, given the huge size and long-term importance of the Brazilian market to US carriers. With American partnered with TAM and Delta with GOL, United-Azul was a virtual certainty. And Azul needed cash, because its

IPO is now delayed probably until 2017.

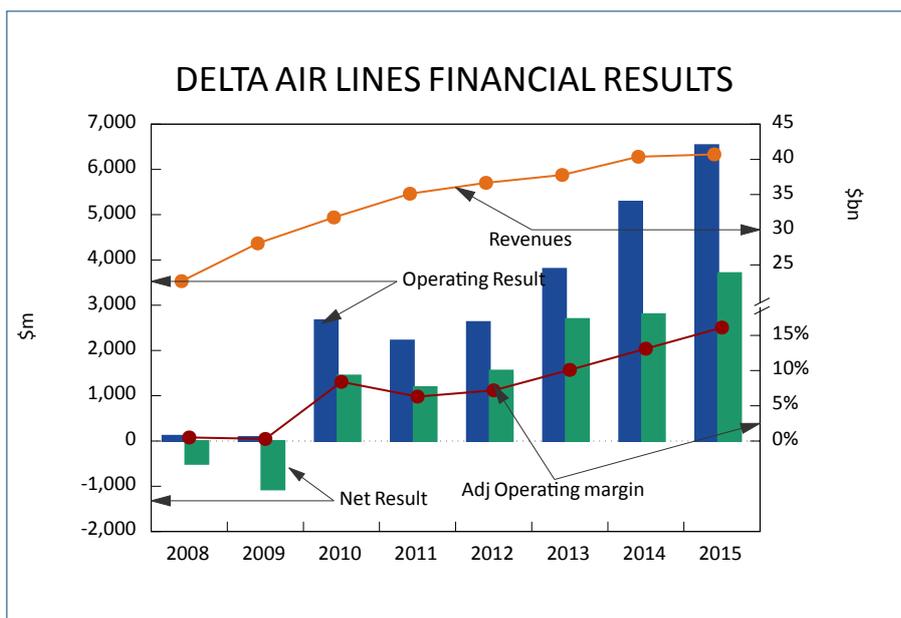
No other US airline has considered it worthwhile to pursue minority cross-border equity stakes on a larger scale. So why is Delta doing it?

The benefits of that strategy to Delta actually seem quite comprehensive. They include long-term strategic benefits, clear economic benefits and potentially even tax benefits, which can be summarised as follows:

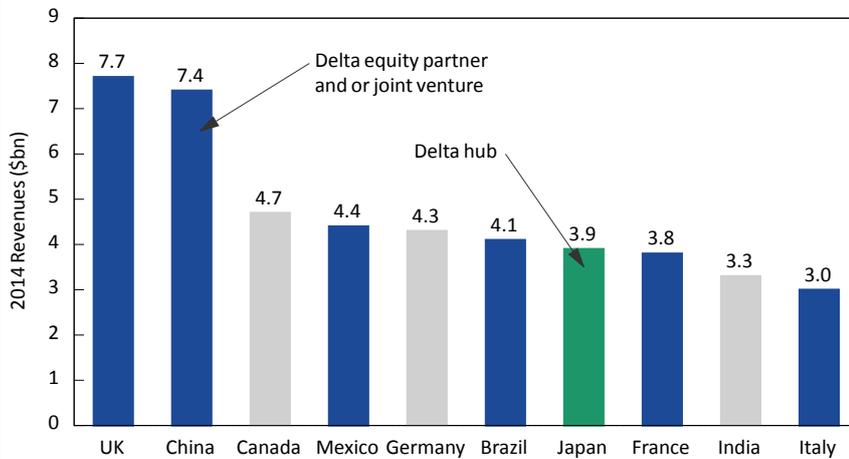
➔ Gaining access to major markets

In the first place, the China Eastern, GOL and Aeroméxico investments are aimed at securing long-term access to some of the world's largest domestic air travel markets — China, Brazil and Mexico.

Delta is talking about establishing hubs at Shanghai and São Paulo, which are its partners' home bases. Delta CEO Richard Anderson stated



TOP TEN US-48 INTERNATIONAL MARKETS



Source: Delta

hub (Japan). And the four countries where the equity investments have been made are among the top six US international markets (see chart on the left).

→ Network and revenue diversification

Delta views its international alliances, joint ventures and airline equity investments as a key part of efforts to build a geographically balanced network and diversify revenues — strategies that reduce business risk.

