Aviation Strategy

Issue No: 38 December 2000

Tilting at windmills

The European Commission (both the transport and the competition directorates) is setting itself up as the guardian of the interests of the airline passenger. This is a laudable role, and it is always useful to question the self-interest of airlines. However, some of the recent proposals from Brussels seem to betray a lack of understanding about the commercial realities of the airline industry. More importantly, these proposals, if translated into legislation, will likely have the opposite effect to that intended.

To take the first example, the Commission is concerned that when passengers buy a ticket they get the service that they have paid for. This is pretty reasonable, but the Commission seems to be suggesting that the practice of over-booking should be outlawed or heavily penalised.

The effect would be to undermine airlines' yield management systems, force airlines to issue more restrictive tickets, impose more penalties on no-shows, and ultimately cause more inconvenience to the passenger. In a deregulated environment, the role of the regulatory body should not be to dictate ticketing and pricing policy.

Secondly, in its draft slots directive the Commission is suggesting that grandfathered slots cannot be re-timed unless the air carrier proposes to use "better", ie larger and/or more modern, aircraft. Here the Commission's aim is again understandable - to reduce the amount of noise and emissions generated in carrying a fixed number of passengers. But again the Commission is in effect trying to interfere in the commercial decision-making of a carrier, ignoring the reality that aircraft choice depends on factors such as changes in demand, the need to feed or connect with alliance partners, or increase schedules to meet competitive threats.

The Commission has a role in making airlines compete with each other, but it cannot specify how they should compete, beyond questions of legality, collusion and dominance.

The third example actually relates to a perceived cartel-type activity. The Commission is thinking of banning interline agreements on the grounds that this is a price-fixing activity that currently enjoys exemption from competition rules. In reality, the interlining system allows passengers to buy a ticket on two connecting airlines usually for less than the price of fares on the two segments. It also adds flexibility to travellers' schedules as many airlines will accept each others' tickets.

Smaller airlines generally benefit from interline agreements, as it gives them the opportunity of feeding larger carriers' intercontinental networks. Ironically, in the early 90s new entrants like Air Europe went to court to establish small carriers' rights to participate in interline agreements.

One unexpected consequence of the Commission's activity has been to revitalise IATA's aeropolitical function, allowing that august body to act as the voice of commercial reason.

www.aviationeconomics.com

CONTENTS

PUBLISHER

Aviation Economics
James House, LG,
22/24 Corsham Street
London N1 6DR
Tel: +44 (0) 20 7490 5215
Fax: +44 (0) 20 7490 5218
e-mail: info@aviationeconomics.com

Deconstructing the manufacturers

Aviation Strategy is published 12 times a year by *Aviation Economics* on the first of each month

Editor: Keith McMullan

Associate Editor: Heini Nuutinen

Subscription enquiries: Keith McMullan Tel: +44 (0) 20 7490 5215

Aviation Economics Registered No: 2967706 (England)

Registered Office: James House, LG 22/24 Corsham St London N1 6DR VAT No: 701780947

ISSN 1463-9254

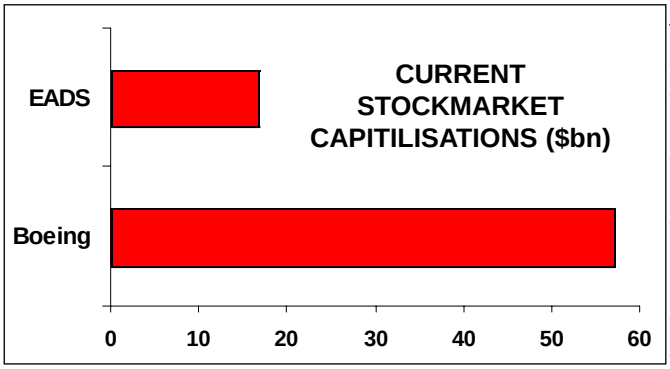
With Qantas announcing its order for 12 A3XXs the project has now gained 44 firm commitments and will be given the final go-head. And the trouble with an Airbus is that you wait for ages then several turn up at once.

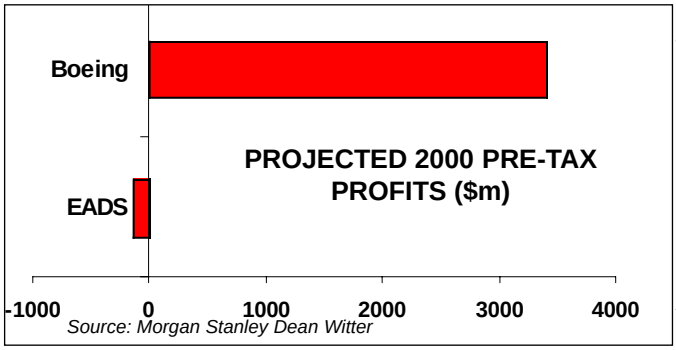
Another Airbus contender to take on the 747 is ready and waiting in a Toulouse hangar, having final systems tests done ahead of its test flight in May. This is the latest version of the A340, the A340-600, which will carry around 388 passengers in standard tri-class configuration, which makes it comparable with earlier 747s and only about 30 seats short of a 747-400. While the A3XX project naturally grabs the attention, it is often overlooked that the big A340 is also attacking from below.

Boeing's own 777s are selling extremely well: indeed Boeing is expected to announce soon that it has landed orders for 113 such aircraft this year, worth some $18bn, which it claims this as a record for aircraft in this category. However, Airbus's A330 and A340 orders had also already topped 100 by early November.

Boeing can take a great deal of comfort from Qantas's order, announced at the same time as the A3XX (and A330) order, for six longer-range 747-400s. But so far there are no signs of orders for the new 747X.

Boeing may be holding its fire in order to distract attention from the formal industrial launch of the A3XX in January. A war of claims and counter-claims has Airbus estimating the A3XX operating cost advantage over the 747-400 at 17-20%, while that the 747X will be only 10%. This apparent advantage for Airbus will be mitigated by a lower Boeing price for a 747X, reflecting the fact that its development cost will be much lower than that of the A3XX.





Source: Morgan Stanley Dean Witter

Profit analysis

Away from the marketing hype, some key questions remain surrounded in mystery - like how much profit does each aircraft production line actually produce. This problem has been tackled by ESG, the results are summarised opposite.

ESG's methodology is to start with estimated discounted prices that airlines actually pay for aircraft by comparing totals delivered against reported commercial aircraft revenues. (The sum of the various aircraft types has to reconcile with the total revenues, but the individual totals are estimated.)

The next stage is to calculate gross profit for each type. This is done for Boeing by separating out reported R&D, depreciation, administrative and interest charges. Using Boeing as a rough guide, the equivalent gross profit numbers are calculated for Airbus, on the assumption that margins would be probably than at Boeing

at similar stages of maturity.

Until Airbus publishes, through EADS, detailed P&L accounts, this is probably the closest we are going to get to understand the company's business.

According to this analysis, the A320 family contributed about 55% of Airbus's gross profit in 1999, compared to 40% for the A330/340 project.

At Boeing gross profit is much higher - $5bn against $2.9bn - and there is also a much more even distribution among the programmes. The narrowbodies, 737NGs and 757s, accounted for about 26% of the gross profit, a little lower than the 31% contribution from the 767s and 777s.

The 747 is estimated to have contributed $1.3bn or about 26%. This contrasts with the situation ten years ago - then the 747 contributed $2.2bn or 56% of Boeing's gross profit.

ESTIMATED PROFIT COMPONENTS IN MANUFACTURERS' 1999 RESULTS (US$ m)

BOEING

Type	**Units**	**Av. Unit price**	**Sales**	**Gross profit**	**% Contrib.**
737	295	34.6	10,207	1,313	26.1%
747	47	152.0	7,144	1,322	26.3%
757	67	51.0	3,417	513	10.2%
767	44	80.0	3,520	528	10.5%
777	83	115.7	9,603	1,056	21.0%
MD-80/90	39	32.8	1,279	154	3.1%
MD-11	8	105.0	840	101	2.0%
717	12	25.0	300	36	0.7%
Total aircraft	**595**		**36,310**	**5,023**	**100.0%**
Spares, parts, bizjets			2094	328	
Total commercial			38,404	5,351	
Govt. & others			19584	2967	
Total sales			**57,988**	**8,318**	
R&D, Dep,, G&A, Interest				-5,579	
Other income				585	
Pre-tax income				**3,324**	

AIRBUS

Type	**Units**	**Av. Unit price**	**Sales**	**Gross profit**	**% Contrib.**
A300	8	85.0	680	136	4.7%
A310	0	67.0	0	0	na
A319	88	34.0	2,992	449	15.4%
A320	101	37.0	3,737	897	30.8%
A321	33	48.0	1,584	253	8.7%
A330	44	106.0	4,664	793	27.2%
A340	20	114.0	2,280	388	13.3%
Total aircraft	**294**		**15,937**	**2,916**	**100.0%**
Spares, parts, bizjets			763	185	
Total commercial			**16,700**	**3,101**	
R&D, Dep,, G&A, Interest				-1,700	
Pre-tax income				**1,401**	

Source: ESG

TCAA : so far concept badly sold

It was September 1999 when the Association of European Airlines (AEA) published their policy statement "Towards a Transatlantic Common Aviation Area" (TCAA). The TCAA proposal from Europe's major scheduled airlines has since been embraced by the European Union's Commissioner for Transport Loyola de Palacio, and remains at the centre of the on-going discussions between the US and the EU.

The major points of the TCAA proposition are as follows:

• Market access - equal and unlimited market access including full 7th freedom rights and cabotage;

• Harmonisation - airlines would compete within a harmonised legal environment, "under equivalent regulatory conditions"; and

• Ownership- within the TCAA, removal of all ownership and control restrictions, thereby permitting cross-border mergers and acquisitions and new market entry.

For some EU member states, notably the UK, and for the Commission itself, the US "open skies" model remains biased. It is not be the sort of agreement that a powerful European state should be accepting from the US. It offers no seventh freedoms, no flexibility on ownership, no cabotage and no standardisation on competition rules.

Proponents of the TCAA are keen to point out that it should form the basis for discussion rather than be regarded as the definitive, finished article. They also acknowledge that harmonisation of, say competition rules, will not occur in one step, but will need to be phased-in. Nevertheless, full harmonisation should be the ultimate goal.

Critics of the TCAA concept argue that the policing of such an arrangement would need to be done by some form of supranational agency. And such an agency would probably end up acting a regulator rather than playing a purely supervisory role or handling disputes between parties.

US reaction: what's in it for us?

At the last round of discussions between the EU and the US in October, US official John Bayerlee noted that "the real challenge is to define the added value for the US". Clearly the TCAA is a European concept, and the US has its own tried and tested "open skies" model that has been successfully adopted in other markets. After all, the US has now negotiated 50 such agreements worldwide.

US officials such as Edward T. Smith, US Mission to the EU, are also concerned that the TCAA is "not doable" given the different legal and regulatory structures and practices that exist between Europe and the US. At a recent seminar sponsored by the European Aviation Club in Brussels, he pointed out that that wholesale changes in federal law would be required on issues such as:

• Investment (foreign ownership limitations);

• Cabotage (which has never appeared on the US agenda);

• The Fly America Act; and

• Wet leasing (the EU permits US airlines to wet-lease aircraft in the EU market but this is not reciprocated by the US).

