Aviation Strategy

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CO/NW - trendsetter?

The 13-year alliance signed between Continental and Northwest is probably a good move for the two US majors, but it is very unlikely to unleash merger mania.

The catalyst for the Northwest/Continental deal was the desire of Air Partners (AP), the investment group led by David Bonderman, to realise its investment in Continental.

Air Partners purchased shares and warrants in 1993 that gave it 19% of the equity and 36% of the voting rights for $55m (before Continental refunded $11m of AP's fees). The sale of Air Partners' interest in 1998 is valued at $511m ($411m in cash plus NWA shares), which represents 14% of the equity and 51% of the voting rights (part of which will be placed in a neutral voting trust).

Bonderman has proved to be an expert in identifying potential in companies within aviation and other sectors that more traditional financiers have laughed at. In 1992/93/94 Continental was posting net losses of $135m, $207m and $132m respectively, was entering Chapter 11, had terrible union relations and a messy brand. In 1997 Continental produced a net profit of $385m, enjoyed good union relations and had a very acceptable international brand. He was also an investor in Ryanair when it had serious problems in the early 1990s and made a similar proportional return when it was successfully floated last year.

The worrying aspect for the industry is that Bonderman is probably as good at identifying the correct time to exit markets as finding the right place to enter them.

The proposed Continental/Northwest alliance is certainly not a merger in the 1980s sense. The driving force is not the usually disappointing search for economies of scale and market share (incidentally in the early 1990s Continental was more than 10% larger in terms of ASMs than it is today). Rather it appears to be designed to exploit difference in regional dominance while maintaining the size of the operating companies at an efficient level.

Reasons for expecting this alliance to uncover those elusive synergies are:

• Continental's US hubs - Houston, Newark and Cleveland - are located far enough away from Northwest's - Minneapolis, Detroit and Memphis - to avoid duplicating services.

• Continental is expanding rapidly into Latin America from its Houston base while Northwest has no presence in this market and could presumably feed Continental.

• Northwest is almost like an Asian airline in disguise such is the importance of its Tokyo hub, which is fed from numerous points in the US. Continental's Pacific strategy mainly involves feeding Continental Micronesia at Guam. In the current market and in anticipation of a more liberal US-Japan ASA, broadening the scope of its transpacific market must surely be beneficial for Northwest.

• Most intriguing of all is the North Atlantic market, as a cooperation agreement with KLM is part of the deal. This could allow the

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alliance to develop a multi-hub system on both sides of the Atlantic, linking in Alitalia with whom KLM signed an agreement in December 1997. However, this alliance will not achieve its full potential unless Northwest is able to serve Malpensa, preferably under anti-trust immunity for the three carriers, which in turn would require the signing of an open skies agreement between the US and Italy. But Continental currently codeshares with Alitalia on the New York-Milan route and is the favourite to become Alitalia's US partner, so perhaps Continental and Northwest could come to some arrangement in order to develop a joint transatlantic operation.

In the end though, the success of the alliance will depend on how the management teams under Gordon Bethune and John Dasburg get along.

Some stockmarket analysts are inferring a new industry consolidation phase from the Continental/Northwest alliance, with US Airways being put into play. However, there was a particular financial reason for the Continental/Northwest deal, and there does appear to be a genuine complementarity between the operations. If American or United were to buy out US Airways they would mainly be buying increased size, with all its attendant problems, plus union complications and a cost structure unsuited to the next downturn. But then again market psychology rather than cool commercial logic may determine how the US industry evolves.

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Is the Asian depression contagious?

The period of denial is certainly over for Asian airlines. There is now a stream of reports of service cut-backs, delivery deferrals and cancellations, and even redundancies. The big question is: will the Asian aviation crisis spread to the rest of the world?

Most professional forecasters such as the IMF and the OECD are still confident that the impact of the Asian financial turmoil on the economies of North America and Europe will be minimal, with the possibility that lower import prices might even boost activity. But faith in such organisations has been somewhat shaken by their total failure to foresee anything going wrong in Asia.

It will be interesting to see whether the big manufacturers, who normally issue their forecasts in the spring but whose basic research and analysis is normally completed around the middle of the previous year, will publish as normal or whether there will be a precautionary delay.

Certainly the Asian picture is more complicated than just depression. Airlines in countries with large tourist flows - Thailand, the Philippines and Indonesia, for instance - stand to gain from currency devaluations (as long as political strife does not break out). And anecdotal evidence suggest that the business classes on intercontinental flights to many Southeast Asian countries are full - there is always money to be made in distress. Freighter business in the region is set to boom with the expected surge in exports.

The problem is within Asia, previously the fastest growing region of the world, where some airlines are expecting a 10% annual decline in traffic in 1998. Cathay Pacific, which has the highest percentage of intra-Asian passengers out of total passengers carried - 78% - has reported annual traffic declines of around 15% every month since last August 1997.