Delta generally puts more emphasis on diversification than its peers. For example, it acquired its own oil refinery in Pennsylvania — the Trainer facility, which is now producing profits.

→ Capital-efficient international expansion

Another reason Delta is increasingly relying on alliances and joint ventures, as noted by one of its executives: “Equity investments and commercial collaboration with global partners have allowed for capital-efficient international expansion”.

Since its Chapter 11 reorganization and merger with Northwest,

recently: “Ultimately, joint ventures will give us the foundation to build the leading US gateways to China and Brazil, including hubs in Shanghai and São Paulo with our great partners China Eastern, China Southern and GOL”.

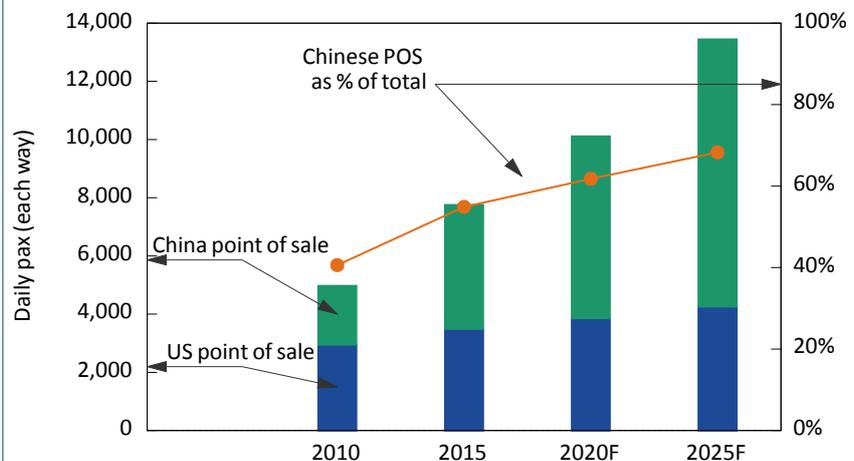
The Skymark investment would have accomplished a similar goal — gaining access to Japan’s large domestic market, as well as Skymark’s slot holdings at Tokyo Haneda. Delta is severely disadvantaged in the US-Japan market because it does not have a Japanese partner (unlike American and United, which have immunised JVs with JAL and ANA, respectively).

China is vitally important to Delta because it has surpassed Japan as the largest transpacific market from the US and because it is expected to be the fastest-growing international market in the future. Total daily US-China passengers are forecast to double between 2010 and 2020, and the proportion of passengers originating in China on the route is projected to surge from 41% of the total in 2010 to 68% in 2025 (see chart on the right). Delta said recently that China would

become the “second key pillar” in its Asia-Pacific franchise but that the China Eastern/Shanghai hub building would be a “decade-long process”.

At Delta’s latest investor day in December 2015, the executives noted that Delta is now “well-represented” in seven of the top ten US international markets, meaning that in those seven markets it either has equity stakes in local carriers (UK, China, Mexico and Brazil), an important JV partner (France and Italy) or a

US-CHINA DAILY PASSENGERS BY POINT OF SALE



Aviation Strategy

Delta has adopted very conservative spending and balance sheet management policies by most airline standards. Despite having a relatively old fleet, Delta has kept fleet capex to a minimum and sought to maximise free cash flow, which it has used to deleverage the balance sheet and reward shareholders.

Delta has also led the industry in keeping capacity growth restrained. In the spring of 2015, anticipating difficult conditions in international markets, it was the first to move to cut international capacity growth this winter.

In the fourth quarter, Delta's international ASMs fell by 4.5%, which included a steep 11% capacity reduction on the Pacific and small 1% and 0.5% reductions on the Atlantic and Latin route areas, respectively. The biggest cuts were in challenging markets such as Japan, Brazil and Russia, while key strategic markets such as China and Mexico continued to see growth.

Delta currently expects its system capacity to inch up by only 0-2% in 2016, but international ASMs would be flat-to-down 2%. Growth will focus on markets with strong demand (US domestic, UK, Mexico and the Caribbean), with offsetting reductions in weaker markets (Brazil, Japan, Middle East).

Relying on alliances and joint ventures fits in perfectly with those strategies. For example, in the US-UK joint venture, growth in 2015 (about 10%) was led by Virgin Atlantic, which reallocated aircraft from its lossmaking Asia/Pacific and Africa networks to the transatlantic market.

