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Emirates: Entering a new era

Having suffered a shock in 2016/17 when its profits slumped, Emirates, partly out of necessity, reined in capacity expansion this year. As a result, profits have recovered, though its margins are still modest in comparison to double digit rates it has achieved in the past.

Overall capacity, passenger and cargo, during the first six months (April-September 2017) of the current financial year to end March 2018 increased by just 2%. Emirates launched only two new routes, to Zagreb (Croatia) and Phnom Penh (Cambodia). ASK growth was limited to 3%, while RPKs were up 5%, which meant that the passenger load factor improved to 77.2%, compared with last year's 75.3%. This, however, is still some way off the near 80% load factors that Emirates used to achieve.

On the other hand, we estimate that overall unit revenues rose by 6.4% during the first half, which, if reflected in the full year results, will reverse a long-term trend for Emirates. Unit costs appear to have edged up by about 2% during this period, largely due to an 11% increase in the price of fuel.

Emirates' revenue (the airline, not the group) including other operating income totalled AED44.5bn ($12.1bn), up 6% compared with AED41.9bn ($11.4bn) for the same period last year. Net profit was reported as AED1.7bn ($452m), over twice the result last year. The profit margin was 3.7%, compared to a low of 1.7% last year, but nowhere near the 10%-plus margins Emirates has reported in the past.

Emirates is operating in increasingly challenging economic and political environment. Dubai is part of regional embargo against its neighbour Qatar; there is the possibility of instability, or much needed reform, in Saudi Arabia; and oil production is only now edging up again. The UAE's GDP growth in 2017 is going to be a very modest 1.3%, though forecasts from the World Bank and IMF suggest a rebound to 3%-plus in 2018.

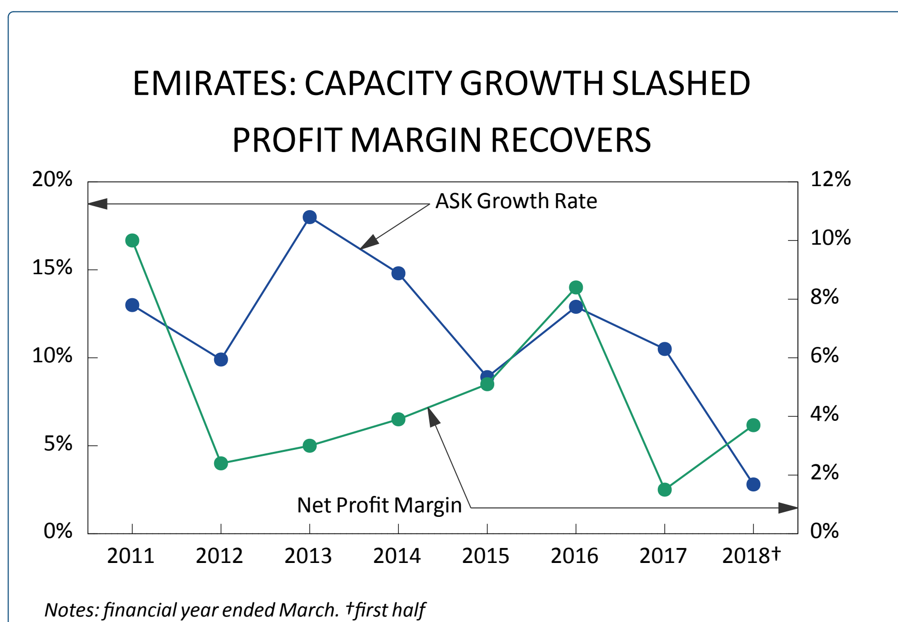
The airline has suffered from the US Administration's new policies on carrying onboard electronic equipment (now rescinded) and its proposed restrictions on travel from certain Muslim countries. The initial impact was a 15% fall in demand on US routes, and a consequent reduction in services. Emirates still has not restored its 2016 frequency levels to Seattle, Boston and Los Angeles.

Now the US government is contemplating imposing corporation taxes on airlines that fly from countries to which US passenger airlines serve two or less times a week. It

This issue includes

Page

Emirates and the A380 1
North Atlantic: Disruption potential 5
Vietnam Airlines, VietJet and the world's fastest growing economy 7
American: Playing the long game 13
Jet values and lease rates 18



Notes: financial year ended March. †first half

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Publisher:

Keith McMullan
James Halstead

Editorial Team

Keith McMullan
kgm@aviationstrategy.aero

James Halstead
jch@aviationstrategy.aero

Tel: +44(0)207-490-4453

Subscriptions:

info@aviationstrategy.aero

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Aviation Strategy Ltd
Registered No: 8511732 (England)
Registered Office:
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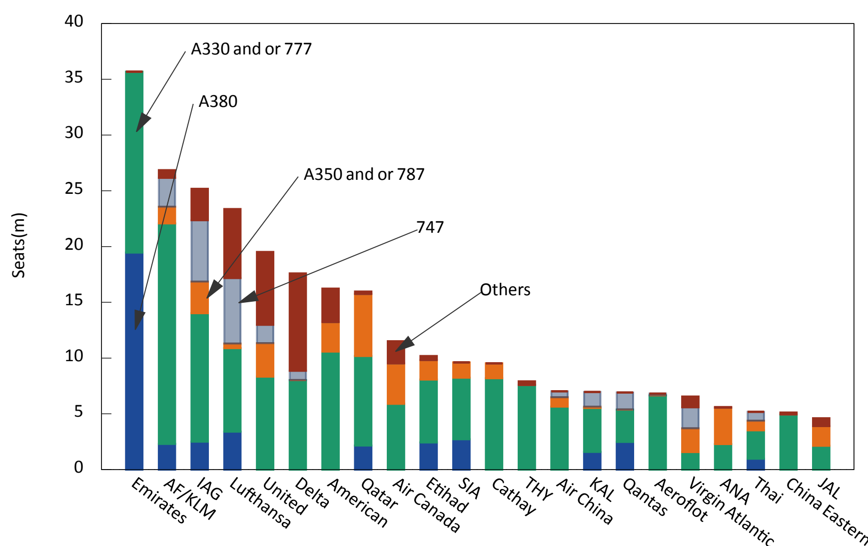


must have taken a high degree of creativity to come up with this rule which neatly captures the three Middle East super-connectors, without naming them explicitly (which would be discriminatory).

Also, the EU is becoming more protectionist and gaining new routes in France and Germany is going to be difficult.

Sir Tim Clark, Emirates CEO, remains, as normal, upbeat about the near future, and, interestingly, identifies the development of long-haul LCCs as being the big issue for 2018. In July, the airline announced a “partnership” with flydubai, the LCC which like Emirates is owned by the government’s Investment Corporation of Dubai. It is unclear as to how this will work in practice — the press release talked about “*leveraging both airlines’ complementary networks to open new city-pair routings for customers*”.

Although the airline’s official line is that its growth potential remains huge, faced with this uncertainty — Sir Tim Clark has stated that he expects “traumas” on a monthly rather than an annual basis — it seems very likely that Emirates’ era of super-growth is over. This is not necessarily a negative — like Ryanair it has completed a “land grab” and now can focus on placing capacity where it earns maximum returns. Indeed, looking at the chart on the preceding page, there does appear to be a tentative inverse relationship between Emirates’ annual capacity growth and profitability.

From this perspective, Emirates’ last-minute refusal to agree a new contract with Airbus at the November Dubai airshow is less surprising. Emirates had been expected to place an order for 36 A380s valued at around $7bn (our estimate rather than the widely quoted $15bn, which was based as usual on artificial list prices).

Reportedly, Emirates demanded a guarantee that Airbus would maintain A380 production for 10 to 15 years after it received the last of its current orders; in turn Airbus demanded that Emirates accelerate deliveries to fill the empty slots after 2019, but Emirates’ priority is to re-

A380s IN SERVICE

	Year of build													
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	Total
Emirates		2	1	4	3	5	7	11	15	13	16	18	5	100
SIA		2	2	3	3	3	4	1						18
Lufthansa					1	7	2		2	2				14
BA									3	4	2	3		12
Qantas				4	4	2	2							12
Etihad										3	5	1	1	10
Korean						1	4	1	2	2				10
Air France					3	2	2		1	1				9
Qatar									2	2	2	2		8
Asiana									1	2	1	2		6
MAS							1	5						6
Thai								4	2					6
China Southern							3	2						5
Others	1													1
Total	1	4	3	11	14	20	25	24	28	29	26	26	6	217
Emirates at %	na	50%	33%	36%	21%	25%	28%	46%	54%	45%	62%	69%	83%	46%

tain flexibility, and commit to taking on new aircraft only after the opening of the Al Maktoum super-airport in 2023. Pricing was probably also a major issue behind the break-down.

Emirates inflicted further pain on Airbus by selecting the 787-10 over the A350 at the airshow, placing an order for 40 units, worth by our estimates around $6bn, for delivery from 2022 on.

How important is the A380 to Emirates?

