

## A dramatically smaller US airline industry by 2010?

The run-up in the price of oil from the \$100 level to over \$120 per barrel in April, coupled with the realisation that the price could go much higher, has cast a dark cloud over the US airline industry, with one Wall Street analyst suggesting that the profit impact would be "every bit as great as the events of 9/11". The airlines have two imperatives. First, they need to raise as much liquidity as they can while that is still possible, to prepare for a potentially prolonged downturn. Second, they need to repair the broken revenue and cost equation, to reduce cash burn and facilitate an eventual return to profitability.

The first part is fairly straightforward: giving the brilliant treasury teams and their bankers a chance to really prove themselves with imaginative fund-raising - asset sales, additional borrowings, debt refinancings, etc.

Fixing the revenue and cost equation is more complicated. Because the US legacies have already reduced their non-fuel costs substantially in recent years (in and out of Chapter 11), there is limited scope for further cost cutting. Most of the improvement will have to be on the revenue side, and the only way to effectively increase revenues is to raise domestic fares substantially.

But it is extremely difficult to get fare increases to stick in the fiercely competitive US domestic market. There is excess capacity, and LCCs now have pricing power in all the key markets. Nevertheless, last year US carriers were able to raise fares to partially offset higher fuel prices.

The problem this year is that recession is expected to begin to bite at some point. While demand has held up well despite the weakening economy and bookings for the summer are strong, most airlines expect this trend to stall in the autumn. That could make it impossible to implement fare increases.

Consequently, a major capacity pull-back is on the cards. It is likely to be the result of voluntary cuts by airlines (this year), mergers (from 2009) and the disappearance of some carriers through the bankruptcy and liquidation process. The extent of the industry shrinkage will depend primarily on the level of fuel prices (and how quickly they rise), as well as the depth and length of the recession.

On the positive side, US legacies have entered this downturn better prepared than ever before. They have chosen to carry significant amounts of cash, given the volatility seen in the business. Aircraft capex plans are extremely modest, as the carriers basically stopped ordering after September 11 and (*continued on page 2*)

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then held back in order to repair balance sheets.

But the earnings outlook is dismal. According to Merrill Lynch analyst Michael Linenberg's latest forecast (May 8th), which assumes WTI oil price averaging \$111 per barrel this year, the eight largest US airlines (including Southwest) will have an aggregate net loss of \$4.2bn in 2008. For 2009, ML is currently projecting a \$1.5bn loss, based on a \$100 average WTI oil price.

With the price of oil hitting \$126 in the early part of May, even steeper losses could materialise. ML's oil price sensitivity analysis showed that, at \$120 oil, the aggregate 2008 loss for the eight largest carriers would be \$6.2bn; at \$130 oil it would be \$8.1bn, and at \$150 oil \$12bn. These calculations assume unit revenue growth of 7%. Interestingly, Southwest would still be profitable at \$150 oil.

Clearly, the industry's financial situation and prospects have deteriorated to the extent that the full range of potential remedies is needed. US legacy carriers will get back on their feet through a combination of the following:

• **Liquidity raising**

The good news is that all of the legacy carriers probably have enough cash to weather the storm at least through 2008. But as oil prices have surged above \$120, pressure has really built up to raise additional liquidity. After all, aircraft values are still holding

up, financing is still available, etc. - but there is no guarantee that would be the case in six months' time.

At the end of April, AirTran raised a very useful \$140m through stock and convertible debt offerings, proving that the capital markets are still open to airlines, but at a cost.

Several of the legacies have non-core assets that they can sell. AMR has already arranged to sell its asset management unit American Beacon Advisors for \$480m and plans to divest of American Eagle this year (see pages 10-16). Continental has announced its intent to sell its remaining 10% stake in Copa, which could raise \$160m.

In a May 8th research note, JP Morgan analyst Jamie Baker suggested that Continental needs to "pull as many liquidity strings as possible" and criticised Delta/Northwest for their "decision to forgo cashing the Air France check". Baker argued that all airlines "need to raise capital now or down the road to survive outside of Chapter 11", given the current fuel prices and without even factoring in a recession.

• **Fare increases**

In the first quarter, most of the domestic fare increases initiated by the legacies only stuck in non-LCC markets, so they were not very useful. But fare-raising efforts have intensified and appear to have become more successful in recent weeks, as oil hit the

\$120 mark. Most recently, on May 8th American, United and Delta again raised ticket prices by \$20 per roundtrip on most domestic routes, and Northwest immediately matched them.

Fares in the US domestic market will have to increase substantially if fuel prices remain at current levels. The big question is: how much capacity will have to come out of the system to facilitate multiple fare hikes, especially if demand weakens?

### • New revenue streams

Given the difficulty in raising fares, US airlines are under enormous pressure to find new revenue sources. Recent months have seen a proliferation of new fees for items that were previously included in ticket prices. For example, charging \$25 for a second checked bag has spread like wildfire. At least one airline has introduced fees for selecting aisle or window seats, while others have raised fees for travelling with pets or booking over the phone.

### • Capacity cuts

The US airline industry is showing remarkable capacity discipline: in 2008, for the first time ever, aggregate domestic capacity will actually decline. In ML's estimate, current plans add up to a modest 1.3% reduction in domestic ASMs (including LCCs). The cuts accelerate sharply towards the end of the year, with the fourth quarter seeing a 4% capacity reduction.

But that is probably nowhere near enough, and the general expectation is that there will be significant additional capacity cuts in the second half of the year. Jamie Baker has suggested that the industry needs to shrink by as much as 20% in order to re-calibrate for current fuel trends.

Most carriers have at least some fleet flexibility. The best positioned are probably Northwest and American, with their DC-9 and MD-80 fleets, while LCCs should continue to be able to sell some of their new aircraft.

The legacies are finding it easier to cut domestic capacity now that LCCs too have

joined in - at least temporarily. Most significantly, Southwest has reduced its 2008 ASM growth to only 4-5%.

### • Mergers

Legacy mergers are now seen as inevitable in the US - one way to rationalise the industry and make it more stable. This is how Calyon Securities analyst Ray Neidl explained it in his recent testimony to a Senate committee: "The industry will have to restructure one way or the other, either through the relatively organised regulatory oversight of mergers or in the more risky and disorganised guise of bankruptcy, which may lead to certain airlines having to liquidate."

While mergers would obviously do nothing to help the industry this year and are laden with risks and pitfalls, they would provide a way to raise needed capital.

Since Continental's recent bold decision to spurn UAL and not participate in any merger in the current environment, there appear to be two deals in the making: Delta/Northwest, which was announced in mid-April and has not been at all well received by investors because of its apparent lack of synergies and capacity cuts; and UAL/US Airways, on which a decision was expected in mid-May.

### • Bankruptcies

As is typical in recessions, the past couple of months have seen a spate of small-carrier bankruptcies in the US, including Aloha, Champion Air, ATA, Skybus, Eos and Frontier. Many of those led to immediate shutdowns (Frontier continues to operate), and more casualties are expected. These liquidations will help ticket pricing in certain leisure markets.

Northwest and UAL have had covenant issues recently, which caused much investor panic, but both airlines easily negotiated waivers with their lenders. The consensus is that the legacy carriers will avoid Chapter 11 in 2008 but that speculation is justified for 2009, particularly in a recession scenario. The industry is fortunate to have the breathing space, because many of those bankruptcies would be for real.

By Heini Nuutinen  
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# British Airways grows in strength - despite the LHR fiasco

The recovery strategy that British Airways put in place in the late 1990s has finally come to fruition. At the time it found itself faced with severely falling margins - on short-haul from the incursion of the new LCC carriers and on long-haul from the typical cyclical build up of capacity, the introduction by competitors of the 777, its own expansion of high capacity equipment and the pursuit of growth for growth's sake.

Promulgated by the then head of strategy, David Spurlock (who later went on to help found EOS), the plan involved concentrating on the traffic types and routes from which the company could earn money: premium point-to-point traffic and premium transfer traffic.

The company cut capacity, improved frequencies, dehubbed Gatwick and embarked on an attempt to strengthen returns and the balance sheet in the knowledge that expansion at London Heathrow was severely constrained until the (belated) opening of the fifth terminal and the vague hope of further runway capacity at some point.

## External blows

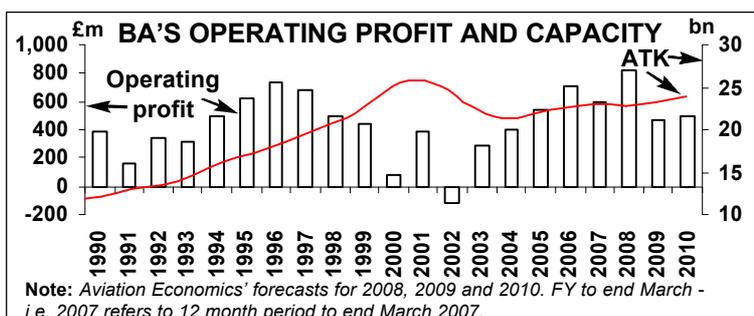
Of course in the process it encountered a few minor events outside its control (September 11, SARS, undermining of the UK pension system, introduction of IFRS etc), which each had further harmful effects on its financial position.

BA cut total capacity by nearly 20% - slightly less in ATK terms than ASK terms as it increased the size of premium cabins - and saw revenues fall by a similar amount. It took a series of sharp knives to its cost base - and among other things seriously attacked the managerial overheads arguably for the first real time since the merger of BOAC and BEA in the 1970s, removing some £1.9bn of controllable costs.

On the revenue and marketing side, it was the first European legacy carrier to have learnt something from the new airline models, and embraced the internet wholeheartedly as a distribution system. It introduced a far greater simplicity and flexibility of pricing tariffs in its capacity management system; went head-to-head with the LCCs on web-only pricing initiatives; and introduced competitive one-way fares while maintaining its perceived superior product quality.

## Financial targets

Over the years BA has used various corporate financial targets, not all of which have been all that understandable by all stakeholders. The latest - a target of 10% operating margin - had the benefit of being relatively simple. At the company's Investor Day in March, it appeared to change this target to a range of 8-12% operating margin - although in fact all they did was to add certain other criteria that are used to create formulas that all boil down to the same result: throughout this time the company's underlying financial strategy has been to bring the company's operation to a point where it can consistently produce returns over the cycle in excess of cost of capital and therefore generate shareholder value. Finally, for the year to end March 2008, it looks as if the company will have been able to achieve its magical 10% operating target.



# Aviation Strategy

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March 2008 also brought in a new era. It involved the inauguration of London Heathrow's Terminal 5 (originally conceived to encompass all of BA's and its alliance partners' operations at Heathrow) combined with the destruction of the machicolations over fortress Heathrow through the long-awaited EU-US open skies agreement.

T5 should really have opened several years ago - but was somewhat delayed by the ridiculous planning system in the UK (the planning enquiry was the longest ever) - and now will (eventually) encompass only the majority of BA's operations; the remainder and those of its oneworld alliance partners will move to the (nearly) adjacent Terminal 3.