➔ Healthy profit contribution

While exact financial figures are not available (treated as confidential information in the case of the joint ven-

tures), the public comments made by Delta's management indicate that the two transatlantic joint ventures are highly profitable.

Delta has noted in every quarterly call in the past 12 months that the JVs with AF-KLM and Virgin Atlantic have allowed it to continue to expand transatlantic profit margins despite a challenging environment. Many of those markets have seen significant currency pressures, reduced fuel surcharges and excessive industry capacity growth.

The JV with AF-KLM benefits from being the oldest and probably the most deeply integrated of the transatlantic alliances. The JV has 25 aircraft devoted to it and achieves double-digit profit margins.

The Virgin Atlantic deal, which involved Delta buying SIA's 49% stake for \$385m, has fixed Delta's Heathrow access problem and made it a credible player in the important New York-London business travel market. Thanks to the JV and other initiatives (new JFK terminal, LaGuardia facility improvements and expansion, slot swaps, etc) Delta made its first profit in New York in 2014.

Delta's management said recently that the \$385m investment in Virgin Atlantic in 2013 produced about \$150m of cash returns in 2015 and would achieve full cash payback by the end of this year. It is producing a "minimum 50% return on investment". The executives described it as "probably the single best investment we've made in terms of our returns".

It is worth recalling that three years ago many in the financial community were sceptical of the value of the Virgin Atlantic stake purchase. At that time Virgin was losing money to the tune of \$150m annually. Delta's initial projection had been

only \$120m annual run-rate benefits when the JV was fully developed.

This year, Delta is bringing Virgin Atlantic to its technology platform, meaning that Delta will operate Virgin's reservations system. The airlines expect it to result in a seamless customer experience.

The success of the transatlantic JVs has given Delta the confidence to seek similar deals elsewhere. The management has said that the carrier is using those JVs as the model for deepening relationships with partners in other regions.

The Aeroméxico and GOL alliances are already contributing materially to Delta's revenues — a combined \$33m incremental revenue contribution in last year's Q1 and \$25m in Q2. But it is still early days; neither deal yet benefits from an open skies agreement or ATI.

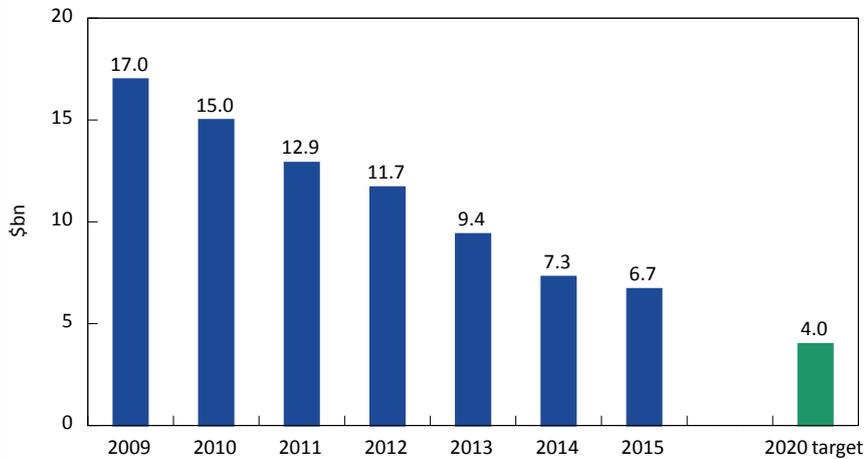
Delta expects this year's planned \$750m additional investment in Aeroméxico to be even more lucrative, with "quick and immediate return", given Mexico's relatively robust economic fundamentals and Aeroméxico's strong market position. But, like the GOL and China Eastern investments, it is a long-term project (more on it in the last section of this article).

➔ Long-term cost savings

Delta also hopes that the Aeroméxico and GOL investments, in particular, will facilitate cost reductions in the long-term.

In the first place, savings are derived through a joint-venture MRO facility that Delta and Aeroméxico opened in Querétaro, Mexico in March 2014. The airlines disclosed in 2012 that they had invested \$50m to build the facility, which Delta said would "usher in lower maintenance costs" without compromising quality.

DELTA'S ADJUSTED NET DEBT



Note: Debt and capitalised leases less cash and short-term investments.

