

Are the Euro-Majors undervalued?

Can Europe's major airlines be worth as little as the stockmarkets are showing?

Although there was a noticeable upturn in values towards the end of October, the share prices of the Euro-majors have been languishing badly. Deutsche Bank, in a recent report, has calculated that these airline stocks in October were trading at price to book-value ratios that were roughly half those of previous troughs. Another indicator is the net asset value per share (net assets adjusted to market values) which are shown in the table below. Air France, Lufthansa and KLM's stocks are being quoted at well under the values implied by the underlying assets; the opposite is true for BA, unfortunately.

The obvious reasons are the continuing slump in traffic and yields, the depression drifting over the Atlantic from the US majors and the impending threat of war in Iraq.

The much sought-after statistic in the upcoming months is positive traffic growth compared to the equivalent period in 2000. In September, Air France, Lufthansa and KLM produced traffic numbers 5-7% above 2001, but still 0-3% below those of 2000. BA's traffic results are not particularly relevant because of its downsizing strategy, but September's RPKs were 5% up on 2001, 16% down on 2000.

Yet the four leading European carriers are in a much stronger position than their US equivalents. They all appear to have sustainable market positions, and are not under immediate threat, unlike United, US Airways or even American. KLM has dismissed

VALUE INDICATORS

	Current Price (€)	Adj. NAV/ Share (€)	Net debt/ Equity	Liquidity (€m)	2001 Actual net profit (€m)	2002 Forecast net profit
BA	1.8	1.0	354%	2,198	-350	-21
AF	8.9	17.4	204%	1,457	76	43
LH	10.4	18.6	177%	1,717	-303	95
KL	9.0	25.0	312%	995	-167	-51

Source: Deutsche Bank, European Airlines, Oct. 2002 Notes: (i) Current share price as at end October 2002 (ii) Adjusted Net Asset Value is NAV adjusted for market prices rather than depreciated values (iii) Net debt including capitalised operating leases as % of book equity (iv) Liquidity is cash and equivalents at June 2002 (v) 2001 is year to March 2002 for BA, AF and KL, calendar year for LH

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reports of a merger with Air France but has talked about much closer cooperation.

In terms of the state of their balance sheet strength at this phase of the cycle, Lufthansa and Air France look very solid; BA appears weak - with a net debt/equity ratio of 354% - but its liquidity is strong.

Deutsche Bank's view of the airline's profitability also provides a bit of comfort. For 2002 Lufthansa is expected to return robustly to profit, Air France to maintain its profitability while BA and KLM are to greatly reduce their losses.

BA's second quarter (July-September) results - an expected pre-tax profit of £245m or €390m - are a huge improvement on last year's £5m, and provide some evidence that BA's "Future Shape and Size" strategy may be working, at least in parts. Given that BA has already faced the low-cost carrier onslaught, which Lufthansa will be the next to experience, and that its profitability is so geared to the Atlantic market, perhaps its financial prospects relative to its continental competitors are rather better than indicated by the stockmarkets.

Charter LCC subsidiaries: a useful development?

The current troubles at MyTravel Group, the UK-based air-inclusive tour operator, appear largely to be due to weak management and poor accounting practices. But these issues mask a more fundamental problem for MyTravel (see Briefing, July/August 2002) and for the inclusive tour (IT) sector in general - demand for the traditional package holidays appears to be ebbing away.

For the European charter industry, 2002 has been a terrible year. September 11 resulted in traditional package holiday customers refraining from making a booking during the winter months for the 2002 summer holiday season, as they would normally do. This trend was compounded by the tendency of 18-35 year old British males and females - a large part of the charter market in the UK - to stay at home to watch the World Cup on television during the early summer months. This pattern was repeated in the German market, and to a lesser extent in the Scandinavian market (the UK, Germany and Scandinavia provides the majority of north Europe-Mediterranean charter customers each year). When the football was over, MyTravel and others expected a huge surge in late bookings, but this just did not occur at the levels expected. Many in the charter industry see these as one-off events, and expect that summer bookings for 2003 will be back to the level of 2001 - but some fear

that a far more long-term change is taking place.

MyTravel and others are having to face the fact that important segments of the IT market - customers, both young and retired, with relatively high disposable incomes and unencumbered with children - are switching to self-assembled holidays. From these customers' point-of view, it's to do with flexibility - encouraged by the internet, they no longer fear bypassing travel agents and putting together their own packages if they can get the destinations, accommodation and departure/arrival times that they prefer, rather than take the rigid one-size-fits-all packages of the tour operators.

This trend away from packages has coincided with the rise of the low cost carriers (LCCs). The LCCs initially targeted cities as their destinations, but are now increasingly offering regular scheduled flights to popular holiday destinations. The LCCs have undoubtedly taken business away from the charter airlines over the last five years as they have intruded onto the key package holiday routes. The key battleground at the moment appears to be Spain - Alicante, Malaga and Mallorca all have LCC flights now. According to travel industry sources on the key package destination of Ibiza, Go flights to the island this summer are believed to have been primarily at the expense of the traditional charter flights there from the UK.

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Europe's inclusive tour operators have been offering seat-only services for a number of years, but while giving some flexibility to holidaymakers, these seats are not sold on dedicated scheduled flights but as fill-ins on charter services. In addition, the charter airlines tend to have a non-existent or even negative brand association with holidaymakers.

Enter the charter LCCs

In response to the LCC threat, the flavour-of-the-month strategy at the tour operators is to start their own LCCs: MyTravelLite, which started flying from Birmingham to five continental European destinations in October, uses two A320s transferred from the MyTravel Group. German travel group TUI has launched Hapag-Lloyd Express in cooperation with Germania, which is supplying eight 737-700s. Meanwhile Lufthansa, which owns 50% of tour operator Thomas Cook, is experimenting indirectly with a low-cost start-up of its own called Germanwings, with five A320s being operated by Eurowings (in which Lufthansa has a 25% stake) out of Cologne/Bonn.

Interestingly, the tour operator groups concerned argue they are launching low cost airlines not because they are losing business to the LCCs, but because there are "new growth opportunities". Few analysts believe this rationale, but what is more important for the future of the traditional charter airlines is whether these tour operator LCCs succeed or not.

Tim Jeans, the ex-Ryanair sales and marketing director who now heads up MyTravelLite, claims that he can merge the culture and expertise of the LCCs with the traditional strengths of the charter carriers, which he claims include higher aircraft utilizations rates. The MyTravel Group will also be able to offer MyTravelLite passengers lots of accommodation options for the destinations they fly to.

Do the LCCs really have anything to learn from the charter operations? Utilisation rates may be higher for the charters, but this apparent advantage will disappear in a

scheduled operation. And as for lots of accommodation options for MyTravelLite passengers, that's great - but the whole point of flexibility is that passengers can and will choose whatever accommodation they want.

There is also a fundamental difference in the revenue management techniques of the charters and the LCCs. Charter carriers end up with their near 100% load factors, almost always because of last minute heavy discounting of package holidays. The successful LCCs generally manipulate fares so that they increase as the departure time approaches. So the charters have a steep learning curve in this area.

Similarly, the charter LCCs do not have the smooth user-friendly websites that are such an integral part of the Ryanair and easyJet operations.

From the point-of-view of the tour operator, the establishment of an LCC appears to be low risk; if it fails, the subsidiary can quickly be abandoned without too much of a hit to the group bottom line. The deeper problem is, however, that the charters may be getting into the LCC business without solving the fundamental problems in their core businesses.

TO/LCC alliances?

If the tour operators' own low-cost start-ups are not successful, they will look at other options. One obvious solution would be for the tour operators to cut back on their own in-house capacity, and partner or ally with a LCC, offering customers seats on preferred flights operated by the likes of easyJet or Ryanair? With a "block booking" from the tour operators on specific routes, LCCs would increase capacity to holiday destinations, and customers could be given a series of flight options for each destination, depending on the LCC timetable.

However, this is a strategic question for the tour operators, who have traditionally seen themselves as being vertical players, offering everything from travel agency services to accommodation to flights etc. under their own brand. They may be forced to be more flexible in today's market.

US Majors: Woeful third quarter results

For the most of US Majors the third quarter was a painful experience with record losses being posted, bringing the year-to-date net loss to close to \$7bn. As the graphs opposite show, their unit cost and unit revenue lines are refusing to converge, with a couple of notable exceptions - Southwest and Alaska.

American

American reported a net loss of \$475m, \$924m after special items. The airline has made some progress in curtailing unit costs but appears to be very weak on the revenue side, largely because of its high exposure to business-fare travel, as well as the depressed Atlantic and South American markets. It faces the problem that further cost cutting exercises could probably impact customer service and further damage its premium product. On the other hand, it will be compelled to make major cost savings in order to match United if that carrier manages to push through its union reforms.

AMR Corp. may consider selling off non-core assets such as American Eagle. The airline is parking a further 42 of its aircraft and deferring 34 Boeing orders. American is planning to take delivery of 11 aircraft in 2003 and then nothing until 2006.

Delta

The airline's loss for the third quarter was \$212m, \$326 after special items. Delta claims that its policy of using its regional partners in low-density markets is working well. It plans to announce a new strategy in November which will centre on expansion of its low-cost carrier subsidiary, Delta Express.

Delta has also deferred the delivery of 29 Boeings and is going to decommission 15 MD-11s over the next year. Delta has announced that it will soon be laying off another 8,000 employees.

Northwest Airlines

Northwest posted an operating profit of \$8m for the third quarter, and a net loss of \$46m - a relatively good performance. The airline partly attributes the result to the flexibility it has in allocating capacity, which in turn is related to the fact that its fleet is fully paid for.

Northwest has announced that it will be able to take all the A319s and A320s, about 75 in all, scheduled for delivery up to 2006. However, the airline seems to be suggesting that it is entitled to a renegotiation of the unit prices in the light of the Airbus deal with easyJet.

Continental

With an operating profit of \$46m and a net loss of \$37m, Continental Airlines was also relatively well placed. Like Northwest, its codesharing alliance partner, Continental posted a profit for both July and August and seems to be continuing to cut costs while not sacrificing its revenue advantage.

United

United posted a record third quarter net loss of \$503m, \$889m after special items. Some perspicacious observers are beginning to draw comparisons with Swissair - United has identifiable cost problems but an apparent unwillingness among management and the unions to face up to them and a belief that its vast network franchise is somehow invulnerable.