The US reaction so far has been largely about a concern about ownership and control issues, and their impact on jobs. And in an election year it would be naive to expect politicians to an "alien" concept which is vigorously opposed by the aviation-related labour groups including the pilots union, ALPA.

However, issues such as Fly America and wet-leasing should not have been insurmountable. It appear that the TCAA concept has been badly sold in the US. "What's in it for us?" is always a valid question, and one

that the European have not thoroughly thought through.

The way forward

A further round of discussions take place in Spring 2001 between the EU and the US on TCAA. At the moment it looks as if the US will be pouring more cold water over the proposal. However, TCAA has gained critical mass, and the new US administration (whoever that is) may prove more willing to negotiate.

One problem is that the EC has very limited powers to negotiate air services agreements with third countries on behalf of member states. So far the Commission has failed to persuade the Council of Ministers to grant it widespread powers, although the EC has been granted "special powers" to negotiate with a limited number of European countries (Poland, Czech Republic, Hungary, Norway, Switzerland and Malta).

An imbalance clearly exists between those EU Members who have negotiated "open skies" agreements with the US and those that have not done so. Increasingly it would appear this is causing some concern in Brussels. The success of the Star Alliance (partly as a result of "open skies" regimes and the granting of anti-trust immunity) has not so far been matched by other alliance groupings.

Brussels' concerns are understandable. The Wings alliance is too small to be a major challenger to Star, SkyTeam has only just been launched, and it is too early to say whether oneworld can be successfully be resurrected following the KLM/BA merger talks collapse. The EC feels that if it can provide a level regulatory playing field, this might be a boost to European competitiveness and industry rationalisation.

The failed KLM/BA talks also served to highlight the airline ownership issues. And it is also clear that the UK or French governments alone are going to be able to persuade the US to change its mind on granting cabotage. One suggestion is that momentum for TCAA should be provided by consumer interest groups. It was consumers that after all were responsible for championing US deregulation in 1978 rather than the airlines themselves.

The EC should perhaps think about rolling out the TCAA concept with other countries as well as just targeting the US (although this would be perhaps require a re-branding exercise first). Representatives of Canada and Australia have expressed an interest in the TCAA concept and Singapore Airlines would prbably be supportive. With the 21-country strong Asia Pacific Economic Co-operation (APEC) forum gaining momentum, perhaps the EC should be looking east before west.

The alternatives to progressing aviation regulatory outside of the TCAA framework remain long shots. The World Trade Organisation would provide one solution through the GATT framework, but so far little has been proposed in this area. The OECD is even more unlikely to provide any solutions. If the TCAA or its successor were to come to fruition it would be likely that this would be adopted globally in time, perhaps sooner rather than later.

European tour operators: consolidation and confusion

The Northern European tour operating/ charter airline industry is consolidating rapidly, overcoming cross-border restraints much more easily than the scheduled airlines. Yet the process is certainly not smooth - new probelms appear as old ones are solved, overall profitability of the sector still looks shaky.

In order to sketch out the complicated relationships between the leading British, German and Swiss operators, the chart opposite indicates the main shareholdings between the major groups as well as their links into the various charter airlines. And to explain the recent history we start with Airtours, Europe's second largest tour operator and owner of the airline Airtours International plus three smaller carriers, which towards the end of November reported its 1999/2000 results (year to the end of September).

The M&A game

Airtours' underlying pre-tax profits were down by about 32% to £91m (€ 150m) (however, the net result looked much better as the result of an exceptional net gain of £133m related mostly to the sale of its 50% stake in Costa Cruises). The disappointing result is being blamed on unexpected costs associated with its purchase of German tour operator Frosche Touristik (FTI).

Airtours' share price had been badly tented by a series of profit warnings that preceded the official results, and its stockmarket valuation has halved to about £1.1bn (€ 1.8bn) since the summer of 1999 when it was in merger talks with First Choice. Speculation is mounting that offers for the company around the £2bn mark would be favourably entertained. The big question is who would have the appetite for Airtours, following the series of mergers and takeovers that have already occurred or been attempted in this sector?

As mentioned, in the summer of 1999 Airtours attempted to merge with First Choice, the second largest UK tour operator and owners of the charter airline Air 2000. To the chagrin of both companies, that transaction was blocked by the European Commission, which decided that a merger would be anti-competitive in the UK market. There would have been, according to the Commission, an unacceptable degree of monopoly power both in the provision of package holidays and in the control of travel agents.

First Choice's stockmarket value has also halved since that time. A minority holding in the UK company by Preussag and Thomas Cook has now been divested and taken up by the Barcelo Group, the largest Spain-based tour operator which has indirect links into Air Europa, the Palma-based charter/scheduled airline currently being courted by Iberia. Barcelo's stake in First Choice, presently 13%, is planned to grow to 21% next year.

The Commission has had fewer reservations about cross-border M&A activity. Prior to the Airtours offer for First Choice, it approved a potential take-over of first Choice by the Swiss-based Kuoni Group, which was never consummated. Kuoni is currently growing aggressively through acquisition, and its corporate strategy states that it is looking to buy out any tour operator that is in the top three in its national market and is profitable. However, Kuoni has also stated that it is no longer interested in acquisitions in the UK or Germany (it has a 49.9% stake in TUI Suisse, the rest being owned by Preussag - see below).

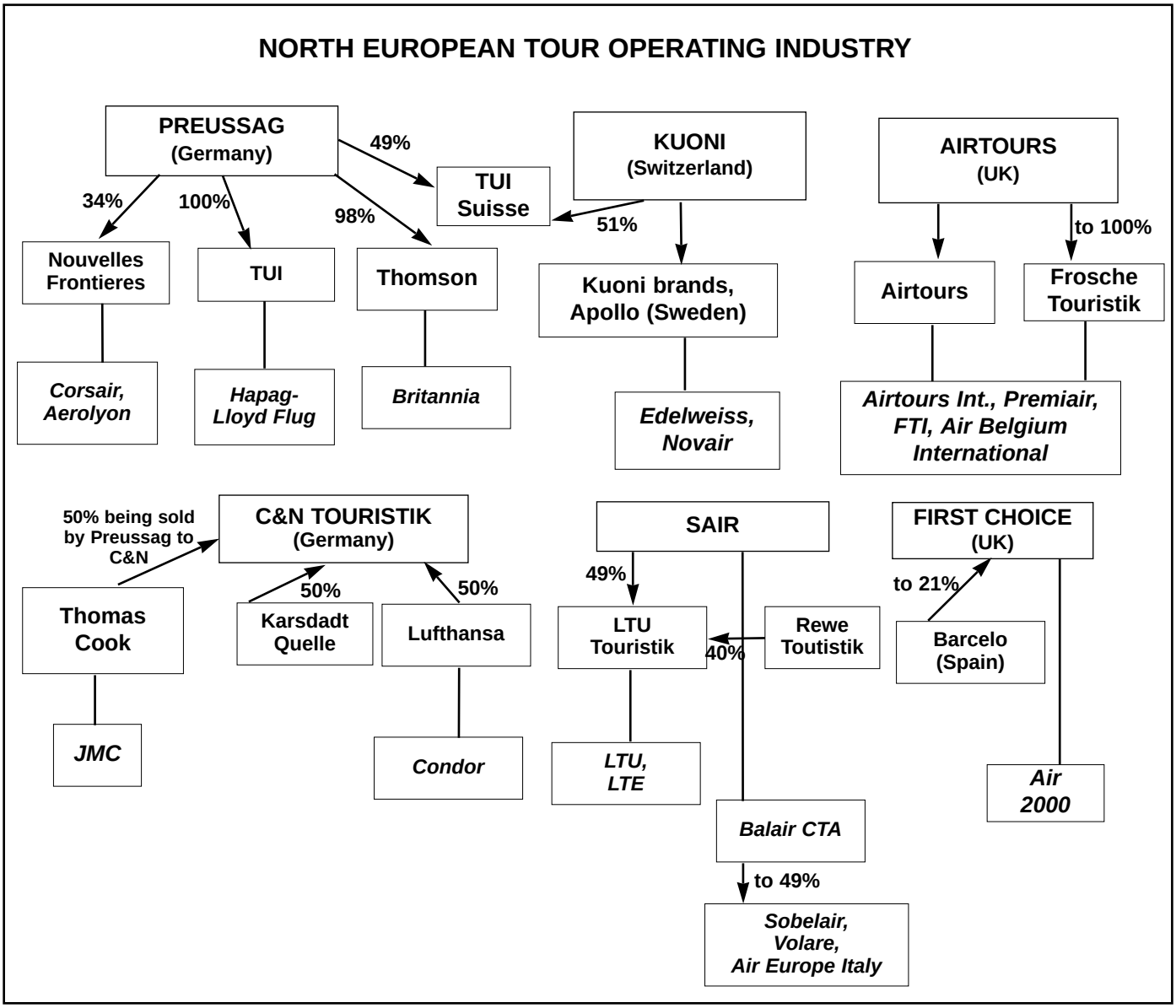
C&N Touristik, which is a 50/50 joint venture between Lufthansa and German retailing company Karsdadt Quelle had made a bid for Airtours earlier this year, but was apparently deterred by a £2.5bn valuation. C&N, which mostly utilises the Lufthansa Condor charter fleet, is now concentrating

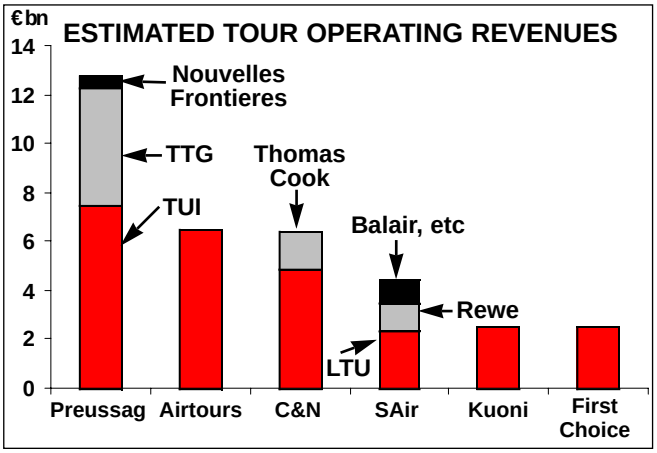
on finalising the purchase of Thomas Cook. This deal is estimated to be about £650m and would also bring C&N the charter airline JMC (which evolved from the merger of Caledonian and Flying Colours).

The reason that Thomas Cook/JMC is up for sale is because the European Commission might have insisted that Preussag divest the British tour operator/travel agency when it bought out Thomson Travel Group for about £1.8bn this summer, having outbid C&N in a keenly fought contest.

This means that Preussag, a conglomerate whose corporate strategy is based on a shift from heavy manufacturing to travel, tourism and media, will have control of three major tour operating/charter airline entities. These are: TUI, Germany's and Europe's largest tour operator, which owns the charter airline Hapag-Lloyd Flug; TTG, which owns the charter airline Britannia; and Nouvelles Frontières, the French company in which it has just bought a 34% stake, which in turn has two charter subsidiaries, Corsair and Aerolyon.

The final option for Airtours might be Rewe Touristik, Germany's third largest tour





operator. However, Rewe is fully occupied trying to sort out serious problems at LTU, the Dusseldorf-based charter airline/tour operator, in which it bought a 40% stake three months ago. SAir owns 49.9% of LTU, having bought out the original family owners and some of WestDeutsche Landesbank's share in 1998 for an undisclosed fee.