✈️ Potential tax savings

For many years Delta, like most of its US peers, has been able to avoid paying federal corporate taxes by utilising its net operating losses (NOLs) accumulated during earlier loss-making years. But thanks to a recent string of record profits, Delta expects to exhaust its NOLs by 2018 and become a full taxpayer that year.

In the US the statutory federal corporate tax rate is relatively high, at 35%, and most airlines pay about 38% — the book rate that Delta has been using. But many European countries have much lower corporate tax rates, typically in the low-to-mid 20s.

At the 2014 investor day, Delta hinted at the possibility that it could obtain tax savings in the future by taking advantage of its international JVs. It could set up a foreign subsidiary for those activities in a country with a lower tax rate.

CEO Richard Anderson remarked at that time that “Amsterdam is a good place”, as Delta has large JVs that are euro-denominated, a 49% stake in a London-based airline and already a large commercial office in

Amsterdam for joint venture pricing and yield management. The corporate tax rate in the Netherlands is 25%.

At the latest investor day, Delta commented on what it described as a “transatlantic business reorganisation”. It has involved expanding the Amsterdam office, which now handles all decision-making for Delta’s transatlantic operations. The purpose is to improve the effectiveness of the JVs and accelerate the benefits. “Strong local brands require local decision making capabilities”, the airline said. The executives indicated that similar moves might follow in other parts of the world.

“That structure is going to allow us to make sure that international component is international”, the airline said. As a result, Delta expects its 2016 book tax rate to be 35-36%, down slightly from the 37-38% up to 2015. It is one way to lower book and cash taxes, supplementing the more common methods such as accelerated depreciation and excess pension funding.

Strong financial position

Last but not least, Delta is buying the equity stakes in other carriers because it can easily afford such investments. As an additional plus point, the financial community is not complaining.

Delta was fortunate in that it had a multi-year head-start over United and American on the merger front. It completed a successful merger with Northwest in 2008 and accomplished a quick and smooth integration. So it was able quickly to reap the benefits of the merger and achieve stellar profitability.

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. And Delta is now also claiming that its financial metrics rank among the top 10% of S&P industrials.

In the past six years, Delta has earned \$13.4bn in aggregate net profits before special items. That includes a \$3.7bn ex-item net profit in 2015. Annual operating margins are now in the high-teens. And Delta earned a ROIC of 28.3% in the 12 months to December 31.

The long term targets outlined by Delta in May 2015 are to deliver annual EPS growth of at least 15%, achieve a ROIC of 20-25% and generate annual operating cash flow of \$7-8bn, of which \$4-5bn would be free cash flow.

The equity investments in other airlines are a small part of what Delta calls a “balanced capital deployment”. First of all, Delta is reinvesting about 50% of its operating cash flow in the business. That includes investing \$2.5-3bn annually into fleet, products, facilities and technology.

Second, Delta continues to strengthen its balance sheet. Having reduced its adjusted net debt by more than \$10bn since 2009, from \$17bn to less than \$7bn, the airline is on track to reach its target of \$4bn in net debt by 2020 (see chart on the previous page). Annual interest costs with \$4bn net debt will be around \$200m, down \$1.1bn from the 2009 level.

On February 11 Delta achieved its long-term goal of becoming investment grade when Moody's upgraded the company's debt rating from Ba3 to Baa3. Delta joined a very exclusive club; in North America, only three other airlines — Southwest, WestJet and Alaska — currently have investment grade credit ratings. It must have been particularly gratifying for CEO Richard Anderson, who is retiring in May.

Third, having returned nearly \$4bn of cash to shareholders since 2013, Delta has announced a new \$5bn share repurchase programme to be completed by the end of 2017.

Last year Delta returned 70% of its free cash flow to shareholders, which was well above its 50% target. With an estimated \$3bn fuel tailwind in 2016 (at the \$40/bbl price), the airline expects to "vastly exceed" the long-term financial goals this year.

Delta is also committed to funding its pension plans to the tune of \$1bn annually. It has a generous employee profit-sharing programme in place. In mid-February Delta made a \$1.5bn employee profit-sharing payment for 2015, which it claimed broke all records of corporate profit sharing payouts in the US.