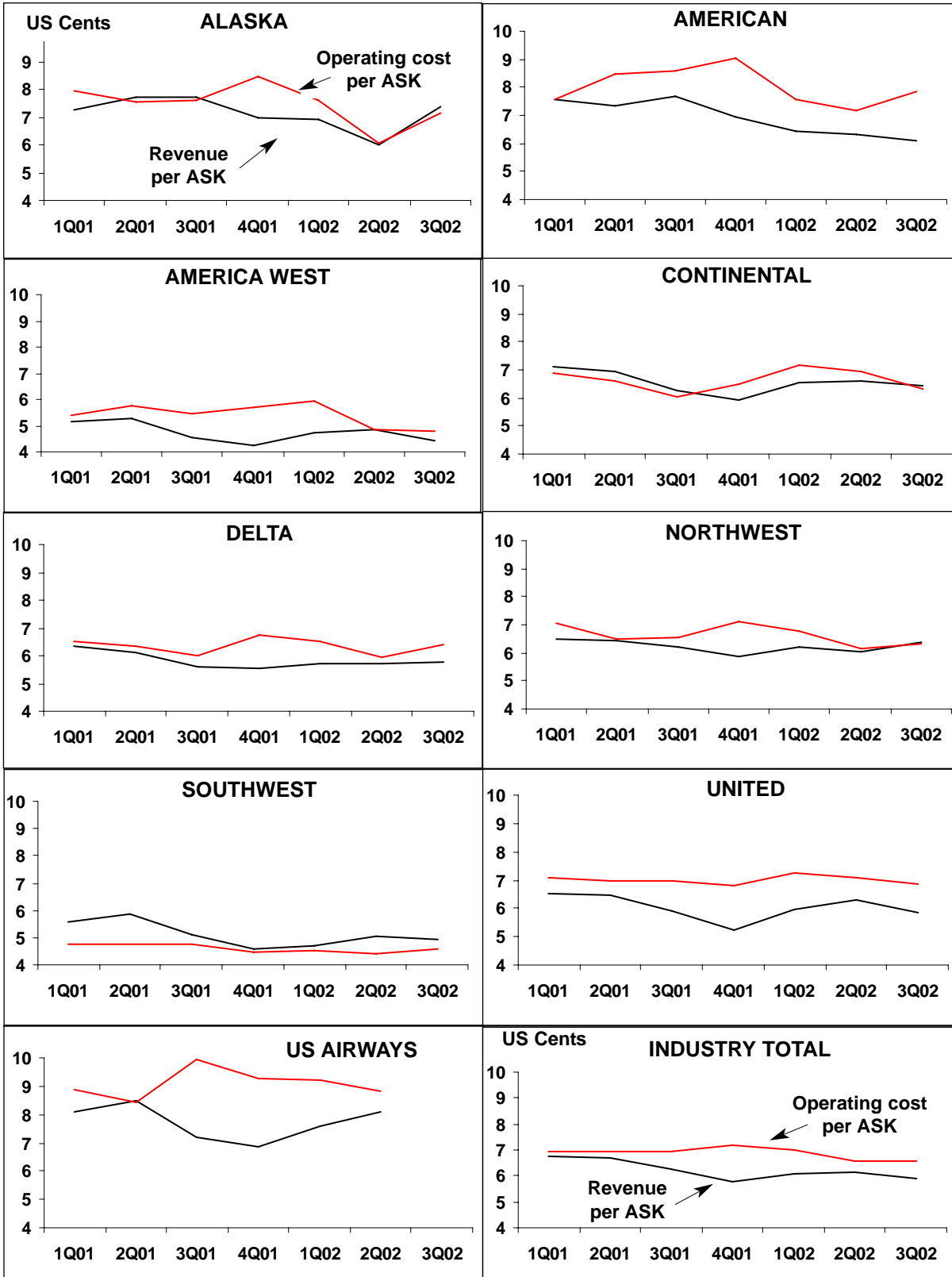
The board has brought in an industry outsider Glenn Tilton as CEO, with a massive upfront bonus, but with a brief that seems to include avoiding too much confrontation with the vested interests at the company.

ALPA, the pilots union and the most important of United's five main unions, has

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US MAJORS UNIT REVENUE AND UNIT COST TRENDS



now to decide whether it will endorse a \$2.2bn cut in wages over the next five recommended by the union membership. If it doesn't the airline will most probably end up in Chapter 11; even if it does, the concession may be too little, too late.

America West

America West posted a net loss of \$31m, having received \$60m from the ATSB in the third quarter. It has managed to cut its unit costs by 10%, but to return to profit, it will have to generate some recovery in unit revenues.

Southwest

Southwest as usual produced a net profit - \$50m. It was also one of only two airlines to increase capacity - ASMs were up 8% on

a year ago, unit costs were down 2% but unit revenues also fell, by 5%.

Southwest has now decided to accelerate its delivery schedule of 737-700s to 23 units this year and 17 in 2003. It is expanding operations at Baltimore, directly attacking US Airways.

US Airways

Covered in this month's Briefing section (pages 16-19), US Airways reported a net loss of \$335m for the third quarter.

Alaska

Alaska is becoming the model for a revitalised US Airways. It reported a \$10.3m net profit for the quarter, and is winning market share from United on the west coast. Capacity was up 11% in the third quarter.

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Air Canada's fragmenting brands

Air Canada has added yet another brand, Elite, to its growing stable which currently includes Jazz (regional), Tango, (eastern Canadian mid-cost), and ZIP (west Canadian mid-cost). Elite, set to launch in 2003, will be a premium business brand with 30-40 seats in A319s, targeted at the corporate jet time-share market.

The Air Canada strategy could, taken to its logical conclusion, lead to the end of the mainline Air Canada brand. Ever since the Air Canada purchase of Canadian Airlines, employee integration issues have proven expensive and damaging to morale as well as customer service. Many of the senior Canadian employees spent their careers competing with Air Canada, and so there is little mutual goodwill between the now legally and contractually integrated labour groups.

By gradually eliminating the Air Canada brand one could get to the position whereby all of the employees will be working for "new" companies. This would allow for the emergence of new loyalties, and hopefully, improved customer service. A fracturing of the Air Canada brand would also allow management to assign frontline service employees based on criteria other than seniority. All Air Canada employees are currently guaranteed a job but not at a specific Air Canada brand. So, for example, the Elite brand would have a fresh and interested customer service employee allocated to it.

This branding may also create a different, more positive perception among Canada's consumers, removing some of the negative perception about Air Canada's monopolistic, bureaucratic presence.

Sub-brand weaknesses

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However, the two semi-discount brands (ZIP and Tango) are not significantly lower cost when compared to the genuine low cost competitor, WestJet, and the newer JetsGo. Many of the services are still provided by Air

Canada facilities, with the attendant costs attached.

Then there are all of the well-documented arguments around the complete failure of low cost subsidiary brands (see *Aviation Strategy*, "Compromise carriers", May 2002), as well as the total failure, so far, of any pure high-end airline brands (MGM Grand Air, etc).

Moreover, as the mainline Air Canada operation shrinks, a higher and higher allocation of the corporate fixed cost pile will be allocated to the newer brands, thus undermining their profitability over time. Once again, agreements with organised labour will limit the percentage of total key union groups that could be paid lower rates or have more flexible work conditions. These union "scope" clauses in effect prevent Air Canada achieving the wholesale labour cost reductions needed to allow its lower cost models to grow and develop.

There are also market-based issues to consider. Will the ZIP brand steal any market share from the ever-expanding Westjet or will it simply cannibalise Air Canada's mainline traffic? Inevitably, prices will fall faster than Air Canada can lower ZIP's costs. Perhaps ZIP's main role is to make life a bit more difficult for Westjet in western Canada, and so slow its expansion in the eastern markets.

However, Tango has not prevented either a re-launch of the previously failed Canjet in eastern Canadian markets nor the launch of JetsGo. The Tango brand is also less focused and more expensive to operate than ZIP, but Air Canada will experiment with deployment of the Tango brand on leisure-oriented Canada-US sectors this coming winter season. (Tango would compare favourably to US mainline airline costs).

In the longer run, Air Canada may be able to make money by spinning off its successful brands to outside investors. But by then the question may be: will there be any mainline Air Canada left operating in North American airspace?

Airport privatisation: the new phase

Airport privatisation is moving into a new phase. Investors have become a bit more sceptical about airport values but there is now a very interesting secondary market.

The birth of the process came with the UK Government privatisation of BAA in 1987. The following years saw a small number of similar transactions, including the part-privatisations of Copenhagen and Vienna Airports.

During the 1990s there was a growth spurt in airport privatisation. A solid financial track record by the privatised airports encouraged other governments to follow suit. Privatisation produced funds for government treasuries, and moved the requirement for major capital expenditure to the private rather than public sector.

With this growth came an increasing level of complexity, with variation on the privatisation process - trade sales, public private initiatives etc. In almost all these privatisations, the bids were led by other airports, although their degree of participation has historically diminished. Nevertheless, when a government sold one of its airports, it usually sought comfort in a strong airport brand name in the bidding consortium.

Mexico is a good example of complexity. Four groups of airports were packaged together by the Mexican government with a 49% foreign ownership limit and sold to a consortium of investors. Fifty-year concessions were granted to the bidders, a form of public private initiative. The idea was that each of the four groups would be floated on the stockmarket. But only one of the groups, Grupo Aeroportuario del Sureste based at Cancun Airport, has so far been able to achieve an IPO.

Since 2000 the privatisation process has slowed for several reasons. First, some airports and financial investors regard the current prices being achieved for airports as too high. Second, airports themselves have downgraded their international expansion

ambitions. Most of the acquisitive airports have decided on an approach that minimises their equity involvement in airport deals. Airports now as a rule prefer to take a small minority stake in a privatisation, often 5-10%, but try to gain value through management contracts and technical consultancy services. In the Mexican privatisations, AENA, Copenhagen and ADP were successful minority participants.

Third, the emergence of low cost airlines, which have re-defined airport/airline pricing mechanisms, has caused concern among airport investors.

Fourth, the cost of putting together a consortium bid has become prohibitive for some. For a complex transaction, often with 5-8 members in the consortia, the cost of some bids has been reported to be as much as US\$5m. When the odds of winning remain as low as 10-15%, a run of failed bids becomes very expensive.

Evaluation criteria

Airports enjoyed an historic perception amongst investors of being defensive, safe havens. Typically they were characterised as being regulated monopolies guaranteed quite high rates of traffic growth, calculated as a multiple (2.5 times) of the rate of GDP growth.

Perceptions have now changed. September 11 and the uncertain traffic recovery since have made some investors wary. In the past, airport managers could rely on traffic growth to fuel increases in profitability levels. Today, airport managers have to demonstrate new skills, such as enhancing productivity and implementing cost-cutting programmes.