Intra-Asian traffic plus domestic traffic accounts for about 70% of total passengers carried by the AAPO airlines, and intra-Asia routes, especially those to/from Northeast Asia, have been the most profitable for these carriers. To cast some light on the structure of the intra-Asian market (including Australasia) *Aviation Strategy* has constructed a traffic matrix based on AAPO city pair data.

Northeast Asia account for about 24% of the total, and it is the fall in this traffic from

DELIVERY SCHEDULES	End 1997 fleet	Scheduled deliveries 1997/98	1999	2000
Widebodies				
Asia/Pacific	1,084	143	72	44
Europe	780	55	35	18
North America	1,213	81	87	56
	3,077	**279**	**194**	**118**
Narrowbodies				
Asia/Pacific	1,075	140	75	51
Europe	2,419	204	127	63
North America	4,901	455	351	259
	8,395	**799**	**553**	**373**

South Korea and Japan that has affected airlines like Cathay so badly. While Korean prospects are so gloomy that it is not at all certain that both Korean and Asiana will survive, Japanese traffic could well recover as the strengthening yen entices travellers to risk smog and chicken flu.

The deeply troubled Southeast Asian countries account for about 23% of the total while Singapore alone generates another 12% of the traffic flows.

Greater China - defined as the PRC, Hong Kong and Taiwan - accounts for about 25% of the traffic base. While attention is currently focused on the turmoil in Hong Kong, this number is a reminder of the huge traffic potential of China.

Given the complexity of the market, there are obviously no simple solutions to Asia's traffic depression. But solutions have to be found for the aircraft - particularly widebodies - that were ordered by Asian carriers on the assumption of perpetual 8%-plus traffic growth rates.

Over half the widebodies due for delivery in 1998 (including 1997 slippage) were destined for Asia. They will be absorbed through various mechanisms: they will be delivered and the airlines in turn will try to dispose of older equipment; they will be deferred (Boeing has announced that it is planning to reach peak production rates of 43 units a month by mid-year and has abandoned plans for a rate of 48 a month); or the new aircraft will be sold off to airlines in other parts of the world.

The market imbalance is already being reflected in aircraft values. Reports, unconfirmed as always when aircraft prices are involved, suggest that second-hand prices for 747-400s and 777s are down 10-20% on a few months ago.

This in turn has caused various financial institutions to examine more closely operating leasing to distressed Asian carriers - buying fleets at prices which allow the prospect of future capital gains and leasing them back at rentals that compare favourably with the carriers'current finance payments.

The availability of relatively cheap widebody equipment, either for purchase or lease, might prove too great a temptation for European and North American carriers whose long-haul capacity expansion has been restrained in recent years.

Then, if there is a traffic slow-down, overcapacity will reappear. In this manner the Asian aviation depression could be contagious.

INTRA-ASIAN TRAFFIC FLOWS
(PERCENTAGES OF 72m INTERNATIONAL PAX. IN 1996)