Delta is also taking steps to improve wages. It has granted its ground workers and flight attendants a 14.5% base pay increase, effective from the beginning of December. However, as

a setback, Delta's pilots failed to ratify a new contract in the summer, as a result of which Delta decelerated its already slow fleet renewal; it dropped a tentative order for 40 smaller narrowbodies (including 737-900ERs) and opted to keep 14 of its aging 757-200s.

However, in December Delta unexpectedly reinstated a big part of that order, saying that it would add up to 20 Boeing-held E190s and 20 new 737-900ERs. This time, the order is not contingent on a pilot deal. "We're not going to limit our growth opportunities", the executives said, pointing out that the new deal also had "more compelling economics".

In short, Delta is generating enormous cash flow and doing a decent job in deploying it in an equitable and balanced fashion. It can be expected to continue acquiring stakes in airlines around the world, given the relatively modest outlays involved, the capital-efficient nature of such expansion, the healthy profits generated by such ventures and the likely tax benefits derived from having assets based outside the US.

The next moves?

Asia could be an area of special focus for Delta. China Eastern was a good start, but Delta could do with more partners in that vast and important region. The management has reportedly talked of the possibility of strengthening the existing partnership with Korean Air.

But the Latin American ventures will also keep Delta busy in the near term, because the impending open skies agreements will make it possible to greatly strengthen the relationships with GOL and Aeroméxico.

However, uncertainties abound. The US-Brazil open skies agreement was supposed to take effect in Octo-

ber 2015, but its ratification by Brazil has been delayed evidently due to the political and economic turmoil in that country. Nevertheless, Delta executives said recently that they expected open skies to come into force in 2016 and that Delta and GOL would file for ATI "shortly thereafter".

The financial assistance that Delta provided to GOL in the summer (the additional stake purchase and loan guarantee) facilitated an extension of the carriers' exclusive codeshare agreement. Although the main upside may be in the long term, one would expect an immunised JV to help both carriers in the current tough market conditions on Brazilian routes.

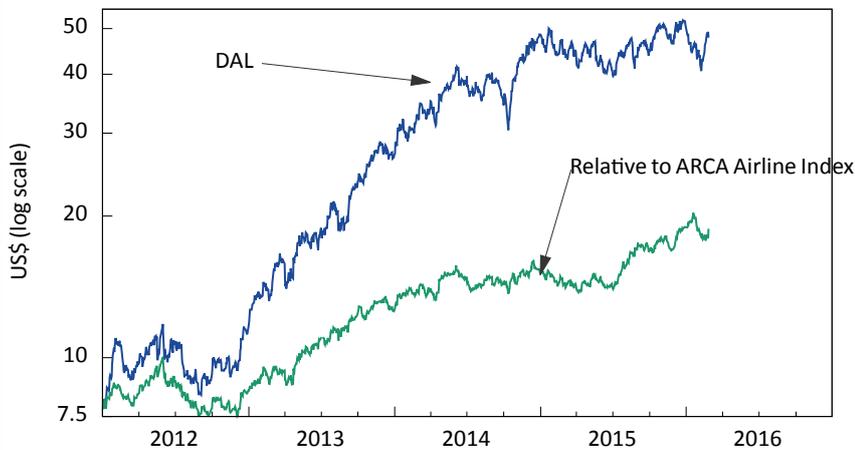
In recent weeks, the three main rating agencies have all raised concern about GOL's ability to meet its financial obligations in the next 12-18 months, given its continued cash burn due to Brazil's economic crisis. Moody's and Fitch have both downgraded GOL's ratings and S&P has placed it on "creditwatch negative". Also, the Brazilian government is considering granting President Dilma Rousseff emergency powers to waive the current foreign ownership limits on airlines on a case-by-case basis.

So Delta might be called to help out its partner again. Back in December, Delta executives noted that the next two years would be tough in Brazil, that the GOL investment was for the longer term and that this was a good time to invest in Brazil. They said that they were working with GOL's leadership in "building a durable model, so that 24 to 36 months from now you're going to see some significant returns from that investment".

Delta is going after Aeroméxico really aggressively with its November proposal to increase its ownership

Aviation Strategy

DELTA SHARE PRICE PERFORMANCE



only a “6% operating margin business today”.

Delta executives stated at the investor day: “We feel relatively confident, just as we’ve done with Virgin, that with our know-how, our investment and our co-location of resources, that we can double those margins over the next 3-5 years. And that’s going to provide a very nice return on that capital investment”.