Underlying forces

What strategic direction lies behind the frenzy of M&A activity?

The tour operating companies have two fundamental aims - to achieve economies of scale through increased size and to squeeze out overcapacity from the market. The tour operators have themselves grown through acquisition in their domestic markets. Airtours is the most dramatic example - it started in the mid 1980s by buying up individual family owned travel agent shops and consolidating them. Volume enabled the tour operators to achieve better rates with hotel owners, to negotiate better terms of seat purchase from the airlines or to build up their own charter airlines, and to be able to advertise and distribute more effectively.

Over the past ten years the UK's big four operators - Airtours, First Choice, Thomson and Thomas Cook - have all built vertically integrated empires, in which they control the supply of holiday packages, the distribution of the holidays through travel agencies and airline capacity required to carry their customers. This structure makes life very difficult for the smaller tour operators - they may have to pay higher commissions to sell their packages through the main travel agents that are owned by the big four and they may have to buy airline seats from the airlines owned by their larger rivals. In the end they tend to be swallowed up.

The problem for the big UK operators has been how to get bigger. If they try to increase capacity beyond expected demand, they risk inducing overcapacity. And as the supply of holiday packages is in effect largely fixed 12-18 months before the selling season, the inevitable result is discounting, particularly of "lates". The impact goes to the bottom line of all the main players. Until the recent German take-overs the same institutional investors held about 40% of the shares in all four main UK tour operators and, naturally, disapproved of excessive expansion on the part of any single company.

The Airtours/First Choice merger proposal did then appear strategically strong. However, the Commission concluded that the merger would lead to an acceptable dominant market position in the UK short-haul holiday market. In retrospect Airtours could have presented a much more persuasive argument to the Commission than that produced by its advisors - after all the combined market share of Airtours/First Choice in this sector would have been about 32% against 27% for Thomson and 20% for Thomas Cook.

The Commission's decision has had various repercussions. Most importantly, it promoted cross-border investments: in its Airtours decision and in its approval of Kuoni's unconsummated offer for First Choice, the Commission established that it did not think that there were any major competition issues in cross-border take-overs.

There are important commercial issues, however. Airtours' purchase of FTI has proved a very expensive move. The German tour operator had hugely overbooked capacity, and as a consequence, lost some € 170m in 1999/2000. It looks as if Airtours simply didn't understand the intricacies of the German market and is now having to recover the situation by taking 100% control of FTI.

The driving force in German expansion has been Preussag. Having bought Thomson for € 3bn, it is raising a similar amount by

divesting its drilling and metals businesses as well as its controlling stake in Thomas Cook. According to the company itself, its strategy now centres on "the further focusing of Preussag's business on tourism activities". This is a major piece of corporate reinvention: it intends to increase the share of tourism in its € 21bn turnover from 42% pre the Thomson take-over to 77%, with another 21% coming from logistic operations. In the first half of its 1999/2000 financial year (ending September 30), Preussag reported an operating loss on tourism of € 72m against an overall pre-tax profit of € 147m. Thomson, based on pre-sale forecasts, should make a pre-tax profit contribution to Preussag of € 160-200m next year.

While the M&A activity has been characterised as part of a rationalisation trend of the European leisure industry, there is also a large element of bargain hunting prompted by the depressed share prices of the UK companies. Ironically, it was Thomson's announcement that it would fight to regain its number one position in the UK market if Airtours/First Choice went ahead that prompted fears of another market share and precipitated its share price decline.

There is also an old-fashioned battle for market leadership in Germany between Preussag and C&N. In C&N's first year of operation, 1999, it reported a pre-tax profit of € 102m and stated that it would reach an agreement with Thomson. In the event it has had to settle for Thomas Cook, which in expansionist terms is a second-best.

What is happening is that higher cost operators have been taking over lower costs ones. And, at a time when the leisure industry is supposed to be revolutionised by e-distribution, the key consolidation trend is being driven by companies based in the construction and department store businesses.

The outlook for the sector is further complicated by uncertainty over underlying demand trends. While the demand for leisure is strong - growth in leisure travel spending continues to rise at twice the rate of personal consumption in Northern Europe - the structure of leisure spending is changing.

The traditional two-week seaside holiday in Spain or Turkey is still hugely popular but there is also a rapidly growing trend for shorter breaks at a wide range of destinations throughout the year. Whether these new-style holidays will erode the mainstream holiday market or complement it is uncertain, but the low-cost scheduled airlines have a clear advantage in this sector.

E-questions

The tour operators simply cannot market their seat-only sales via the internet anything like as effectively as the low cost scheduled airlines. They have to reserve the vast majority of their charter airline capacity for holiday packages, either their own or those contracted to other operators, and their websites - Britannia Direct, for instance - have a very low profile compared with easyJet, Ryanair, Go, etc..

Nevertheless, the charter airlines are persisting with semi-scheduled products. For example, Air 2000 has reconfigured some of its A321s with 30 scheduled class seats (33 inches as opposed to 28in charter class), and offers flights to a wide range of Mediterranean destinations from UK airports such as Birmingham, Bristol, and Newcastle as well as London Stansted (where it comes up against Go and Ryanair). However, this is essentially a marginal activity, a means of enhancing revenue by attracting a relatively small number of higher-yielding passengers who want more flexibility than the seat-only charter product.

The tour operators are also developing e-distribution strategies for theoir package holidays. Here they have to tackle similar types of conflicts of interest as the traditional scheduled carriers. Putting brochures on the web and enabling customers to book directly is an obvious way to cut distribution costs. But it also undermines the business of the travel agent chains that they own. There is an unsatisfied demand for customised packages, provided via the tour operators' websites, with holidaymakers selecting their own options for flight times, length of holiday, extras, etc. But the risk here is that the tour operators' bulk purchasing strategies will become so much riskier if they promote such options.

In any case, at present only a minuscule proportion of package holidays are booked

online in the UK and even fewer in Germany. Buying a holiday package is usually a much bigger investment than an airline ticket. Customers still tend to require personal attention from travel agents, or travel consultants as they are being re-branded.

SAir's incursion into the tour operating market represented a bold attempt to exploit changing trends in leisure travel. Following the purchase of 49% of LTU, 34% of Volare and 49% of Air Europe Italy, it attempted to integrate their operations with those of its own charter subsidiary Balair CTA and Sabena's Sobelair. Elements of the strategy included:

• Feeding traffic into 'leisure hubs', for example, Crossair now codeshares with LTU, facilitating connections from Basle to long-haul destinations via LTU's bases at Dusseldorf and Munich.

• Balancing the whole leisure network towards long-haul operations from southern Germany, Switzerland and northern Italy to the Caribbean. Florida, East Africa, Thailand, etc.

• Standardising aircraft types and improving utilisation by being able to schedule aircraft from a destination airport to any of the SAir Group hubs (Zurich, Brussels, Milan, Munich, Dusseldorf).

SAir's approach was essentially to apply a scheduled airline strategy to the tour operating industry. It does not appear to have worked. The idea of building "leisure hubs" runs contrary to one of the central tenets of charter airlines operation - 100% load factors on point to point routes. Cross-utilisation of aircraft between operators is theory attractive but has not been widely implemented, possibly because of union resistance.

Most importantly, SAir underestimated the depth of the financial crisis at LTU (the German company does not reveal its results). However, a three-year productivity improvement regime as been agreed with the unions there in return for guarantees on employment, as well as a capacity reduction programme. And this persuaded Rewe Touristik to purchase a 40% stake in LTU from WestDeutsche Landesbank (which still retains 10%). SAirGroup and Rewe are restructuring the leisure group, disbanding LTU Touristik's holding company and integrating the airline within the new tourism group under a co-operation agreement. Rewe, which controls the largest chain of travel agents in Germany, should bring much-needed distribution power to the new entity.

AGE AND UTILISATION DATA

Narrowbodies	Av. Age	Utilisation (hrs/day)
Air 2000	8.8	10.8
Airtours	8.3	10.0
Monarch	9.7	9.7
Britannia	5.8	9.6
LTU	7.3	9.5
Hapag Lloyd	3.1	8.7
Condor	5.3	8.0
Volare	5.1	6.5
Widebodies		
Britannia	6.6	13.2
Condor	8.6	13.1
Air 2000	4.1	13.0
Air Europe	4.1	13.0
LTU	6.5	12.1
Airtours	7.6	9.4
Monarch	11.3	9.2
Hapag Lloyd	12.2	8.9

Source: ACAS

NORTHERN EUROPEAN CHARTER FLEETS

	A320 family	737	757	A300/ A310	A330	767/ 777	Other widebodies	Total
Preussag	1	33	22	8	2	16	9	91
Airtours	28	1	6	3	8	3	5	54
SAir	19	11	16		7	17		70
C&N	10		54	1		9	7	81
Kuoni	6				2			8
First Choice	9		13			4		26
Cosmos (Monarch)	8		7	4	2		2	23
Total	81	45	118	16	21	49	23	353

Source: ACAS, Nov 2000 Notes: Preussag=Britannia, Hapag Lloyd, Corsair, Aerolyon; Airtours =Airtours Int., Premiair, FTI, Air Belgium; SAir= LTU, Balair, Sobelair, Volare, Air Europe; C&N= Condor, JMC; Kuoni= Edelweiss, Novair First Choice = Air 2000. Monarch is the main supplier of marginal capacity to the main tour operators.

Delta: one of the US industry's star performers

Delta has been one of the US industry's top profit performers this year. Its operating income of $525m and a net profit of $273m (excluding special items) in the September quarter accounted for 12.1% and 6.3% of revenues, which rose by 13.5% to $4.3bn. Although net profit before charges fell slightly, it was a great achievement in a challenging fuel environment. A reduction in share count actually led to a 9% gain in per-share earnings excluding charges, from $1.91 to $2.08.

However, the latest results were boosted by the inclusion of Comair, which Delta acquired in November 1999. Comair, the biggest and the most successful of the independent US regional carriers, earned a net profit of around $143m on $882m revenues in 1999. The results of Atlantic Southeast, which was purchased in May 1999, were consolidated into Delta's in the third quarter of last year.

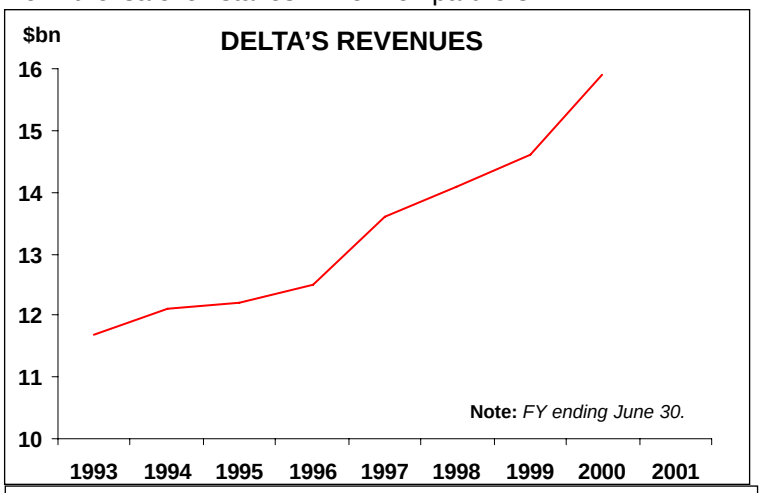
Excluding the Comair impact, Delta's September quarter earnings benefited, first, from higher demand, a strong pricing environment and a new revenue management system introduced in April. Unit revenues rose by 5.6% as all operating regions reported gains.