There is a growing level of sophistication and understanding of the main drivers of value creation at airports. Airport investors have a long checklist when making an investment decision, the prime factors being:

- The regulatory regime, single till or dual till, benign or active
- Traffic growth forecasts
- The capital expenditure requirement
- Non-aeronautical revenues, often seen as an area regarded as offering strong growth, but in reality, often fully exploited by well run airports
- Degree of dependence on individual carriers
- Corporate governance issues
- Competitive environment, from other airports and in some cases the possible threat from high-speed rail links
- Exposure to ground handling - investors prefer airports that do not indulge in ground handling, regarded as a low margin, highly competitive activity. This is particularly the case in Europe following the EC Ground Handling Directive which has broken up monopolies at some EU airports
- Quality of management
- The ability to create value

One of the issues surrounding part-privatisations or concession agreements is reaching a successful balance between public and private interests. Governments are often reluctant to share power and decision-making with private interests, and conversely the private sector does not always appreciate the need to satisfy public interests, both local and national, associated with an airport.

Future developments

Some new trends have emerged in the airport privatisation process. There is now a second-hand market in airports - Perth, Bristol, East Midlands and Glasgow Prestwick are examples. Also, some of the airports that were initially only part-privatised, with governments retaining majority stakes, have now been placed in majority private hands. Vienna and Copenhagen are examples.

The investment case for airports has changed in the past two years. During the 1990s, airports were regarded as having only upsides for investors and few downsides. Today the investment case has to take

in account:

- The impact of the September 11 and the threat of war in Iraq;
- Although barriers to entry in the airport sector remain high, airlines including flag carriers can fail, with major implications for their hub airports - notably Sabena at Brussels and Swissair at Zurich;
- Although major airports retain pricing power, many regional airports or airports with direct competition have been forced to lower tariffs (particularly those exposed to the low cost carrier market).

The emergence of financial investors has changed the nature of airport privatisations. Macquarie Bank has led the way. By being prepared to accept a highly leveraging debt structure, Macquarie has been able to outbid competitors in successful acquisitions of Birmingham, Rome and Sydney airports in the past two years. Macquarie has some excellent in-house airport operating experience, having bought out the specialist airport consultancy, the Portland Group.

Airport values

At the Global Airport Development (GAD) conference held in Hamburg in October, the question of airport values and an appropriate level of gearing for airports caused much debate. Agreement was reached that most airports had "lazy" balance sheets that could and should be more aggressively geared. Concern however was voiced as to whether a highly leveraged airport with little financial headroom would in reality be able to increase charges to airlines, in order to recover revenues possibly lost in another Gulf War or September 11 type event.

The sale of Sydney Airport to a consortium led by Macquarie Bank is instructive. At a price paid of Aus\$5.6bn (US\$3.1bn), Sydney was sold on an EV/EBITDA multiple of 18.3 times, based on 2002 earnings. Such trade sales are regarded as maximising revenues for the seller when the airport is efficiently run and there are a number of interested bidders. If the Sydney sale had been conducted as an IPO, it was estimated at the GAD conference that proceeds to the

Australian government could have been some Aus \$1bn less than the trade sale achieved, as local demand to support was weak.

However, Sydney represents a rare privatisation. It was a clean sale in the sense that, although a 50-year concession plus options to extend, the Government has sold all of its interest in the airport to Macquarie. The airport has no local competition, enjoys a benign level of price regulation, has a very highly regarded management team, is the major hub for the region and has a strong national carrier in Qantas.

These factors, supported by strong cash flows, allowed the Macquarie consortium to support the bid with Aus\$3.7bn of debt finance. Such a high level of gearing brings strong equity returns - if the airport management team delivers the investors' expectations. Both parties argue that the benign regulatory environment and the airport's effec-

tive monopoly will allow price increases to offset any disappointments in future traffic flows.

To put the price paid by the Macquarie consortium into context, HSBC estimate that EV/EBITDA multiples are currently in the range of 4 to 9 times for European airports and 5 to 12 for Asian airports. Where trade sales occur however, they can attract significant premiums with EV/EBITDA multiples often in excess of 15 times.

The resilience of the airport sector was highlighted at the GAD conference by the fact that Standard & Poor's have made very few adjustments to their credit ratings assigned to airports following September 11. The ratings agency had already factored into its ratings, which take a five-year view, that a traffic downturn similar in scale to the Gulf War would be encountered by the industry.

As for the future of airport privatisations, the requirement of having an airport in the bidding consortium is already fading. Most

candidates for privatisation are already well run and managed. Having another airport as a shareholder may also bring conflicts in areas such as hubbing strategy, competition for capital and management resources.

Future airport privatisations will clearly require different models. Privatisation of successful, mature airports such as Amsterdam Schiphol is likely to be via an IPO with no other airport involvement, assuming the level of public demand is seen as strong. Sales of less well established airports, or those requiring new infrastructure are likely to be in the form of trade sales. Often this will lead to airport and contractor involvement in the bid, although it can perhaps be argued that such management and engineering skills could be better acquired without an airport/contractor needing to make a financial commitment but rather through a straight management consultancy contract.

AIRPORT CREDIT RATINGS (S&P)

Airport	Rating / outlook	Outlook statement
Adelaide	BBB- Stable	Tight financial structure Needs to recover from loss of Ansett
Aeroports de Paris	AAA Stable	No prospect of privatisation Sovereign support
Aer Rianta	A+ Negative	3% traffic growth in 2001, expected to be higher in 2002 Concern over future regulatory regime
Amsterdam Schiphol	AA- Stable	Traffic has shown strong resilience Privatisation remains delayed
Auckland	A+ Stable	Returning NZ\$ 212m of capital to shareholders Review being conducted of regulatory regime
BAA	AA- Negative	Concern over on-going regulatory review Need to assess development of T5
Birmingham	A- Stable	Traffic levels recovering Management implementation of cost and capital reduction measures
Brisbane	BBB- Stable	2002 expected to show falls of 5% internationally and 10% domestically Subject to upcoming regulatory review
Christchurch	A Stable	10% decline in international passengers Offset by strong balance sheet
Edmonton	A+ Stable	88% traffic domestic, therefore low exposure to US carriers Strong local economic prospects
London City	BBB Stable	Strong traffic recovery Runway reconfiguration should support growth
Melbourne	A- Stable	Cautious strategy in returns to shareholders 2002 revenues proving resilient
Montreal	A+ Stable	Exposure to transborder traffic Conservative budget
Newcastle	BBB+ Stable	Financials above budget for 2002 Entry of easyJet into winter programme
Ottawa	A+ Stable	Strong level of liquidity Restraint likely in capex programme
Sydney	BBB	Aggressively geared Longer term growth rates remain robust
Toronto	A Stable	High transborder traffic exposure Air Canada committed to airport as a hub
Vancouver	AA- Stable	Rate increase in July Strong non-aeronautical revenues
Wellington	A- Stable	Limited capital demands Prospect of increased charges

The operating lessors: Trying to find the ILFC formula

The operating lease industry is dominated by two companies - ILFC and GECAS. Together they account for 49% of the operating lessor fleet (top 20 lessors) and some 83% of lessor orders. ILFC continues to be the industry benchmark, with an operating margin of 29%.

Below them there are a substantial number of lessors trying in one way or another to find niches. The key strategic aim for many of the secondary lessors is to establish themselves as the number three operator. Industry consolidation is inevitable in the short-term as the smaller lessors search for economies of scale. Some of the smaller lessors have been put up for sale, their owners, usually banks, having discovered how difficult it is to make ILFC-type returns.

Airbus has a much heavier exposure to the operating lessors than Boeing. But Boeing is increasingly being pulled into the operating leasing business through the Boeing Capital Corporation.

Currently, second-hand values are suicidally depressed and very few airlines can be considered good risks. So the immediate outlook for operating lessors is poor. However, it is possible that a combination of a rebound in demand from the very depressed post September 11 market and a one-off reduction in supply caused by the effective scrapping of half of the parked fleet could mean that aircraft market balance is stored more quickly than expected in late 2003/2004

(see Market balance forecast, *Aviation Strategy*, October 2002). Also, leasing has long since ceased to be the associated with poor credit airlines; it may well become the standard means of ownership for the industry.

So there is a major potential upside for the lessors if they can find the magical combination of success factors.

Success factors

- Access to sources of cheap funding; for example, ILFC is able to attract AA rated debt, with its own Single A rating and the AAA rating of its parent, AIG.
- Size, which provides airlines with flexibility - ILFC and GECAS are able to offer their customers ability to trade up or down because of the range of their portfolios.
- Purchasing power, which obtains discounts from manufacturers through placement of mega-orders and also builds in flexibility to those orders. For example, GECAS can change the type of aircraft nine months ahead of delivery.

OPERATING LESSOR FLEET SUMMARY

Company	No. of jet aircraft	Average age (years)
GECAS	778	8.5
ILFC	579	5.2
Boeing Capital	278	9.6
CIT Aerospace	182	11.5
Ansett Worldwide	162	10.4
debis AirFinance	104	8.4
GATX	103	6.9
Babcock & Brown	83	9.9
Boullioun	80	5.5
Orix	60	10.1
BAE SYSTEMS Asset Management	56	12.8
Aviation Capital Group	53	14.7
Pembroke	48	7.4
SALE	41	5.0
Tombo	37	8.4
IEM	29	5.9
Bavaria	28	8.2
Deutsche Structured Finance	20	5.0
Itochu	16	6.7
Sunrock	14	7.2
TOTAL	2,751	

LESSORS' ORDERBOOKS		
	Order backlog	Options
GECAS	287	334
ILFC	526	54
CIT Aerospace	88	5
debis AirFinance	31	0
Boullioun	39	30
SALE	31	0
Pembroke	12	15
Tombo	1	0
TOTAL	1,015	438

- Access to a range of diversified funding sources and products, such as securitisation and EETC market plus strong relationships with banking and financial communities.
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 - experience and contacts
 - independence
 - financial skills
 - credit analysis
 - market awareness
 - re-marketing experience

An acid test of the quality of the lessor's management is how quickly an aircraft can be re-leased after an airline default - within two months is a good standard.

General Electric Capital Aviation Services (GECAS)

The wholly owned subsidiary of General Electric reported a net profit of \$475m on revenues of \$2.2bn in 2001 and expects a slightly reduced result, around \$250m, this year. GECAS is the world's largest lessor with 778 jets in its fleet and a further 287 on order. Its strongest asset is its parent's AAA credit rating.