The chart on the preceding page encapsulates an analysis of the size and structure of long-haul operations (defined strictly as sectors of over 5,000km), which gives the following insights into the fleet strategies of the 22 leading airlines:

- Emirates is by some margin the number one global network airline in terms of long-haul seat capacity; the three European Majors, (Air France Group, IAG and Lufthansa Group), each combining several individual airlines, are 25-35% smaller.
- Emirates is clearly the number one A380 operator, with A380s accounting for 55% of its long- haul capacity; Qantas, with 36% of its long-haul capacity, and SIA, with 28%, are the closest.
- Emirates has a clearly defined dual fleet strategy; the other 45% of its capacity is provided exclusively by 777s, which will be complemented by 787s after 2022.
- The other two Middle East super-connectors — Qatar and Etihad — have not committed to the A380 to anything like the same degree as Emirates, utilising A380s for 14% and 24% or their long-haul capacity
- The three US Majors — American, Delta and United — have not touched the A380. (Hence, there is no Form 41 data available on operating performance and no publically available information on actual A380 economic performance.)
- Each of the US Majors deploy, on average, about half of Emirates' long-haul capacity.
- The global long-haul capacity split by aircraft type is:
  - A380s, 14%
  - Standard A330/777s, 55%
  - New A350s/787s, 12%

A380 "FIRM" ORDERS

	Scheduled Deliveries								
	2017	2018	2019	2020	2021	2022	2023	Undated	Total
Emirates	3	7	5	8	8	8	2		**41**
SIA	3	2							**5**
Qatar	1	1						8	**10**
ANA			3						**3**
Virgin Atlantic		1						6	**7**
Others†								32	**32**
Total	7	11	8	8	8	8	2	46	**98**
Emirates at %	56%	64%	63%	100%	100%	100%	100%	na	**42%**

†Others includes, Amedeo (20), Air Accord (3) and Undisclosed

- Once dominant 747s, 8%
- Others (A340, 767, 757, Narrowbodies, etc), 12%

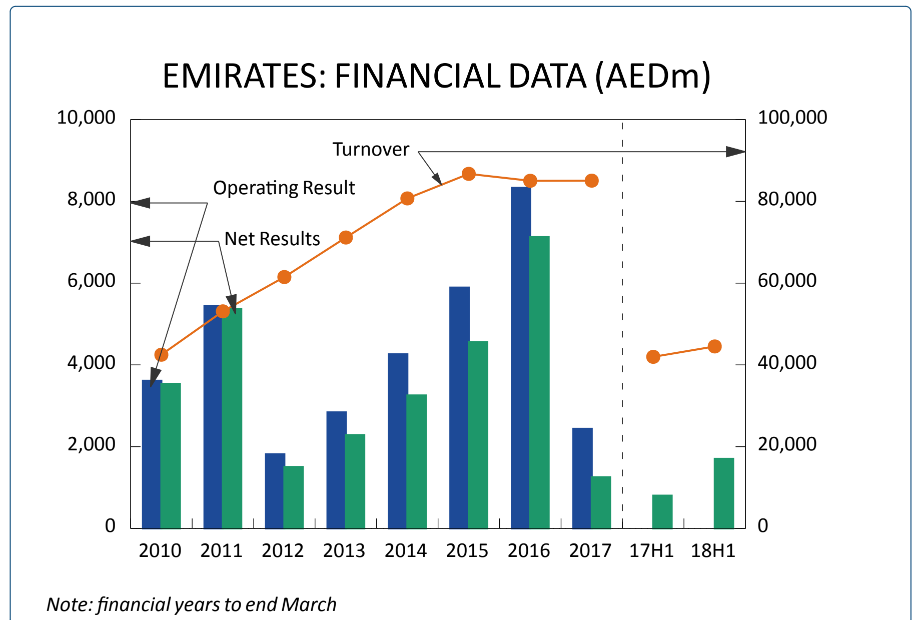
In short, Emirates is an outlier in the global long-haul market, both in terms of its size and its A380 operation. It may be the only airline that is able to utilise the A380 ("hugely profitably", according to Sir Tim Clark) as its main asset in its mainstream operations, as opposed to a niche role on limited routes. The conditions for Emirates' success — being the first mover, building a huge intercontinental network at its Dubai hub, unencumbered by capacity or curfew constraints (wave patterns throughout the 24-hour period), and fully supported by an integrated national but commercial aviation corporation, which in turn is wholly owned and controlled by the national power, the Emirate of Dubai — are probably unique.

However, business models evolve, and Emirates may be moving towards a more mainstream long-haul fleet structure, with proportionately more capacity being provided by 777/787s than by A380s.

How important is Emirates' A380 fleet to Airbus?

The short answer is, totally. The tables on the preceding page A380 FIRM ORDERS on the previous pagesummarise the A380 fleet in service and those, allegedly, on order.

- Emirates accounts for just under half of the global A380 fleet of 217 units as of November 2017.
- SIA is the only other major operator to have the A380 as an important component of its fleet.
- The three Euro-Majors together account for 16% of the global fleet, but one suspects that Lufthansa and Air France were sort of obliged to buy.
- MAS has put its six A380s into a Hajj charter subsidiary.
- The first A380, returned by SIA to a German investment fund, has been parked; more returns are imminent from SIA and Emirates to leasing companies, notably to Amedeo.
- Deliveries have tailed off badly in recent years and there is a gaping hole for delivery slots post-2019 which Airbus was hoping Emirates would fill.
- In theory, Emirates accounts for 42% of the orderbook; in reality, this is about 70% after stripping out dubious commitments — Amedeo, Virgin under Delta control, Air Accord (who?).



Note: financial years to end March

One of the most important purchasers of the A380 has been lessor Amedeo; it has 13 leased out to Emirates, five to SIA, and 20 on order from Airbus. The company is considering some innovative ideas for using A380s as they come off lease. The concept seems to be to operate the A380s themselves, selling seat blocks to other airlines or to travel companies. CEO Peter Lapidus thinks that Airbnb might be a prime customer.

The unit cost argument is tempting, but the practicalities are daunting. For a 700-seat A380, targeting one daily return flight, a 90% load factor, and a 30% market share, which would be highly disruptive, the aircraft would have to be deployed on city-pairs with about 1.5m pax/year. There are very few long-haul routes with that volume of traffic, and those that meet this criterion tend to be very defensible.

The alternative might be an Allegiant-type long-haul operation, and organised around seasonal demand. But this implies low average aircraft utilisation which is incompatible with the capital costs of second-hand A380s.

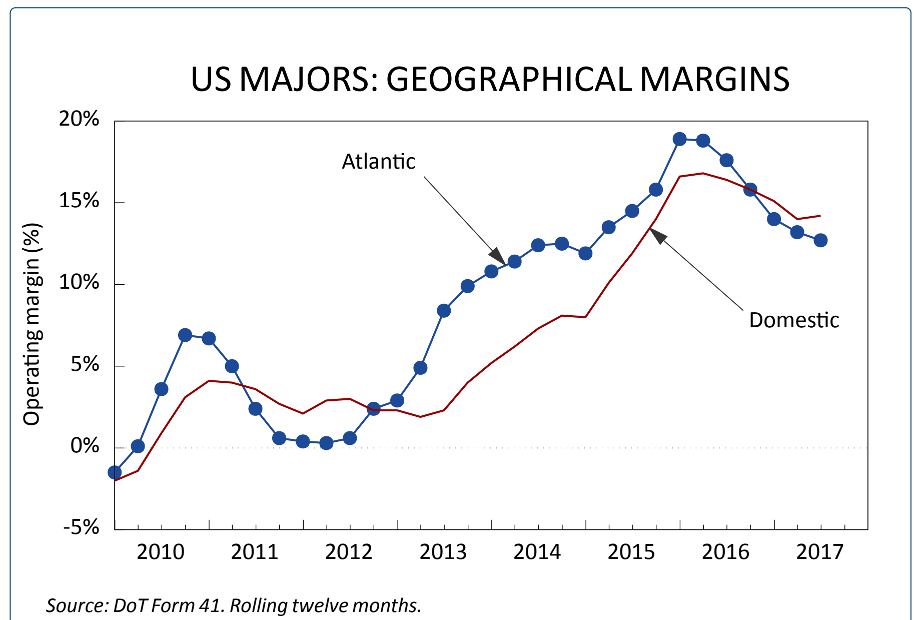
What is the value of a ten-year old A380? AVAC, the most transparent and realistic of the appraisal companies (see page 18) indicates $100m, but with no second-market this figure cannot be validated. In any case, there are no apparent buyers at this price. And if the price is lowered it might quickly hit a floor where it is more economic to part-out the airframe and four Trent 900 engines.

North Atlantic: Disruption potential

TRANSATLANTIC services represent the largest and most mature long haul air transport market in the world. For the ten years up to 2013 growth in capacity terms had been lacklustre, but since then the total number of seats on offer has risen by 20%.

From 2009, the market on the Atlantic has become increasingly consolidated. The anti-trust immunised joint ventures of Air-France-KLM and Delta (erstwhile Alitalia and now Virgin), Lufthansa Group, United and Air Canada, British Airways, Iberia, Finnair and American are all required to operate on a "metal-neutral" basis as a precondition of their immunity against talking about fares and capacity. The US domestic industry has also consolidated with the combinations of Delta/Northwest, United/Continental and American/US Airways.

The three virtual airline combinations control nearly 70% of the capacity on services between North America and Europe/Middle East and Africa (see chart below).

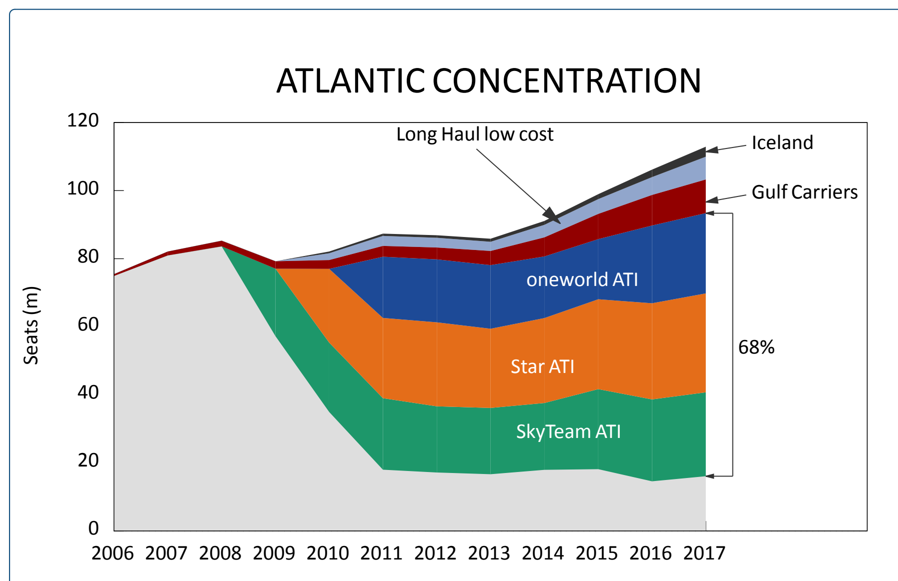


Source: DoT Form 41. Rolling twelve months.

None of the major carriers produce details of profitability by route network region, but the US DoT still requires US carriers to file detailed information. The chart above shows the rolling 12 month operating margins for the three major US carriers on the traditional traffic Form 41 Atlantic and Domestic regions.

There may be many reasons why individual route area results change from year to year, but it is noticeable that the operating margins on the Atlantic really started to pick up from mid 2012 as the trans Atlantic joint ventures kicked in. Indeed the margin performance preceded that of the devlopment in the domestic market — until the emergence of American from Chapter 11 and its merger with US Airways in 2014.