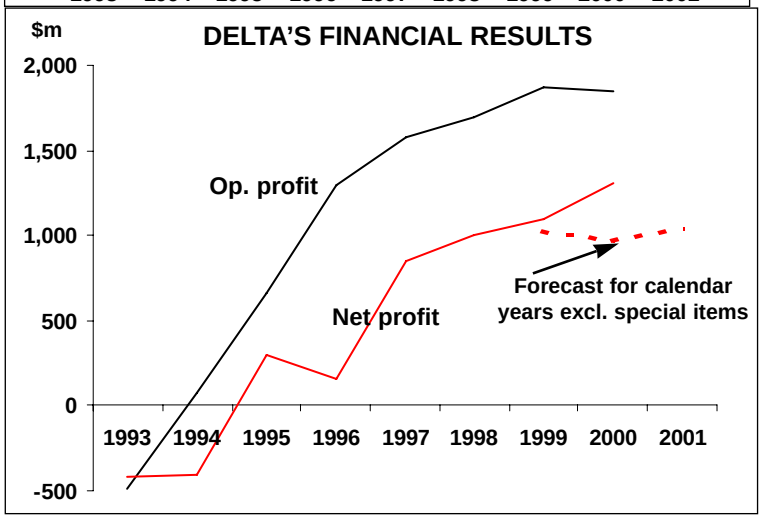
Second, Delta benefited from an excellent fuel hedging position, having covered 60% of its needs in the second half of this year. While fuel costs still rose by 45% to $533m, without hedging that figure would have been $160m higher. This meant that total unit costs (excluding Comair, ASA and unusual items) rose by just 6%.

Third, Delta derived substantial savings from reduced commissions and increased use of lower-cost distribution channels. Those savings offset a 16% hike in labour costs and meant that non-fuel unit costs rose by only 2.6% - well below industry average.

Delta is in great financial shape, having achieved double-digit operating margins for five consecutive years and net income exceeding $1bn for three consecutive years. The company had $1.9bn in cash at the end of September, though long term debt is relatively high ($4.4bn).

Delta also pays regular cash dividends and has repurchased $2.2bn worth of common stock since 1996. The latest of the buybacks ($500m) was completed in the first quarter of 2000 specifically to redistribute a $711m pretax gain from the sale of Priceline.com stock in 1999. Over the past year or so, the strategy of "monetising non-core assets" has raised another $500m or so from the sale of stakes in former partners





SIA and SAirGroup and part of a holding in Equant.

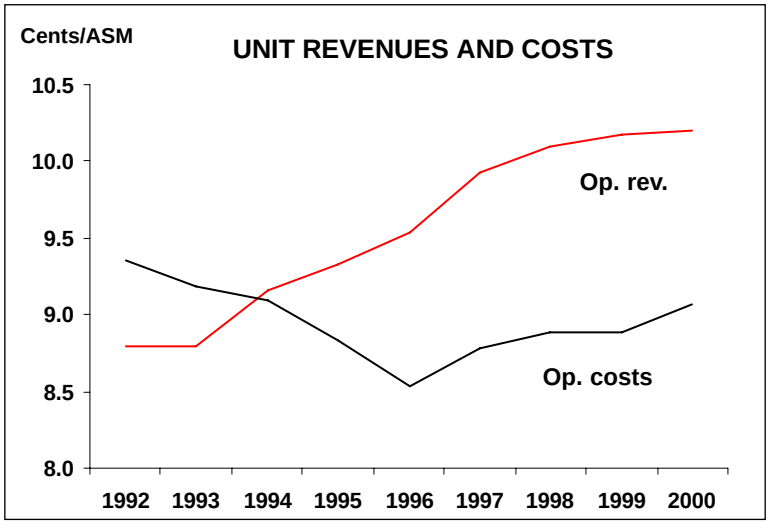
With continued favourable revenue trends and a strong forward fuel hedging position, Delta's earnings are expected to rise in 2001 (the company is changing its FY to calendar year, as of December 31, 2000). This year's earnings before charges will decline marginally, though a reduced share count will mean higher per-share earnings. The latest First Call consensus forecast is a profit of $7.32 per diluted share in 2000, up from $6.94 in 1999, and $7.88 in 2001.

Analysts have long argued that Delta's stock is well undervalued relative to both its net asset value and earnings potential. In late October Merrill Lynch analyst Michael Linenberg picked Delta as an extreme example of a company where net asset value (he calculated it at $11bn or $90 per share) and market value ($41 per share) were "completely out of sync". Although the price has since then recovered to around $50, the company is still trading at only 6.2 times the First Call 2001 earnings estimate.

Delta's longer-term prospects are particularly promising in light of cost savings anticipated from e-commerce and strategic initiatives made over the past year or so to strengthen position in various markets. The only cloud on the horizon is the pilot situation - see below.

Unit revenue and cost trends

Delta's unit revenues have improved steadily since the mid-1990s, when service standards suffered as a result of cost cutting. In recent years the carrier has fairly consistently outperformed the industry in revenue per ASM growth. This reflects success in restoring on-time performance and mending customer service, which CEO Leo Mullin made his top priority soon after taking up his position in 1997.



The good operational performance standards achieved in 1999 have been maintained. This year Delta has continued to rank among the top three major carriers in the key DoT service quality criteria - on-time performance, least customer complaints and fewest mishandled bags. In January-August it came second or third in each, up from ninth or tenth in 1997.

In the early part of this year Delta appeared to be falling behind its competitors in unit revenue growth, but over the past six months the gap was again positive. This is attributed to a new revenue management system, which is generating $5m in incremental revenues a month. Since the full benefits ($15-20m extra revenues a month) will not be realised until perhaps the middle of next year, Delta has the potential to outperform the industry in unit revenue growth in the coming months.

The 1994-96 "Leadership 7.5" project made Delta the lowest cost major network carrier in the US. That position has been maintained, despite industry-leading pay. Leo Mullin believes that the main reason is limited unionisation - only pilots or 16% of the workforce are unionised - which has helped maintain a productivity advantage.

Delta's unit costs were 9.07 cents and 9.14 cents per ASM in the FY ended June 30 and the September quarter respectively. This compares with an average of a little over 10 cents for United, American, Northwest and Continental in the latest period. Mullin estimates that Delta currently has an 8% non-fuel CASM advantage over the other large network carriers.

The company expects to maintain or increase that gap, in the first place, because it is one of only three US carriers with a material fuel hedge position for 2001. It has hedged 42% of its requirements next year,

all at $18 per barrel, and 25% of fuel needs in 2002. Next year's hedges are expected to save around $300m.

In the longer term, Delta hopes to maintain its unit cost advantage through fleet simplification, tight cost controls, high labour productivity and e-commerce and other strategic initiatives.

Pilot talks

Negotiations with the pilots began early (September 1999) by mutual agreement, but economic issues have only been tackled since early October when ALPA put forward its proposals. Evidently, Delta's pilots waited for the ratification of the United pilot deal, which greatly raised the salary bar for all subsequent pilot talks in the US.

The pilots are seeking a 29-49% increase in pay over a three-year contract - some 5-8% above United's rates - as well as limits on RJ flying and elimination of the dual wage system with Delta Express. In its counter proposal, the management offered a complex eight-year contract under which pay would initially exceed United's but fall behind in subsequent years, and much of the later increase would be tied to performance, productivity and company profitability. Analysts estimate that a new contract based on United's wage levels would raise Delta's labour costs by around $1bn in 2001.

In mid-November, amid signs that Delta's pilots might start taking United-style job action such as refusing to fly overtime, the two sides requested federal mediation beginning on December 1. Rather unusually, to maintain a sense of urgency (and avert job action during the busy holiday travel period), they asked for a 90-day deadline (February 28) on reaching agreement.

Fleet simplification

Delta continues to achieve significant cost savings through fleet restructuring and modernisation. There are still many 727s and L-1011s in the fleet, though they are being phased out at a fairly rapid rate as new 737s, 757s, 767s and 777s are delivered. There are also plans to retire early (over the next 6-8 years) the MD-90 and MD-11 fleets.

DELTA'S FLEET

	In operation	On order
727	86	
737	68	101
757	116	5
767	106	16
777	7	6
L1011	47	
MD-11	15	
MD-80	120	
MD-90	16	
Total	**581**	**128**

Source: ACAS

The carrier is in the middle of a 100-week span to take almost weekly deliveries of those aircraft types. The first 767-400, for which Delta was the launch customer with an order for 21 plus 40 options, entered service in October and will replace the L-1011 as the long-haul domestic aircraft.

E-commerce strategy

A recent Merrill Lynch research report called Delta "undoubtedly the leader among the Big Six airlines in terms of making technology work", while one magazine survey named it one of the "top 50 web smart companies". The carrier has invested over $800m in the past three years in developing technology initiatives.

As a result, 10% of its total ticket sales already come through its web site, up from 5% a year ago. Commission expenses have fallen to 4% of passenger sales in the latest quarter from 5.6% a year ago. Future savings from web site sales will be substantial, because the cost of ticketing a passenger through delta.com is just $2, compared to $34 if the ticket is sold via a travel agent.

In addition to Orbitz (the first multi-airline travel web site), Delta's e-commerce initiatives over the past year have included MYOB Travel (a site dedicated to the needs of small business travellers), a partnership with e-Travel (to help corporate customers

purchase directly from Delta's reservation system) and an alliance with SoftNet Systems (to offer wireless broadband Internet services).

In August Delta formed its "e-Business" unit, which it stressed would not be a separate company, to "help shape and execute e-business strategy" in respect to B2C, B2B and B2E and "maintain position as an e-leader". Recently the company named heads for each of the three divisions, which will be in charge of Delta's entire range of current and future activities related to the Internet and other emerging technologies.

Delta was either very perceptive or very lucky in selling most of its Priceline.com stock for a huge profit before its value, like that of many other dotcoms, collapsed. In a recent SEC filing, Delta said that it may sell its remaining 5.3% stake, which could pave the way for it to join Hotwire.com.

Strategic expansion

Another thing that has distinguished Delta from its competitors over the past year is the enormous effort it has put into strengthening its position in different types of markets. This has included acquisitions (Comair and ASA), further development of specific products (Delta Shuttle and Delta Express), major investments in airport facilities in key markets like the Northeast, rapid expansion in Latin America and, of course, catching up on the international alliance front with the formation of SkyTeam.

Rather like some retail conglomerate, Delta now talks of having the "full range of product lines" - mainline, Shuttle, Delta Express, Delta Connection and SkyTeam - and of "putting the right product in the right markets". The different products are increasingly scheduled to complement one another at any given airport.

The effect is to make Delta look even more formidable domestically than it already was (with its domination of Atlanta, the world's largest airport, and with strong hubs also at Cincinnati and Salt Lake City) and suggest that it has caught up internationally.

Regional operations

The acquisition of Comair and ASA gave Delta the largest RJ fleet in the world, making it uniquely well-positioned to take advantage of growth opportunities in regional markets. Its earnings have already been boosted by the 20% operating margins generated by those two carriers.

Earlier this year a massive order was placed for 94 CRJs and 406 options for the Delta Connection carriers, which already have 200 RJs in their fleets - about 35-40% of the US RJ total. Comair's Cincinnati operations are now all-jet, while ASA is rapidly replacing its turboprops with RJs at Atlanta. ACJet, a new subsidiary of independent regional partner ACA, is building RJ feeder service for Delta at New York LaGuardia.