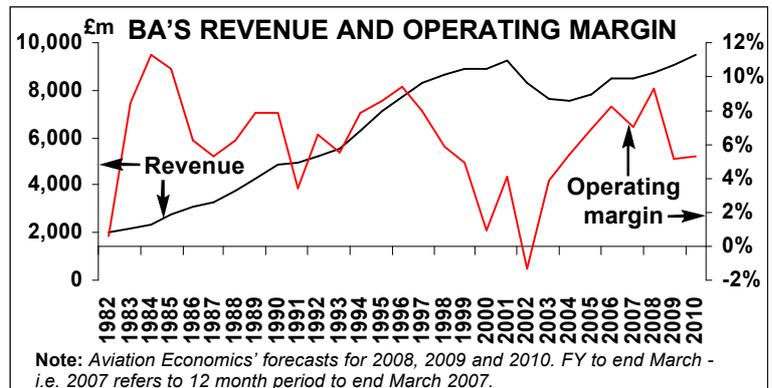
In the last few years, BA has had to distribute its services at its home hub over all the available terminals, substantially increasing complexity, adding to the difficulties of providing competitive minimum connecting times and reducing further the attractiveness of its product at Heathrow. At the same time the aging T4 services have become somewhat overloaded and, despite some upgrade work by BAA, those at T1 increasingly crowded.

The result has been a further degradation in product quality - exacerbated by the draconian security measures and increase in immigration controls that were imposed in an atmosphere of panic by the UK authorities after the attempted terrorist attacks in 2006.

One of the immediate impacts of limiting carry-on hand luggage was to increase the demands on the baggage systems at the airport by half, pushing an already worn and overloaded system at T4 over design constraints.

Not unsurprisingly, this led to some monumental and well-publicised failures, even further deteriorating BA's perceived product quality. At the same time, the construction work on T5 limited ground access airside.

Since to get an aircraft to or from Terminal 4 (which is south of the southerly runway at Heathrow) requires crossing one of the runways, the resulting congestion

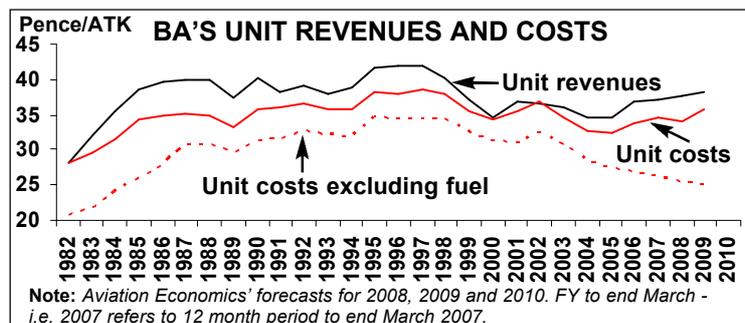


undermined BA's attempts to maintain a semblance of good on-time performance.

### T5 benefits

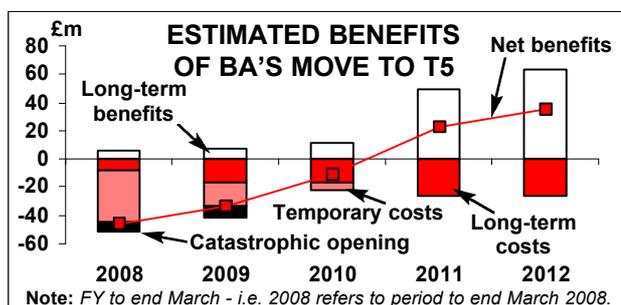
The opening of T5 - which in itself is larger than many airports in their entirety - should alleviate many of BA's product quality problems. First and foremost it is sited between the two runways, providing more efficient access for both take-off and landing, while the aircraft jetties and stands appear to have been designed with far fewer cul-de-sacs. It is now to encompass all of BA's operations - apart from the 757 operations that will continue to operate out of T1 until the oneworld move to T3 - which will eventually significantly reduce inter-connect times and substantially restore BA's competitive position compared with Air France and KLM, Lufthansa and SWISS.

As part of the grand move at Heathrow, the SkyTeam alliance will operate out of Terminal 4, the Star Alliance out of Terminal 1 (to become with Terminal 2 the new Heathrow East) and all BA's oneworld partners will move into Terminal 3. It is planned



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that once the second satellite for Terminal 5 is built (2011-2012?) BAA will extend the people-mover that connects the main body of the terminal to its satellites underground to Terminal 3, thereby allowing a reduction in minimum connecting times between it and its alliance partners. Importantly, while BA has appeared to concentrate on point-to-point traffic, it has not lost sight of the fact that half its long haul traffic does transfer at Heathrow.

The opening of T5 was an unmitigated public relations disaster for both BA and BAA - the failure of the much-heralded

high-tech baggage handling system was somewhat redolent of the opening of Denver International or Hong Kong's Chep Lap Kok, but at least there are no signs of the failures at CDG 2E.

### Logistics complexity

The overnight move of the majority of the company's short haul operations was an incredibly complicated logistic exercise and in the end it is not surprising that there were some initial problems - apocryphally, some of the BA team were advised by their friends at Cathay to stock up with candles in readiness for the opening.

In the first few days after opening the company had to cancel a myriad of flights, while the seemingly ill-trained baggage handlers found it impossible to cope with the new high-tech system creating an apparent mountain of mis-matched bags. Not all of the chaos was BA's fault: lifts did not work, escalators failed, and Heathrow

### LONDON CHANGES - TOTAL DAILY SEATS

Airport	LHR Heathrow			LGW Gatwick			STN Stansted			LTN Luton			London total			% of total
	2007	2008	% ch	2007	2008	% ch	2007	2008	% ch	2007	2008	% ch	2007	2008	% ch	
New York (Kennedy)	5,883	5,940	1.0%	441	223	-49.5%	187	557	197.7%	—	—	—	6,511	6,720	3.2%	22%
Chicago (O'Hare)	3,137	3,162	0.8%	—	—	—	—	—	—	—	—	—	3,137	3,162	0.8%	10%
Los Angeles	2,831	3,096	9.4%	—	—	—	—	—	—	—	—	—	2,831	3,096	9.4%	10%
Washington (Dulles)	1,972	2,261	14.6%	—	—	—	26	—	-100.0%	—	—	—	1,998	2,261	13.1%	7%
San Francisco	1,744	1,744	—	—	—	—	—	—	—	—	—	—	1,744	1,744	—	6%
Boston	1,508	1,619	7.4%	—	—	—	—	—	—	—	—	—	1,508	1,619	7.4%	5%
Newark/New York	1,378	1,835	33.2%	509	353	-30.7%	—	28	—	96	191	98.8%	1,983	2,407	21.4%	8%
Miami	1,275	1,275	—	—	—	—	—	—	—	—	—	—	1,275	1,275	—	4%
Seattle/Tacoma	420	580	38.1%	—	—	—	—	—	—	—	—	—	420	580	38.1%	2%
Philadelphia	416	684	64.4%	268	195	-27.1%	—	—	—	—	—	—	684	879	28.6%	3%
Phoenix	291	291	—	—	—	—	—	—	—	—	—	—	291	291	—	1%
Denver	226	486	115.2%	—	—	—	—	—	—	—	—	—	226	486	115.2%	2%
Baltimore	191	191	—	—	—	—	—	—	—	—	—	—	191	191	—	1%
Detroit (Metro)	190	200	4.8%	300	223	-25.9%	—	—	—	—	—	—	491	422	-14.0%	1%
Orlando	—	—	—	1,135	1,232	8.5%	—	—	—	—	—	—	1,135	1,232	8.5%	4%
Houston (G.Bush)	—	912	—	1,012	237	-76.6%	—	—	—	—	—	—	1,012	1,149	13.5%	4%
Dallas/Ft. Worth	—	474	—	719	246	-65.8%	—	—	—	—	—	—	719	721	0.2%	2%
Atlanta	—	216	—	716	711	-0.7%	—	—	—	—	—	—	716	926	29.4%	3%
Las Vegas	—	—	—	455	455	—	45	—	-100.0%	—	—	—	500	455	-9.0%	1%
Minneapolis/St. Paul	—	300	—	300	—	-100.0%	—	—	—	—	—	—	300	300	0.0%	1%
Charlotte	—	—	—	268	268	—	—	—	—	—	—	—	268	268	—	1%
Raleigh/Durham	—	249	—	249	—	-100.0%	—	—	—	—	—	—	249	249	0.0%	1%
Cincinnati	—	—	—	215	215	—	—	—	—	—	—	—	215	215	—	1%
Tampa	—	—	—	161	161	—	—	—	—	—	—	—	161	161	—	1%
Cleveland	—	—	—	113	113	—	—	—	—	—	—	—	113	113	—	0%
Orlando (Sanford)	—	—	—	72	41	-42.9%	—	—	—	—	—	—	72	41	-42.9%	0%
<b>Total</b>	<b>21,462</b>	<b>25,514</b>	<b>18.9%</b>	<b>6,935</b>	<b>4,673</b>	<b>-32.6%</b>	<b>258</b>	<b>584</b>	<b>126.3%</b>	<b>96</b>	<b>191</b>	<b>98.8%</b>	<b>28,751</b>	<b>30,963</b>	<b>7.7%</b>	
% total	75%	82%	7.8%	24%	15%	-9.0%	1%	2%	1.0%	0%	1%	0.3%	100%	100%	0.0%	
<b>NB New York total</b>	<b>7,261</b>	<b>7,776</b>	<b>7.1%</b>	<b>950</b>	<b>576</b>	<b>-39.4%</b>	<b>187</b>	<b>584</b>	<b>212.5%</b>	<b>96</b>	<b>191</b>	<b>98.8%</b>	<b>8,494</b>	<b>9,127</b>	<b>7.4%</b>	
% total	25%	25%		3%	2%		1%	2%		0%	1%		30%	29%		

had suddenly (only days before the opening) found that the planned fingerprint recognition of passengers on domestic flights (which would have allowed the mingling of international and domestic passengers in the same airside departure halls) was deemed illegal.

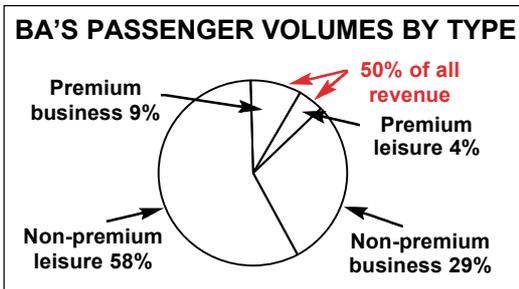
Nevertheless "questions were asked in the House", and the top management of both BA and BAA were hauled before the House of Commons Select Committee to explain the national embarrassment.

### Traffic hit

On the face of it, the impact on British Airways' traffic in this first month of operation has been dire. For April - despite somewhat invidious prior year comparisons because of the timing of Easter, combined with the UK's decision to delay some school holidays away from the traditional religious period - the company experienced a 7% fall in traffic demand.

In some mitigation at least it saw a modest year on year improvement in "premium" traffic, but the number of people at the back of the aircraft fell by more than 8% year-on-year and the load factor slumped by five points. As a result of the chaotic opening, the second stage of the move into the new facility has been delayed from April to June - the final stage is still slated for March 2009 - which will have a continual knock-on effect on the scheduled transfer times for connecting flights. Incidentally, this also creates further logistical nightmares for BAA as it will delay the planned move by Air France KLM and its SkyTeam partners into T4 and Lufthansa and its Star alliance partners into T1 - both of whom are said to be pursuing the beleaguered BAA for damages.