Meanwhile, the three virtual airlines retain a stranglehold on the hub-to-hub traffic (see table on the next page). The Star Alliance JV has a virtual monopoly on its operations between its hubs — highlighting if anything that it is the most dependent on short haul feed at either end of the routes.



OLIGOPOLISATION OF THE ATLANTIC

Alliance	Hub	EWR	*NYC†*	IAD	ORD	YYZ	LAX	SFO	Total Atlantic
Star	FRA	100%	*68%*	100%	100%	95%	100%	100%	82%
	BRU	100%	*71%*	100%	100%	100%			76%
	MUC	100%	*100%*	100%	100%	100%	100%	100%	87%
	VIE	100%	*100%*	100%	100%	100%	100%		100%
	ZRH	100%	*71%*	100%	100%	100%	100%	100%	88%
		JFK	*NYC†*	ATL	DTW	MSP	SLC		
Skyteam	CDG	72%	*57%*	100%	100%	100%	100%		66%
	PAR‡	*73%*	*62%*	*100%*	*100%*	*100%*	*100%*		
	AMS	100%	*87%*	100%	100%	100%	100%		83%
		JFK	*NYC†*	ORD	MIA	DFW	LAX	PHL	
oneworld	LHR	61%	*46%*	71%	81%	100%	54%	86%	56%
	LON§	*50%*	*50%*	*71%*	*81%*	*100%*	*49%*	*86%*	
	MAD	64%	*56%*	100%	73%	100%	100%	100%	67%
	DUB	75%	*63%*	89%	100%		56%	100%	68%

Source: Schedules data, 2017 Notes: North Atlantic includes hub to hub and all other routes to/from the hub airport. † NYC includes JFK and Newark. ‡ PAR includes Roissy Charles de Gaulle and Orly. § LON includes Heathrow and Gatwick.

Skyteam is not far behind. Since we last did this analysis, Rome has fallen out of the data as a hub (not only did Alitalia resign from the joint venture but it also decided to go bust).

The **one**world JV is the least concentrated. But this is mostly because the BA hub at Heathrow, and American's at JFK, are the primary gateways on the Atlantic. We have included Dublin as a hub in our analysis on the assumption that IAG's subsidiary Aer Lingus will eventually join the joint venture.

New entrants

It is a tenet of economics that concentration in a dynamic industry can foster innovation, and new entrants will attempt to enter a consolidated market. It is also frustrating to incumbents.

In the past five years the three ATI joint venture virtual airlines have increased capacity on the Atlantic by an annual average 4%.

In the same period the Gulf superconnectors have grown by an average annual 23% to account for nearly 9% of the capacity; long haul low cost carriers (as exemplified by Norwegian) have grown by an average 19% to account for a 6% market share. It is these two who have provided the growth in the market.

They have also encountered significant opposition from the three US Majors. The latter's "Partnership for Open and Fair Skies" seems to have built an effective lobby to the new administration in the US — claiming now to have the support of 300 members of Congress — to the point of getting the addition of a specific tax amendment targeted at the Gulf carriers.

Norwegian meanwhile endured much resistance from the US to the establishment of its Irish and UK AOCs. It has nevertheless had some success: on the London to Los Angeles market for example, according to DoT Form 41 data, it seems to have achieved a 11% share of the market since starting operations in 2014 — roughly equivalent to the absolute growth in the market in the past three years.

No wonder the encumbents are worried. The US carriers do not have the corporate structures (or maybe the imagination) to allow them to counter the threat; but the European majors — respectively with IAG's Level, Lufthansa's Eurowings and (maybe) Air France's Juno — and Air Canada (with Air Canada Rouge) do.

Meanwhile the next disruptive element on the Atlantic may well be the introduction of efficient long range short haul aircraft on thin routes further bypassing the traditional hubs. Norwegian is already trialling this on select secondary route-pairs using its 737-MAX. The A321LRneo with its slightly longer range could be more of a game changer. A main advantage is that these aircraft can combine short and longer haul operations within a network.

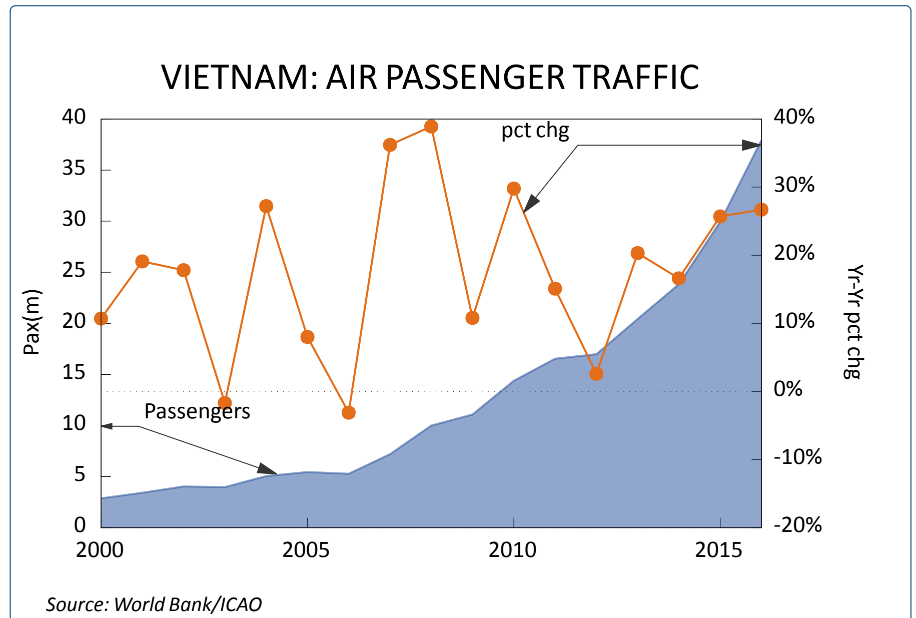
At the IAG annual investor day this month, Aer Lingus' CEO Stephen Kavanagh highlighted his plans for the exploit of the 12 A321s he aims to have in service by 2021, emphasising that half of the 55m US citizens claiming Irish ancestry live within reach of Dublin with the new aircraft (and there are only 6m people in the whole of Ireland).

And then there is JetBlue — based in New York, the prime US gateway on the Atlantic — with 60 A321neos on order.

Vietnam Airlines, VietJet and the world's fastest growing economy

THE VIETNAMESE economy is expanding fast, thanks to the communist regime's active fostering of a mixed economy in a country with a population of more than 91m. Vietnam Airlines and Vietjet Air are also growing rapidly and are engaged in a classic flag-carrier/LCC competition.

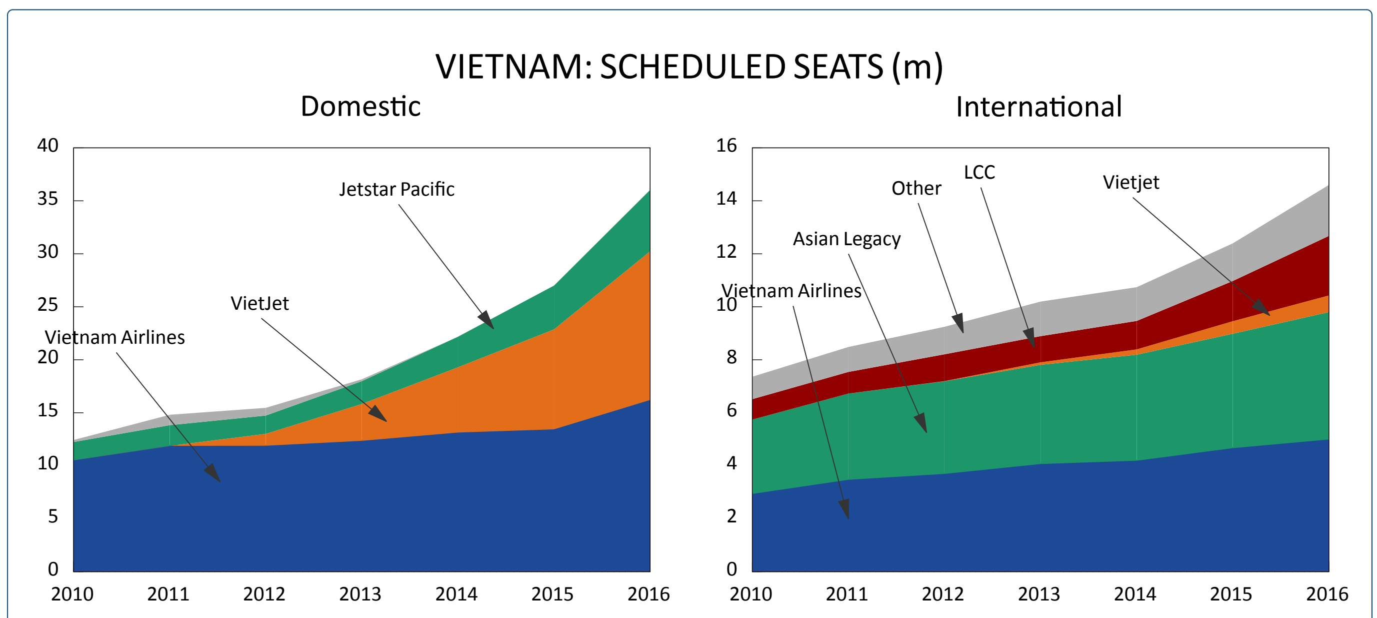
The growth of Vietnam's economy is impressive. Though starting from a very low base following years of economic stagnation following the disastrous Vietnam War of the 1950s-1970s, after joining the WTO in 2007 and implementing the so-called " Đổi Mới " market economy reforms of the mid-1980s, its GDP has grown at a CAGR of 11.9% from 1985 to 2016 (according to World Bank data). More recently, GDP per capita has grown at a CAGR of 5.3% during 2000 to 2015 — one of the highest rates in the ASEAN region.