Delta Express

Low-cost carrier Delta Express, launched as a separate business unit in October 1996, has been expanded at a steady pace in Northeast-Florida markets. It is not a major profit generator, but its good operational reliability and customer appeal have helped Delta retain low-fare markets.

However, Delta's leadership remains extremely concerned about Southwest Airlines, which has expanded its capacity to Florida by 38% over the past year and in June announced an order for up to 290 737s. Florida is of special concern to Delta because it accounts for 30% of its revenues. Delta Express' "discount airline cost structure" makes it "our most important weapon in these potentially crippling encounters".

Delta Shuttle

In order to retain the key high-volume, high-yield Northeast markets in the face of service enhancements by competitors, Delta has beefed up its Boston-New York-Washington Shuttle service and is re-fleeting it with new-generation 737-800s. The aircraft facilitate improved reliability and roomier, state-of-the-art interiors. By the end of January, all of Delta Shuttle will be 737-800s.

Northeast investments

Delta has announced plans to invest $1.6bn in terminal expansion and redevelopment at New York JFK to "establish our pri-

macy in the world's largest aviation market". If approved by the Port Authority, work would begin in June and be completed by 2004. This would considerably strengthen Delta's position as the leading transatlantic airline from New York, currently serving 20 cities in Europe on a daily nonstop basis.

A $350m terminal improvement project, announced a year ago, is also due for completion in 2004 at Boston's Logan International - another potential growth market. Like at JFK, Delta plans to bring to Boston its full product range, including Delta Express and some international services.

Response to UAL/US Airways

While carriers like American have said that they remain open to acquisition and merger possibilities if a United/US Airways merger takes place, at present industry talk focuses more on the tempting prospect that valuable US Airways assets might go on the block. Mullin said at a recent conference that "if there is bargaining or an auction, you can be sure that Delta will be there", adding that the company has 15 or so markets on its shopping list.

Delta believes, first, that its strong East Coast position would enable it to compete just as successfully against UAL than US Airways.

Second, there would probably be a three-year time lag before consolidation would have real impact, during which Delta would cement its strategic advantages. Third, if acquisitions become necessary, Delta's strong industry position would ensure that there would be options.

Latin American expansion

The company describes its foray into Latin America, which began in April 1998, as a "wonderful strategic move". It has already captured an 8-9% share of the traffic carried by US airlines and is achieving a 15% operating margin, which makes Latin America Delta's most profitable region.

The focus has been on building nonstop service from Atlanta to the key Latin American cities - the latest additions are Santiago (November) and Bogota and Rio (December) - while new service to Mexico and the Caribbean has also been added from JFK and Cincinnati. There are applications pending to at least Buenos Aires and Montevideo. Long-standing codesharing with Aeromexico has been substantially expanded, and an LoI on a marketing relationship was recently signed with ACES. Delta is also talked about as a potential equity partner for Aerolineas, but it is very doubtful that it would invest in that carrier.

SkyTeam

The global alliance formed in June with Air France, Aeromexico and Korean Air (see *Aviation Strategy*, July 2000) has had a promising start. SkyTeam has secured number two position behind Star, and Mullin suggests that those are the only two global alliances that are "materially working". Moreover, "we have the hub capacity and the expansion potential to grow to number one".

CSA Czech Airlines will be the first new member to join SkyTeam (April 2001). Attracting more members will be crucial, but Delta and its partners are lucky in that, even though they left things rather late, the unstable condition of other global alliances is likely to mean defections. Thai, which may not be able to remain in Star, would make a good Southeast Asian partner for SkyTeam.

Mullin believes that over the next couple of years SkyTeam will have the opportunity to pick up the "4-5 additional partners" that it desires. A Star-style 15-16 member alliance is considered too complicated in terms of decision-making.

While SkyTeam does not envisage cross-equity holdings, Delta is keeping an eye out for opportunities. The likely pre-sale breakup of the two CINTRA carriers next year could provide an opportunity for Delta to buy into Aeromexico. Another possibility is Air India, for which Delta and Air France may bid jointly.

By Heini Nuutinen

Network strategies and performance across the cycle

The big questions being asked by airline financial analysts at the moment must include: how is it possible that Air France is growing fast, with ever increasing profitability, while former industry benchmarks like KLM and BA are slipping into the red? How long will Air France sustain its profitable growth? Will the new "shrinking" strategy of KLM and BA work? In this article, Lucio Pompeo from McKinsey & Co. offers some insights on the dynamics of airline economics and on how network strategies can affect performance across an industry cycle.

There are different drivers of earnings volatility. The first and most obvious driver is when the increase in capacity exceeds the increase in demand, leading to declining load factors. This is the classic situation where "too many seats are chasing too few passengers" and tends to be an industry-wide phenomenon.

The second driver is when the difference between unit costs and unit revenue (yields) narrows. This can be triggered by rising costs for non-influenceable items such as fuel, but also by stagnating labour productivity (through concessions to labour groups), a typical upturn syndrome.

Or earnings can be related to the revenue side of the equation. Certain markets and customer segments tend to be more exposed to traffic and/or yield declines than others in an overcapacity situation. This in turn will very often trigger competitive behaviour, which is responsible for a major part of earnings volatility.

To illustrate in a simplified way the competitive effects in a cycle downturn, one can look at the four different types of markets in which a major network carrier competes, each one with specific competitive structures:

Long-haul direct: in these markets the competitive structure is very dependent on the size of the traffic flow and the regulatory environment. It is not unusual for only one or two carriers to compete for this traffic, and sometimes they cooperate under a code-share agreement (or an antitrust immunised agreement, which in effect allows two airlines to act as one). Competitive behaviour in a cycle downturn is likely to be determined by the number of competitors. As an example, BA is significantly more exposed than Swissair, as about 60% of its intercontinental capacity is in highly competitive markets with more then two competitors, while Swissair never faces more than one competitor, and 40% of its capacity is in routes without direct competitors. Of course, passengers can and do connect in hubs, so being the only player on a route does not mean having a monopoly. However, the time-sensitive passenger is likely to give this carrier a high share and also premium yields, and the downturn exposure will be lower.

Long-haul connecting: this tends to be a much more competitive market. For passengers desiring to travel from Berlin to Boston or from Marseille to Osaka, there are always at least 5-6 airline systems competing against each other, trying to attract them into their hubs, whether at Frankfurt, Paris CDG, London Heathrow, Amsterdam or Zurich. Moreover, competition is likely to involve very aggressive prices, reflecting the low marginal costs of filling empty seats.

These markets can be expected to be the ones with the highest yield declines in the event of overcapacity on the long-haul segment. Hub location, frequencies offered, and quality of connections are obvious competitive advantages which apply also in a cycle downturn. However, as the trade-off between time and price moves towards the latter in a downturn, an increasing share of passengers will opt for a detour in exchange of a favourable price, especially considering the lower relative impact on elapsed time in long-haul.

Short-haul direct: in the European environment there are typically two competitors - the two flag carriers of the two countries involved, although niche and low-cost carriers are increasingly entering these markets. In some markets, like the UK, multi-airline competition on short hauls is now the norm. The competitive behaviour of the mainline carriers in this situation will be more or less fierce, depending on the overall demand and relative market position and fre-

quency share. Exposure in this market is likely to be determined by the same factors as for long-haul direct markets, with the exception that low-cost competition may intensify during a downturn because it is at such times that passengers become more price-sensitive. Also cycle downturns may facilitate entry of new low-cost carriers because of the availability and lower cost of aircraft, crew, airport facilities, etc.

Short-haul connecting: these markets have similar characteristics to the long-haul connecting markets, with the difference that hub location and quality of connections is much more important. The consequence is that typically only 2-3 airline systems are really competing against each other for these traffic flows. So the competition will be fierce, but less than on the long-haul connecting markets. An additional factor in these markets is regional carriers, specialising in exploiting under-served markets and entering with direct services. However, this type of competitive threat is not expected to depend on the position on the industry cycle.

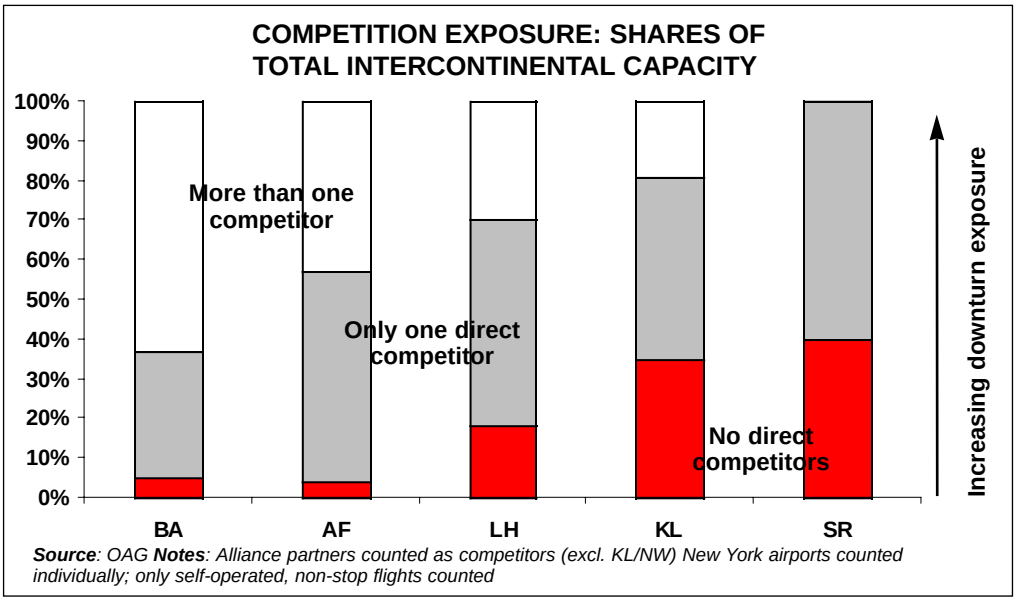
How does network strategy affect downturn exposure?

To summarise, the more revenue an airline generates in exposed markets, the greater the drop in yield is likely to be if somewhere in the global airline network overcapacity is created. Airlines like KLM, Sabena and Swissair, with relatively small home markets and highly dependent on connecting traffic, are quite exposed, especially as a high proportion of revenues are generated in competitors' home markets, where these airlines cannot count on the full tool-set to control revenue quality (FFP affiliation, brand awareness, contracts with travel agencies and corporations). This means that competition is based essentially on price and on schedule competitiveness and these airlines tend to have a quite exposed traffic structure, as they have to rely on a high number of connecting passengers. To take KLM as an example, its long haul network is based on connecting Amsterdam to Northwest hubs (Minneapolis, Detroit, Boston), but point-to-point traffic on these routes is quite thin, so there is a high proportion of double connections - this exposes KLM's long haul network to intense hub competition and partly explains its poor yield). These airlines compensate by a fairly limited exposure on the direct routes, as they typically face little direct competition.

Airlines operating from large markets, like BA, are less dependent on connecting revenues, and some like BA are attempting to reduce their exposure further by downsizing, in effect rejecting low yielding connecting traffic on some long-haul routes. This move seems to be showing some initial positive results. BA is combining capacity reduction with significant product improvements, such as beds in business class, which will certainly attract more premium traffic, but at the price of higher seat costs.