At one point at BA's Investor Day in March the company highlighted the anticipated long-term benefits of the move to T5 (see chart, above left). One of the most important operationally will have been the opportunity to introduce new working practices (particularly in handling) - many of the old agreements dating back decades appear to have been different by terminal. In addition, for the first time the flight and



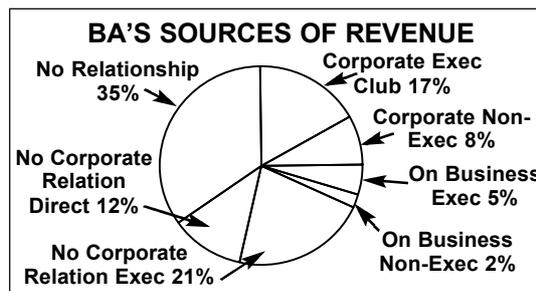
cabin crew have their ops-centre within the terminal, voiding the need for the almost off-airport Compass Centre and the requirement to bus the crew to the different terminals; and thus hopefully improving on-time performance.

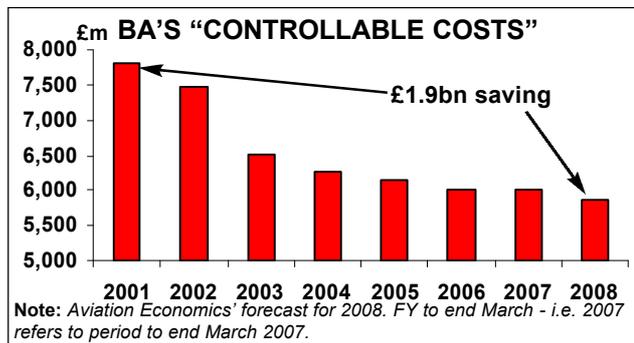
In the run up to full operation of the new terminal the company has had to boost staffing levels strongly at the airport - and has incurred some heavy start-up costs - and these will now start to dissipate. In addition, the heavy capital cost of its own facilities within the terminal will add some £30m to the annual base costs.

One of the major additional benefits - tangible and intangible - will come from the design of check-in hall and the departure process: ranks of automatic boarding pass machines, bag-drops and (as a last resort) check-in-desks that will funnel the departing hordes efficiently (and apparently without queues) towards and through security. The first year's net impact has been badly hit by the fiasco of the first few days - BA estimates some net additional £16m in costs - but in the long run the net returns should be positive.

### Cautious growth

The operational and balance sheet restructuring put in effect since the start of



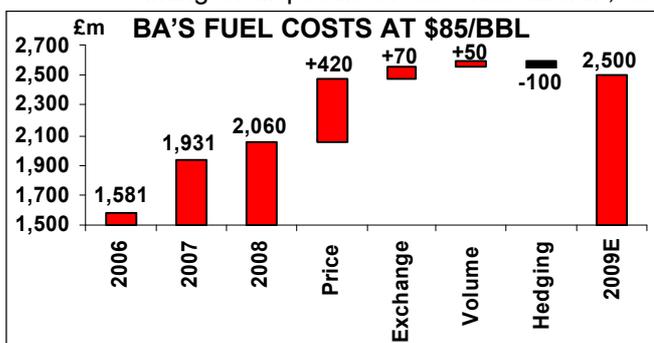


the new century, and now the move into Terminal 5, finally gives British Airways comfort to start reconsidering growth - albeit no more than the industry average. In the short run it still plans only modest capacity increases of just 2-3% for 2008-09 - and with further emphasis on the front-of-the bus as it continues expansion of the new Club World product.

From 2009-10 it appears to be planning a more "normal" growth of 4-5%, with the launch of a new First class product slated for that year. Last September it finally addressed some concerns over the long-haul fleet replacement with an order for 12 A380s and 242 787 Dreamliners (with options for a further seven and 18 respectively) to replace 34 of the airline's long haul fleet.

These are to be delivered from 2010 (depending on further delays in production of the 787 no doubt) up to 2014; while the company is still considering the options for replacing its last remaining 747s.

The timing of the orders and options gives the company considerable flexibility in its fleet mix and capacity and, through the timing of disposals of the older aircraft, the



ability more easily to match capacity to market demand conditions.

## Open skies

The second major event of April this year was the start of the first phase of the open skies agreement between the EU and the US. The only thing the US really wanted out of the agreement was access to Heathrow and the dismantling of the Bermuda II agreement - and Heathrow is *the* Atlantic gateway between the US and Europe. Were it not for the fact that Heathrow is so constrained with its two runways, BA might be seriously concerned.

As it is there has been a rush to acquire slots - at some astounding prices - and a massive switch of capacity into Heathrow (see table, page six). Most of this switch has come from existing routes operated into Gatwick, with the non-Bermuda II US carriers finally able to push routes from their hubs into the airport perceived to have the higher attraction and yields. In fact BA (and partner American) will benefit strongly from the move as it will at last be able to operate the "oil" routes from Dallas and Houston through LHR.

## BA superiority

There will undoubtedly be some yield dilution on minor routes, but BA's control over 40% of the slots at the airport and dominance of the important LHR-NYC route (and New York is by far *the* gateway on the other side of the Atlantic) gives it an unmatched superiority. The main moves into Heathrow have been from the US carriers forbidden access under the old bilateral - Delta, Continental and Northwest - each of whom have acquired or leased slots from their respective alliance partners.

The only European carrier to make a move so far has been Air France/KLM with a (somewhat dubious) rotation from LAX. In the short run this may not represent more than a teaser, but with Delta and Northwest in the throes of merger, the SkyTeam partners gaining ATI, and AF

planning a four way joint venture on the Atlantic, the AF move represents a serious bridgehead. Intriguingly, British Midland has decided not to introduce transatlantic services out of Heathrow (at least not yet); but even more danger to BA may be presented by what Lufthansa finally decides to do with its option to buy out Michael Bishop and the resulting combined 20% pool of slots.

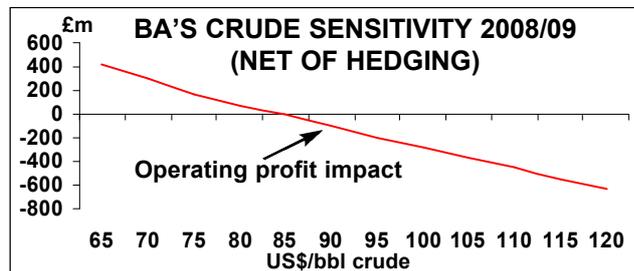
However, one of the resulting opportunities of the open skies agreement - especially in consideration of the announced DL-NW merger and the anticipated consolidation of the six US majors into three - will be reopening an ATI application with oneworld partner American (and possibly Continental), and the possibility for being able to create a oneworld-based joint venture on the Atlantic. This it would follow as long as there were no regulatory penalties imposed (particularly any slot disposals).

### "The best laid plans..."

The short-term outlook - and especially that as presented in the company's Investor Day in March - currently appears to have been eradicated as if by a harvester, and all because of the fuel price. At the time the company was predicating its plans for the current year on a central case of crude oil at \$85/bbl and the cable rate at \$1.95/£.

As with the other two European majors - and totally unlike any of the US carriers - BA has a good strong fuel hedging position. In March it stated that it had covered over 50% of its 08/09 fuel uplift requirements at \$75/bbl equivalent (through the normal mix of forwards, collars and swaps in what is ironically an un-liquid market); was looking at a possible 4-4.5% revenue growth, a modest uptick in underlying non-fuel unit costs (mainly because of the T5 move) and operating margins of around 7% despite a £500m increase in the anticipated fuel bill (at £2.5bn fuel would represent 30% of total costs).

It also pointed out that in the past it had been able to recover some 60% of the increased fuel costs through fuel sur-



charges. The CFO did however suggest that at \$120/bbl operating profits could be wiped out. The chart (above) shows the sensitivity of the average full year price of crude on operating profits - although as usual sensitivity analyses at a single point in time on a single input variable automatically ignore potential reactions in other variables let alone human intervention (and in the past few weeks many carriers have posted increases in their fuel surcharges) - but the net impact on bottom line profitability may not be the result of a straight line equation.

Nevertheless the higher the fuel price goes, and the higher the average fuel price through the coming year, the greater the risk to the company being able to generate profits.

### BA set for the future

It has been a long haul for British Airways to get its operations and finances in order. The new facility at Heathrow should at last allow it to recover some if not all of its reputation lost because of the constraints at its main hub. The open skies agreement on the Atlantic may provide some increased competition, but also provides the opportunity to join in the industry consolidation process (particularly on the Atlantic). The spectre of an era of very high fuel prices will harm ability to generate sufficient profits - but, if fuel prices stay at these levels, the industry will have to respond (and we have already seen the failure of some of the weaker carriers to help in the consolidation process).

While there is a very difficult current environment, British Airways is now in a far better position and has much greater flexibility than it had for many years.

By James Halstead

## AMR: A Chapter 11 risk or one of the likeliest survivors?

American, the world's largest airline in terms of traffic, is seen by many as a Chapter 11 risk in a prolonged recession, given its labour cost disadvantage and pension exposure. But AMR also possesses significant strengths, including a diversified global network, powerful FFP, huge cash reserves and a range of non-core assets that could be monetised. How does the management plan to tackle this year's challenges? And could an immunised American/BA alliance become a reality?

AMR is the only one of the "big six" US network carriers to have avoided Chapter 11. While that is something to be proud of, it has become a negative for AMR as its four largest competitors have gone through bankruptcy restructurings in the past few years. Delta, Northwest, UAL and US Airways have all used the Chapter 11 process to slash their labour and aircraft ownership costs and shed their pension obligations. This has resulted in American having the highest labour costs in the industry. Like Continental (which last visited Chapter 11 in the early 1990s), American also has the more burdensome defined benefit pension plans, though those costs are manageable as a result of new pension legislation.

Because of the cost disadvantages, AMR is headed for what is likely to be the worst loss margin among the US legacies in 2008. If fuel prices remain at the current levels, this year's net loss could exceed \$2bn.

To make the situation worse, American's pilot contract is now open and the union is demanding substantial rises. AMR could therefore find it hard to work with labour to pursue cost savings that are needed to offset fuel prices and potentially softening demand and unit revenue trends.

Consequently, AMR is the only legacy carrier that could benefit significantly from Chapter 11 (many of the others would probably end up liquidating if they had to file for

bankruptcy again). In addition to labour cost savings, American could reap aircraft savings, given recent trends in lease rates and aircraft values, and eliminate unsecured debt.

In recent months AMR's shares have been trading at what one analyst called "near-bankruptcy" levels (see chart, right), as investors have evidently considered Chapter 11 a likely eventual outcome - say, in early 2009. But AMR's top executives have made it very clear that they are determined to avoid it.

AMR came very close to filing for Chapter 11 in the spring of 2003, averting it only when it secured \$1.8bn of annual labour concessions literally on the courthouse steps. It was a painful experience for both labour and management and involved the resignation of the popular chairman/CEO Don Carty. Gerard Arpey, the current CEO, noted in AMR's recent earnings conference call that the company demonstrated in 2003 how hard it was willing to work to avoid Chapter 11 and that it has been "very mindful of that experience".

AMR has numerous strengths that will help it avoid Chapter 11 in all but the most dismal of fuel and economic scenarios. First, it has ample liquidity: almost \$5bn in cash (as of March 31st), or 21% of last year's revenues. AMR had the wisdom to build cash reserves and reduce debt when the capital markets were strong.

Second, AMR is well positioned to raise additional funds. Debt reduction has increased the pool of unencumbered aircraft. There are attractive non-core assets that could be monetised; in addition to the recently announced sale of asset management unit American Beacon Advisors, which will raise \$480m, AMR is likely to put its regional subsidiary American Eagle on the block. There are assets that could be used as collateral, such as Heathrow slots. And if the going gets really tough, AMR might even

attract a minority investment from its oneworld co-founder and transatlantic partner BA.