It has 139 airline operators, still mostly North American based. Possible problem operators include US Airways, United, America West and Varig. GE as a whole has recently estimated its potential liability with regard to US Airways and United at over \$4bn.

GECAS attempts to differentiate itself from other lessors by offering a wide scope of support services such as arranging training, inventory management, securing maintenance support etc. It is seen as a big risk taker yet approval processes are very restrictive and response times recognised as

slow compared to its great rival ILFC. Senior management continuity is not assured as managers may move on to other parts of the GECC organisation.

With a third of its aircraft portfolio placed on finance leases, GECAS makes aggressive use of tax-efficient structures and securitisations. It is, in effect, the sole provider of lease equity in the US market. And PK Air Finance, acquired from Credit Lyonnais, has strengthened financial expertise, particularly in the area of syndicated loans.

Despite its continued profitability GECAS may be under pressure from its parent to meet a financial target of a 25% return on equity. This may explain why GECAS has continued to be very aggressive in past twelve months, writing \$3bn of business with United alone. Significantly, GECAS appears to believe that the commercial jet market is currently at or near bottom. A new mega-order from Airbus is rumoured for early 2003, including 75 A320s and probably A380s.

International Lease Finance Corporation (ILFC)

Generally regarded as the benchmark for the industry, ILFC reported operating income of \$749m in 2001, a 29% margin on revenues of \$2.6bn. ILFC has been owned by insurance giant American International Group since 1990. ILFC itself has a Single A credit rating but combined with its parent's AAA credit rating, can normally obtain AA funding.

ILFC dominates the lessor order book with a backlog of 526, particularly with Airbus (347). Interestingly, the approximate value of ILFC orders - US\$28bn - is more than double the current stockmarket capitalisation of EADS, Airbus's parent. It is now considering whether to enter the regional aircraft market.

The main operators are relatively strong credits in today's market - Air France, American, Iberia, SWISS and KLM, Dragonair, bmi British Midland and Asiana.

ILFC is at core an aircraft trader, with aircraft assets usually only held for five years - an operating lessor in the purest sense. Throughout the recession it has continued to

place aircraft "almost uncannily", according to a rival. Aircraft are ideally pre-placed up to 18 months prior to delivery.

The management team, still centred around the founding Udvar-Hazy family, is regarded as tight-knit, entrepreneurial and highly empowered. They enjoy a high degree of autonomy from the parent company, and so the approval process is more liberal and rapid than that of GECAS. ILFC's strategy is highly relationship-driven.

Nevertheless, neither ILFC nor AIG is immune to the state of the aviation and insurance markets. Increasing leverage may put into question ILFC's credit rating.

Boeing Capital Corporation

Boeing's subsidiary is by fleet number, 278 (173 Boeing, 10 Airbus and 95 others), the third largest lessor in the world. It also has 75 parked, ranging from Airbuses taken as part of Boeing replacement orders to 717 whitetails.

BCC is essentially a Boeing aircraft trader and provider of financing to client airlines. Boeing has stated that it does not want to become a major lessor, yet, by default it has to expand in this sector to keep assets flying.

It may be tempted to acquire specialist leasing management skills through buying out an operating lessor. It was rumoured earlier this year to be looking to acquire either debis or AWAS.

CIT Aerospace

CIT was successfully extricated from troubled conglomerate Tyco, (which had bought CIT in June 2001), through a flotation on the NYSE in July this year. CIT was capitalised at over \$4bn, though its share price has slipped from \$23 to \$19 since then. Following the IPO, Standard & Poor's upgraded CIT's credit rating to A/A-1.

CIT's aim has been to establish itself as the third operating lessor after GECAS and ILFC, and to achieve this has acquired 20-30 aircraft per year from other lessors with leases attached. Consequently, the fleet of 182 jets contains just about every commercial type. The strategy now is to shift the

portfolio away from older used jets and regional jets, and buy A320 and 737NG types. CIT has 62 operators in its fleet, but is heavily exposed to the US Majors (American, United Airlines, Delta, Northwest Airlines and America West Airlines).

CIT is seen as a possible takeover target. GECAS considered buying the company in 2001, and other possible suitors include Berkshire Hathaway, Citicorp and Bank of America.

Ansett Worldwide Aviation Services (AWAS)

Morgan Stanley bought out AWAS, formerly regarded as the number three lessor, from TNT/News Corporation two years ago but the investment does not seem to have met the bank's expectations. Morgan Stanley is not interested in making additional investments in the business and may be looking to offload AWAS, either in toto or in parts of the aircraft portfolio.

AWAS has 162 units in its fleet but no orders. The portfolio is biased towards 737-300s and MD-80s, which have limited marketability. There are 66 operators of AWAS aircraft, the main ones being American, Air France, Rio Sul Linhas Aereas, Avianca and Qatar Airways.

debis AirFinance

The Dutch-based lessor is owned by DaimlerChrysler Aerospace (45%) and four German banks (55%). In 2000, debis acquired AerFi (the residual GPA which itself had bought out Indigo).

It achieved an operating margin of 16% on revenues of \$359m in 2000. debis has 104 units in its fleet and 31 orders.

It is exposed on its Fokker portfolio, especially now that American and US Airways have grounded their fleets. It is now looking to dispose of this portfolio and concentrate on more mainstream aircraft, possibly placing an order for Airbus aircraft.

There are 40 operators of debis aircraft, including TAM, bmi, Air France and Thai. Its exposure to South American carriers may be a concern.

The management at debis is aggressive with strong technical skills. They harbour ambitions to become the third largest lessor.

However, the lessor's owners might well be willing sellers.

GATX Capital Corp.

San Francisco-based GATX Capital is a subsidiary of GATX Corp., which is quoted on the NYSE. It has a portfolio of 103, mostly modern jets leased to 40 airlines, notably SAA, TAM, Air France and Euralair.

Growth has been achieved largely through a number of joint ventures which spread risk and broaden the funding base, for example: GATX and Gulfstream joint venture (85%/15%) in Corporate Jets; a 50% stake in Rolls-Royce and Partners Finance; a 50% stake alongside Rolls-Royce in Pembroke.

The joint venture with Flightlease (part of the SAir Group) was aimed at combining GATX's expertise in financing and Flightlease's expertise in fleet management. The strategy, which was to build the core business around airlines in the QualiFlyer alliance, is now defunct following SAir's bankruptcy.

Nevertheless, GATX has good structured finance expertise and solid connections with the banking community. It is continuing with an expansion policy, possibly through merger or acquisition of other lessors.

Babcock & Brown

Founded in 1977, Babcock & Brown is 80% owned by the employees and 20% by HVB Group. Its fleet of 83 jets is operated by 30 airlines including Braathens, BA, Iberia and SAS.

Three product areas are offered:

- Trading and investment;
- Management and re-marketing (for example, managing the ALPS securitisation of 120 aircraft)
- Deal origination, structuring, syndication and advisory (in association with Nomura Babcock & Brown, 100 aircraft have been syndicated in the JOL market).

Boullioun Aviation Services

Boullioun was sold by Deutsche Bank to West LB in February 2001, maximising its return on its October 1999 purchase of the former Boeing in-house lessor from Sumitomo Trust & Banking.

It has 80 modern jets in its portfolio leased to 35 airlines including America West Airlines, Virgin Blue, and MyTravel.

West LB has identified airlines/transport as one of seven key sectors in which it will specialise and expects Boullioun to exceed its internal 25% RoE target - the aim is to emulate ILFC performance - although the lessor has, as yet, to make decent returns. The target is to increase its portfolio to between 125 and 150 aircraft by 2007. Boullioun's management is well regarded - quick acting when confronted with distress situations.

Orix

Founded in 1991, Orix is a wholly owned subsidiary of Orix Corporation, Japan's largest non-banking financial institution. The parent bank is rated BBB by Standard & Poor's.

Its portfolio consists of 60 jets (half of which are A320s) leased to 24 operators including Air Canada, Indian Airlines, ANA and America West. Orix also advises on aircraft equity providers on the Japanese operating lease market (JOL) although this market is now virtually dead.

BAE SYSTEMS Asset Management

Its role is to manage BAe's leased-out fleet, which comprises 56 BAe146s operated by 18 airlines, the largest of which is Air Canada Jazz. It is increasingly difficult to place the 146.

Aviation Capital Group

The Pacific Life Group owns California-based ACG. It has a portfolio of 53 slightly elderly jets leased out to 33 operators.

The parent is apparently encouraging faster growth (25% per year) in an attempt to create an ILFC rival. This may not sit well with the current conservative management team.

Pembroke

Established in Dublin in 1993 Pembroke is now 50% owned by Rolls Royce (since 1998) and GATX (since 2001). GATX is now likely to be a willing seller.

It has 48 jets (including 12 717s) in its fleet and 12 operators led by Qantas (taking over Impulse Airlines aircraft), Air France and Delta. Pembroke also provides technical advisory services that have been strengthened through its recent partnership with Lufthansa Technik. Expansion plans are believed to focus on the A320 family.

Singapore Aircraft Leasing Enterprise (SALE)

Founded in 1993 SALE is owned by Boulliou (35.5%), Singapore Airlines (35.5%), Temasek (14.5%) and the Government Investment Corporation of Singapore 14.5%. In the 2001/02 financial year its pre-tax profits were US\$47m, a 30% margin on revenues.

Its fleet consists of 41 units, of which nine are widebodies. There are 23 operators, notably America West Airlines, Malaysia Airlines and Qatar Airways. It is likely to place an order for either A320/737NG or A330/777 aircraft.

SALE's aim is to reach 100 aircraft by 2007. It now conducts own marketing, having previously depended on shareholder Boulliou. It needs to increase its capital base over the next two years, which raises the possibility of an IPO, or finding new shareholders.

Tombo Aviation

Owned by Mitsui, Tombo has a portfolio of 37 jets operated by 23 carriers, including ANA, Jet Airways and Varig. Tombo is considered to be stronger than Sunrock though both their parents are suffering due to the state of Japanese economy.

IEM

Formerly ING Lease, IEM was formed when Abbey National, the UK bank converted from a building society, acquired the business in 2001. Its fleet of 29 modern aircraft is operated by 13 airlines including Air Europa, Taca, TAM and easyJet.

IEM is up for sale but has not attracted much interest as yet.

Bavaria International Aircraft Leasing GmbH

The Munich-based lessor is owned by Schörghuber Stiftung & Co., which also has brewing and hotel interests. It has a fleet of 28 jets (including 20 737s) operated by 14 airlines including Varig and Qantas. It does not appear to be active in the current market.