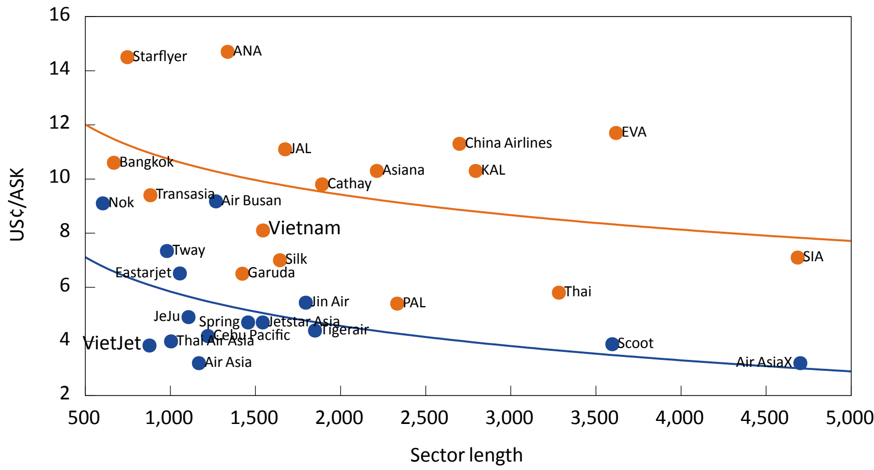


Source: World Bank/ICAO

Even more impressive, according to a report "The World in 2050", released by PricewaterhouseCoopers in February this year, Vietnam will be the world's fastest-growing economy over the 2016-2050 period, with an average annual growth rate of 5.2%. If that forecast turns out to be correct, Vietnam will be the world's 20th largest economy in 2050.

Despite that economic expansion, air travel is relatively underdeveloped in Vietnam — though it has grown significantly in the last few years. Geographically, Vietnam is





a long and thin country with rough terrain (level land covering less than 20% of the country) and its road infrastructure is undeveloped — naturally making car/bus/train transportation challenging for many people.

Traditionally, air fares were not affordable to a wide population base, as for a very long time Vietnam Airlines was the only carrier in the country and air fares were basically controlled by them. However, the emergence of Vietjet Air reduced air fares while providing much faster and more convenient travel than other modes of transportation, and this has significantly stimulated domestic market demand.

Though no foreign airline can operate in the country, in 2016 28m passengers were carried domestically — 30% up on the previous year. And international passengers totalled 24.2m in 2016, some 27% up on 2015. All this makes Vietnam one of the fastest growing aviation markets in the world, and the fastest growing in south east Asia.

The Vietnamese government is furiously trying to keep up with this growth, as infrastructure is already overstretched — particularly at Tân Sơn Nhất airport in Ho Chi Minh City (HCMC) — resulting in delays in take-offs and landings. Vietnam Airlines says airport delays cost it US$8.3m in 2016 alone. Some Vietnamese airports have plans to temporarily cut capacity by as much as 30% in order to allow urgent repairs and upgrade to certain facilities.

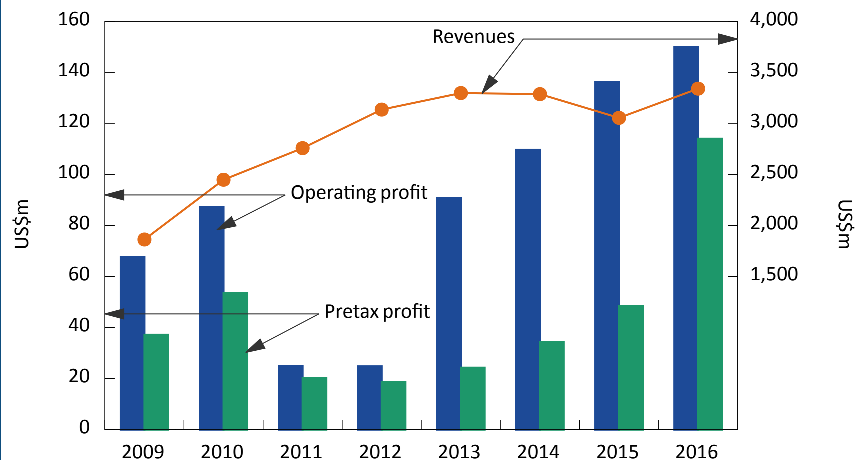
Altogether the government is currently investing more than US$10bn in developing airport infrastructure, with a plan to open four more airports in the country by 2020, bringing the total number of airports to 26. The country's Civil Aviation Administration estimates that the total number of passengers will rise to 122m a year by 2020 and 322m by 2030.

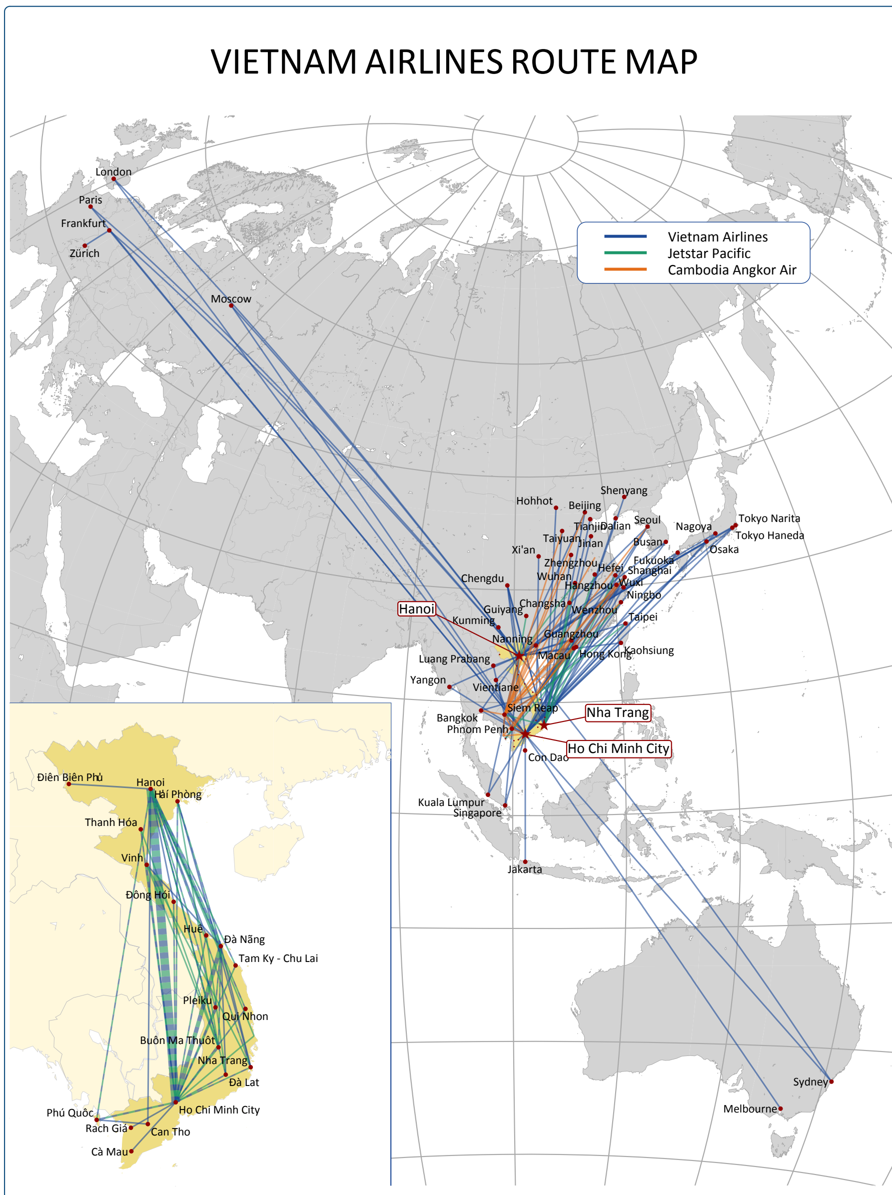
Vietnam Airlines

Hanoi-based Vietnam Airlines dates back to 1956 and was a state-owned enterprise until 2015, when it became a "joint stock company" under Vietnamese regulations. In July 2016 Japan's ANA bought an 8.8% stake for US$109m, with the two airlines also entering into a partnership that includes codesharing on domestic and international routes, the linkage of FFPs, shared ground infrastructure and — perhaps most importantly — ANA contributing aviation knowledge and expertise to the Vietnamese carrier.

In 2016 the airline carried 20.6m passengers and saw revenue rise 6.3% year-on-year to ₫70.6tn (US$3.2bn), with an underlying operating profit up by 41% to ₫4.14tn (US$192m). Net profits were ₫2.11tn (US$95m), more three times higher than the net profit a year previously.

Vietnam Airlines listed on the





Hanoi stock exchange in January 2017 (although the state still owns 86.2%, with ANA retaining its 8.8% stake), and in the first nine months of 2017 Vietnam Airlines recorded revenue of ₫65.1tn (US$2.9bn) — 20% up on the first three-quarters of 2016 — and made a pre-tax profit of ₫2.32tn (US$102m). It carried more than 16m passengers in January to September, up 5% year-on-year, and is on target to carry around 21.9m passengers this year.

Today the country's flag carrier employs 6,800 staff and its main hubs are at Nội Bài and Tân Sơn Nhất. It's very much a full-service airline, recently opening new business lounges at both those airports, although it is also launching a new super-economy product on domestic flights in the last quarter of 2017.

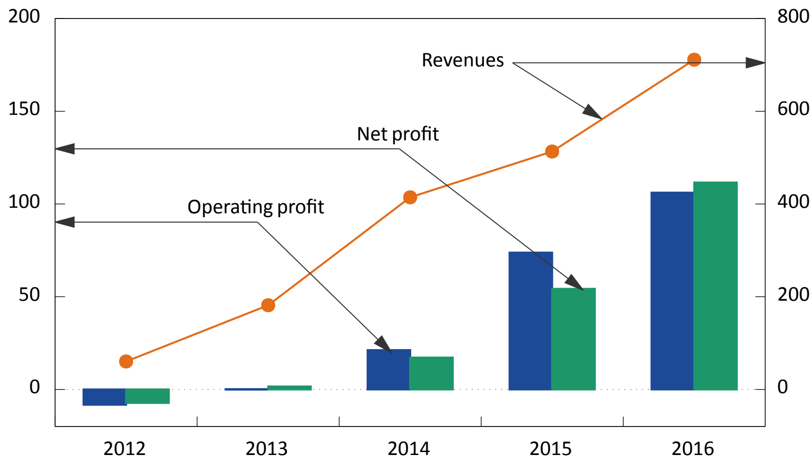
It currently operates to 49 destinations (20 domestic and 29 international) with a fleet of 84 aircraft — 57 A321s, eight A330s, eight A350-900s and 11 787-9s. It received the last of an order for 787-9s in May this year (the first arrived in 2015), as part of the ongoing transition to a more efficient, modern fleet with lower unit costs. The 787s supply the core of long-haul services to destinations such as London, Frankfurt, Sydney and Melbourne.