Delta may be forgetting something. Mexico has a vibrant LCC sector, with the three leading LCCs accounting for 63% of Mexico’s domestic traffic (and therefore having pricing power) and 41% of international traffic to and from Mexico (July 2015 DGAC data). The high level of LCC competition is one reason why Aeroméxico’s operating margins are lagging. The LCCs have done a lot to develop the domestic market and will fight tooth and nail to retain their market shares. That said, Aeroméxico could still be a successful investment for Delta.

stake from the current 17% (including Delta’s 4.1% stake, options and Delta pension trust’s holdings) to up to 49% through a cash tender offer, which it hopes to commence in the June quarter. It would be a \$750m cash deal.

It would solidify Delta’s position in what is the largest US-Latin America market and one of the region’s stronger economies. On December 18, the US and Mexico signed a more liberalised ASA, which will become effective once Mexico ratifies it. Delta has also suggested that an open skies agreement could be ap-

proved in 2016. The JV would make Delta/Aeroméxico the number one airline system on US-Mexico routes.

But Delta also believes that Aeroméxico will be an even more lucrative investment than Virgin Atlantic because Aeroméxico has a substantial domestic marketplace. Mexico is a “neighbour country with a marketplace that is still relatively underdeveloped”, and Aeroméxico is the “flag carrier with a number one slot position [in slot-constrained Mexico City] much like BA at Heathrow”. Yet, Aeroméxico is

By Heini Nuutinen

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Aviation Strategy

Boeing and Airbus orders 2015

AIRBUS beat Boeing in the annual PR race for orders in 2015. In the year it achieved announced net sales of 1,036 aircraft (after allowing for cancellations and conversions) down from 1,456 in 2014 compared with the Seattle-based manufacturer's 769 (half the previous year's 1,432). Total industry net orders are estimated to have totalled 2,193 in the year down from a

peak of 3,698 in 2014.

Airbus gained from two particularly large orders in the narrowbody segment. Indigo, the Indian LCC, put in an order for 250 A320s and Wizz Air for another 110 of the type. Total A320 orders (neo and ceo) amounted to just short of 900 units. On top of this were net orders for 140 A330s, net cancellations of 3 A350s and a mere net two new A380 orders.

DELIVERIES 2015

Boeing			Airbus		
Type	No.	Rate†	Type	No.	Rate†
737	495	41.2	A320	491	40.9
767	16	1.3			
777	98	8.2	A330	103	8.6
787	135	11.2	A350	14	1.2
747	18	1.5	A380	27	2.2
Total	762		Total	635	

† per month

Boeing Orders 2015

Customer	737		767	777	787	747	BBJ	Total	
	NG	MAX							
Asia/Pacific	Air Tahiti Nui				2			2	
	ANA	5			3			8	
	EVA Air			7	18			25	
	Korean Air		30	7				37	
	Qantas				5			5	
	Ruili Airlines		30					30	
	Silk Way Airlines						3	3	
	SilkAir		6					6	
	Sriwijaya Air	2						2	
	Virgin Australia		4					4	
Asia/Pacific Total	7	70		14	28	3		122	
Europe	AirBridgeCargo					2		2	
	Enter Air		1					1	
	Jet2.com	30						30	
	Norwegian				19			19	
	Ryanair	3						3	
	Swiss Global				3			3	
	TUI Travel				1			1	
	THY		10					10	
Europe Total	33	11		3	20	2		69	
Latin America	Air Austral				2			2	
	COPA		51					51	
	GOL		9					9	
Latin America Total		60			2			62	
Middle East/Africa	EL AL				3			3	
	Ethiopian				6			6	
	Ethihad			2				2	
	Oman Air		20					20	
	Qatar				14			14	
Middle East/Africa Total		20		16	9			45	
North America	Alaska	6						6	
	Atlas Air					1		1	
	Delta	20						20	
	FedEx			49				49	
	United				10			10	
North America Total	26		49	10		1		86	
Lessors	AerCap		100					100	
	ALC		8					8	
	BOC	13	11					24	
	GECAS	2						2	
	SMBC		10					10	
	Lessor Total	15	129						144
	Business Jet/VIP	2	2		2		1		7
	Unidentified	151	117		15	38			321
US Navy	13							13	
Gross Orders	247	409	49	58	99	6	1	869	
Cancellations / Conversions		(68)			(28)	(4)		(100)	
Net orders	588		49	58	71	2	1	769	