However, BA is potentially exposed to increased competition on the direct long-haul services as the result of the number of competitors in theses markets (and that number would obviously increase if BA were to find itself in a open skies regulatory regime across the Atlantic).

Again, the cycle dynamics may play a role in determining the success or failure of this strategy: if there is a strong displacement from business to



***Source**: OAG **Notes**: Alliance partners counted as competitors (excl. KL/NW) New York airports counted individually; only self-operated, non-stop flights counted*

economy (as in the last cycle downturn, when the load factors of European airlines dropped on average by 15 percentage points in business class and increased by five percentage points in economy class), this might create a challenge to airlines with oversized premium compartments.

What about Air France? How is it possible to increase capacity at two-digit rates and still be able to increase both load factors and yields? The explanation might lie in the different balance between offered long-haul capacity and overall long-haul traffic growth.

It appears that Air France still has some room to grow and will find a high share of passengers in its home market, without need to buy market share on connecting markets. Air France's strong position on the French domestic market is likely to help protect yields in other French cities, even if increased competition from the Qualiflyer Group can be expected. Of course, Air France's long-haul growth cannot continue indefinitely, and at the current growth rates Air France will reach the penetration levels of other hub carriers quite soon.

The need for balance

Realising a robust network with more stable profitability requires balance. Balance is required in different areas:

Balance between exposure and growth in connecting markets. Growth in connecting markets is the easiest way to get additional traffic at virtually no additional cost. Most airlines have been well able to structure their schedules so as to dramatically increase the number of connections offered, and many hubs have experienced a proliferation of connecting waves (typically going from 3-4 waves to up to 6-8 waves). Airlines like Sabena have been able to increase dramatically their connecting traffic in the past two years. Overdoing this process could increase the exposure in case of downturn. There are, however, two ways to limit this exposure:

• Appropriate Origin/Destination selection: certain connecting flows, for example from a secondary destination to another secondary destination (e.g. Oslo-Kinshasa via Paris) are by nature less exposed than trying to attract people from a strong competing hub to a major destination (e.g. Frankfurt-New York via Paris). This can obviously only work if an airline has a quite broad long-haul destination portfolio, like KLM, and is significantly harder for airlines like, say, Sabena.

• Protection of feeder traffic through alliances: a way to secure and reduce volatility for connecting flows is to develop significant market clout in the geographic area where the tickets are sold. This can be best done through alliances with carriers that have a strong market position. Examples are Swissair and Lufthansa, which are estimated to generate a significant share of their long-haul connecting traffic from the home markets of their alliance partners, like Sabena, LOT and SAS, Austrian respectively.

Balance between hub connectivity and exposure in secondary airports. Hub economics dictate the concentration of the largest possible number of flights in one single hub. Only in this way can the number of connections offered be maximised. However, doing this exposes some important airports within the area of influence (e.g. Dusseldorf for Lufthansa, Geneva for Swissair or Manchester for BA) to attack by the competing network carriers or carriers from other continents (like Delta Airlines, which serves cities such as Nice or Stuttgart directly from the United States). The economic trade-off is between the additional cost of offering direct long-haul services from secondary airports, and the additional revenue captured (net of network cannibalisation). The direct service between Basle and New York introduced by Swissair in 1999, and already withdrawn, shows how difficult is to create new direct services from secondary airports without enough base traffic and without an effective short-haul feeder structure.

Balance between capacity offered and home market potential. As mentioned before, the ratio between the long-haul capacity offered in the hub and the total local market potential is an indicator of the combined effect of local market position and dependency on connecting traffic. Swissair and KLM are particularly exposed, due to the small size of the traffic flows to and from Zurich and Amsterdam respectively, while Air France still has some more room for long-haul expansion. Alliances and consolidation can reduce this type of exposure, as complementarity of network strategies and exposures can significantly contribute to increased stability of earnings. From this point of view, the unsuccessful attempt to merge KLM and Alitalia would have been an effective combination of a carrier with an "oversized" net-

work in a small country and a carrier with the opposite characteristics.

Balance between product configuration and achievable yields. As point-to-point premium passengers generate higher unit revenue than connecting passengers, airlines focusing on the first type of passenger can afford higher-cost product configurations, such as more space for seating, beds, etc. If the network strategy is to capture substantial connecting traffic, the seat unit costs must be lower, so that they can be covered by the lower yields generated. The question is not which of these two strategies is better, but whether network strategy and product configuration are aligned. BA is a good example of the first strategy, with its new emphasis on point-to-point premium passengers and a high-end first class and business class product offering, while KLM best represents the second strategy, with a very high share of connecting traffic and corresponding high-density seating configuration and two-class product. Problems would arise if an airline pursued a KLM network strategy with a BA product strategy.

Traffic mix is also a key driver of yields, both for point-to-point and connecting passengers. As traffic mix tends to deteriorate significantly in a downturn, some flexibility to re-adjust product configurations would be required to re-align unit costs to the achievable yields. Or, if the yield curve allows it, capacity could be reduced to "cut off" the lowest yield segments, like in the case of BA's long-haul network, with the replacement of 747s by 777s. This obviously helps only if the improved yields and load factors outweigh the unit cost increase.

By Lucio Pompeo, Associate Principal. McKinsey & Co., Inc.

Lucio_Pompeo@mckinsey.com

EUROPEAN SCHEDULED TRAFFIC

	Intra-Europe			North Atlantic			Europe-Far East			Total long-haul			Total international		
	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 %
1992	129.6	73.5	56.7	134.5	95.0	70.6	89.4	61.6	68.9	296.8	207.1	69.8	445.8	293.4	65.8
1993	137.8	79.8	57.9	145.1	102.0	70.3	96.3	68.1	70.7	319.1	223.7	70.1	479.7	318.0	66.3
1994	144.7	87.7	60.6	150.3	108.8	72.4	102.8	76.1	74.0	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	73.0	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	72.0
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
Sep 00	18.0	12.8	71.0	20.3	16.9	83.0	11.4	9.5	83.4	43.3	35.9	82.8	64.6	51.0	79.0
Ann. chng	4.0%	8.9%	3.2	3.2%	7.9%	3.6	2.6%	4.3%	1.4	2.7%	7.4%	3.6	3.4%	8.1%	3.4
Jan-Sep 00	157.2	101.9	64.8	173.3	138.1	79.7	103.4	81.4	78.7	382.9	301.7	78.8	568.6	423.5	74.5
Ann. chng	5.7%	8.0%	1.4	5.3%	8.6%	2.4	2.9%	5.1%	1.7	3.7%	7.7%	2.9	4.6%	8.1%	2.4

Source: AEA.

US MAJORS' SCHEDULED TRAFFIC

	Domestic			North Atlantic			Pacific			Latin America			Total international		
	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 %
1992	857.8	536.9	62.6	134.4	92.4	68.7	123.1	85.0	69.0	48.0	27.4	57.0	305.4	204.7	67.0
1993	867.7	538.5	62.1	140.3	97.0	69.2	112.5	79.7	70.8	55.8	32.5	58.2	308.7	209.2	67.8
1994	886.9	575.6	64.9	136.1	99.5	73.0	107.3	78.2	72.9	56.8	35.2	62.0	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	63.0	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	64.0	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
Sep 00	85.2	56.7	66.5										33.0	25.9	78.5
Ann. chng	1.8%	2.7%	0.7										6.8%	8.5%	1.2
Jan-Sep 00	776.5	561.4	72.3										285.5	221.2	77.5
Ann. chng	3.3%	5.4%	1.4										5.9%	8.9%	2.2

Note: US Majors = American, Alaska, Am. West, Continental, Delta, NWA, Southwest, TWA, United, USAir. **Source:** Airlines, ESG.

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	79.4	4.9	7.4	6.8	8.0	6.0	7.8
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**	2,004	1,392	69.4	2,745	1,969	71.8	4,750	3,361	70.8	4.9	7.2	5.6	6.0	5.3	6.5
***2001**	2,100	1,440	68.5	2,907	2,063	70.9	5,009	3,503	69.9	4.7	3.5	5.9	4.7	5.4	4.2
***2002**	2,161	1,463	67.7	3,022	2,119	70.1	5,182	3,582	69.1	2.8	1.6	3.9	2.7	3.5	2.2
***2003**	2,233	1,533	68.7	3,170	2,253	71.1	5,403	3,788	70.1	3.4	4.9	4.9	6.3	4.3	5.8
***2004**	2,317	1,607	69.4	3,332	2,393	71.8	5,651	4,000	70.8	3.7	4.8	5.2	6.2	4.6	5.6

Note: * = Forecast; ICAO traffic includes charters. **Source:** Airline Monitor, July 2000.

DEMAND TRENDS (1990=100)

	Real GDP					Real exports					Real imports				
	US	UK	Germany	France	Japan	US	UK	Germany	France	Japan	US	UK	Germany	France	Japan
1992	102	98	102	102	105	113	103	112	109	110	107	101	115	104	96
1993	105	100	100	101	105	117	107	106	109	112	117	104	108	101	96
1994	109	103	103	104	106	126	117	115	115	117	131	110	117	107	104
1995	111	106	105	106	107	137	126	122	123	123	141	115	124	113	119
1996	114	108	107	107	111	152	135	128	128	126	155	124	127	116	132
1997	118	112	110	109	112	172	146	142	142	138	177	135	136	123	132
1998	122	115	113	112	109	173	150	152	150	135	196	144	147	133	121
1999	127	117	114	115	111	179	150	155	153	135	220	151	152	136	122
***2000**	131	120	117	118	112	191	156	164	162	142	239	158	159	143	126

Note: * = Forecast; Real = inflation adjusted. **Source:** OECD Economic Outlook, December 1999.

FINANCIAL TRENDS (1990=100)

	Inflation (1990=100)						Exchange rates (against US$)						LIBOR
	US	UK	Germany	France	Japan		UK	Germ.	France	Switz.	Euro**	Japan	6 month Euro-$
1991	104	106	104	103	103	**1991**	0.567	1.659	5.641	1.434	0.809	134.5	5.91%
1992	107	107	109	106	105	**1992**	0.570	1.562	5.294	1.406	0.773	126.7	3.84%
1993	111	109	114	108	106	**1993**	0.666	1.653	5.662	1.477	0.854	111.2	3.36%
1994	113	109	117	110	107	**1994**	0.653	1.623	5.552	1.367	0.843	102.2	5.06%
1995	117	112	119	112	107	**1995**	0.634	1.433	4.991	1.182	0.765	94.1	6.12%
1996	120	114	121	113	107	**1996**	0.641	1.505	5.116	1.236	0.788	108.8	4.48%
1997	122	117	123	114	108	**1997**	0.611	1.734	5.836	1.451	0.884	121.1	5.85%
1998	123	120	124	115	109	**1998**	0.603	1.759	5.898	1.450	0.896	130.8	5.51%***
1999	125	122	126	116	108	**1999**	0.621	1.938	6.498	1.587	1.010	103.3	5.92%***
***2000**	127	126	127	117	108	**Nov 2000**	0.705	2.288	7.673	1.769	0.855	110.1	6.54%***

Note: * = Forecast. **Source:** OECD Economic Outlook, December 1999. **Euro rate quoted from January 1999 onwards. 1990-1998 historical rates quote ECU. *** = $ LIBOR BBA London interbank fixing six month rate.