Traditionally Vietnam Airlines dominated both domestic and international markets in Vietnam, but is its supremacy on the former will soon be overturned by Vietjet, and so a key focus of its ambitious target to carry around 25m passengers in 2018 will be through expanding international flights, most particularly into south-east and north-east Asia

Vietnam Airlines also wants to launch routes to the US by the end of 2018, and it has started the necessary regulatory and safety processes with both the Vietnam and US authorities. The targeted destination is Los Angeles or San Francisco, which would be served by A350s or 787-9s that would need to stop en-route at either Tokyo or Osaka.

VIETNAM AIRLINES FLEET

	Vietnam Airlines			Jetstar Pacific	
	In service	**On Order**	**Options/LOI**	**In service**	**On Order**
787	11	8			
A320				17	4
A321	57	18			
A330	5				
A350	8	6	12		
Total	**81**	**32**	**12**	**17**	**4**



Note: Revenues excludes sale of aircraft: $517m 2016, $406m 2015. Operating profit excludes profit on aircraft sales $68m 2016, $24m 2015.

For future international expansion the airline has six A350-900s on order direct from the manufacturer, but Vietnam Airlines now prefers sale and leaseback finance for new aircraft, rather than outright purchase, and has lined up a number of deals that include 18 A321neos (12 being leased from Air Lease Corporation and six from ACG, and being delivered in 2018 and 2019), and eight 787-10s (to be leased form Air Lease Corporation, and delivered in 2019-2021)

The carrier has been a member of SkyTeam since 2010 and has more than 20 codeshares or partnerships; the latest was signed in October with Air France, which extends an existing codeshare into a joint venture on routes between Europe and Vietnam.

Vietnam Airlines also owns 49% of Cambodia's flag carrier — Cambodia Angkor Air — which was set up with the Cambodian government in 2009. The airline operates to 20 domestic and international destinations with a fleet of two A320s, one A321 and three ATR 72-500s.

It also owns 70% of HCMC-based LCC Jetstar Pacific Airlines, a stake it bought in 2012 following a convoluted history that dates back to the launch of a cargo carrier called Pacific Airlines in 1991 (see *Aviation Strategy,* February 2016).

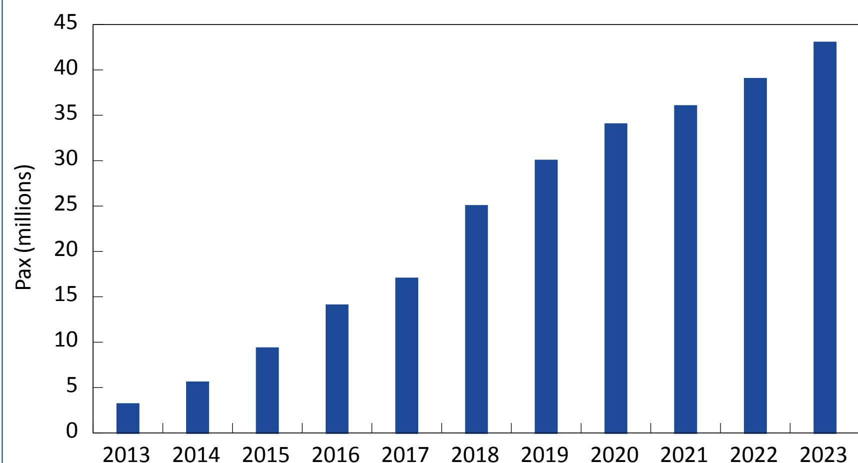
Jetstar Pacific operates 19 A320-200s to more than 20 domestic and international destinations, and has four A320ceos on order as part of a plan by Vietnam Airlines and 30% shareholder Qantas to steadily grow the LCC over the next decade. Vietnam Airlines has also transferred some domestic routes to the LCC, and it will be interesting to see how much more of this it does as the threat from its main rival — Vietjet — intensifies.

Vietjet Air

Vietjet Air became Vietnam's first private airline when it launched in December 2011, although this was four years after it was granted an AOC, thanks to a whole host of regulatory/political problems. The airline was founded by Nguyễn Thị Phương Thảo (she is the current CEO), who studied finance and economics in Soviet Russia in the 1980, but even she must have been surprised when the communist government in Vietnam introduced a favourable tax regime for start-ups, which has helped Vietjet significantly.

Benefitting from Vietnam's rapid economic growth, the LCC has grown steadily, and today it operates to 23 domestic and 17 international destinations with a fleet of 43 Airbus aircraft.

Vietjet employs more than 2,500 and is headquartered in Hanoi, whose Nội Bài airport is a hub alongside four other Vietnamese airports — Đà Nẵng, Cam Ranh (in Nha Trang), Cát Bi (in Hải Phòng) and Tân Sơn Nhất. Internationally it operates to



Thailand (Bangkok), South Korea (Seoul and Busan), China (Tianjin, Ningbo, Chengdu, Wuhan, Wuxi and Hangzhou), Hong Kong, Taiwan (Taipei, Shalu, Tainan and Kaohsiung), Cambodia (Siem Reap), Singapore, Malaysia (Kuala Lumpur), Macau and Myanmar (Yangon). Most of these are scheduled destinations, but some are run on a charter basis.

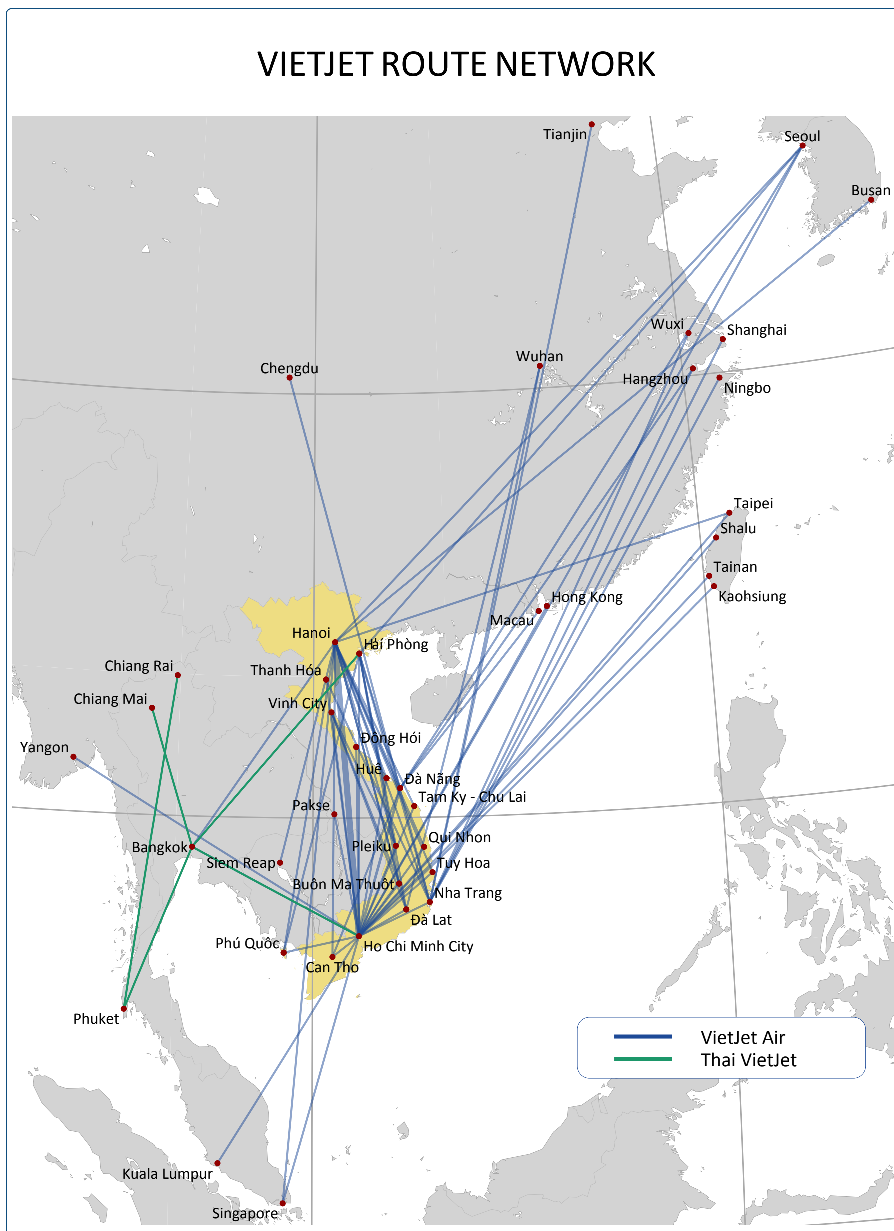
Vietjet defines its market as the 50% of the global population that lives within a 2,500-mile radius of Vietnam, but Thao insists that her airline is not competing with Vietnam Airlines; rather "we create our own customers", with around 30% of its passengers being working class/low income Vietnamese who had never flown previously. The airline has built business by strong Vietnamese brand awareness and through close partnerships with local travel agencies.

Low operating costs enabled the carrier to take less than two years from launch to become profitable, and in 2016 Vietjet carried 14.1m passengers, 51% up on 2015, and saw published revenues grow by 38.6% to ₫27.5tn (US$1.2bn), with net profit more than doubling, to ₫2.5tn (US$112m) — although this includes revenues and profits from the sale of aircraft (see chart on the facing page). This financial performance enabled Vietjet to carry out a successful IPO on the Ho Chi Minh stock exchange in February this year.

Before the IPO Vietjet successfully placed 44.8m shares with institutional investors in December 2016, and the actual float listed its 300m shares at ₫90,000 (US$4) each, giving a market cap of US$1.2bn — although less than a week after its debut the shares had risen so much it overtook the market cap of Vietnam Airlines.

At the IPO the airline also raised around US$170m through issuing 44.7m new shares, 15% new equity, which is being used to finance aircraft purchase and leases, and for investment in IT.