As rating agency Fitch noted in a recent report, AMR's strong cash position and large unencumbered asset holdings "provide considerable room to manoeuvre in a prolonged industry downturn".

Third, while AMR has a labour cost disadvantage, it is not that dismally positioned in terms of its total cost structure. While its competitors slashed labour costs in Chapter 11, AMR quietly achieved the industry's best non-labour cost reductions - an impressive \$4bn of annual savings as part of its "Turnaround Plan" in 2003-2007. This was in addition to the \$1.8bn voluntary labour cost savings.

Fourth, AMR has exercised considerable capacity restraint for years - long before other legacies began to see merit in the idea. Its latest plan envisages a near-5% domestic contraction in the fourth quarter.

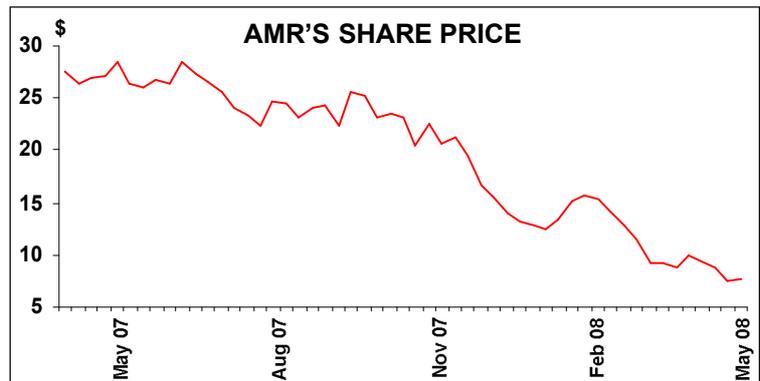
Fifth, in response to \$110-plus oil, AMR has smartly decided to accelerate MD-80 retirements. It is now taking as many as 70 737-800s in 2009-2010. This will help offset the unit cost increase resulting from reduced capacity. To offset the higher capital spending, AMR is clamping down on all non-aircraft capex.

Like its peers, AMR is taking action on multiple fronts. There are new efforts to boost ancillary revenues, a management and support staff hiring freeze and countless other cost and revenue initiatives.

Finally, AMR's size and network strengths mean that it is not under pressure to play a major role in industry consolidation. It has been able to stay on the sidelines, focusing efforts on this year's real challenges, while keeping a lookout for any great opportunities and exploring less risky deals such as alliances.

### The fuel cost challenge

AMR returned to profitability in 2006 (like most other US carriers), following five years of net losses totalling \$8.1bn. 2006 and 2007 saw net profits of \$231m and \$504m,



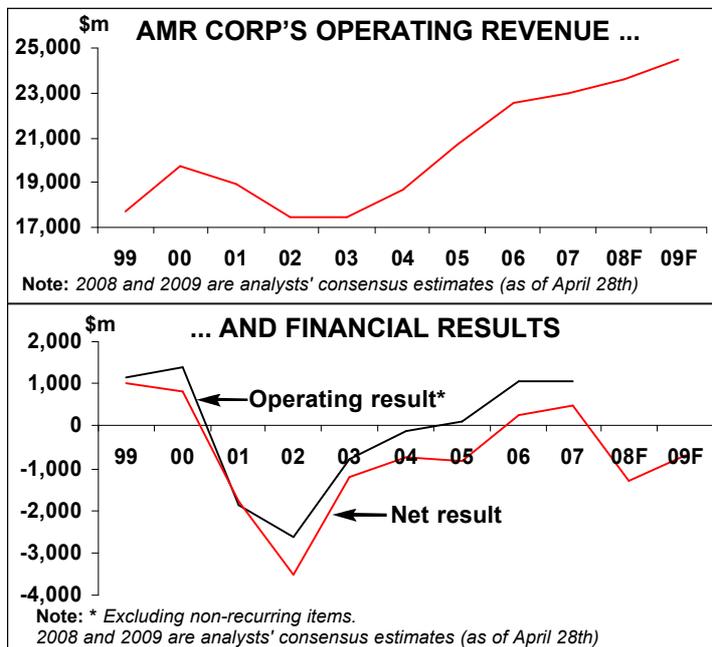
respectively. Last year's operating margin was 4.7% - at the low end of the range for the legacy carriers.

AMR's recovery was almost entirely due to the \$5.8bn Turnaround Plan cost savings, though an improved domestic revenue environment in the past two years also helped. American's ex-fuel unit costs declined by 17.4% between 2002 and 2007. However, because the average fuel cost almost tripled in the five-year period, total CASM increased from 11.54 cents to 11.98.

Like the rest of the industry, AMR plunged back into losses in this year's first quarter, when oil prices surged to the \$110-plus range, though AMR's 6% pretax loss margin was actually better than the legacy average. The airline had good revenue performance and kept non-fuel expenses in check, but its average fuel price per gallon soared by 48%, increasing fuel costs by \$665m. RASM was up by a healthy 6.5%, but it nowhere near compensated for the 15.8% increase in CASM.

The problem now is that fuel prices look likely to remain at extremely high levels for the foreseeable future. AMR faces CASM headwinds in light of the reduced capacity, and demand and RASM trends are expected to weaken due to recession (though so far there are no signs). AMR is currently expected to post a loss of almost \$1.3bn for 2008 (consensus estimate as of April 28th), though the range of individual analysts' estimates is rather wide.

According to a fuel-sensitivity analysis carried by Merrill Lynch analyst Michael Linenberg (April 23rd), at \$100 oil, AMR would have a net loss of about \$1bn in 2008.



At \$110 oil, AMR would lose \$1.7bn; at \$120 oil, the loss would be \$2.4bn; and at \$130 oil, about \$3bn.

Whichever of those scenarios materialises, as Arpey put it, AMR needs to "right the revenue-cost equation" but "there is certainly no silver bullet to the problem". The company has continued hedging for fuel; it has a useful 29% of its 2008 fuel needs capped at about \$75 per barrel. Like its peers, AMR has put much effort into developing ancillary revenues; most recently, it followed UAL and others in introducing a \$25 fee for a second checked bag domestically. But the only effective solution is to raise fares substantially - and, realistically, that is unlikely to happen in the domestic market without a significant capacity reduction.

### Domestic contraction, modest international growth

AMR has been very conservative in managing its capacity for several years - even its international growth has been disciplined compared to the other legacy carriers. What was thought to be a conservative plan for 2008 has already been revised down twice this year in response to oil. The latest changes, announced on

April 16, pull down domestic capacity in the second half of this year and also reduce regional flying.

American's mainline capacity is now slated to fall by 1.4% in 2008, which will include a 3.6% reduction in domestic ASMs and 2.5% growth internationally. Regional affiliates' capacity will decline by 2.1%. The biggest impact will in the fourth quarter, when mainline domestic capacity is expected to fall by 4.6%. This is in line with the other legacies' capacity cuts.

But since those plans were formulated before oil surged above \$115, further domestic capacity cuts (by all of the airlines) are likely. American has significant flexibility on that front because of the 300 MD-80s still in the fleet. This year's cuts will also be achieved through the return of three A300s as their leases expire.

In the first place, American will be eliminating some of its more marginal longer-haul domestic flying. It is ending service to Oakland (California) in September.

This year's modest international expansion will include a new Chicago-Moscow route and linking JFK with Barcelona and Milan. American's domestic/international ASM split, which is currently 63%/37%, will obviously continue to shift in favour of international operations.

American's main response so far to the EU/US open skies regime has been to terminate operations to Gatwick, in favour of focusing on Heathrow (with one daily flight to Stansted). The airline has moved its three daily Gatwick flights to Heathrow (after obtaining a few additional slots there), which has given its main hub at Dallas Fort Worth its first LHR link. Even though American has extensive service to continental Europe from the US, Heathrow represents about half of its transatlantic capacity.

### Accelerated fleet renewal

American operates a relatively old mainline fleet, averaging about 15 years in age. At year-end, the 655-strong fleet was made up of 47 777-200ERs, 58 767-300ERs, 15 767-200ERs, 124 757-200s, 34 A300-600Rs, 77 737-800s and 300 MD-80s. In

addition, there were 47 non-operating aircraft - mostly MD-80s that had been permanently grounded and were held for disposal.

The main challenge is replacing the MD-80s, which account for nearly half of the fleet and have an average age of over 18 years. The process began in March 2007, when American announced its intent to pull forward the delivery of 47 737-800s from their 2013-2016 delivery schedules into the 2009-2012 timeframe - possible because of an earlier flexible long-term purchase contract with Boeing. But last year American accelerated the delivery of only about 12 737-800s, because financial restraint was the name of the game. The leadership stressed the need to be very careful about allocating further capital until there was certainty of getting a return on that capital.

The breaking point was \$110-plus oil. American announced on April 16 that it had decided to accelerate the MD-80 retirements and 737-800 deliveries, as well as place new 737-800 orders. The plan now is to take 34 737-800s in 2009 and 36 in 2010, compared with a total of 26 in those years previously, though all of those are not yet firm orders. The move reflected the realisation that, at the current oil prices, American can get a very clear ROI on the 737-800 in the near-term, though CEO Arpey also noted that the date of Boeing's next-generation narrowbody keeps moving into the future.

The downside is that the new strategy will shift the main capital spending burden from the 2011-2016 period to the immediate future - just when liquidity may become an issue. The new plan would increase 2008-2010 aircraft commitments by around \$1.3bn, from \$787m to over \$2bn.

But there is obviously much flexibility. The MD-80 replacement process will take a while because of the sheer size of the fleet, and the retirement schedule can be adjusted to suit market conditions. There is strong demand for the 737-800 globally, so getting out of any orders or doing sale-leasebacks should not be a problem.

American also has leases expiring on 21 A300s in 2009-2011.

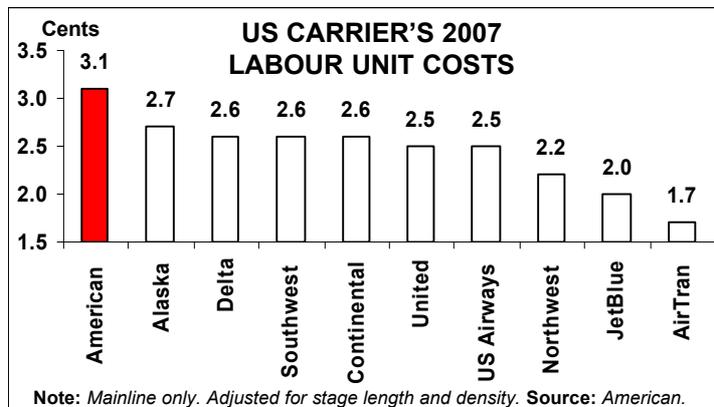
As for the international fleet, American, like some of its peers, faces the challenge of finding timely replacements for its ageing aircraft, given the manufacturers' order backlogs and delays to new aircraft. Currently AMR has orders in place for only seven 777s, for delivery in 2013-2016. Because of the long lead times, the airline should be placing more orders immediately, if it wants to continue expanding internationally. By 2015, its 15 767-200ERs will have an average age of 28 years, its 58 767-300ERs will be 21 years old and its 124 757-200s will average 20 years. One can only assume that AMR can count on its special relationship with Boeing to resolve those challenges.

### Balance sheet considerations

AMR has made great progress in repairing its balance sheet since 2003, even though it remains highly leveraged. Net debt (debt minus cash reserves) has declined by 43% in the past five years, from \$18.9bn at the end of 2002 to \$10.7bn as of March 31st - the lowest level since 1998. The cash position peaked at \$5.9bn a year ago (26% of annual revenues), though the balance has declined to \$4.9bn (March 31st) mainly because AMR has been prepaying debt. Last year alone, total lease-adjusted debt declined by \$2.3bn to \$15.2bn.