Deutsche Structured Finance

Aereal Bank, which also has interests in wind power generation, real estate finance and public sector finance, owns DSF. Its fleet consists of 20 jets, split between 737s and CRJs. Principal operators are Deutsche BA and Air Littoral. It has no clear strategy at present.

Itochu Airlease

Owned by Itochu Corporation this lessor has a portfolio of 16 jets leased to eight operators including Air Europa, Air Canada and BA.

Itochu's future depends on the financial state of its parent - it is probably for sale.

Sunrock Aircraft Corporation

This Dublin-based lessor is the wholly owned subsidiary of Nissho Iwai Corporation (Boeing's sales consultant in Japan). It has 14 Boeing jets leased to 10 operators including Varig, Kibris Turkish Airlines and National Airlines (US).

Its future is linked to the strength of its Japanese parent.

US Airways: Will Chapter 11 help its long-term survival prospects?

In August US Airways became the first - and so far the only - major airline to file for Chapter 11 bankruptcy protection in the post-September 11 environment. Not much of a surprise because, even in the best of times, the airline never looked like a long-term survivor because of its punitively high cost levels.

US Airways entered the current industry crisis in a weaker position than its competitors, because its financial profile began deteriorating long before September 11. Since the late 1990s, its yields have plummeted due to escalated low-cost competition on the East Coast, while its costs per ASM have remained in the 12-13 cent range. The company posted a \$269m net loss already for 2000 and another \$195m loss for the first half of last year.

The past 12 months have been disproportionately tough for US Airways because of its heavy exposure to the high-yield East

Coast markets and focus on short haul operations. The airline suffered also because of the closure and gradual opening of its main hub at Washington National (service was not fully restored there until May 2002) and continued loss of passengers to competitors' regional jets.

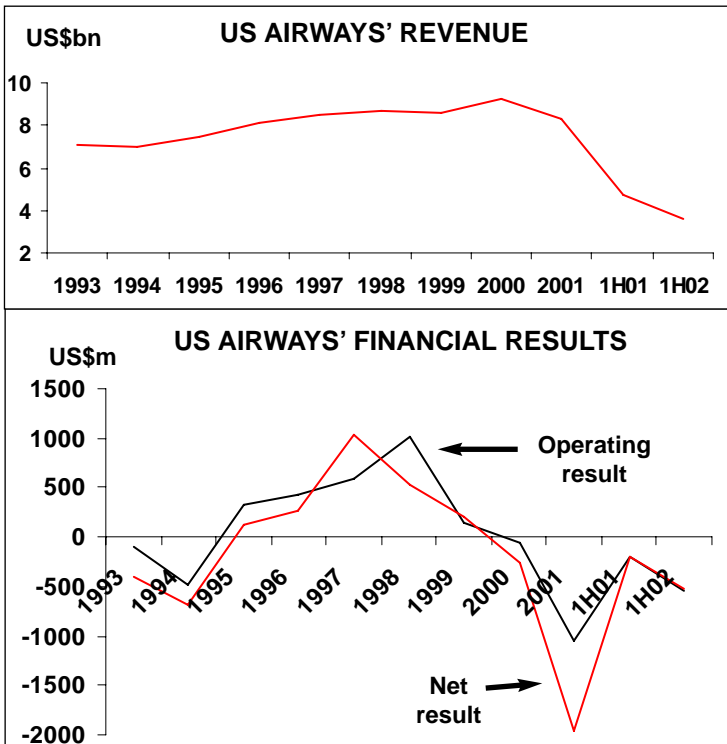
In recent presentations to creditors, the company has estimated that, over the past four years, low-cost carriers have almost doubled their share of East Coast capacity from 10.7% to 19.4%, while US Airways' share has fallen from 21.9% to 18%. Low-cost carriers now overlap with 40% of US Airways' revenues, compared with 24% in 1998.

The airline also estimates that regional jet (RJ) operations on the East Coast (defined as the area east of the Mississippi) have surged from 80m ASMs in 1998 to 469m ASMs this year, while the number of cities served with RJs has risen from 76 to 113. Competitors account for virtually all of that expansion, because until very recently US Airways had severe scope clause restrictions on RJ numbers.

US Airways also blames the failed merger with UAL, which might have addressed some of the issues by adding it to a global network. The DoJ failed to approve the merger in late July 2001 after reviewing it for almost 15 months, during which time US Airways was precluded from restructuring its operations as a stand-alone carrier.

After the merger fell through, US Airways quickly announced a staged, stand-alone restructuring under the leadership of the Gangwal-Wolf team. The plan, presented in August 2001, included measures such as elimination of MetroJet and the shedding of three fleet types.

That plan was, of course, pre-empted by the terrorist attacks. However, its existence did give US Airways a head start in dealing with the crisis, enabling it to achieve some post September 11 restructuring. Within



months, the carrier had, among other things, cut capacity by 23%, furloughed 20%-plus of its workers, discontinued MetroJet, parked 111 aircraft and deferred Airbus deliveries.

As things turned out, US Airways reported a staggering \$1.97bn net loss (or \$1.17bn before special items) for 2001 and a \$269m loss for the first quarter of 2002. The pre-tax loss margins before special items were the industry's worst.

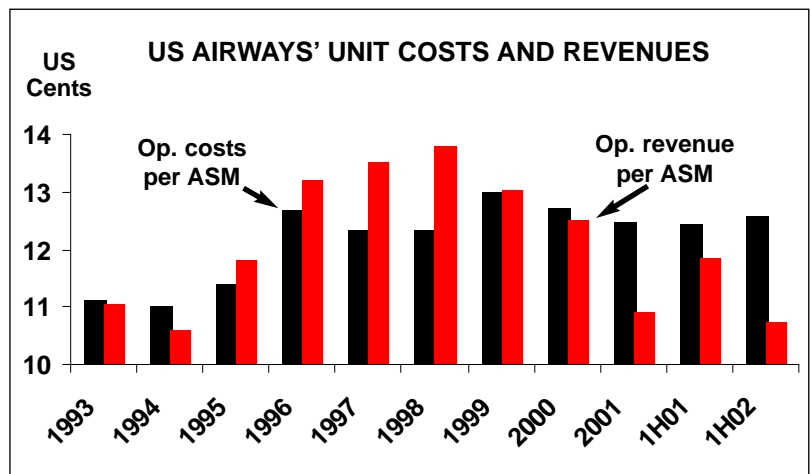
Cash reserves had fallen from \$1.08bn at year-end to \$561m at the end of March. US Airways predicted that, without additional funds, a liquidity crisis was likely by this winter.

US Airways embarked on yet another major restructuring in May - this time under the guidance of its new CEO David Siegel, who had begun his tenure in March by strengthening the company's management team.

The aims of the latest restructuring are the same as those identified by the Gangwal-Wolf team last year - to reduce the cost structure, operate more RJs and maximise the revenue potential of the East Coast franchise through domestic and international alliances. As a new twist, the plan called for the participation of all key stakeholders and applying for a government-guaranteed loan. The schedule was tight because the deadline for submitting loan guarantee applications was June 28.

Since then, in only a few months, US Airways has accomplished much in terms of restructuring and strategic initiatives. First, it has secured \$840m of annual labour concessions from its unions. Second, it has persuaded its pilots to allow a significant expansion of RJ operations. Third, it has signed and begun to implement a codeshare and global marketing alliance with United.

Fourth, with the bulk of the labour concessions already negotiated by the end of June, in early July US Airways obtained conditional approval from the Air Transportation Stabilization Board (ATSB) for federal loan guarantees to cover 90% of a \$1bn 6.5-year private sector loan. This will provide liquidity and fund the restructuring plan. The ATSB confirmed after the Chapter 11 filing that the offer was still effective; however, the loan would now be used as Chapter 11 exit financing.



In contrast to the rough treatment extended to other applicants, the ATSB was uncharacteristically complimentary about US Airways' business plan. The board noted the "disciplined and comprehensive approach that US Airways brought to its restructuring" and that the proposal "is based on reasonable assumptions and includes substantial cost savings".

The loan guarantee offer was conditioned on the successful conclusion of all concessions talks (labour, as well as lessors, financiers and vendors) and on US Airways providing the government more compensation (such as warrants).

When filing for Chapter 11 on August 11, US Airways still had in excess of \$500m in unrestricted cash. It had defaulted on some lease and debt payments, but all of those were what the company described as "strategic deferrals". US Airways made it clear that the main purpose of the bankruptcy filing was to restructure aircraft-related liabilities, as it had failed to secure voluntary concessions from its lessors and lenders.

The positive attributes - the restructuring plan, early success in securing labour concessions and promise of a government-guaranteed loan - set the stage for a successful and potentially "fast-track" Chapter 11 reorganisation.

DIP and equity funding

US Airways has had two serious offers of DIP and equity funding. The initial one came

from David Bonderman's Texas Pacific Group (TPG), which helped Continental and America West out of Chapter 11 in the early 1990s, as well as Credit Suisse First Boston and Bank of America. The second one, which US Airways accepted as a better offer on September 26, came from the Retirement Systems of Alabama (RSA), a state-employee pension fund that is one of US Airways' largest creditors.

Since the RSA bid is subject to continuing due diligence and better or higher bids through mid-November, there are potentially more offers to come.

RSA topped TPG's bid by \$40m or 20%, offering to invest \$240m for a 37.5% stake in US Airways when it emerges from Chapter 11. This would give it five of the 13 board seats. The pension fund is also foregoing transaction fees, saving another \$10m over the TPG offer. Third, as part of the deal, RSA agreed to restructure \$340m of aircraft debt obligations.

RSA has \$25bn in assets, and it already held more in US Airways debt than it is now taking in equity. Under its longtime CEO David Bronner, RSA has ventured into many non-traditional areas, including TV stations and newspapers, as well as tourism related investments such as golf courses.

RSA is also providing a fully underwritten \$500m DIP financing, made up of a \$250m term loan and a \$250m revolving credit facility. The bankruptcy court initially authorised the release of \$300m of that funding (of which \$75m was used to pay off the original facility), with final court approval expected on November 7.

The DIP lending appears less risky when considering that it is due to be fully repaid from the \$1bn government-guaranteed loan upon emergence from Chapter 11. Moreover, the remaining \$200m of the DIP funding will not be released until US Airways has secured unconditional approval for the loan guarantees from the ATSB.

In late October, US Airways disclosed that it had received a commitment for the \$100m at-risk portion of the \$1bn loan. The airline also said that the ATSB had conditionally approved the issuance of a guarantee to support the loan once the court had approved a

plan of reorganisation. US Airways expects to file that plan in December and to emerge from Chapter 11 in March.