AIRCRAFT AVAILABLE FOR SALE OR LEASE

	Old narrowbodies	Old widebodies	Total old	New narrowbodies	New widebodies	Total new	TOTAL
1988	**126**	**34**	**160**	**16**	**1**	**17**	**177**
1989	216	38	254	42	2	44	298
1990	380	77	457	74	14	88	545
1991	457	129	586	114	27	141	727
1992	433	138	571	75	15	90	661
1993	370	195	565	103	37	140	705
1994	267	182	449	61	23	84	533
1995	238	157	395	49	29	78	473
1996	124	101	225	32	22	54	279
1997	162	104	266	54	13	67	333
1998	187	125	312	67	55	122	434
1999	243	134	377	101	53	154	531
2000	285	147	432	145	57	202	634

Source: BACK Notes: As at end year, Sept for 2000;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

JET AND TURBOPROP ORDERS

	Date	Buyer	Order	Price	Delivery	Other information/engines
ATR	-					
Airbus	Nov 29	Qantas	12 A3XXs, 13 A330-200		2002-05,2006-11	
	Nov 24	Monarch Airlines	5 A321s		2002+	V2500 engines
	Nov 11	ILFC	18 A319s, 27 A320s			
			17 A321s, 20 A330s	$5bn+	2002-08	
	Nov 6	CLT	35 A320 family, 15 A330s	$3.5bn		
BAE Systems	-					
Bombardier	Nov 15	Qantas	2 Q300s	$29m	4Q 2000	Eastern Australian Airlines operator
	Oct 31	Japan Air Lines	2 CRJ200s	$44m	4Q 2000+	J. Air will be operator
	Oct 31	Nagasaki Airways	1 Q200		4Q 2001	
Boeing	Nov 29	Qantas	6 747-400s		2002-06	Extended range version
	Nov 14	Royal Air Maroc	20 737NGs, 2 767s	$1.4bn		
	Nov 14	Atlas Air	4 747-400Fs	$750m	2002+	
	Nov 10	Virgin Atlantic	5 747-400s			GE CF6 engines
	Nov 9	Alitalia	6 777-200ERs			Replaces 747-400 order

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

	Group revenue	Group costs	Group operating profit	Group net profit	Total ASK	Total RPK	Load factor	Group rev. per total ASK	Group costs per total ASK	Total pax.	Total ATK	Total RTK	Load factor	Group employees
	US$m	US$m	US$m	US$m	m	m	%	Cents	Cents	000s	m	m	%	
American*														
Jan-Mar 99	3,991	3,954	37	158	62,624.3	41,835.4	66.8	6.37	6.31					
Apr-Jun 99	4,528	4,120	408	268	67,313.8	47,945.9	71.2	6.73	6.12					
Jul-Sep 99	4,629	4,603	547	279	67,972.2	48,792.9	71.8	6.88	6.26					
Oct-Dec 99	4,477	4,206	271	280	65,751.2	44,328.2	67.4	6.81	6.41					98,700
Jan-Mar 00	4,577	4,365	212	132	64,392.8	43,478.4	67.5	7.11	6.78					104,500
Apr-Jun 00	5,011	4,494	517	321	67,000.4	50,538.7	75.4	7.48	6.71					105,900
Jul-Sep 00	5,256	4,684	572	313	66,654.0	50,828.1	76.3	7.89	7.03					107,500
America West														
Jan-Mar 99	520	469	51	26	10,135.4	6,485.5	64.0	5.13	4.63	4,263				
Apr-Jun 99	570	494	76	42	10,446.0	7,204.8	69.0	5.46	4.73	4,724				
Jul-Sep 99	553	511	41	22	10,522.9	7,502.8	71.3	5.26	4.86	4,896				
Oct-Dec 99	569	532	37	29	10,594.0	7,307.8	69.0	5.37	5.02	4,822				11,575
Jan-Mar 00	563	552	11	15	10,440.8	6,960.5	66.7	5.39	5.29	4,612				12,024
Apr-Jun 00	618	570	48	33	10,979.8	8,091.7	73.7	5.63	5.19	5,206				12,158
Jul-Sep 00	591	591	0	1	11,079.9	8,088.3	73.0	5.33	5.33	5,178				
Continental														
Jan-Mar 99	2,056	1,896	160	84	30,938.8	22,107.0	71.5	6.65	6.13	12,174				
Apr-Jun 99	2,198	1,942	256	137	32,448.3	24,009.1	74.0	6.77	5.98	11,493				
Jul-Sep 99	2,283	2,071	21	110	34,711.0	26,380.3	76.0	6.58	5.97	11,922				
Oct-Dec 99	2,158	2,073	85	33	33,771.2	24,094.4	71.3	6.39	6.14	11,347				
Jan-Mar 00	2,277	2,223	54	14	33,710.2	24,143.0	71.6	6.75	6.59	11,201				
Apr-Jun 00	2,571	2,292	279	149	34,406.9	26,534.0	77.1	7.47	6.66	12,084				
Jul-Sep 00	2,622	2,368	254	135	35,978.0	27881.1	77.5	7.29	6.58	12,155				
Delta														
Jan-Mar 99	3,504	3,148	356	216	56,050.3	39,163.9	69.9	6.25	5.62					
Apr-Jun 99	3,957	3,315	642	364	57,957.3	43,422.1	74.9	6.83	5.72	27,438				
Jul-Sep 99	3,877	3,527	350	352	60,710.8	45,528.3	75.0	6.39	5.81	27,183		5,258.2		72,300
Oct-Dec 99	3,713	3,705	8	352	58,265.1	40,495.3	69.5	6.37	6.36	25,739				
Jan-Mar 00	3,960	3,605	355	223	57,093.8	39,404.4	69.0	6.94	6.31	25,093				72,300
Apr-Jun 00	4,439	3,863	606	460	59,753.4	46,509.8	77.8	7.48	6.46	28,333				73,800
Jul-Sep 00														
Northwest														
Jan-Mar 99	2,281	2,295	-14	-29	37,041.3	26,271.8	70.9	6.16	6.20					
Apr-Jun 99	2,597	2,333	264	120	40,541.5	30,900.2	76.2	6.41	5.75					
Jul-Sep 99	2,843	2,472	370	180	43,194.5	33,562.1	77.7	6.58	5.73					
Oct-Dec 99	2,555	2,461	94	29	39,228.3	28,618.2	73.0	6.51	6.27					
Jan-Mar 00	2,570	2,573	-3	3	39,486.0	28,627.4	72.5	6.51	6.52					
Apr-Jun 00	2,927	2,675	252	115	42,049.6	33,523.5	79.7	6.96	6.36					
Jul-Sep 00	3,178	2,824	354	207	44,379.9	35,353.1	79.7	7.16	6.36					
Southwest														
Jan-Mar 99	1,076	909	167	96	19,944.0	12,949.2	64.9	5.40	4.56	12,934				
Apr-Jun 99	1,220	966	254	158	20,836.9	15,241.7	73.1	5.85	4.64	14,817				
Jul-Sep 99	1,235	1,029	206	127	21,903.8	15,464.0	70.6	5.64	4.70	14,932				
Oct-Dec 99	1,204	1,050	154	94	22,360.7	15,047.8	67.3	5.38	4.70	14,818				27,653
Jan-Mar 00	1,243	1,057	155	74	22,773.8	15,210.2	66.8	5.46	4.77	14,389				27,911
Apr-Jun 00	1,461	1,146	315	191	23,724.3	17,624.9	74.3	6.16	4.83	16,501				
Jul-Sep 00	1,479	1,179	300	184	24,638	17,650.8	71.6	6.00	4.79	16,501				
TWA														
Jan-Mar 99	764	802	-38	-22	13,352.4	9,205.2	68.9	5.72	6.01					
Apr-Jun 99	866	848	18	-6	14,274.4	11,130.9	78.0	6.07	5.94					
Jul-Sep 99	876	935	-59	-54	15,188.0	11,524.3	75.9	5.76	6.16	6,928	1,957.0	1,248.6	63.8	20,982
Oct-Dec 99	809	913	-104	-76	14,501.6	9,687.1	66.8	5.58	6.30	6,038				
Jan-Mar 00	954	939	15	-4	15,465.4	11,607.0	75.1	6.17	6.07	7,020				
Apr-Jun 00														
Jul-Sep 00	973	984	-11	-35	15,928.0	12,316.3	77.3	6.00	4.79	7,211				
United														
Jan-Mar 99	4,160	4,014	146	78	67,994.5	46,899.8	69.0	6.12	5.90					
Apr-Jun 99	4,541	4,108	433	669	71,573.6	50,198.9	70.1	6.34	5.74					
Jul-Sep 99	4,845	4,226	619	359	74,043.0	55,628.0	75.1	6.54	5.71	23,765				96,700
Oct-Dec 99	4,480	4,286	194	129	70,715.9	49,172.2	69.5	6.34	6.06	21,536				96,600
Jan-Mar 00	4,546	4,294	252	-99	68,421.1	46,683.5	68.2	6.64	6.28	20,141				96,100
Apr-Jun 00	5,109	4,504	605	408	70,913.5	53,624.8	75.6	7.20	6.35	22,412				98,300
Jul-Sep 00	4,905	4,946	-41	-116	72,495.7	54,049.9	74.6	6.77	6.82	21,458				99,700
US Airways														
Jan-Mar 99	2,072	1,983	89	46	22,745.8	15,405.8	67.7	9.11	8.72					
Apr-Jun 99	2,286	2,007	279	317	23,891.7	17,557.5	73.5	9.57	8.40					
Jul-Sep 99	2,102	2,213	-111	-85	23,006.6	17,205.6	71.7	8.76	9.22	13,984				40,613
Oct-Dec 99	2,135	2,256	-121	-81	24,705.9	16,714.2	67.6	8.64	9.13	14,075				41,636
Jan-Mar 00	2,098	2,237	-139	-218	24,250.3	15,568.7	64.2	8.65	9.22	12,804				42,727
Apr-Jun 00	2,433	2,265	168	80	26,171.9	19,557.4	74.7	9.30	8.65	15,554				42,653
Jul-Sep 00	2,381	2,376	5	-30	28,452.4	20,726.2	72.8	8.37	8.35	15,809				44,026
ANA														
Jan-Mar 99														
Apr-Jun 99	SIX MONTH FIGURES													
Jul-Sep 99	4,541	4,329	212	146	44,156.0	29,032.0	65.7	10.28	9.80	21,970				
Oct-Dec 99	SIX MONTH FIGURES													
Jan-Mar 00	5,591	5,842	-251	6	49,646.9	31,844.9	64.1	11.26	11.77	27,430				
Apr-Jun 00														
Jul-Sep 00														
Cathay Pacific														
Jan-Mar 99	SIX MONTH FIGURES													
Apr-Jun 99	1,695	1,664	31	17	28,801.0	19,325.5	67.1	5.89	5.78		5,267.0	3,581.6	68.0	
Jul-Sep 99	SIX MONTH FIGURES													
Oct-Dec 99	1,989	1,658	331	133	29,313.0	22,167.9	75.6	6.79	5.66		5,600.0			
Jan-Mar 00	SIX MONTH FIGURES													
Apr-Jun 00	2,070	1,765	305	285	29,839.0	22,588.1	75.7	6.94	5.92		5,483.0			
Jul-Sep 00														
JAL														
Jan-Mar 99														
Apr-Jun 99														
Jul-Sep 99														
Oct-Dec 99	TWELVE MONTH FIGURES													
Jan-Mar 00	14,665	14,254	411	181	126,282.4	88,478.5	70.1	11.61	11.29	37,247	18,856.7	12,738.0	67.6	
Apr-Jun 00														
Jul-Sep 00														

Note: Figures may not add up due to rounding. 1 ASM = 1.6093 ASK. *Airline group only.