Thảo is still the largest single shareholder (with a 9.4% direct stake and 23.2% owned by Hướng Dương Sunny Investment Co, which she controls, and around another 30% owned through other entities), but a plethora of international investors subscribed to the float, including GIC (the Singaporean state wealth fund, which has a 5.5% stake), Wellington and Morgan Stanley. Foreign ownership is capped at 49%, and total foreign entities currently own around 26%-30% of the equity.



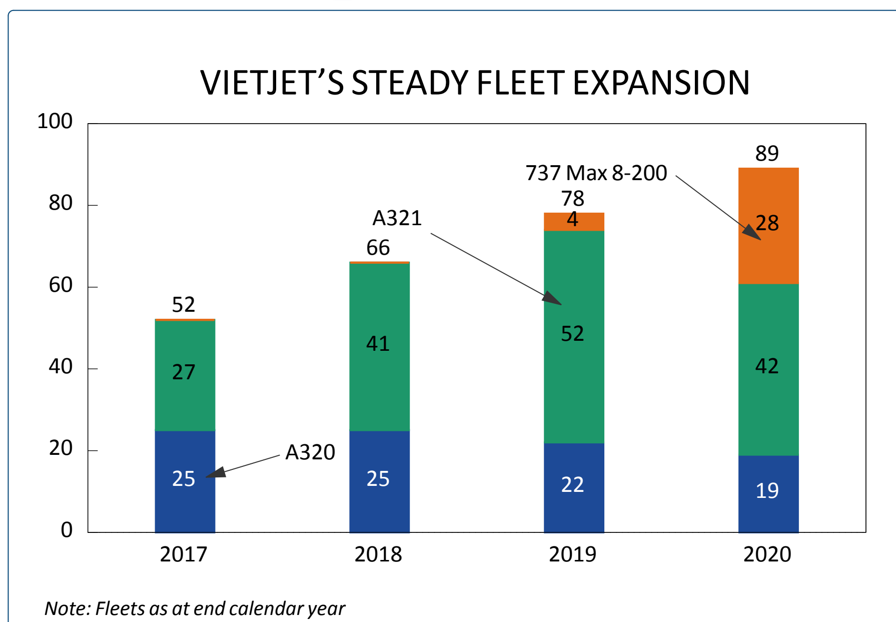
VIETJET FLEET

	In service		
	VietJet	Thai VietJet	On order
737 Max 8			100
A320	21	3	42
A321	16		49
Total	37	3	191

The carrier had wanted to list first in Singapore or Hong Kong, but local laws require companies to list first on a domestic exchange. However, it still harbours ambition to list internationally, and potentially even go onto the New York stock exchange.

Vietjet has continued to prosper since the IPO. It became a member of IATA in August this year and in the third quarter of calendar 2017, Vietjet saw a 34.4% rise in revenue to ₫6.14tn (US$270m), based on a 25% rise in passengers carried, to 4.4m. ASKs rose 32.1% in the third quarter, and load factor was an impressive 89.7%. Operating profit grew 21.2% in July-September 2017, to ₫1.05tn (US$46m), with profit before tax rising by 35.1%, to ₫1.05tn (US$46m).

Ancillary revenue increased to 23% of all revenue in the third quarter of 2017 (from 20.3% in Q3 2016), with ancillary revenue per passenger growing from US$12.1 a year ago to US$14.6 in Q3 2017.



Fleet expansion

The fleet currently comprises 25 A320-200s and 18 A321-200s, with an average age of three and a half years — which the airline points out is younger than most (if not all) of its major LCC rivals.

But there are no less than 192 aircraft on firm order, comprising 42 A320neos, 19 A321-200s, 31 A321neos and 100 737 Max-200s. 100 Airbus aircraft were ordered in 2013, 100 Boeing aircraft in May 2016, 20 A321s in September 2016 and 77 A320 family aircraft in December 2016 — all of which will be delivered by 2023. The fleet will therefore rise steadily over the next few years, reaching 89 aircraft by the end of 2020 (see chart on the current page) and underpinning a huge increase in passengers carried (see chart on page 10).

VietJet estimates it has a domestic market share of around between 41% to 43%, just one or two per cent behind Vietnam Airlines, although these positions are likely to be reversed within the next few months. The domestic network includes several high frequency "arterial routes", as the airline calls them, such as 26 flights a day between HCMC and Hanoi, 15 between HCMC and Đà Nẵng, and 14 between Hanoi and Đà Nẵng. At the same time the airline has developed new routes connecting its hubs to secondary Vietnamese cities, such as Pleiku, Huế, Tuy Hòa and Buôn Ma Thuột.

In August this year (during the Vietnamese low-season) Vietjet wet-leased four aircraft to Pakistan International Airlines, where they operate on domestic routes.

But VietJet's strategic priority this year is to extends its international network to north east Asia from its Vietnamese hub airports. In October it launched an interline partnership with Qatar Airways, and one with Japan Airlines in July.

Vietjet also launched an operation in Thailand — Thai Vietjet — in 2015, with three A320s and 300 employees stationed at Suvarnabhumi airport in Bangkok, and a fourth aircraft due to be added before the end of the year.

Until November this year it operated only four domestic routes after the Thai CAA banned most Thai carriers from operating internationally due to safety concerns from ICAO — although the airline has just been recertified for international flights, enabling it to restart the one route it previously operated, between Bangkok and Hai Phong.

Another eight to 10 aircraft will be transferred from Vietnam every year — starting in 2018 — and potentially to include A321 models.

According to Nguyễn Thị Thúy Bình, CEO of Thai Vietjet, the aim is to carry 1m passengers this year, rising to 2m in 2018 as the operation increases connections between Thailand and Vietnam, and builds routes to Asean countries (with the priority being Philippines, Indonesia and Myanmar) and China.

American: Playing the long game

SEPTEMBER 28 marked an important event for US airline analysts and investors: American Airlines Group (AAG), the world's largest airline by traffic, held its first investor day since the closing of the AMR-US Airways merger and AMR's exit from Chapter 11 in December 2013. What were the key messages?

First there were the typical investor day comments: American's executives said that they were "incredibly excited and bullish" about the airline's future. They talked about plans to create substantial value for shareholders. And yes, the stock is grossly undervalued.

But the event had an unusual theme: "Playing the long game". CEO Doug Parker and his team declared that they were focusing on the longer term and also tried to persuade analysts and investors to shift their thinking. Wall Street's focus on short-term metrics such as monthly RASM has been a source of frustration for US airline managements in recent years.

Also noteworthy was Parker's remark that he does not think American will ever lose money again (he muttered it, as opposed to saying it arrogantly). American expects to earn at least $3bn in pretax profit even in the worst years, with the peak years bringing in as much as $7bn.

Parker described the post-2013 era of higher profitability at American as the "new world". He urged everyone to make the "leap of faith", which he defines as "understanding and appreciating that this industry and our airline have been materially and permanently transformed". The old world was about survival, the short term, "burning the furniture" and "managing through intimidation". The new world is about thriving, the long term, investing in the future and "inspiration through leadership".

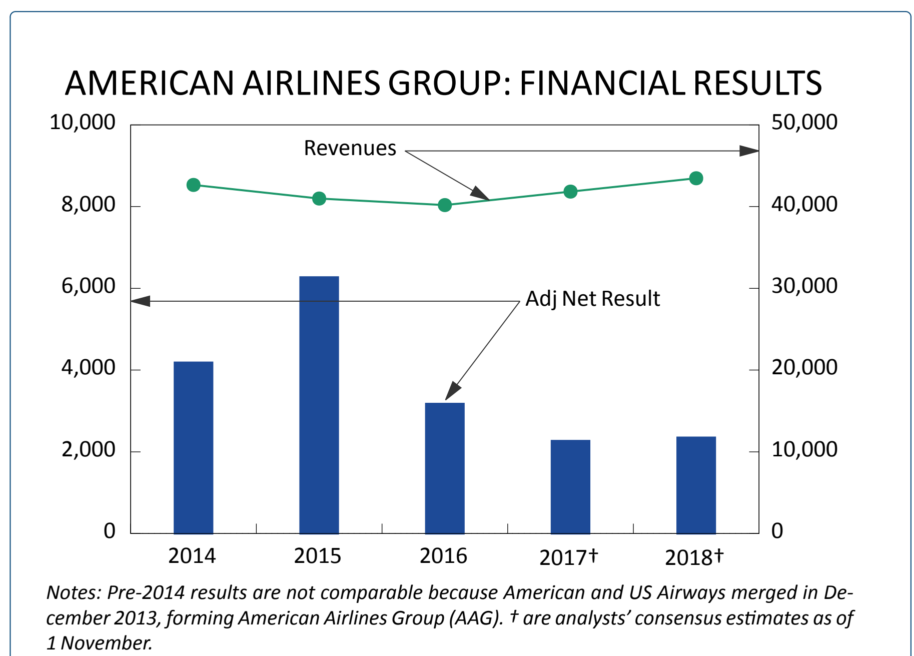
American's management laid out four long-term strategic objectives that reflect the new philosophy: build a world-class product; drive efficiencies; make culture a competitive advantage; and "think forward, lead forward". The latter refers to adoption of new technology that improves passengers' experience or makes it easier for employees to do their jobs.

As a result of efforts to build trust with employees, American is seeing a significant increase in labour costs. However, American has also identified $3.9bn of revenue and cost opportunities in the next four years that will offset some of the cost pressures. That includes $1bn of cost savings in part related to the merger and $2.9bn of "commercial projects", of which the most important ones are the Basic Economy and Premium Economy product offerings.