The interest of the top-tier banks, a respected leveraged-buyout firm and a state pension fund could be regarded as a vote of confidence in US Airways' restructuring plan and its longer-term survival prospects. The investors have to take a long-term view because the US major airlines are not expected to return to decent profitability until 2005 at the earliest.

After being ousted by RSA, TPG released a statement saying that it would continue to watch US Airways' progress "with interest". One analyst suggested recently that it may have turned its attention to "other similar interests" (a Chapter 11 filing from UAL is possible this month).

The new funding will provide US Airways with adequate liquidity for the near term, considering that it had more than \$500m in unrestricted cash in August and that it will have reduced debt and lease payments in the future. However, Standard & Poor's cautions that the cash reserves could prove insufficient in the event that the industry environment worsens materially (if there is a war with Iraq).

The long-term survival plan

The May 2002 restructuring plan called for \$1.3bn of annual cost savings and \$600m additional revenues, to convert a \$1.3bn pre-tax loss into a "required" \$600m pre-tax profit (representing a 6-7% margin). As a result of rising fuel costs and continued revenue weakness, the cost-cutting target was recently raised to \$1.4-1.6bn. All of this adds up to a very impressive package, and the signs are that much of it will materialise.

Of the \$1.3bn original annual concessions, almost \$1bn was due to come from labour and the remaining \$300m from lenders, lessors and suppliers. The airline hopes that most of the additional \$100-300m cost savings would come from aircraft lessors. The extra revenues would come from codeshare alliances and increased utilisation of regional jets.

The labour concessions are all in place. US Airways reached agreement with its five

unions for a total of \$840m in annual savings over 6.5 years through modification of contracts. This will mean a 20%-plus reduction in annual labour expenses. Remarkably, the airline got about 85% of the cost reductions it asked for - all on a voluntary basis, without having to use Chapter 11 provisions. In return, employees will participate in the airline's financial recovery through equity and profit sharing plans. The unions will also get three board seats.

Because of the concessions agreed to by the workers, US Airways promised not to seek further contract changes during Chapter 11. However, it has continued to furlough staff. The workforce has been cut from 46,000 before the terrorist attacks to about 35,400 at present, and recently announced furloughs will reduce it to about 32,000 by next spring.

US Airways is still in negotiations with its lenders and lessors about reductions in aircraft ownership costs. The talks focus on four Boeing models - the 737-300, 737-400, 757-200 and 767-200 - where the objective is to reduce lease obligations to "competitive capital costs" and debt obligations to current appraised values. Recent presentations to creditors have emphasised the continued decline in aircraft market values and the high cost of remarketing those aircraft.

In early October, as the 60-day protection from repossession afforded by Section 1110 expired, US Airways announced its decisions on various financing obligations. As expected, it affirmed all financings related to Airbus aircraft - which it intends to keep - and paid past due amounts. It rejected financings related to its grounded fleet of older aircraft plus 10 Boeing aircraft.

Early in the Chapter 11 proceedings, US Airways had gained court approval to walk away from leases on 57 aircraft that it no longer operated (including 737-200s, MD-80s, DC-9s, Fokker 100s and Dash 8-100s) and 10 other Boeing aircraft (eight 737-300/400s and two 757-200s). The airline is believed to be seeking to dispose of another 22 Boeing aircraft to right-size operations.

The fleet size has declined rather dramatically: from 417 at the end of 2000 to about 300 at present. However, US Airways will not shrink very much further because, as part of

the labour concessions agreements, it promised to operate at least 245 mainline jets.

US Airways is, of course, hoping to keep its longer-term Airbus order obligations. It has 37 A320-family aircraft on firm order for delivery in 2005-2009, plus 173 purchase rights and 72 options. There is also one A330-300 on firm order for 2007 delivery, plus 20 options.

The revenue benefits in US Airways' business plan will take longer to materialise, but the key components are in place. First, the airline signed a marketing agreement with United in July and, following the DoT's recent approval, plans to begin codesharing in early 2003. Annual revenue benefits are estimated at \$200m when fully implemented, assuming no competitive response.

Second, US Airways has obtained permission from its pilots to operate up to 465 RJs, subject to certain restrictions. This represents a massive increase from the current ceiling of 70 RJs.

It is expected to keep its three hubs (Pittsburgh, Philadelphia and Charlotte) and maintain high levels of service to New York LaGuardia and Washington National. It will also maintain high levels of service to Europe and continue expansion to the Caribbean and Central America.

US Airways' greatest strength is its solid route franchise. It is the largest airline east of the Mississippi, where 60%-plus of the US population resides. It accounts for 35% of industry revenues in that area followed by Delta (28%), Continental (8%), Southwest (7%) and American (4%). It dominates its hubs and is the largest or second-largest carrier in 77% of the cities that it serves.

Sceptics argue that, even after Chapter 11 reorganisation has narrowed the cost gap, US Airways will still have a hard time competing with the low-cost carriers that are expanding aggressively on the East Coast. However, Blaylock & Partners analyst Ray Neidl pointed out in a recent research note that if US Airways has competitive hubs, it does not have to be directly competitive in terms of costs with the point-to-point low-cost airlines.

By Heini Nuutinen

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 employees	
Alaska												
Year 2000	2,177	2,198	-20.6	-70	-0.9%	-3.2%	27,834	19,277	69.3%	13,512	9,940	
Jul-Sep 01	583.4	570.6	12.8	25.3	2.2%	4.3%	7,536	5,351	71.0%	3,741	10,826	
Oct-Dec 01	462.2	558.6	-96.4	-36.4	-20.9%	-7.9%	6,622	4,389	66.4%	3,025	10,500	
Year 2001	2,141	2,263	-121.8	-39.5	-5.7%	-1.8%	28,837	19,712	68.4%	13,668	10,742	
Jan-Mar 02	497	548	-51.4	-34.4	-10.3%	-6.9%	7,189	4,791	66.6%	3,193		
Apr-Jun 02	477	480	-2.2	-2.5	-0.5%	-0.5%	7,932	5,427	68.4%	3,616	10,222	
Jul-Sep 02	620	597	24	11	3.9%	1.8%	8,380	5,911	70.5%	3,978	10,465	
American												
Year 2000	19,703	18,322	1,381	813	7.0%	4.1%	258,951	187,507	72.4%	86,239	99,610	
Jul-Sep 01	4,816	5,374	-558	-414	-11.6%	-8.6%	62,676	45,315	72.3%	20,123	127,200	
Oct-Dec 01	3,804	4,952	-1,148	-798	-30.2%	-21.0%	54,907	35,580	64.8%		109,300	
Year 2001	18,963	20,823	-1,860	-1,762	-9.8%	-9.3%	161,030	176,143	69.4%	61,287	102,093	
Jan-Mar 02	4,136	4,865	-729	-575	-17.6%	-13.9%	64,515	44,766			100,100	
Apr-Jun 02	4,479	5,080	-601	-495	-13.4%	-11.1%	70,724	53,125	71.4%			
Jul-Sep 02	4,494	5,815	-1,321	-924	-29.4%	-20.6%	73,899	53,236	72.0%		99,700	
America West												
Year 2000	2,344	2,357	-12,637	7,679	-539.1%	327.6%	43,580	30,741	70.5%	19,950	13,869	
Jul-Sep 01	491	590	-99	-32	-20.2%	-6.5%	10,774	7,973	74.0%	5,034	13,633	
Oct-Dec 01	400	538	-138	-61	-34.5%	-15.3%	9,477	6,492	68.5%	4,144		
Year 2001	2,066	2,380	-316	-148	-15.3%	-7.2%	42,709	30,696	71.9%	19,576	13,827	
Jan-Mar 02	460	583	-123	-358	-26.7%	-77.8%	9,780	6,859	70.1%	4,303		
Apr-Jun 02	533	534	-1	-15	-0.2%	-2.8%	11,024	8,351	75.8%	5,080		
Jul-Sep 02	510	552	-42	-32	-8.2%	-6.3%	11,504	8,619	74.9%			
Continental												
Year 2000	9,899	9,170	729	342	7.4%	3.5%	134,718	100,283	74.4%	45,139	45,072	
Jul-Sep 01	2,223	2,136	87	3	3.9%	0.1%	35,395	26,086	73.7%	11,254		
Oct-Dec 01	1,738	1,895	-157	-149	-9.0%	-8.6%	29,321	20,554	70.1%	9,508		
Year 2001	8,969	9,119	-150	-95	-1.7%	-1.1%	135,962	98,393	72.4%	44,238	45,166	
Jan-Mar 02	1,993	2,180	-187	-166	-9.4%	-8.3%	30,498	22,582	74.0%	10,057		
Apr-Jun 02	2,192	2,307	-115	-139	-5.2%	-6.3%	33,108	24,922	74.6%			
Jul-Sep 02	2,178	2,132	46	-37	2.1%	-1.7%	33,839	25,625	75.0%	10,581		
Delta												
Year 2000	16,741	15,104	1,637	828	9.8%	4.9%	236,665	173,453	73.1%	105,591	79,584	
Jul-Sep 01	3,398	3,649	-251	-259	-7.4%	-7.6%	60,719	43,260	71.3%	26,441	83,500	
Oct-Dec 01	2,863	3,457	-594	-734	-20.7%	-25.6%	51,460	32,798	63.7%			
Year 2001	13,879	15,124	-1,245	-1,216	-9.0%	-8.8%	237,914	163,693	68.8%	104,943	77,654	
Jan-Mar 02	3,103	3,538	-435	-397	-14.0%	-12.8%	54,298	37,384	68.9%	24,618		
Apr-Jun 02	3,474	3,601	-127	-186	-3.7%	-5.4%	60,709	42,355	73.4%	27,427	75,700	
Jul-Sep 02	3,420	3,805	-385	-326	-11.3%	-9.5%	59,287	44,037	74.3%	27,713	76,000	
Northwest												
Year 2000	11,240	10,671	569	256	5.1%	2.3%	171,789	127,298	76.6%	56,836	53,131	
Jul-Sep 01	2,594	2,749	-155	19	-6.0%	0.7%	41,871	31,753	75.8%			
Oct-Dec 01	1,985	2,426	-441	-216	-22.2%	-10.9%	33,985	23,620	69.5%			
Year 2001	9,905	10,773	-868	-423	-8.8%	-4.3%	158,284	117,682	74.3%	54,056	50,309	
Jan-Mar 02	2,180	2,376	-196	-171	-9.0%	-7.8%	35,022	26,611	76.0%	11,899		
Apr-Jun 02	2,406	2,452	-46	-93	-1.9%	-3.9%	39,848	29,902	78.9%		46,260	
Jul-Sep 02	2,564	2,556	8	-46	0.3%	-1.8%	40,321	31,787	78.8%	14,365	45,466	
Southwest												
Year 2000	5,650	4,628	1,021	603	18.1%	10.7%	96,463	67,961	70.5%	72,568	28,752	
Jul-Sep 01	1,335	1,242	93	151	7.0%	11.3%	26,217	18,121	69.1%	16,208	30,946	
Oct-Dec 01	1,238	1,201	37	64	3.0%	5.2%	26,888	17,343	64.5%	14,996	31,580	
Year 2001	5,555	4,924	631	511	11.4%	9.2%	105,079	71,604	68.1%	64,447	31,014	
Jan-Mar 02	1,257	1,207	49	21	3.9%	1.7%	26,586	16,726	62.9%	14,463		
Apr-Jun 02	1,473	1,284	189	102	12.8%	6.9%	29,074	20,314	69.9%	16,772	33,149	
Jul-Sep 02	1,391	1,300	91	75	6.5%	5.4%	28,342	19,180	67.7%	16,256		
United												
Year 2000	19,351	18,685	666	96	3.4%	0.5%	282,276	204,188	72.3%	83,853	100,976	
Jul-Sep 01	4,107	4,819	-712	-542	-17.3%	-13.2%	69,233	50,610	73.1%	19,815	95,900	
Oct-Dec 01	2,949	3,835	-886	-308	-30.0%	-10.4%	56,421	38,140	67.6%	15,450	79,300	
Year 2001	16,138	18,481	-2,343	-2,145	-14.5%	-13.3%	265,291	187,701	70.8%	75,457	96,142	
Jan-Mar 02	3,288	3,999	-711	-510	-21.6%	-15.5%	55,056	39,761	72.2%	15,361		
Apr-Jun 02	3,793	4,278	-485	-341	-12.8%	-9.0%	60,315	44,896	74.4%	17,501	79,800	
Jul-Sep 02	3,737	4,383	-646	-889	-17.3%	-23.8%	64,147	48,335	75.4%	18,900	79,900	
US Airways												
Year 2000	9,268	9,322	-54	-269	-0.6%	-2.9%	106,999	75,358	70.4%	59,772	45,228	
Apr-Jun 01	2,493	2,473	20	-24	0.8%	-1.0%	29,395	21,693	73.8%	16,582	44,673	
Jul-Sep 01	1,989	2,739	-750	-766	-37.7%	-38.5%	27,609	19,619	71.1%	14,188	42,723	
Oct-Dec 01	1,554	2,101	-547	-906	-35.2%	-58.3%	22,640	14,308	63.2%	11,151	35,232	
Year 2001	8,288	9,355	-1,067	-1,969	-12.9%	-23.8%	107,347	73,944	68.9%	56,114	43,846	
Jan-Mar 02	1,709	2,079	-370	-269	-21.7%	-15.7%	22,495	15,419	68.5%	11,825		
Apr-Jun 02	1,903	2,078	-175	-248	-9.2%	-13.0%	23,516	17,658	75.1%	13,000		