AMR has completed some well-timed share offerings and debt refinancings. Most significantly, in early 2007 it raised almost \$500m by selling equity at close to \$40 a share - a level that turned out to be the five-year peak for the share price. The stock has since declined steadily and has been trading below \$10 in recent months.

Those efforts have meant that AMR is now in a better shape to endure a tough fuel and economic environment than it was just a few years ago. (It is amazing to think that in the past two years AMR was criticised for hoarding cash. Only six months ago it was under pressure from investors to pay a dividend.)



Near-term obligations appear to be manageable. This year's scheduled debt and capital lease payments are \$1bn, including a \$300m convertible debt payment. The pension cash contribution is estimated at \$350m. Capital expenditure is expected to be \$1.2bn, including \$600m in pre-delivery payments on 737s.

On the negative side, AMR is likely to violate the fixed charge covenant related to its \$439m credit facility term loan this year, possibly even in the current quarter. Like Northwest and UAL recently, it will have to negotiate new terms with its lenders - either paying onerous consent fees or having to tap into its cash reserves to repay the loan. AMR is fortunate in that it is currently not required to maintain any reserve under its credit card processing agreement, but there are no guarantees this will be the case in the future.

JP Morgan analyst Jamie Baker suggested in a mid-April research note that the only real trigger for a Chapter 11 filing by AMR would be liquidity (as opposed to the need to get cost savings). Based on his 2008 loss forecast, and assuming no additional liquidity raising, Baker estimated that AMR would have \$3.1bn cash at the end of 2008, which would probably be adequate. However, if fuel prices remain at current levels and no funds are raised in addition to the Beacon sale, unrestricted cash could approach \$2bn in 2009, which Baker considers AMR's minimum bankruptcy filing threshold.

So raising liquidity will be the key. AMR is fortunate in having large unencumbered

asset holdings that it could sell or put up as collateral.

### Asset monetisation potential

Raising funds through asset sales will be easier for AMR because of the strategic review that the company launched - for a different reason - in the early autumn of 2007. At that time certain equity investors, unhappy about share price trends, were trying to spur the largest US airlines into taking concrete action to create shareholder value. American faced pressure from FL Group, one of its largest shareholders, to spin off its FFP and other non-core assets.

In other words, while the purpose of asset sales may have changed from enhancing shareholder value to raising funds for survival, the important thing is that AMR already has a pretty good idea of which non-core assets might be the easiest to separate and sell, raise adequate proceeds and result in minimal damage to the core business.

The process started last month, when AMR announced the sale of its wholly owned asset management subsidiary, American Beacon Advisors, to investment funds affiliated with two private equity firms for \$480m. The primarily cash transaction is expected to close this summer. CEO Arpey noted that finding the right buyer took a while and that the agreement reflects the full value of the unit for AMR shareholders. AMR is retaining a 10% stake in Beacon, enabling it to benefit from the growth of the high-margin business, which earned a \$48m pretax profit on \$101m revenues in 2007 (both up by 40%).

AMR is still hoping to divest its wholly owned regional unit, American Eagle, by year-end. The decision to shed Eagle - either through a spin-off to AMR shareholders, a sale to a third party or an IPO - was first announced in November 2007, when the value was estimated at between \$600m and \$1.1bn. The move would seem to make sense to both parties. It would put American in step with other large carriers that have shed their feeders, enabling it to focus on core operations and save costs in the longer

term through the use of outside contractors and the competitive bidding process. Eagle, in turn, would be better able to pursue growth opportunities outside AMR, while retaining a service agreement with AMR for some years at least.

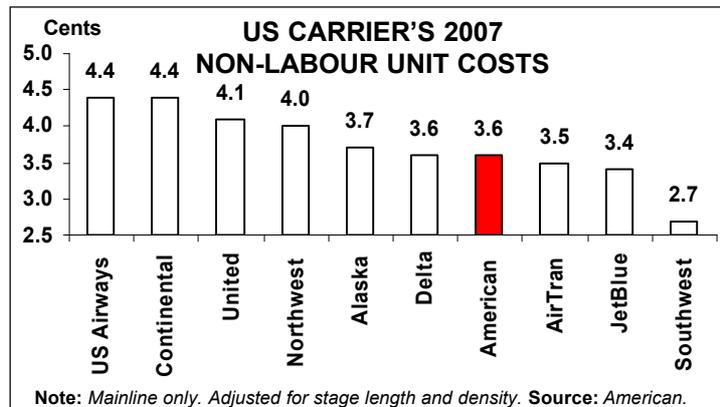
Eagle is a large airline, with revenues of \$2.3bn in 2007 and a fleet of 300 aircraft and a network of 150 cities at the end of 2007. AMR has been laying the groundwork for its separation for many years, as a result of which Eagle is fully capable of standing on its own. It has a separate management and has produced independently audited financial results for several years. Last year AMR and Eagle revised their agreement to reflect market-based rates, but Eagle was still able to earn a \$114m pretax profit (5% of revenues) in 2007. Another small regional business, Executive Airlines, which serves the Caribbean, is included in the planned divestiture.

But Eagle does have some cost issues, especially high labour costs, which are mainly due to the seniority of its workforce. And there is the thorny issue of a large fleet of 50-seat RJs, which were in excess supply long before the current fuel environment (as legacy pilot scope clauses have been relaxed and 70-100 seat RJs have gained popularity). It is a tough market to sell regional carriers, but AMR will probably try because it may not get any easier in future years.

The original list of divestiture candidates also included AAdvantage FFP and AMR's MRO business. But separating the maintenance business was always considered to be many years away, because even though there is potential to develop third-party revenues, today the vast majority of AMR's MRO business is still from American. As for the FFP, AMR is unlikely to want to shed that business in the current environment because of the cash flow it generates. In any case, separation of the FFP poses tricky issues that probably require further study.

### The labour challenge

American faces serious problems on the labour front. First, it has uncompetitive



labour costs because its workers are the highest-paid in the industry. Second, all of its labour contracts are now open and the workers are demanding immediate substantial pay increases. Third, its labour relations are so strained that strikes cannot be completely ruled out.

The problems date back to the labour concessions that American secured on the courthouse steps in May 2003. All of the contracts became amendable on May 1. The key unions are determined to roll back the concessions. American, of course, cannot afford that because of its labour cost disadvantage, weakening financial position and all the uncertainty about fuel prices and the economy. The situation is aggravated by the large bonuses collected by AMR's top executives in the past two years. The workers must be angry and dismayed to think that they missed a two-year profit window.

A year ago the pilots, represented by the independent Allied Pilots Association (APA), put forward outrageous pay and bonus demands, which would have meant a near-50% increase in their total compensation this month. This was rejected by the management. The talks, which started in 2006, have made no progress whatsoever. The two sides are so far apart that the National Mediation Board has been unwilling to get involved, despite APA's requests. APA has alleged that the management is delaying the process. The pilots recently started staging protests at airports.

American's traditionally militant flight attendants are also keen to get a new

contract in place. The union recently elected as their new president a leader of their 1993 strike, who has since promised to get the 2003 concessions back "with interest".

It is hard to see how these issues can be resolved. One can only hope that the management will behave responsibly (decline any further bonuses) and that the unions will keep in mind that AMR does have the last-resort option of a Chapter 11 filing, which would solve many of these problems.

It will be a shame if the situation remains in limbo, because it would further weaken morale. American recently experienced a serious spate of flight cancellations due to MD-80 wiring inspections (which will mean a financial hit in the "high tens of millions of dollars" in the current quarter). There have also been reliability issues. Last month the pilots reportedly declined to participate in meetings aimed at improving customer service and operations. AMR needs the full cooperation and goodwill of its workforce to meet this year's challenges.

### An immunised AA/BA alliance?

At this point it looks like AMR is not going to participate in any major way in US industry consolidation. AMR's official position is that that it does not need to take part in a big merger to stay competitive, that it "may or may not participate" in consolidation, but that it would be alert to opportunities to buy assets.

AMR's network strengths include strong hubs at Dallas Fort Worth and Miami, extensive Latin American operations, a strong transatlantic presence (including Heathrow), a highly competitive position in the key business markets in the US - including Chicago, Los Angeles and New York (all of which have global service), the most powerful FFP in the world and membership of oneworld, which AMR's management believes represents "the best global airlines and brands". So AMR believes that it will remain competitive irrespective of any consolidation that occurs.

By Heini Nuutinen  
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Also, AMR is not a good potential merger candidate because of its large size, relatively high costs and difficult labour relations.

AMR could gain by doing nothing. Its management believes that the Delta-Northwest merger, if it takes place, will lead to higher labour costs for the combined carrier, thereby narrowing AMR's labour cost disadvantage.

But if there were to be Delta-Northwest and UAL-US Airways mergers, AMR would fall from being the largest US airline to the third largest, so it would probably want to do something to strengthen its position.

One obvious strategy would be to strengthen links with BA. AMR and BA are at a competitive disadvantage on the transatlantic vis-à-vis the other alliances (Northwest-KLM and Delta-Air France) because they lack antitrust immunity, which would allow them to coordinate their pricing, schedules and service as if they were one company. They have twice failed to secure antitrust immunity because BA could not agree to the Heathrow slot divestitures required by the European regulators. The problem has been their large market share on US-UK routes and BA's dominant position at Heathrow.

But BA and AMR may have a stronger case now, first, because more competitors have gained access to Heathrow as a result of the EU-US open skies treaty. Second, the DOJ has given tentative approval for NW/KL and DL/AF to combine into a four-way transatlantic JV.

Therefore some kind of a compromise solution might be possible soon that would give AA/BA the all-important antitrust immunity. According to Arpey, it has been a continuing subject of discussion between the two airlines. "Speaking from American's perspective, I think there will be an appropriate time to cross that bridge."

In recent weeks it has emerged that Continental is in early-stage talks on a marketing alliance with BA and AMR. This could create potentially a very powerful and profitable three-way transatlantic alliance, with an incredible position in New York and unbeatable connections to Latin America, but there would be added regulatory hurdles.

### Is China's booming airline industry set for a slowdown?

China's air transport industry has been growing steadily ever since 1987, when the fundamental restructuring of the country's aviation infrastructure was launched. But while passenger numbers have boomed in the 2000s, China's current economic cycle is now approaching its peak. Although 2008 is a so-called "Golden Year" for China's airlines, do they need to prepare for tougher times ahead?

The market forecasts issued by Airbus and Boeing continue to paint a highly optimistic picture of China's aviation industry, with expected annual average growth rates of between 6%-8% over the next 20 years. Given the country's huge population and relatively underdeveloped aviation market, these forecasts are entirely feasible over the long-term, as the fundamental drivers of China's air transport - GDP and disposable income - will continue to grow over the next couple of decades.

Indeed, over the past seven years the Chinese airline fleet has grown by almost 600 aircraft, although the majority of this increase has come at China's Big Three carriers (Air China, China Southern and China Eastern). Chinese start-up airlines have yet to play a significant role in the industry, and in the last seven years 12 new passenger airlines have added capacity of just 50 aircraft into the Chinese market. And whereas in 2006 more than 200 domestic and 50 international routes were launched by Chinese airlines, passengers on these new routes accounted for just 4.5% of total passengers carried in that year.