Airbus Orders 2015

Customer	A320		A330	A350	A380	Total	
	ceo	neo					
Asia/Pacific	Air New Zealand	2				2	
	AirAsia	(9)	9				
	ANA	4	3			7	
	Asiana		25			25	
	Indigo		250			250	
	Korean Air		30			30	
	Lion Air	(9)	9				
	Peach Aviation	3				3	
	Philippine Airlines	(10)	12			2	
	SIA			4		4	
	Tigerair	(2)	2				
	Vietjet Air	15	21			36	
	Asia/Pacific Total	(6)	361		4		359
	Europe	Acropolis Aviation		1			1
Aer Lingus				2		2	
Atlantic Airways		1				1	
British Airways			15			15	
Croatia Airlines		(4)	4				
easyJet		6	30			36	
Groupe Dubreuil				1	1	2	
Iberia			20	5	8	33	
Lufthansa		(1)	1				
TAP			39	14		53	
THY			20	4		24	
Vueling		15			15		
Wizz Air	(10)	110			100		
Europe Total	(8)	255	26	9		282	
Latin America	Avianca		100			100	
	Latin America Total		100			100	
	Middle East/Africa	Isair	1				1
Middle East Airlines				1		1	
Rwandair				2		2	
South African Airways				5		5	
Middle East/Africa Total		1		8			9
North America	Frontier Airlines	12				12	
	North America Total	12				12	
Lessors	ALC	3	30	26	1	60	
	ACG		1			1	
	Avolon	4				4	
	BOC Aviation	3		2		5	
	CALC	2				2	
	CASC			30		30	
	CIT	5				5	
	GECAS		60			60	
	IAC	30		20		50	
	Standard Chartered			2		2	
	Lessor Total	47	91	80	1		219
	Private Customer	1	4	2			7
Undisclosed	13	50	27	2	3	95	
Gross Orders	60	861	143	16	3	1,083	
Cancellations	(13)	(11)	(3)	(19)	(1)	(47)	
Net Orders	47	850	140	(3)	2	1,036	