Note: Annual figure may not add up to sum of interim results due to adjustments and consolidation. 1ASM=1.6093 ASK

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 employees
Air France											
Year 2000/01	11,148	10,746	402	382	3.6%	3.4%	119,562	93,355	78.1%	42,400	52,310
Apr-Jun 01	3,113	2,887	226		7.3%		32,266	25,515	79.0%		
Jul-Sep 01	2,959	2,895	64		2.2%		31,738	25,481	79.2%		
Oct-Dec 01	2,682	2,785	-103	-121	-3.8%	-4.5%	30,070	20,907	70.6%		
Jan-Mar 02	2,667	2,647	20	1	0.7%	0.0%	29,703	22,925	77.2%		
Year 2001/02	11,234	11,017	217	141	1.9%	1.3%	123,777	94,828	76.6%		
Apr-Jun 02	3,276	3,124	163	157	5.0%	4.8%	31,687	24,435	77.1%		
Alitalia											
Year 2000	4,968	5,210	-242	-236	-4.9%	-4.8%	57,483	41,433	72.1%	26,700	23,478
Jan-Jun 01	2,348	2,504	-156	-228	-6.6%	-9.7%	26,437	18,953	71.7%	12,565	24,023
Jul-Dec 01	2,397	2,503	-106	-590	-4.4%	-24.6%	24,944	17,423	69.8%	12,204	
Year 2001	4,745	5,007	-262	-818	-5.5%	-17.2%	51,392	36,391	70.8%	24,737	23,667
BA											
Year 2000/01	13,700	13,139	561	189	4.1%	1.4%	162,824	116,674	71.7%	44,462	62,844
Apr-Jun 01	3,277	3,206	71	37	2.2%	1.1%	40,980	28,646	69.9%	11,293	58,989
Jul-Sep 01	3,219	3,116	103	33	3.2%	1.0%	39,629	29,297	73.9%	11,306	59,902
Oct-Dec 01	2,616	2,882	-266	-205	-10.2%	-7.8%	35,449	23,106	65.2%	8,574	55,758
Jan-Mar 02	2,842	2,908	-66	-63	-2.3%	-2.2%	34,998	25,221	72.1%	8,831	
Year 2001/02	12,138	12,298	-160	-207	-1.3%	-1.7%	151,046	106,270	70.4%	40,004	
Apr-Jun 02	3,127	2,886	241	61	7.7%	2.0%	35,020	24,679	70.5%	9,665	52,926
Iberia											
Year 2000	4,136	4,075	61	188	1.5%	4.5%	54,120	40,049	73.8%	24,500	26,814
Year 2001	4,240	4,236	4	45	0.1%	1.1%		41,297	70.8%	24,930	
KLM											
Year 2000/01	6,319	6,068	251	70	4.0%	1.1%	75,222	60,047	79.8%	16,100	30,253
Apr-Jun 01	1,507	1,487	20	17	1.3%	1.1%	19,231	15,200	79.0%		27,211
Jul-Sep 01	1,679	1,596	83	24	4.9%	1.4%	19,554	16,049	82.1%		28,911
Oct-Dec 01	1,291	1,358	-67	-82	-5.2%	-6.4%	17,030	12,483	73.3%		27,738
Jan-Mar 02	1,302	1,414	-112	-97	-8.6%	-7.5%	16,473	13,215	79.9%		
Year 2001/02	5,933	6,018	-85	-141	-1.4%	-2.4%	72,228	56,947	78.7%		33,265
Apr-Jun 02	1,639	1,599	40	11	2.4%	0.7%	18,041	14,326	79.4%		34,366
Lufthansa											
Year 2000	14,014	12,648	1,366	635	9.7%	4.5%	123,801	92,160	74.4%	47,000	69,523
Apr-Jun 01	4,119	4,045	74	41	1.8%	1.0%	30,658	22,930	74.8%	12,236	85,771
Jul-Sep 01	4,188	4,027	161	96	3.8%	2.3%	32,454	24,546	75.6%	12,692	83,447
Oct-Dec 01	3,437	3,674					28,293	18,854	67.4%	9,873	
Year 2001	14,966	14,948	18	-530	0.1%	-3.5%	126,400	90,389	71.5%	45,710	87,975
Jan-Mar 02	3,556	3,513	43	-165	1.2%	-4.6%	26,757		71.0%	9,700	
Apr-Jun 02	4,968	4,601	285	138	5.7%	2.8%	30,344			11,300	90,308
SAS											
Year 2000	5,185	4,853	332	233	6.4%	4.5%	33,782	22,647	67.0%	23,240	22,698
Jan-Mar 01	1,183	1,175	8	2	0.7%	0.1691%	8,558	5,286	61.8%	5,482	29,985
Apr-Jun 01	1,345	1,329	16	18	1.2%	1.3%	9,144	6,227	68.1%	6,279	30,499
Jul-Sep 01	1,199	1,220	-21	-20	-1.8%	-1.7%	9,629	6,498	67.5%	6,463	30,896
Oct-Dec 01	1,208	1,316	-108	-108	-8.9%	-8.9%	8,509	5,097	59.9%	5,300	
Year 2001	4,984	5,093	-109	-103	-2.2%	-2.1%	35,521	22,956	64.6%	23,060	22,656
Jan-Mar 02	1,392	1,534	-142	-133	-10.2%	-9.6%	8,228	5,229	63.1%	5,091	
Apr-Jun 02	1,888	1,545	343	102	18.2%	5.4%	8,773	6,240	71.1%	6,034	
Ryanair											
Year 2000/01	442	338	104	95	23.5%	21.5%	6,657	4,656	69.9%	7,000	1,476
Apr-Jun 01	132	107	25	21	18.9%	15.9%				2,400	
Jul-Sep 01	168	105	63	58	37.5%	34.5%			84.0%	2,900	
Oct-Dec 01	122	97	25	26	20.5%	21.3%			79.0%	2,700	
Jan-Mar 02	220	165	55	50	25.0%	22.7%					
Year 2001/02	642	474	168	155	26.2%	24.1%			81.0%	11,900	1,547
Apr-Jun 02	189	153	47	40	24.9%	21.2%			83.0%	3,540	
easyJet											
Sep 00-Mar 01	210	225	-15	-15	-7.1%	-7.1%			80.6%	3,200	
Apr-Sep 01	314	273	41	41	13.1%	13.1%				3,915	
Year 2000/01	513	455	58	54	11.3%	10.5%	7,003	5,903	83.0%	7,115	1,632
Sep-Mar 02	285	279	6	1	2.1%	0.4%			84.2%	4,300	

Note: Annual figure may not add up to sum of interim results due to adjustments and consolidation. 1ASM=1.6093 ASK