Essentially, start-ups have as yet been unable to exert a significant impact on the Chinese aviation market, and the growth that is taking place comes mainly from increased passenger numbers on existing domestic and international routes.

Nevertheless, although growth in the 2000s has been concentrated around the Big Three, that growth has been substan-

tial and sustained. In 1999, at the bottom of the last Chinese economic downturn, passenger load factor at Chinese airlines dropped to 58%, but over the past nine years load factor has climbed steadily, reaching 76% in the first three quarters of 2007. But it would be a mistake to assume that robustness of the Chinese aviation market will continue forever.

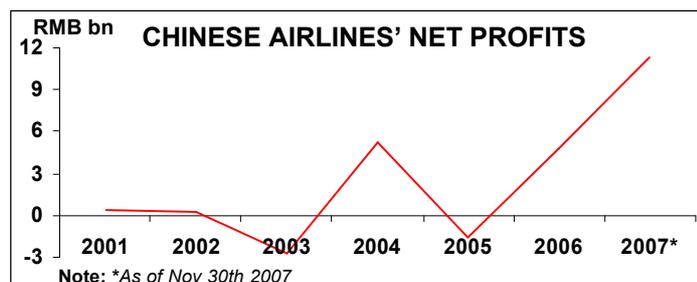
#### Economic slowdown

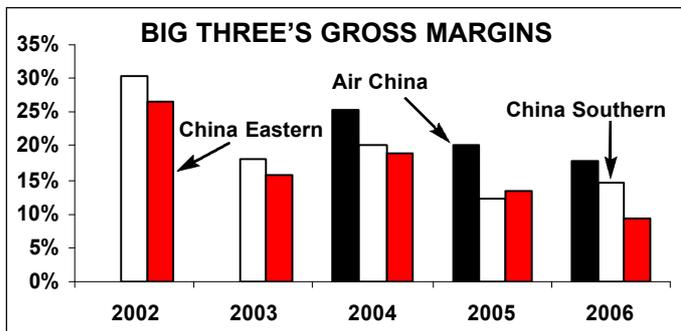
That's because after almost five years of high growth, the combined factors of soaring inflation, increasing manufacturing costs, a tightening monetary policy and a gloomy global economy are signalling an end to China's current economic upturn.

China's outstanding economic growth over the last five years has been the result partly of the government's fiscal and monetary policies, which were designed to pull the economy out of the recession caused by the east Asian financial crisis of the late 1990s and the global recession of the early 2000s.

These policies encouraged public and private sectors to borrow and invest in the Chinese economy at interest rates of less than 3%, which occurred at the same time as increased foreign investment into China in order to build and expand manufacturing capacity (and take advantage of China's low labour costs).

But as China's exports surged, higher foreign currency reserves in conjunction with an inflow of foreign capital have result-

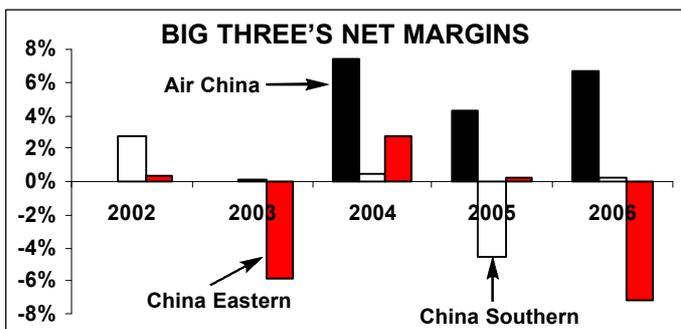




ed in excess liquidity in the country, pushing equity and property prices to a record high. Combined with rising oil and food prices, the Chinese government has now decided to encourage a soft economic landing rather than risk a full recession, and the most striking policy shift has been a tightened monetary policy, including higher interest rates and a reduced money supply.

Hence China has passed the peak of the current economic cycle, and an economic slowdown lies ahead, although the scale and duration is uncertain. Given that China's GDP growth rate is expected to fall below 10% in 2008 and the rate of growth will continue to slow down over the next few years, what are the implications of this for China's airlines?

Most obviously, the rate of growth in China's passenger air transport market is likely to decelerate. While the first half of 2008 will see passenger demand and load factors continuing to climb, the post-Olympics years are likely to see a reduction in the rate of growth of these factors. While the Chinese aviation industry will continue to expand, there's little doubt that the rate of growth will slow down - but by how much is unknown at the moment, as



this depends on whether a soft economic landing can be achieved and just how serious the global economic slowdown will turn out to be.

That uncertainty about air passenger demand in the future matters, because despite China's aviation boom of the past few years, most Chinese airlines have seen their finances weaken over the same period. While airlines have increased net profit over the past seven years (see chart, page 17), these figures mask some worrying underlying facts.

### Air China dominance

First, Air China accounts for more than 60% of total profits within the Chinese aviation industry. In 2004, when the airline industry reported its biggest profit - RMB 5.2bn (US\$0.6bn) - for more than a decade, Air China contributed RMB 3.5bn of this. And in 2005 - when the industry overall recorded a financial loss - Air China posted a profit of RMB 2.6bn (US\$0.3bn). And in 2006 Air China's profits of RMB 3.8bn (US\$0.5bn) accounted for 80% of the industry's total profits - although Air China's phenomenal profits in 2006 are attributable mainly to gains from RMB appreciation, the sale of Dragonair and dividends from Cathay Pacific Airways (RMB 1bn, RMB1.6bn and RMB 0.5bn respectively).

Second, the surging net profits of the Chinese aviation industry have been gained largely from irregular items rather than from underlying operating profit. Among all the exceptional items, the most significant has been the gain from RMB appreciation, as China's airlines finance aircraft deliveries largely through commercial debt or financial leasing denominated in US dollars. For example, as of June 30th 2007 China Southern had a US dollar debt from aircraft finance leases of around US\$1.7bn.

Under the previous mechanism of RMB pegging against the US dollar, the airlines were unable to take advantage of the US dollar's depreciation against other major currencies in the 2000s, and were there-

fore unable to reduce their aircraft financing costs. However, after the RMB was freed from the pegging mechanism in July 2005 the currency appreciated steadily against the US dollar, and hence Chinese airlines' huge aircraft financing costs began to shrink.

In 2006, approximately 81% of seven publicly listed Chinese airlines' profits were derived from RMB appreciation, while in 2007 the RMB appreciated by 6.3%, resulting in China Southern, Air China and China Eastern boosting profits in the first half of the year by RMB 1.3bn, RMB 0.9bn and RMB 0.7bn respectively.

### Sluggish productivity

In contrast, the performance of Chinese airlines' underlying operations has been less than spectacular. From 1998 to 2005, Chinese airlines' yield per RPK declined at an average annual rate of 1.6%, and even soaring passenger demand in 2006 and 2007 did not translate into yield improvement. Air China, for example, reported a domestic passenger yield of RMB 0.6 per RPK in 2006 (the same as in 2004), while China Eastern posted a passenger yield of RMB 0.6 per RPK in 2006 - approximately the same as in 2000, when China's economy was deflating.

Adjusted for inflation, yields have actually declined by about 10% over the period. And on international routes, where passenger traffic is still rising, Chinese airlines' average passenger yield is just 62% of the level of their international competitors to/from China.

On other measures too, the performance of Chinese airlines has been disappointing. The average utilisation of large and medium-size aircraft in Chinese fleets was 9.7 hours in the first half of 2007, just 0.1 hours higher than that in 2006. And in 2006, A320s and 737-700s - the types most widely used by Chinese airlines - recorded utilisation rates of 9.38 and 10.38 hours respectively, which is far from the widely-regarded "profitable" level of use (estimated at approximately 12 hours), especially considering the fact that the

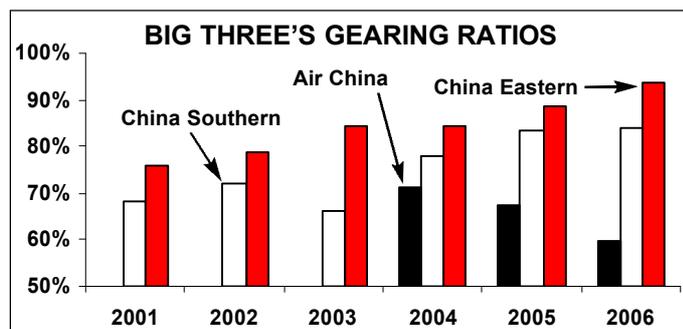
majority of these aircraft in the Chinese fleet are less than 10 years' old.

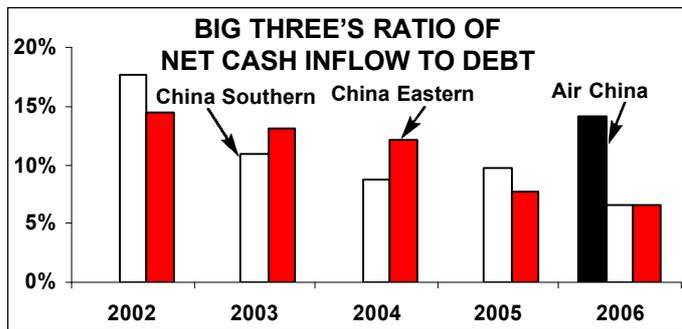
And while Chinese airlines' passenger load factor climbed to a high of 71.4% per cent in 2006, this was 4.6% lower than the average level for airlines globally. Chinese load factor is expected to increase to 74% in 2007, but this will still be lower than the global average.

Without significant improvement in productivity, it is hardly surprising to see Chinese airlines' gross profit margins deteriorate, even in the market upturn (see chart, left). Soaring fuel prices might be blamed for the declining profits, but the woes of soaring fuel price have been cushioned by the appreciation of RMB over the last three years.

In 2007 the fuel price (which is set by China's government) was actually slightly lower than that in 2005 and 2006, and China Eastern's fuel costs, for example, accounted for 35% per cent of total operating costs in the first half of 2007, down from nearly 40% in 2005. Hence the argument that soaring fuel prices have swallowed Chinese airlines' profit is not convincing.

The more staggering statistic is Chinese airlines' net profit margin (see chart, below left) Although Air China has maintained a positive net margin, China Southern and China Eastern have been unable to make any significant net profits from the market upturn. Indeed, worryingly, the difference between the gross and net profit margins at China Southern and China Eastern is not explained by high fuel prices or any other external factors, but rather from those airlines' increased gearing (see chart, below).





Higher debt levels have been attributed traditionally to the major consolidation among Chinese airlines in 2003 and 2004, in which China Southern and China Eastern merged with financially-troubled China Northern and China Northwest respectively.

However, the flaw in this argument is that both China Southern and China Eastern posted gearing ratios that were just 3% cent higher in the first year after they acquired the other major airlines - i.e. the debt attached to the acquired/merged airlines was a contributing rather than the principal reason for China Southern and China Eastern's deepening financial difficulties.

In fact the driving force for these airlines' rising debt to equity ratios has been sharply increased capital expenditure, with - for example - China Eastern recording a capex of RMB 16.6bn (US\$2.1bn) in 2006.

Accompanying the increasing leverage and capex has been a reduced cash inflow (see chart, above). Even in the market upturn most Chinese airlines could not improve their cash flows, and - for example - China Eastern reported a net cash inflow from operating activities of RMB 1.3bn in 2006, down from RMB 2bn in 2005. Only Air China has improved its net cash inflow recently.

Overall, the unprecedented boom over the recent four or five years has not significantly improved Chinese airlines' productivity, operational profitability or financial positions, and these airlines' huge net profits in this period were an outcome largely of various external factors - the most important of which has been the

steady and continuing appreciation of the RMB.