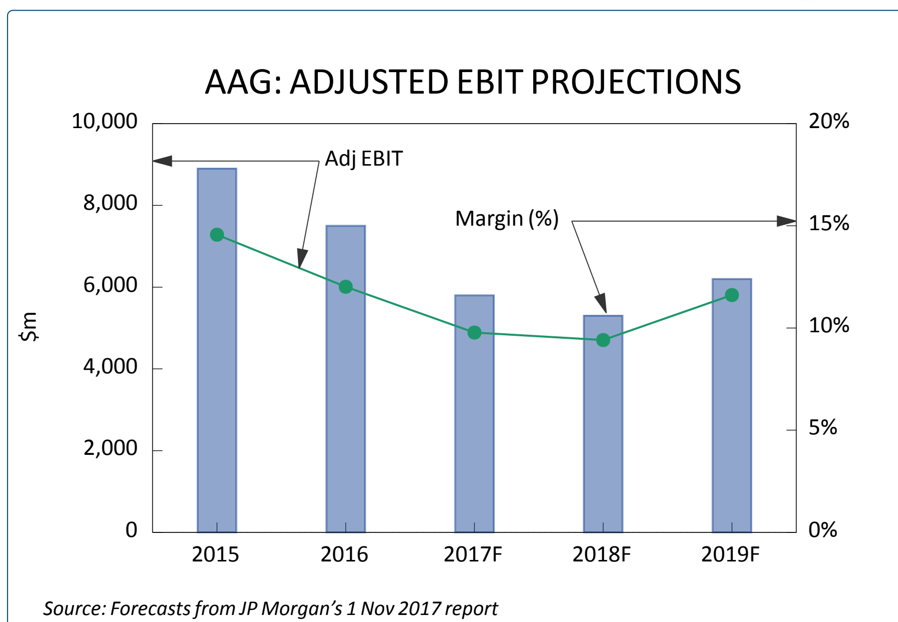
On a positive note, as American's fleet renewal programme nears completion and capex needs decrease, the airline expects to turn its attention to deleveraging the balance sheet.

Perpetual profitability?

In 2011 when he was at US Airways, Doug Parker was the first US airline CEO to argue, to a mostly sceptical audience, that things had changed permanently for the US airline industry. Among analysts, JP Morgan's Jamie Baker was an early proponent of the idea that airlines had evolved into a "viable, long-term business where adequate returns on invested capital



Notes: Pre-2014 results are not comparable because American and US Airways merged in December 2013, forming American Airlines Group (AAG). † are analysts' consensus estimates as of 1 November.



Source: Forecasts from JP Morgan's 1 Nov 2017 report

can confidently be anticipated" (*Aviation Strategy*, Jan/Feb 2013).

Six years on, the idea has become more widely accepted. 2017 will be the eighth consecutive year of healthy profitability for the US airline industry. Delta, which led the US legacies' profit recovery (because it was the first to restructure and complete a merger in 2008), is now achieving financial metrics that rank among the top 10% of S&P industrials.

The reasons for the legacies' changed fortunes are well documented: a decade of restructuring; many Chapter 11 visits, extensive consolidation, lack of new entrants, years of tight capacity discipline, lucrative new ancillary revenue streams and return-oriented management teams. Two additional factors have come to play in recent years: sharply reduced fuel prices, and continued strong domestic air travel demand.

However, US investors still worry that the industry could slip back into the bad old ways. Every time there is a mere hint of an airline stepping up capacity growth, a competitive skirmish developing at some hub or RASM growth not meeting expectations, airline share prices plummet.

American faces the additional challenge that it has only reported healthy profits since 2013, because it was the last of the legacies to restructure and complete a merger. Since then American has overtaken United but has not closed the operating margin gap with Delta.

But American's post-2013 profits are impressive. According to the investor day presentation, AAG has earned $19.2bn in aggregate pretax profits in the past four years (including a consensus estimate for 2017), which compares with a mere $1bn pretax profit achieved by American and US Airways on a combined basis in the 35 years from 1978 to 2013.

The surge in profits in 2014-2017 could be interpreted as just another (albeit bigger) peak in the cycle, but to Parker it represents further proof that American has transformed itself. He expects American's pretax profits to fluctuate in the $3bn-$7bn range and average $5bn annually. The management incentive compensation plan has been set around those targets.

Parker argued that if the management is correct about American's prospects, the company's NPV is well above the current levels. He suggested that the share price should be "at least $75" or 63% higher than the $46 price that day.

Parker also felt that Wall Street had wrongly labelled developments such as United's decision to fight ULCC Spirit in Denver as "bad behaviour". "There is nothing unusual about an airline adding capacity at its hub if it feels it does not have its [fair] share", he said, adding that it is low-risk growth since an airline has a competitive advantage at its hub. Also, he made the point that it was entirely rational for supply to increase when the cost of production declines (such as when fuel prices fall).

US airlines stocks have been heavily punished for such misunderstandings this year. At the end of October, the NYSE Arca Airline Index was down 3.8% year-to-date. American's share price beat the Index slightly in that it was up 1.1% in the first 10 months of the year.

Although American's share price rose in the two weeks after the investor day, the gains were wiped out during the airline's Q3 earnings call on 26 October. The results were better than expected, with the RASM performance and outlook being particularly strong, but investors reacted badly to news that American may grow its system ASMs by 2.5% in 2018 on a flat fleet count.

The share price correction prompted JP Morgan to upgrade American from neutral to overweight and increase its year-end 2018 price target from $53 to $65. The analysts noted Parker's prediction that RASM growth would outpace ex-fuel CASM growth in 2018, giving them "reasonable confidence in normalised

AAG'S MAINLINE AND REGIONAL AIRCRAFT FIRM ORDERBOOK

	At end of June 2017	Delivery schedule
A320neo	100	From 2019
A350 XWB	22	From 2020
737-800	5	Q4 2017
737 MAX	99	From 2017
787	11	2017-2019
ERJ175	4	Q4 2017
Total	**241**	

Source: American Airlines

margin growth".

One problem bothering some investors is that, despite continued healthy GDP growth, US airline profits are declining this year and 2018 also looks lacklustre for American. Analysts' consensus estimates at the beginning of November see AAG's adjusted net profit declining from $3.2bn in 2016 to $2.3bn this year and remaining at that level in 2018.

AAG earned adjusted pretax profits of $4.2bn, $6.3bn and $5.1bn in 2014, 2015 and 2016, respectively, on the basis of which the $5bn "average" year projection looks very reasonable. However, American now faces three leaner years, with profits fluctuating between the "worst year" and "average year" levels, despite a strong US economy.

Shifting focus to the longer term

Some investors may feel that, given the lacklustre short/medium term prospects, it is in American's interest to try to shift focus to the longer term. But such a move has many benefits and it may even start a trend in the US airline industry.

American has stopped reporting monthly traffic and is guiding to quarterly and annual expectations. Starting in 2018, it plans to lay out "long-term, clear financial objectives" and provide three years' guidance for both fleet and unit costs.

Among the North American carriers, Air Canada, too, has stopped reporting monthly traffic. More airlines could well follow suit.

Culture is critical

American reached new joint agreements with its work groups quickly (though the deal with the mechanics was on an interim basis), because the management recognised that, in light of the history of contentious labour relations at both AMR and US Airways, the only way to agree joint contracts was to build trust and restore pay rates.

But even with the labour deals in place, building trust has been difficult. Since American's management believes that a good employee culture is critical for a service-oriented company, it has gone to extraordinary lengths to build trust with employees.

In 2015 CEO Parker gave up his contract (and associated benefits and protections) and switched to working on the same "at will" basis as the airline's employees. Subsequently he gave up his salary, opting instead to be paid only in stock. In March 2016 American unilaterally instituted a profit-sharing programme. And in April 2017 American offered a mid-contract pay increase of up to 8% to its flying personnel.

The mid-contract pay increases, which sent shockwaves through Wall Street as they will cost American an additional $230m in 2017 and $350m in both 2018 and 2019, were unprecedented in the airline industry. But the reasons are easy to understand. Since American signed its post-merger contracts, Delta's pilots have seen their pay soar under a new agreement, and United's pilots (thanks to a snap-back provision) have seen their pay automatically match Delta's. Parker said that American's workers were so far behind Delta's and United's and the contract terms were still so long (until 2020) that "it did not feel right for us to continue to leave that gap in place."

American's move will not cause any pay escalation at Delta or United. Parker also told analysts: "If any of you are building models that are based upon American having

AAG'S MAINLINE FLEET

	Number of aircraft at end		
	Dec 16	**Sep 17**	**Dec 17E**
A319	125	125	125
A320	51	48	48
A321	199	219	219
A330-200	15	15	15
A330-300	9	9	9
737-800	284	299	304
737 MAX		1	4
757	51	40	34
767-300	31	27	24
777-200	47	47	47
777-300	20	20	20
787-8	17	20	20
787-9	4	11	14
E190	20	20	20
MD-80	57	46	42
Total	**930**	**947**	**945**

Source: American Airlines

some sort of labour cost advantage over a sustainable period of time, I encourage you to change your assumptions".

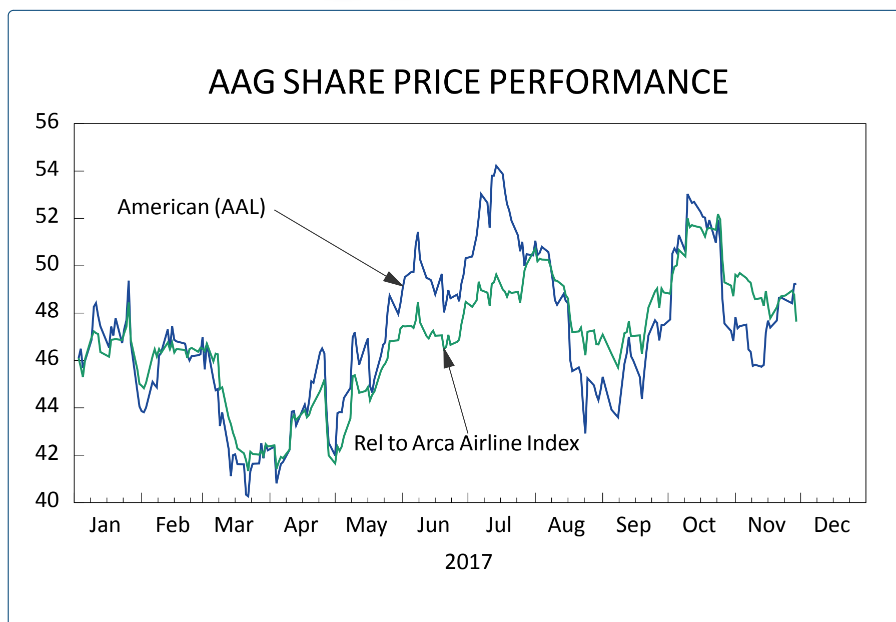
In another first for a legacy carrier, American wants to make culture a "competitive advantage" (think Southwest Airlines). It will not be the easiest thing to measure (employee surveys, engagement scores and attrition rates are possible tools), but the management prefers to frame it as an "investment" in frontline employees that will help revenue generation. The planned $2.9bn commercial initiatives will not materialise in full if the workforce is not truly motivated. Therefore American believes that its new labour philosophy is in shareholders' best interest.