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 employees
ANA	Apr-Sep 00	5,228	4,793	495	359	9.5%	6.9%	47,586	31,753	66.7%	24,958	
	Oct 00-Mar 01	5,376	5,186	190	-486	3.5%	-9.0%	46,278	29,168	63.0%	24,471	
	Year 2000/01	10,914	10,629	285	-137	2.6%	-1.3%	85,994	58,710	68.3%	43,700	14,303
	Apr-Sep 01	5,168	4,811	357	136	6.9%	2.6%	45,756	30,790	67.3%	25,876	
	Oct 01-Mar 02											
	Year 2001/02	9,714	9,529	185	-76	1.9%	-0.8%	87,908	57,904	64.7%	49,306	
Cathay Pacific	Jan-Jun 00	2,070	1,765	305	285	14.7%	13.8%	29,839	22,588	75.7%	5,483	
	Jul-Dec 00	2,356	1,983	373	382	15.8%	16.2%	32,070	24,587	76.7%	6,147	
	Year 2000	4,431	3,752	679	642	15.3%	14.5%	61,909	47,153	76.2%	11,860	14,293
	Jan-Jun 01	2,031	1,898	133	170	6.5%	8.4%	32,419	23,309	71.9%	5,936	
	Jul-Dec 01	1,871	1,897	-26	-86	-1.4%	-4.6%	30,371	21,497	70.8%	5,378	
	Year 2001	3,902	3,795	107	84	2.7%	2.2%	62,790	44,792	71.3%	11,270	15,391
	Jan-Jun 02	1,989	1,753	235	181	11.8%	9.1%	29,537		78.1%		14,300
JAL	Year 1999/00	14,442	14,039	403	177	2.8%	1.2%	119,971	88,479	70.2%	37,200	18,974
	Year 2000/01	13,740	13,106	634	331	4.6%	2.4%	129,435	95,264	73.6%	38,700	17,514
	Year 2001/02	9,607	9,741	-135	-286	-1.4%	-3.0%				37,183	
Korean Air	Year 2000	4,916	4,896	20	-409	0.4%	-8.3%	55,824	40,606	72.7%	22,070	16,000
	Year 2001	4,309	4,468	-159	-448	-3.7%	-10.4%					
	Jan - Mar 02	1,113	1,060	54	23	4.9%	2.1%	13,409	9,799	73.1%	5,399	
Malaysian	Year 1999/00	2,148	2,120	28	-68	1.3%	-3.2%	48,158	34,930	71.3%	15,370	21,687
	Year 2000/01	2,357	2,178	179	-351	7.6%	-14.9%	52,329	39,142	74.8%	16,590	21,518
Qantas	Year 1999/00	5,710	5,162	548	324	9.6%	5.7%	85,033	64,149	75.4%	20,490	29,217
	Jul-Dec 00	2,745	2,492	224	142	8.2%	5.2%	46,060	35,451	77.0%	11,175	31,382
	Year 2000/01	5,473	5,099	374	223	6.8%	4.1%	92,943	70,540	75.9%	22,150	31,632
	Jul-Dec 01	3,050	2,904	125	84	4.1%	2.8%	48,484	37,262	76.9%	13,335	32,361
	Year 2001/02	6,133	5,785	348	232	5.7%	3.8%	95,944	75,134	78.3%	27,128	33,044
Singapore	Apr-Sep 00	2,864	2,438	426	668	14.9%	23.3%	46,478	36,137	77.8%	7,584	
	Oct 00-Mar 01	2,635	2,317	318	209	12.1%	7.9%	46,171	34,982	75.8%	7,416	
	Year 2000/01	5,729	4,954	775	892	13.5%	15.6%	92,648	71,118	76.8%	15,000	14,254
	Apr-Sep 01	2,592	2,329	263	90	10.1%	3.5%	48,058	36,091	75.1%		
	Oct 01-Mar 02	2,807	2,508	299		10.7%		46,501	33,904			
	Year 2001/02	5,399	4,837	562	395	10.4%	7.3%	94,559	69,995	74.0%	14,765	
	Apr 02-Sep 02	2,948	2,661	287	436	9.7%	14.8%	49,196	37,799	76.80%	7,775	14,252

Note: Annual figure may not add up to sum of interim results due to adjustments and consolidation. 1ASM=1.6093 ASK

JET AND TURBOPROP ORDERS

	Date	Buyer	Order	Price	Delivery	Other information/engines
Airbus	Oct 14	easyJet	120 A319s		Sep 03-08	plus 120 options
	Oct 30	Vietnam Airlines	5 A321s		2003-05	
Boeing						
Bombardier	Oct 8	ANA	4 Q400s		2003-04	

Note: Prices in US\$. Only firm orders from identifiable airlines/lessors are included. Source: Manufacturers.

MoUs and Lols

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 %
1994	144.7	87.7	60.6	150.3	108.8	72.4	102.8	76.1	74	334.0	243.6	72.9	503.7	346.7	68.8
1995	154.8	94.9	61.3	154.1	117.6	76.3	111.1	81.1	73	362.6	269.5	74.3	532.8	373.7	70.1
1996	165.1	100.8	61.1	163.9	126.4	77.1	121.1	88.8	73.3	391.9	292.8	74.7	583.5	410.9	70.4
1997	174.8	110.9	63.4	176.5	138.2	78.3	130.4	96.9	74.3	419.0	320.5	76.5	621.9	450.2	72.4
1998	188.3	120.3	63.9	194.2	149.7	77.1	135.4	100.6	74.3	453.6	344.2	75.9	673.2	484.8	72
1999	200.0	124.9	62.5	218.9	166.5	76.1	134.5	103.1	76.7	492.3	371.0	75.4	727.2	519.5	71.4
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
Aug-02	18.8	13.5	71.6	17.6	14.8	84.1	11.3	9.4	83.1	40.8	33.9	83.1	62.7	49.8	79.4
Ann. chng	-9.9%	-7.1%	2.1	-18.2%	-14.9%	3.3	-2.8%	-2.8%	0.0	-11.0%	-9.2%	-1.7	-10.8%	-8.8%	-1.8
Jan-Aug 02	133.4	88.9	66.7	124.3	100.2	80.6	85.3	69.0	81	301.7	239.9	79.5	457.7	344.4	75.3
Ann. chng	-12.3%	-8.4%	2.8	-21.0%	-16.8%	4.1	-7.7%	-5.0%	2.3	-12.9%	-10.6%	2.0	-12.9%	-10.2%	2.3

Source: AEA

US MAJORS' 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 %
1994	886.9	575.6	64.9	136.1	99.5	73.0	107.3	78.2	72.9	56.8	35.2	62	300.3	212.9	70.9
1995	900.4	591.4	65.7	130.4	98.5	75.6	114.3	83.7	73.2	62.1	39.1	63	306.7	221.3	72.1
1996	925.7	634.4	68.5	132.6	101.9	76.8	118.0	89.2	75.6	66.1	42.3	64	316.7	233.3	73.7
1997	953.3	663.7	69.6	138.1	108.9	78.9	122.0	91.2	74.7	71.3	46.4	65.1	331.2	246.5	74.4
1998	960.8	678.8	70.7	150.5	117.8	78.3	112.7	82.5	73.2	83.5	52.4	62.8	346.7	252.7	72.9
1999	1,007.3	707.5	70.2	164.2	128.2	78.1	113.2	84.7	74.8	81.3	54.3	66.8	358.7	267.2	74.5
2000	1,033.5	740.1	71.6	178.9	141.4	79.0	127.7	97.7	76.5	83.0	57.6	69.4	380.9	289.9	76.1
2001	1,025.4	712.2	69.5	173.7	128.8	74.2	120.1	88.0	73.3	83.4	56.9	68.2	377.2	273.7	72.6
Sep-02	81.2	51.4	63.3	14.4	11.7	80.8	8.9	7.0	78.4	6.5	3.8	58.4	29.8	22.4	75.2
Ann. chng	14.3%	29.1%	7.3	8.9%	23.3%	9.4	-2.4%	19.9%	14.6	18.0%	19.3%	0.6	7.1%	21.5%	9.0
Jan-Sept 02	744.2	530.7	71.3	120.1	96.2	80.1	76.5	62.5	81.7	63.9	43.7	68.3	260.5	202.3	77.7
Ann. chng	-7.2%	-5.8%	1	-12.4%	-9.2%	2.9	-19.7%	-13.2%	6.1	0.3%	-2.4%	-1.9	-12.0%	-9.1%	2.5

Note: US Majors = Aloha, Alaska, American, Am. West, American Transair, Continental, Cont. Micronesia, Delta, Hawaiian JetBlue, MidWest Express, Northwest, Southwest, United and US Airways Source: ATA

ICAO WORLD TRAFFIC AND ESG FORECAST

	Domestic			International			Total			Domestic growth rate		International growth rate		Total growth rate	
	ASK bn	RPK bn	LF %	ASK bn	RPK bn	LF %	ASK bn	RPK bn	LF %	ASK %	RPK %	ASK %	RPK %	ASK %	RPK %
1993	1,349	855	63.3	1,785	1,205	67.5	3,135	2,060	65.7	3.4	2.0	4.4	4.8	3.9	3.6
1994	1,410	922	65.3	1,909	1,320	69.1	3,318	2,240	67.5	4.6	7.9	6.9	9.4	5.9	8.8
1995	1,468	970	66.1	2,070	1,444	69.8	3,537	2,414	68.3	4.1	5.4	8.5	9.4	6.6	7.8
1996	1,540	1,043	67.7	2,211	1,559	70.5	3,751	2,602	70.4	4.9	7.4	8.8	10.0	7.0	9.1
1997	1,584	1,089	68.8	2,346	1,672	71.3	3,930	2,763	70.3	2.9	4.5	6.1	7.2	4.8	6.1
1998	1,638	1,147	70.0	2,428	1,709	70.4	4,067	2,856	70.3	3.4	5.2	3.5	2.2	3.4	3.4
1999	1,911	1,297	67.9	2,600	1,858	71.5	4,512	3,157	70.0	5.4	5.0	5.7	7.4	5.6	6.4
2000	2,005	1,392	69.4	2,745	1,969	71.8	4,750	3,390	70.8	4.9	7.2	5.6	6.0	5.3	6.5
*2001							4,698	3,262	69.4					-1.1	-3.9
*2002							4,607	3,294	71.1					-1.9	0.4
*2003							4,903	3,584	73.1					6.4	9.4
*2004							5,154	3,8819	74.1					5.1	6.6

Note: * = Forecast; ICAO traffic includes charters. Source: Airline Monitor, June 2002

AIRCRAFT AVAILABLE FOR SALE OR LEASE

	Old		Total old	New		Total new
	narrowbodies	widebodies		narrowbodies	widebodies	
1997	162	104	266	54	13	67
1998	187	125	312	67	55	122
1999	243	134	377	101	53	154
2000	302	172	474	160	42	202
2001	368	188	556	291	101	392
2002-Aug	452	171	623	305	125	430

Source: BACK Notes: As at end year; Old narrowbodies = 707, DC8, DC9, 727, 737-100/200, F28, BAC 1-11, Caravelle; Old widebodies = L1011, DC10, 747-100/200, A300B4; New narrowbodies = 737-300+, 757, A320 types, BAe 146, F100, RJ; New widebodies = 747-300+, 767, 777, A600, A310, A330, A340.

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