### Big Three problems

Among the Big Three, the biggest challenges are increasing debt and weakening net cash inflows at both China Southern and China Eastern. Since these two airlines have been unable to stop debt from rising and net cash inflow from falling in times of prosperity, how will they be able to cope with the tougher times ahead? The most obvious solution is to find an equity investor, but China Eastern is currently struggling to overcome the various hurdles set by minority shareholder CNAC (owner of Air China) that are blocking China Eastern's attempt to sell a 24% stake to Singapore Airlines and Temasek Holdings (the investment arm of the Singaporean government). If the deal does go ahead eventually, China Eastern could see its gearing reduced from 94% to around 80%.

However, no such solution is immediately available to China Southern, because under the current regulations it cannot sell any more shares to investors. Meanwhile Grand China Airlines - the parent of Hainan Airlines - is planning an IPO on the Hong Kong stock exchange, while Shenzhen Airlines (a medium-sized airline with 100 ARJ21s, 15 A320s and seven 737-800s on order) is expected to take the same approach.

Whether or not Chinese airlines obtain fresh capital in the next few years is crucial given the huge aircraft deliveries they are due to receive over the same period. In 2006 to 2010, the fleet growth rate set by CAAC is an average annual rate of 13% (compared with 10.4% in the previous five-year period). According to the CAAC's plan, Chinese airlines will acquire 140, 160 and 140 aircraft in 2008, 2009 and 2010 respectively, the majority of which will be narrowbodies.

With less than 30 aircraft a year being withdrawn from the Chinese fleet in this period, by the end of 2010 China's airlines are likely to be operating approximately

1,400 aircraft, the majority of which will remain narrowbodies operating in the huge domestic market.

The huge increase in the fleet is likely to have two effects. Firstly, with air transport growth decelerating due to economic slowdown, Chinese airlines' load factors, aircraft utilization and yields are likely to decline steadily. Consequently, airlines' profit margins and net cash inflow will deteriorate, and an aviation downturn similar to the one that occurred in 1998 and 1999 is likely to happen.

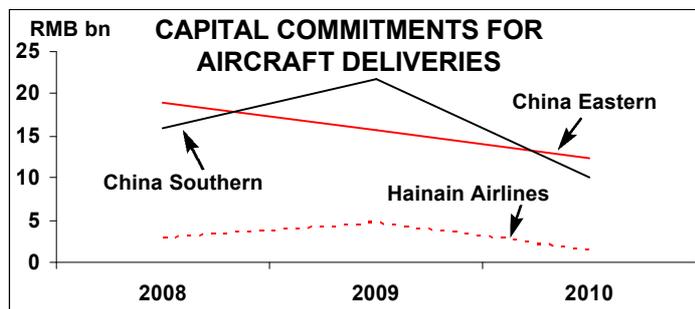
The second effect is that the airlines will have to somehow find the cash to finance these aircraft deliveries (see graph, right). But these new financial commitments will come on top of existing operating and finance lease rentals as well as a large amount of long-term commercial loans that will mature over the next few years. China Southern, for example, needs to pay a total of RMB 8bn (US\$1.1bn) in 2009 for committed loans and rentals.

To make matters worse, the China Central Bank is continuing to raise interest rates, resulting in higher finance costs that will only further reduce the airlines' weak net cash inflow.

Among all large and medium-sized Chinese carriers, only Air China is an exception. Thanks to its strong cash flow position and its equity link with Cathay Pacific, the carrier is in a powerful position to acquire its financially weak peers in China, if opportunities present themselves.

### Appreciation danger

The one factor that could help Chinese airlines pull through the next few difficult



years is continuing appreciation of the RMB against the US dollar and most other currencies.

However, the RMB cannot continue to strengthen forever, and the currency's exchange rate is expected to settle down to its "genuine" market level against other currencies within the next three to five years. And once it does that, this will halt the knock-on effect of appreciating RMB making imported aircraft cheaper and Chinese airlines being more profitable at the net level.

And then, of course, there is the effect of the oil price, which (if it continues to rise globally) may force the Chinese government at some point to raise the price of fuel in the Chinese market - a factor that many Chinese airline executives have never had to face before.

Overall therefore, while some analysts talk about 2008 being a "Golden Year" for Chinese airlines, economic slowdown and a number of other factors (such as large aircraft deliveries, weak balance sheets and the eventual stabilisation of the RMB) mean that the next two to four years are likely to be tough times for airlines in China - and perhaps so tough that the existence of some Chinese airlines may even be brought into doubt.

By Yong Qiu

## AVIATION STRATEGY ONLINE

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# Aviation Strategy

## Databases

		Group revenue US\$m	Group costs US\$m	Group op. profit US\$m	Group net profit US\$m	Operating margin	Net margin	Total ASK m	Total RPK m	Load factor	Total pax. 000s	Group emp.
Alaska	<b>Year 2006</b>	<b>3,334</b>	<b>3,422</b>	<b>-87</b>	<b>-53</b>	<b>-2.6%</b>	<b>-1.6%</b>	<b>43,306</b>	<b>33,012</b>	<b>76.2%</b>	<b>24,025</b>	<b>12,933</b>
	Jan-Mar 07	759	778	-18	-10	-2.4%	-1.3%	10,652	7,552	71.0%	5,471	13,236
	Apr-Jun 07	904	827	78	46	8.6%	5.1%	10,448	8,196	78.5%	5,329	9,748
	Jul-Sep 07	995	852	143	86	14.4%	8.6%	10,225	8,154	79.7%	4,878	9,753
	Oct-Dec 07	747	730	17	7	2.3%	0.9%	9,688	7,239	74.7%	4,191	9,672
	<b>Year 2007</b>	<b>3,506</b>	<b>3,294</b>	<b>212</b>	<b>125</b>	<b>6.0%</b>	<b>3.6%</b>	<b>45,359</b>	<b>34,389</b>	<b>75.8%</b>	<b>25,110</b>	<b>13,485</b>
Jan-Mar 08*	840	889	-50	-36	-5.9%	-4.3%	9,791	7,284	74.4%	4,080	9,881	
American	<b>Year 2006</b>	<b>22,563</b>	<b>21,503</b>	<b>1,060</b>	<b>231</b>	<b>4.7%</b>	<b>1.0%</b>	<b>280,052</b>	<b>224,423</b>	<b>80.1%</b>	<b>98,139</b>	<b>86,600</b>
	Jan-Mar 07	5,427	5,179	248	81	4.6%	1.5%	72,362	56,063	77.5%	23,299	85,100
	Apr-Jun 07	5,879	5,412	467	317	7.9%	5.4%	68,632	57,402	83.6%	25,301	85,500
	Jul-Sep 07	5,946	5,627	319	175	5.4%	2.9%	69,636	58,401	83.9%	25,448	85,800
	Oct-Dec 07	5,683	5,752	-69	-69	-1.2%	-1.2%	73,408	58,416	79.5%	24,080	85,800
	<b>Year 2007</b>	<b>22,935</b>	<b>21,970</b>	<b>965</b>	<b>504</b>	<b>4.2%</b>	<b>2.2%</b>	<b>273,307</b>	<b>222,719</b>	<b>81.5%</b>	<b>98,160</b>	<b>85,800</b>
Jan-Mar 08	5,697	5,884	-187	-328	-3.3%	-5.8%	66,065	52,283	79.1%	23,048	85,500	
Continental	<b>Year 2006</b>	<b>13,128</b>	<b>12,660</b>	<b>468</b>	<b>343</b>	<b>3.6%</b>	<b>2.6%</b>	<b>178,500</b>	<b>144,060</b>	<b>80.7%</b>	<b>67,119</b>	<b>44,000</b>
	Jan-Mar 07	3,179	3,115	64	22	2.0%	0.7%	43,853	34,519	78.7%	16,176	
	Apr-Jun 07	3,710	3,447	263	228	7.1%	6.1%	47,622	39,626	83.2%	18,120	45,000
	Jul-Sep 07	3,820	3,540	280	241	7.3%	6.3%	48,836	40,912	83.8%	17,901	
	Oct-Dec 07	3,523	3,443	80	71	2.3%	2.0%	45,947	36,483	79.4%	16,732	
	<b>Year 2007</b>	<b>14,232</b>	<b>13,545</b>	<b>687</b>	<b>459</b>	<b>4.8%</b>	<b>3.2%</b>	<b>165,951</b>	<b>135,655</b>	<b>81.7%</b>	<b>50,960</b>	<b>45,000</b>
Jan-Mar 08	3,570	3,636	-66	-80	-1.8%	-2.2%	45,665	35,855	78.5%	16,440		
Delta	<b>Year 2006</b>	<b>17,171</b>	<b>17,113</b>	<b>58</b>	<b>-6,203</b>	<b>0.3%</b>	<b>-36.1%</b>	<b>238,168</b>	<b>186,892</b>	<b>78.5%</b>	<b>106,649</b>	<b>51,300</b>
	Jan-Mar 07	4,144	3,989	155	-130	3.7%	-3.1%	56,774	43,794	77.1%	25,325	52,260
	Apr-Jun 07	5,003	4,513	490	1,592	nm	nm	61,358	50,818	82.8%	28,305	55,542
	Jul-Sep 07	5,227	4,774	453	220	8.7%	4.2%	65,889	54,774	83.1%	28,987	55,022
	Oct-Dec 07	4,683	4,685	-2	-70	0.0%	-1.5%	60,210	47,052	78.1%	26,499	55,044
	<b>Year 2007***</b>	<b>19,154</b>	<b>18,058</b>	<b>1,096</b>	<b>1,612</b>	<b>5.7%</b>	<b>8.4%</b>	<b>244,187</b>	<b>196,403</b>	<b>80.4%</b>	<b>109,180</b>	<b>54,467</b>
Jan-Mar 08	4,766	11,027	-6,261	-6,390	-131.4%	-134.1%	58,083	45,390	78.1%	25,586	55,382	
Northwest	<b>Year 2006</b>	<b>12,568</b>	<b>11,828</b>	<b>740</b>	<b>-2,835</b>	<b>5.9%</b>	<b>-22.6%</b>	<b>149,575</b>	<b>125,596</b>	<b>84.0%</b>	<b>67,600</b>	<b>30,484</b>
	Jan-Mar 07	2,873	2,672	201	-292	7.0%	-10.2%	36,845	29,964	81.3%	15,600	30,008
	Apr-Jun 07**	3,181	2,824	357	2,149	nm	nm	38,070	32,495	85.9%	17,400	29,589
	Jul-Sep 07	3,378	2,919	459	244	13.6%	7.2%	38,445	33,222	86.4%	17,300	29,579
	Oct-Dec 07	3,096	3,009	87	-8	2.8%	-0.3%	36,836	30,361	82.4%	16,100	30,306
	<b>Year 2007****</b>	<b>12,528</b>	<b>11,424</b>	<b>1,104</b>	<b>2,093</b>	<b>8.8%</b>	<b>16.7%</b>	<b>138,603</b>	<b>117,335</b>	<b>84.7%</b>	<b>53,680</b>	<b>29,871</b>
Jan-Mar 08	3,127	7,180	-4,053	-4,139	-129.6%	-132.4%	37,592	30,921	82.3%	15,874	30,053	
Southwest	<b>Year 2006</b>	<b>9,086</b>	<b>8,152</b>	<b>934</b>	<b>499</b>	<b>10.3%</b>	<b>5.5%</b>	<b>149,123</b>	<b>108,936</b>	<b>73.1%</b>	<b>96,277</b>	<b>32,664</b>
	Jan-Mar 07	2,198	2,114	84	93	3.8%	4.2%	38,105	25,924	68.0%	19,960	33,195
	Apr-Jun 07	2,583	2,255	328	278	12.7%	10.8%	40,204	30,606	76.1%	23,442	33,261
	Jul-Sep 07	2,588	2,337	251	162	9.7%	6.3%	41,385	31,680	76.5%	23,533	33,787
	Oct-Dec 07	2,492	2,366	126	111	5.1%	4.5%	40,649	28,171	69.3%	24,876	34,378
	<b>Year 2007</b>	<b>9,861</b>	<b>9,070</b>	<b>791</b>	<b>645</b>	<b>8.0%</b>	<b>6.5%</b>	<b>160,314</b>	<b>116,361</b>	<b>72.6%</b>	<b>88,710</b>	<b>33,655</b>
Jan-Mar 08	2,530	2,442	88	34	3.5%	1.3%	40,454	28,311	69.8%	21,505	33,895	
United	<b>Year 2006</b>	<b>19,340</b>	<b>18,893</b>	<b>447</b>	<b>22,876</b>	<b>2.3%</b>	<b>118.3%</b>	<b>255,613</b>	<b>208,769</b>	<b>81.7%</b>	<b>69,325</b>	<b>53,000</b>
	Jan-Mar 07	4,373	4,465	-92	-152	-2.1%	-3.5%	61,900	49,415	79.8%	16,350	51,500
	Apr-Jun 07	5,213	4,676	537	274	10.3%	5.3%	64,451	55,049	85.4%	18,190	51,400
	Jul-Sep 07	5,527	4,871	656	334	11.9%	6.0%	65,547	55,089	84.0%	17,804	51,800
	Oct-Dec 07	5,030	5,094	-64	-53	-1.3%	-1.1%	62,679	49,732	79.3%	16,042	51,700
	<b>Year 2007</b>	<b>20,143</b>	<b>19,106</b>	<b>1,037</b>	<b>403</b>	<b>5.1%</b>	<b>2.0%</b>	<b>228,200</b>	<b>188,857</b>	<b>82.8%</b>	<b>68,630</b>	<b>55,000</b>
Jan-Mar 08	4,711	5,152	-441	-537	-9.4%	-11.4%	61,812	47,854	77.4%	15,250	52,500	
US Airways Grp.	<b>Year 2006</b>	<b>11,557</b>	<b>10,999</b>	<b>558</b>	<b>304</b>	<b>4.8%</b>	<b>2.6%</b>	<b>123,889</b>	<b>97,667</b>	<b>78.8%</b>	<b>57,345</b>	<b>32,459</b>
	Jan-Mar 07	2,732	2,616	116	66	4.2%	2.4%	35,411	27,039	76.4%	19,935	36,000
	Apr-Jun 07	3,155	2,866	289	263	9.2%	8.3%	37,144	30,631	82.5%	22,232	35,485
	Jul-Sep 07	3,036	2,834	202	177	6.7%	5.8%	31,653	26,385	83.4%	14,965	34,321
	Oct-Dec 07	2,776	2,850	-74	-79	-2.7%	-2.8%	34,859	26,812	76.9%	19,828	
	<b>Year 2007</b>	<b>11,700</b>	<b>11,167</b>	<b>533</b>	<b>427</b>	<b>4.6%</b>	<b>3.6%</b>	<b>127,344</b>	<b>102,248</b>	<b>80.3%</b>	<b>66,060</b>	
Jan-Mar 08	2,840	3,036	-196	-236	-6.9%	-8.3%	35,298	27,316	77.4%	19,731	34,684	
JetBlue	<b>Year 2006</b>	<b>2,363</b>	<b>2,236</b>	<b>127</b>	<b>-1</b>	<b>5.4%</b>	<b>0.0%</b>	<b>46,016</b>	<b>37,522</b>	<b>81.6%</b>	<b>18,565</b>	<b>9,265</b>
	Jan-Mar 07	608	621	-13	-22	-2.1%	-3.6%	11,861	9,562	80.6%	5,091	9,260
	Apr-Jun 07	730	657	73	21	10.0%	2.9%	12,981	10,840	83.5%	5,587	9,421
	Jul-Sep 07	765	686	79	23	10.3%	3.0%	13,446	11,020	82.0%	5,528	9,301
	Oct-Dec 07	739	709	30	-4	4.1%	-0.5%	13,056	9,995	76.6%	5,181	9,909
	<b>Year 2007</b>	<b>2,842</b>	<b>2,673</b>	<b>169</b>	<b>18</b>	<b>5.9%</b>	<b>0.6%</b>	<b>51,334</b>	<b>41,411</b>	<b>80.7%</b>	<b>21,390</b>	<b>9,473</b>
Jan-Mar 08	816	799	17	-8	2.1%	-1.0%	13,510	10,562	78.2%	5,518	10,165	