FROM: / TO:	**Australasia**	**Oceania**	Brunei	Indonesia	Malaysia	Philippines	Singapore	Thailand	Others	**SE-Asia**	PR China	Hong Kong	Rep. China	**Greater China**	Korea	Japan	**NE Asia**	**Total**
Australasia	**3.8**	**0.6**	**-**	**0.7**	**0.4**	**0.1**	**1.5**	**0.4**	**-**	**3.1**	**-**	**0.9**	**0.2**	**1.2**	**0.3**	**1.4**	**1.7**	**10.5**
Oceania	**0.6**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**		**-**	**0.1**	**0.6**	**0.7**	**1.4**
Brunei	**-**	**-**	-	-	0.2	0.1	0.2	-	-	**0.5**	-	-	-	**-**	-	-	**-**	**0.5**
Indonesia	**0.7**	**-**	-	-	0.5	-	2.1	0.2	-	**2.9**	-	0.4	0.4	**0.8**	0.1	0.7	**0.8**	**5.1**
Malaysia	**0.4**	**-**	0.2	0.5	-	0.1	2.6	0.5	0.1	**3.9**	0.1	0.5	0.3	**1.0**	0.7	0.3	**1.0**	**6.3**
Philippines	**0.1**	**-**	0.1	0.1	0.1	-	0.4	0.2	-	**0.8**	-	1.1	0.4	**1.5**	0.1	0.6	**0.7**	**3.1**
Singapore	**1.3**	**-**	0.2	3.4	2.9	0.4	-	1.4	0.1	**8.4**	0.2	1.2	0.7	**2.1**	0.2	1.4	**1.5**	**13.4**
Thailand	**0.4**	**-**	-	0.3	0.5	0.2	1.4	-	0.6	**3.1**	0.3	1.8	0.9	**3.0**	0.5	1.1	**1.6**	**8.1**
Others	**-**	**-**	-	-	0.1	-	0.1	0.6	-	**0.8**	-	0.2	0.2	**0.4**	-	-	**-**	**1.3**
SE Asia	**3.0**	**-**	**0.5**	**4.2**	**4.2**	**0.8**	**6.9**	**3.0**	**0.9**	**20.4**	**0.7**	**5.4**	**2.8**	**8.9**	**1.6**	**4.0**	**5.7**	**38.0**
PR China	**-**	**-**	-	-	0.1	-	0.2	0.2	-	**0.6**	-	-	-	**-**	0.1	1.3	**1.3**	**2.0**
Hong Kong	**0.9**	**-**	-	0.4	0.5	1.1	1.2	1.9	0.2	**5.4**	-	-	3.9	**3.9**	1.1	2.5	**3.6**	**13.7**
Rep. China	**0.3**	**-**	-	0.4	0.3	0.4	0.7	1.0	0.2	**3.0**	-	3.9	-	**3.9**	0.4	2.5	**2.9**	**10.1**
Greater China	**1.1**	**-**	**-**	**0.8**	**1.0**	**1.6**	**2.1**	**3.2**	**0.4**	**9.1**	**-**	**3.9**	**3.9**	**7.8**	**1.6**	**6.3**	**7.8**	**25.8**
Korea	**0.3**	**0.1**	-	0.1	1.3	0.1	0.2	0.5	-	**2.3**	0.1	1.0	0.4	**1.5**	-	3.9	**3.9**	**8.0**
Japan	**1.5**	**0.7**	-	0.6	0.3	0.6	1.4	1.1	-	**4.0**	1.1	2.5	2.4	**6.0**	4.1	-	**4.1**	**16.3**
NE Asia	**1.8**	**0.8**	**-**	**0.7**	**1.6**	**0.7**	**1.5**	**1.6**	**-**	**6.3**	**1.2**	**3.5**	**2.8**	**7.5**	**4.1**	**3.9**	**8.0**	**24.3**
TOTAL	**10.3**	**1.4**	**0.6**	**6.5**	**7.2**	**3.2**	**12.0**	**8.2**	**1.3**	**38.9**	**1.9**	**13.7**	**9.7**	**25.4**	**7.7**	**16.2**	**23.9**	**100.0**

Labour gap closes, infrastructure gap widens

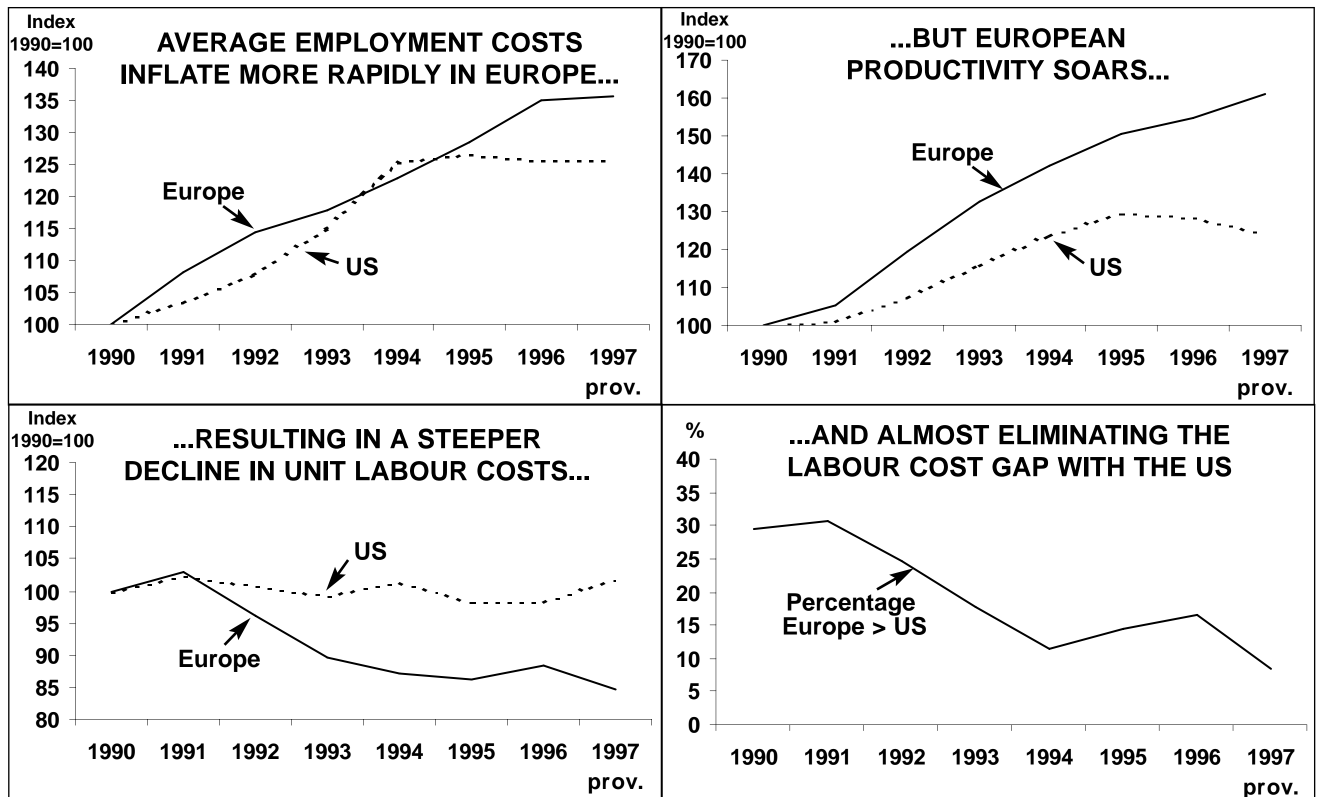
The good news is that Europe's leading flag-carriers have almost closed the labour cost gap on their US counterparts. The bad news is that the overall operating cost difference is greater than ever.