	Group revenue	Group costs	Group operating profit	Group net profit	Total ASK	Total RPK	Load factor	Group rev. per total ASK	Group costs per total ASK	Total pax.	Total ATK	Total RTK	Load factor	Group employees
	US$m	US$m	US$m	US$m	m	m	%	Cents	Cents	000s	m	m	%	
Korean Air														
Jan-Mar 99														
Apr-Jun 99														
Jul-Sep 99	TWELVE MONTH FIGURES													
Oct-Dec 99	4,340	4,177	163	232	49,516.0	36,693.0	74.0	8.76	8.44	20,564	7,827	5,995	78.2	
Jan-Mar 00														
Apr-Jun 00														
Jul-Sep 00														
Malaysian														
Jan-Mar 99														
Apr-Jun 99														
Jul-Sep 99														
Oct-Dec 99	TWELVE MONTH FIGURES													
Jan-Mar 00	2,148	1,652	496	-67	48,906.0	34,930.0	71.4	4.39	3.38		7,531.5	4,853.4	64.4	
Apr-Jun 00														
Jul-Sep 00														
Singapore														
Jan-Mar 99	2,421	2,130	291	341	41,725.5	30,843.7	74.9	5.80	5.10	6,537	7,958.5	5,540.3	69.6	
Apr-Jun 99	SIX MONTH FIGURES													
Jul-Sep 99	2,577	2,259	317	346	43,145.7	32,288.3	74.8	5.97	5.24	6,752	8,251.9	5,852.7	70.9	
Oct-Dec 99	SIX MONTH FIGURES													
Jan-Mar 00	2,459	2,203	256	439	44,582.6	33,430.1	75.0	5.51	4.94	7,030	8,665.8	6,185.7	71.4	
Apr-Jun 00														
Jul-Sep 00														
Thai Airways														
Jan-Mar 99														
Apr-Jun 99	TWELVE MONTH FIGURES													
Jul-Sep 99	2,858	2,695	163	136	51,788.0	37,642.0	72.7	5.52	5.20	16,331	7,309.0	5,097.0	69.7	
Oct-Dec 99														
Jan-Mar 00														
Apr-Jun 00														
Jul-Sep 00														
Air France														
Jan-Mar 99	5,550	5,552	-2	56	51,394.0	38,242.0	74.4	10.80	10.80					
Apr-Jun 99	SIX MONTH FIGURES													
Jul-Sep 99	5,249	4,889	360	316	56,934.0	43,896.0	77.1	9.22	8.59	20,600				
Oct-Dec 99	SIX MONTH FIGURES													
Jan-Mar 00	4,831	4,430	401	41	55,508.0	41,650.0	75.0	8.70	7.98	19,200				
Apr-Jun 00	SIX MONTH FIGURES													
Jul-Sep 00					60,088.0	48,464.0	80.7				4,125.0	4,689.0	65.2	
Alitalia														
Jan-Mar 99	SIX MONTH FIGURES													
Apr-Jun 99	1,937	1,990	-53	1	26,227.2	16,805.2	64.1	7.39	7.59	11,318	3,749.3	2,434.3	64.9	
Jul-Sep 99														
Oct-Dec 99														
Jan-Mar 00	SIX MONTH FIGURES													
Apr-Jun 00	2,225	2,254	-29	-15	24,747.8	16,898.8	68.3	8.99	9.11	11,693	3,464.8	2,404.5	69.4	
Jul-Sep 00														
BA														
Jan-Mar 99	3,343	3,481	-138	-119	43,544.0	29,537.8	67.8	7.68	7.99	10,285	6,130.0	3,933.0	64.2	64,366
Apr-Jun 99	3,527	3,378	149	302	45,813.0	32,032.0	69.9	7.70	7.37	11,733	6,437.0	4,215.0	65.5	65,179
Jul-Sep 99	3,933	3,742	191	49	47,465.0	35,873.0	75.6	8.29	7.88	12,983	6,690.0	4,689.0	70.1	65,607
Oct-Dec 99	3,473	3,476	-3	-112	45,347.0	30,192.0	66.6	7.66	7.67	11,084	6,469.0	4,270.0	66.1	65.800
Jan-Mar 00	3,097	3,281	-184	-247	44,533.0	29,328.0	65.9	6.95	7.37	10,778	6,253.0	4,041.0	64.6	64,874
Apr-Jun 00	3,488	3,342	146	-85	44,826.0	32,295.0	72.0	7.78	7.46	11,633	6,475.0	4,407.0	68.1	61,411
Jul-Sep 00	3,673	3,293	380	197	45,333.0	35,093.0	77.4	8.10	7.26	12,615	6,608.0	4,741.0	71.7	62,793
Iberia														
Jan-Mar 99														
Apr-Jun 99														
Jul-Sep 99	TWELVE MONTH FIGURES													
Oct-Dec 99	3,712	3,659	53	179	50,227.6	34,606.8	68.9	7.39	7.28	21,877				
Jan-Mar 00														
Apr-Jun 00														
Jul-Sep 00														
KLM														
Jan-Mar 99	1,550	1,670	-120	-45	17,716.0	13,294.0	75.0	8.75	9.43		3,088.0	2,284.0	74.0	33,892
Apr-Jun 99	1,626	1,547	79	37	18,778.0	14,302.0	76.2	8.66	8.24		3,253.0	2,427.0	74.6	34,980
Jul-Sep 99	1,731	1,596	135	32	19,630.0	16,083.0	81.9	8.81	8.13		3,352.0	2,640.0	78.8	35,226
Oct-Dec 99	1,450	1,479	-29	-17	19,014.0	14,434.0	75.9	7.63	7.78		3,280.0	2,550.0	77.7	35,128
Jan-Mar 00	1,361	1,436	-75	-142	18,627.0	14,084.0	75.6	7.31	7.71		3,238.0	2,453.0	75.8	35,348
Apr-Jun 00	1,600	1,509	91	39	18,730.0	15,149.0	80.9	8.54	8.06		3,276.0	2,549.0	77.8	27,267
Jul-Sep 00	1,615	1,445	170	100	19,386.0	16,378.0	84.5	8.33	7.45		3,359.0	2,703.0	80.5	26,447
Lufthansa* **														
Jan-Mar 99	3,301	3,210	91	64	25,445.0	17,942.0	70.5	12.97	12.62	9,658	4,972.0	3,435.0	69.1	56,420
Apr-Jun 99	3,322	3,012	310	97	30,500.0	22,279.0	73.0	10.89	9.86	11,444	5,626.0	3,993	71.0	53,854
Jul-Sep 99	4,049	3,677	382	184	31,335.0	23,866.0	76.2	12.92	11.73	11,891	5,699.0	4,142.0	72.7	
Oct-Dec 99	3,398	2,964	434	378	29,120.0	20,313.0	69.8	11.67	10.18	10,807	5,503.0	3,930.0	71.4	66,207
Jan-Mar 00	2,831	2,742	89	11	28,599.0	19,781.0	69.2	9.90	9.59	10,355	5,422.0	3,751.0	69.2	
Apr-Jun 00	3,346	3,123	223	400	31,865.0	24,405.0	76.6	10.50	9.80	12,249	5,988.0	4,338.0	72.4	
Jul-Sep 00	3,375	2,993	382	182	32,654.0	25,878.0	79.2	10.33	9.17	12,849	6,156.0	4,536.0	73.7	
SAS														
Jan-Mar 99	1,203	1,227	-24	-3*	8,062.0	4,713.0	58.5	14.92	15.22	5,017				27,110
Apr-Jun 99	1,357	1,294	63	60*	8,466.0	5,571.0	65.8	16.03	15.28	5,580				27,706
Jul-Sep 99	1,173	1,150	23	12*	8,450.0	5,667.0	67.1	13.88	13.61	5,589				27,589
Oct-Dec 99	1,210	1,083	127	138*	8,227.0	5,210.0	63.3	14.71	13.16	5,536				
Jan-Mar 00	1,145	1,179	-34	-33*	8,253.0	4,992.0	60.5	13.87	14.24	5,314				28,060
Apr-Jun 00	1,289	1,176	113	112*	8,492.0	6,004.0	70.7	15.18	13.85	6,236				28,295
Jul-Sep 00	1,122	1,070	52	33*	8,496.0	6,155.0	72.4	13.21	12.59	5,943				28,485
Swissair**														
Jan-Mar 99	SIX MONTH FIGURES													
Apr-Jun 99	1,932	1,877	55	57	23,411.0	16,130.0	68.9	8.25	8.02	7,784				10,715
Jul-Sep 99	SIX MONTH FIGURES													
Oct-Dec 99	2,344	2,272	72	125	21,934.0	16,839.0	76.8	10.69	10.36	6,081				
Jan-Mar 00	SIX MONTH FIGURES													
Apr-Jun 00	1,916	2,006	-90	2	25,476.0	18,241.0	71.6	7.52	7.87	9,162	3,972.8	2,719.6	68.5	
Jul-Sep 00														

Note: Figures may not add up due to rounding. 1 ASM = 1.6093 ASK. *Pre-tax. **SAirLines' figures apart from net profit, which is SAirGroup. ***Excludes Condor from 1998 onwards. 4Q+ data are on IAS basis.

Aviation Economics

The Principals and Associates of *Aviation Economics* apply a problem-solving, creative and pragmatic approach to commercial aviation projects.

Our expertise is in strategic and financial consulting in Europe, the Americas, Asia, Africa and the Middle East, covering:

- Start-up business plans
- Antitrust investigations
- Credit analysis
- Privatisation projects
- Asset valuations
- Turnaround strategies
- Merger/takeover proposals
- Corporate strategy reviews
- IPO prospectuses
- E&M processes
- State aid applications
- Competitor analyses
- Market forecasts
- Cash flow forecasts
- Distribution policy

For further information please contact:

Tim Coombs or Keith McMullan

Aviation Economics

James House, LG, 22/24 Corsham Street, London N1 6DR

Tel: + 44 (0)20 7490 5215 Fax: +44 (0)20 7490 5218

e-mail:kgm@aviationeconomics.com

SUBSCRIPTION FORM

☐ **Please enter my Aviation Strategy subscription for: One year (12 issues) @ £390 / € 625 / US$625, starting with the _____ issue**

(Discounts available for multiple subscriptions - please call for details)

Delivery address

Name _____

Position _____

Company _____

Address _____

_____

_____

Country _____ **Postcode** _____

Tel _____ **Fax** _____

e-mail _____

DATA PROTECTION ACT

The information you provide will be held on our database and may be used to keep you informed of our products and services or for selected third party mailings

☐ **I enclose a Sterling, Euro or US Dollar cheque, made payable to: Aviation Economics**

☐ **Please invoice me**

☐ **Please charge my AMEX/Mastercard/Visa credit card**

Card number _____

Name on card _____ Expiry date _____

☐ **I am sending a direct bank transfer of £390 net of all charges to Aviation Economics' account:** HSBC Bank

Sort code: 40 04 37 Account no: 91256904

Invoice address (if different from delivery address)

Name _____

Position _____

Company _____

Address _____

_____

_____

Country _____ Postcode _____

PLEASE RETURN THIS FORM TO:

Aviation Economics

James House, LG

22/24 Corsham Street

London N1 6DR

Fax: +44 (0)20 7490 5218