Notes: \*Mainline stats for ASKs, RPKs, pax. & employees, \*\* = April to May Predecessor Company, June Successor Company, \*\*\* = Net Result includes net reorganisation items of \$1,215m, \*\*\*\* = Unaudited results Successor Company. Net Result includes net reorganisation items of \$1,551m

Note: Annual figures may not add up to sum of interim results due to adjustments and consolidation. 1 ASM = 1.6093 ASK. All US airline Financial Year Ends are 31/12.

# Aviation Strategy

## Databases

### EUROPEAN SCHEDULED TRAFFIC

	Intra-Europe			North Atlantic			Europe-Far East			Total long-haul			Total Int'l		
	ASK bn	RPK bn	LF %	ASK bn	RPK bn	LF %	ASK bn	RPK bn	LF %	ASK bn	RPK bn	LF %	ASK bn	RPK bn	LF %
2000	208.2	132.8	63.8	229.9	179.4	78.1	137.8	108.0	78.3	508.9	396.5	77.9	755.0	555.2	73.5
2001	212.9	133.4	62.7	217.6	161.3	74.1	131.7	100.9	76.6	492.2	372.6	75.7	743.3	530.5	71.4
2002	197.2	129.3	65.6	181.0	144.4	79.8	129.1	104.4	80.9	447.8	355.1	79.3	679.2	507.7	74.7
2003	210.7	136.7	64.9	215.0	171.3	79.7	131.7	101.2	76.8	497.2	390.8	78.6	742.6	551.3	74.2
2004	220.6	144.2	65.4	224.0	182.9	81.6	153.6	119.9	78.0	535.2	428.7	80.1	795.7	600.7	75.5
2005	309.3	207.7	67.2	225.9	186.6	82.6	168.6	134.4	79.7	562.6	456.4	81.1	830.8	639.3	76.9
2006	329.9	226.6	68.7	230.5	188.0	81.5	182.7	147.5	80.7	588.2	478.4	81.3	874.6	677.3	77.4
2007	346.6	239.9	69.2	241.4	196.1	81.2	184.2	152.1	82.6	610.6	500.4	81.9	915.2	713.9	78.0
Mar-08	28.4	19.4	68.5	18.6	15.3	82.3	16.2	13.3	82.0	52.2	42.5	81.4	78.2	60.6	77.5
Ann. change	2.0%	4.2%	1.4	1.4%	1.8%	0.3	2.0%	-0.3%	-1.9	3.9%	2.1%	-1.4	4.4%	3.7%	-0.5
Jan-Mar 08	81.5	51.7	63.4	53.4	40.4	75.7	47.1	38.1	80.8	151.8	119.7	78.8	226.3	167.5	74.0
Ann. change	4.3%	5.1%	0.5	3.9%	2.9%	-0.7	3.0%	1.3%	-1.3	5.4%	3.0%	-1.8	6.0%	4.4%	-1.1

Source: AEA

### EIGHT LARGEST US PASSENGER AIRLINES' SCHEDULED TRAFFIC

	Domestic			North Atlantic			Pacific			Latin America			Total Int'l		
	ASK bn	RPK bn	LF %	ASK bn	RPK bn	LF %	ASK bn	RPK bn	LF %	ASK bn	RPK bn	LF %	ASK bn	RPK bn	LF %
2005	225.1	172.2	77.8	41.9	33.2	82.1	27.4	22.3	82.7	24.2	17.2	72.7	93.5	72.7	79.8
2006 Q1	219.2	169.3	77.2	39.6	29.7	75.0	26.1	21.7	83.2	28.2	21.1	74.8	93.9	72.5	77.2
Q2	228.1	188.3	82.6	49.7	42.1	84.7	28.2	23.9	84.7	26.3	20.4	77.6	104.2	86.4	82.9
Q3	232.2	187.9	80.9	54.0	45.3	83.9	28.7	24.4	85.0	26.3	20.4	77.6	109.0	90.1	82.7
Q4	223.2	174.3	78.1	46.0	36.1	78.5	27.8	22.8	81.9	25.8	19.2	74.2	99.6	78.1	78.4
2006	902.7	719.7	79.7	189.2	153.2	81.0	110.8	92.8	83.7	106.6	81.1	75.7	406.7	327.1	80.4
2007 Q1	217.4	169.6	77.5	42.9	32.5	75.5	27.0	22.5	83.4	29.5	22.7	76.8	99.4	77.7	78.2
Q2	226.6	189.9	83.8	53.7	44.9	83.6	28.1	23.5	83.8	27.1	20.8	76.8	108.9	89.2	81.9
Q3	229.9	191.8	83.4	59.6	49.9	83.8	28.9	24.7	85.2	26.2	21.1	80.8	114.7	95.7	83.4
Q4															
2007															

Note: Legacy airlines plus Alaska and Southwest.

### JET ORDERS

	Date	Buyer	Order	Delivery	Other information/engines
Boeing	22 Apr	Biman Bangladesh AL	4 x 777-300ERs,		
			4 x 787-8s		
	21 Apr	ACG	17 x 737NGs		Previously listed at Boeing as "Unidentified"
	16 Apr	Southwest AL	13 x 737-300s		
	15 Apr	SAS	1 x 737-800		
	11 Apr	Unidentified	2 x 737-800		
	3 Apr	Iraq government	30 x 737-800s		
	20 Mar	Southwest AL	2 x 737-700s		
	20 Mar	Turkmenistan AW	2 x 737-900ERs, 1 x 737-700		
	18 Mar	Unidentified	6 x 737-800s		
	11 Mar	Unidentified	41 x 737-800s		
	10 Mar	Unidentified	35 x 787-9s, 10 x 777-300ERs		
	27 Feb	Southwest AL	1 x 737-700		
	21 Feb	RAK Airways	4 x 737-800s		Plus purchase rights for two more 737-800s
20 Feb	Unidentified	15 x 737-700s, 15 x 737-800s			
Airbus	11 Apr	Aer Lingus	6 x A330-300s, 6 x A350-900s		
	31 Mar	Aer Lingus	4 x A320s		
	31 Mar	Finnair	1 x A330-300		
	27 Mar	China Southern	10 x A330-200s		
	27 Mar	AirAsia X	10 x A330-300s		
	26 Mar	Virgin America	2 x A320s		
	19 Mar	Unidentified	1 x A350-900		
	18 Mar	Unidentified	1 x A319		
	12 Mar	CIT	7 x A319s, 8 x A320s, 5 x A330-200s		
	6 Mar	Unidentified	2 x A318s, 1 x A319		
3 Mar	Unidentified	2 x A319s			
22 Feb	BOC Aviation	5 x A330-200Fs			

Note: Only firm orders from identifiable airlines/lessors are included.

Source: Manufacturers

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