Serving all segments

American's management made it clear that even as the airline is intensely focused on providing for the premium sector, it will also fight tooth and nail to keep its share of the most price-sensitive travellers.

The management believes that attributes such as the world's largest network, strong JVs and alliances, leading loyalty programme, powerful hubs and the huge domestic market make American uniquely well positioned to serve every type of customer. They waxed enthusiastically about the benefits of the hub-and-spoke business model in fending off ULCCs.

Past efforts at segmenting the market were too simplistic, left many gaps and did not provide what passengers wanted. Now American feels that it has a product offering for every point along the demand curve, including two powerful weapons called "Basic Economy" and "Premium Economy".



Basic Economy is an unbundled, still superior product offered by the US legacies at the same price as the ULCCs' economy product. Pioneered by Delta, it has also been introduced by United and American in the domestic market this year. American had it available across the continental US by early September and has described it as a "game changer".

The early indications are that American's Basic Economy has been more successful than United's, because the latter introduced it too quickly and made it too restrictive (for example, not allowing upgrades). About half of American's Basic Economy customers are upgrading to the higher main cabin fare, which allows carry-on bags etc, so the move is definitely paying off financially. That said, American has not yet decided whether to expand the Basic Economy offering internationally to tackle LCC competition in markets such as the transatlantic.

Internationally, American is seeing a revenue benefit from its Premium Economy offering, which was introduced in October 2016 on the 787-9s and is now being added to the existing 777/A330 long haul fleet by the end of 2018. The project is still in its early stages but American is seeing "great results" with a premium of 50% on the economy fare.

American continues to make significant investments in its highest-end product offerings (Flagship Business and Flagship First), as well as further develop products that fill a gap on the demand curve, such as Main Cabin Extra (better legroom at the front of the economy cabin, preferred boarding for a fee).

These segmentation moves are a key part of American's plan to maintain overall revenue outperformance and offset cost increases. In the past four quarters American has led the industry in terms of unit revenue improvement and the management expects that to continue in 2018.

Driving efficiencies

American is still integrating after the merger. The $1bn further opportunity from "Project One Airline" in the next four years is made up of 400-plus different efficiency-related projects.

The remaining major capital projects include flight attendant

operational integration (by late 2018), HR and payroll integration (first phase in early 2018) and tech operations integration (another 2-3 years).

Another important project is standardising the seat configurations for different aircraft types following the merger. American currently operates 52 different "sub-fleet combos" but is reducing that number to 30 over three years. It will make the aircraft easier to schedule, improve utilisation and even enable new markets to be served.

American continues to reap benefits from fleet renewal. Since the merger it has brought in 496 new aircraft (by end-2017) and retired almost as many older aircraft (469), reducing the average age of the fleet to 10 years.

The fleet transformation has been driven by larger replacement aircraft, upgauging existing aircraft and longer stage length flying. The five-year plan to 2021 sees a significant increase in the number of larger (two-class) RJs, 161-200 seat narrowbody aircraft and 250-plus seat widebody aircraft, with corresponding reductions in smaller aircraft in those three categories.

There were no changes to the fleet plan at the investor day. 2018 will see only 22 new mainline aircraft deliveries, down from 57 this year. But as the A321neos start arriving, total deliveries will jump to 47 in both 2019 and 2020 and may remain at that level in 2021-2022. The overall fleet size will grow only slightly as deliveries will be accompanied by retirements, though the upgauging strategy will result in modest ASM growth.

With the anticipated efficiency gains from Project One and fleet renewal, American is targeting only 2% ex-fuel unit cost growth in 2018 and "below 2%" growth in subsequent years. However, those projections exclude the impact of any new labour deals.

Improving capital structure

After a significant $22.9bn in capital investments in 2014-2017, or about $5.7bn annually, now that its fleet renewal is nearing completion American will see total capex fall to around $3.9bn a year in 2018-2020.

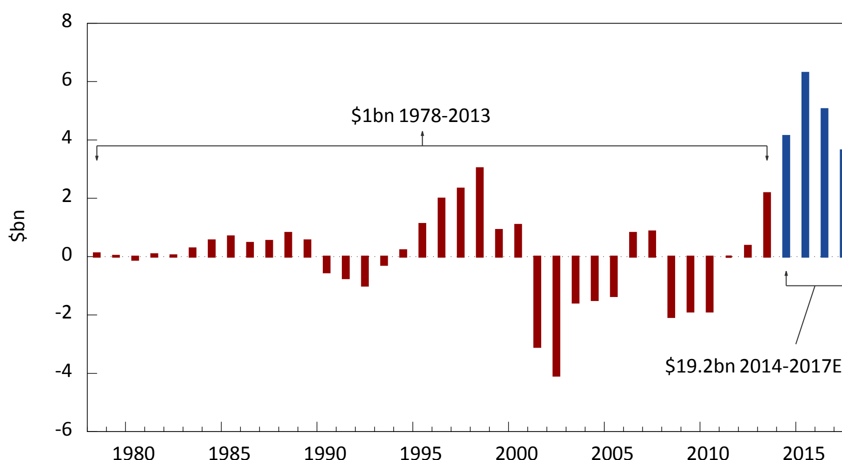
In terms of future cash allocation, the priorities are to complete merger integration, meet pension and debt obligations and invest in the business. After that American will prepay high-cost debt. And finally, American will return to shareholders any cash in excess of $7bn.

American has maintained a stronger cash position than its peers because of its higher level of debt. At the end of September its total liquidity was $8.3bn or 20% of annualised revenues, while long-term debt and capital leases amounted to $24.9bn. But even as deleveraging gets under way, American is maintaining its $7bn minimum liquidity target.

American was unusually quick to start returning capital to shareholders after bankruptcy. It has returned over $10bn in share repurchases and $700m in dividends since mid-2014. If strong cash flow continues, shareholders can expect the buybacks to be expanded in the coming years.

The aggressive re-fleeting programme, which was financed at very low interest rates, has given American a significant competitive advantage, both in terms of lower costs and a better product. It is something Delta and United will have to do at some point. However, the high level of debt also poses a risk in a downturn, so the opportunity to reduce its gearing comes none too soon.

By Heini Nuutinen



Source: American Airlines. Pretax income excluding net special items for AMR and US Airways combined for 1978-2012, American Airlines Group 2013-2016. 2017E based on concensus forecast

Jet values and lease rates

THE FOLLOWING tables reflect the current values (not "fair market") and lease rates for narrowbody and widebody jets. Figures are provided by The Aircraft Value Analysis Company (see following page for contact details) and are not based exclusively on recent market transactions but more generally reflect AVAC's opinion of the worth of the aircraft. 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.

JET VALUES ($m)

			Years old					Years old		
		New	**5**	**10**	**20**		**New**	**5**	**10**	**20**
Regional	CRJ 900NG	24.3	17.0			Emb 175✳	28.1			
	CRJ 1000	26.5	19.8			Emb195	31.4	23.0	14.5	
	CRJ300-ER	34.6								
	MRJ90	33.6				S100-95	23.1	15.8		
Narrowbody	A318		15.3	9.9		717-200			7.7	
	A319neo	40.9				737-300‡				2.1
	A320-200§			17.4	9.2	737-400‡				2.9
	A320neo	49.5				737-500‡				1.7
	A321-200‡☆	50.7	35.7			737-600‡			8.4	3.7
	A321neo	58.3				737-700‡✈		23.3	15.0	
						737-800‡✈		31.2	20.3	
						737 MAX 7	40.9			
						737 MAX 8	50.4			
						737 MAX 9	51.7			
						737 MAX 10	58.9			
						757-300†				7.1
Widebody	A300B4-600†				3.9	747-400				5.5
	A310-300§				3.0	747-8I	148.0	107.3		
	A330-200✳§	83.8	63.6			767-300ER†✈			22.8	13.4
	A330-300 REGIONAL	92.9				777-200ER		51.2	39.0	14.5
	A340-300ER				8.6	777-300ER	155.6	119.6	83.6	
	A350-900	145.2				787-8	119.6	83.4		
	A350-1000	166.0				787-9	141.6			
	A380-800‡	214.2	153.7	93.2		787-10	157.3			
	A380-800†	225.0	164.4							

Source: AVAC.
Notes: As at end-October 2017, lease rates assessed separately from values
†=HGW, ‡=LGW, §=IGW, ✈=Winglets, ☆=Sharklets, ✳=Enhanced

JET LEASE RATES ($'000s/month)

		New	Years old 5	Years old 10	Years old 20		New	Years old 5	Years old 10	Years old 20
Regional	CRJ 900NG	182	161			Emb 175✴	226			
	CRJ 1000	206	182			Emb195	252	209	160	
	CRJ300-ER	275								
	MRJ90	273				S100-95	141	135		
Narrowbody	A318		125	96		717-200			105	
	A319neo	340				737-300‡				59
	A320-200§			190	143	737-400‡				60
	A320neo	397				737-500‡				38
	A321-200‡☆	411	316			737-600‡			87	50
	A321neo	458				737-700‡✈		213	144	
						737-800‡✈		263	212	
						737 MAX 7	346			
						737 MAX 8	431			
						737 MAX 9	468			
						737 MAX 10	474			
						757-300†				93
Widebody	A300B4-600†				77	747-400			156	101
	A310-300§				84	747-8I	1,031	933		
	A330-200✴§	751	614			767-300ER†✈			242	206
	A330-300 REGIONAL	765				777-200ER		561	491	294
	A340-300ER				149	777-300ER	1,492	1,187	887	
	A350-900	1,161				787-8	931	721		
	A350-1,000	1,560				787-9	1,176			
	A380-800‡	1,721	1,290	858		787-10	1,331			
	A380-800†	1,820	1,386							

Source: AVAC.
Notes: As at end-October 2017, lease rates assessed separately from values
†=HGW, ‡=LGW, §=IGW, ✈=Winglets, ☆=Sharklets, ✴=Enhanced

AIRCRAFT AND ASSET VALUATIONS

Contact Paul Leighton at AVAC
(Aircraft Value Analysis Company)

Website: www.aircraftvalues.net
Email: pleighton@aircraftvalues.net
Tel: +44 (0) 20 7477 6563
Fax: +44 (0) 20 7477 6564

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