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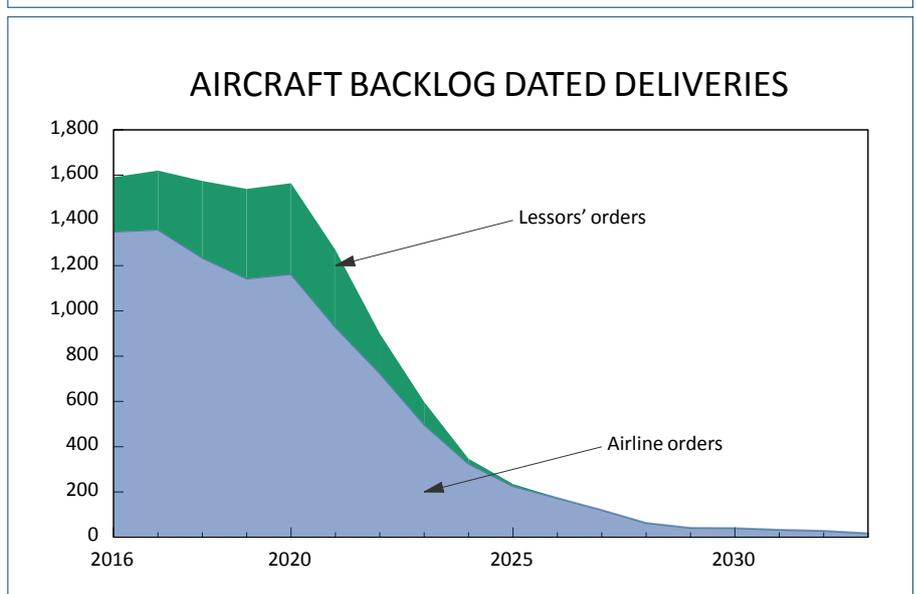
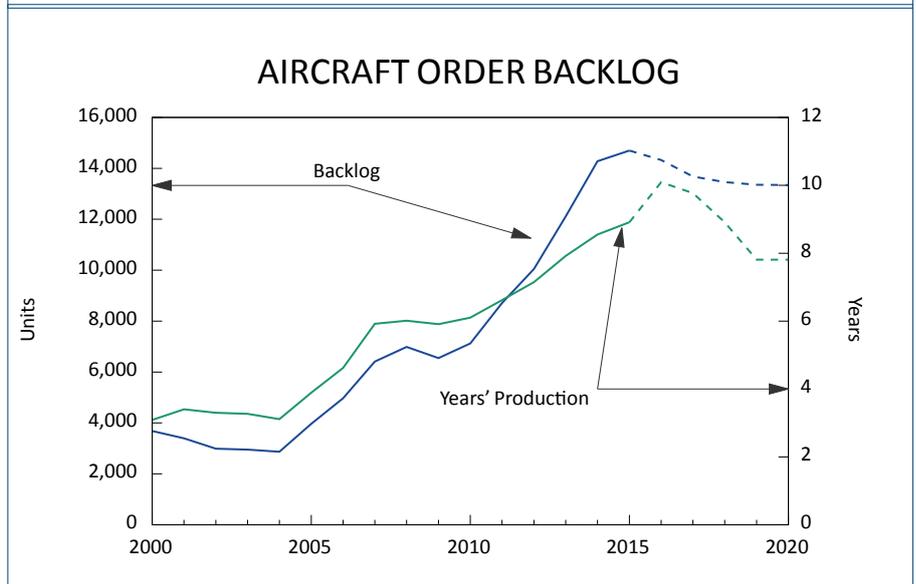
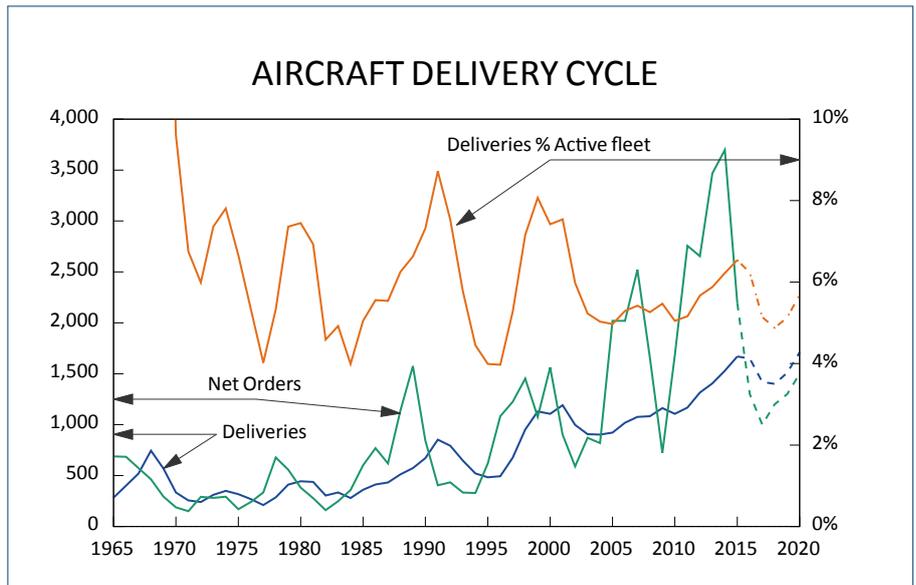
Boeing meanwhile received net new orders for 588 737s, 49 767Fs (from FedEx), 58 777s (including ten each from Qatar and United) and 71 787s.

On deliveries however, Boeing outshone Airbus with an overall production of 762 aircraft against 635. On narrowbodies the two were evenly matched delivering 495 737s and 491 A320s respectively (equivalent to around 40 aircraft a month each).

Overall, the outstanding industry backlog is estimated at nearly 14,700 aircraft to be delivered from 2016. This is up by 400 units from the end of 2014 and represents some nine years of current production. The backlog schedule of deliveries suggest production levels of around 1,600 aircraft a year for the next four years.

In February the doyen of equipment forecasting, Ed Greenslet, published his *Airline Monitor* update of long term projections. Controversially, he has brought forward his expectation of the next industry downturn from 2021 to 2018, adding in an assumption that with low oil prices there will be a lower rate of retirement of older equipment, and that the combination of slower growth in China, collapse in commodity prices and US Dollar strength will have a material impact on demand.

As a result, his new forecasts suggest that 2015 will be the peak for aircraft deliveries in this cycle. Moreover he is suggesting that total deliveries over the next few years may be less than those suggested by the order backlog, implying that the manufacturers' plans to build production rates (particularly of the narrowbodies) may be mistaken.



Source: Airline Strategy, Airline Monitor (airlinemonitor.com/)

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