The samples *Aviation Strategy* has examined comprise: British Airways, Lufthansa and KLM, and American, United, Delta and Southwest - the largest and/or the most commercial airlines on both sides of the Atlantic. If we had expanded the European sample to include the reforming state aiders, Europe would appear less competitive but adding the other US carriers to the sample would probably make little difference to the US position. To minimise exchange rate distortion we have used average 1997 rates throughout the analysis. The various airlines are weighted according to their revenues in 1997. In addition, 1997 is denoted as provisional as the data used refer mostly to the first nine months of the year.

Having got the methodological details out of the way, we can outline some of the key trends.

From a lower base, European average employment costs (salaries plus social costs) increased in parallel with the US until 1994 when the US carriers managed to control wage increases (by offering job security, fleet expansion incentive etc); European costs have continued to grow so that today there is an insignificant difference between the two cost levels - $59,000 per employee in Europe and $61,000 in the US.

The European carriers' great success has been in containing employee numbers while expanding capacity, resulting in a surge in the ATK per employee productivity measure. In the US the slight decline in this ratio in recent years reflects a restoration of



staffing to levels that are adequate for customer service. It should not be forgotten, however, that the US industry was very much more labour-efficient to begin with, and even now a US airline employee produces 14% more ATKs than a European.

Nevertheless, the net result of the trends in remuneration and efficiency is that the unit labour costs of the leading European airlines are now just 8% above those of the US carriers. This contrasts with a gap of around 30% in the early 1990s.

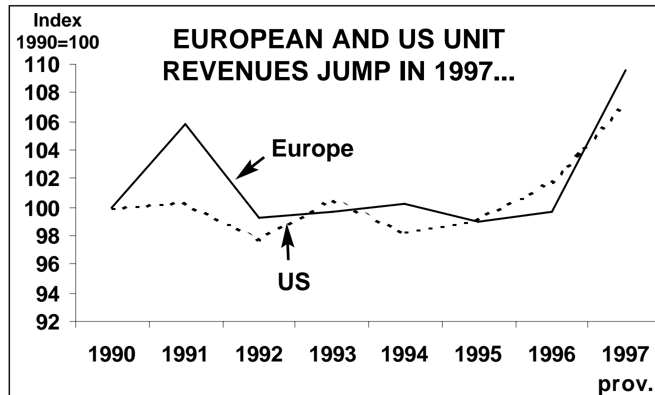
Alas, successes on the European labour front have not filtered through to the bottom line.

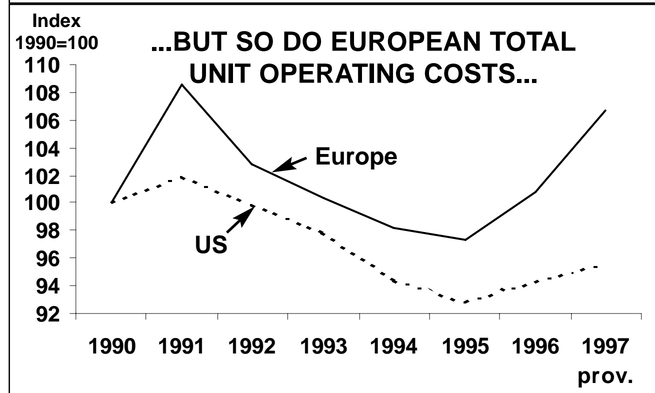
Having remained fairly stable throughout the 1990s, units revenues ($/ATK) leapt up in 1997 for both the US and the European carriers as they finally managed to take advantage of a tight supply/demand situation and push prices up. Yield and capacity management tools have been used to great effect.

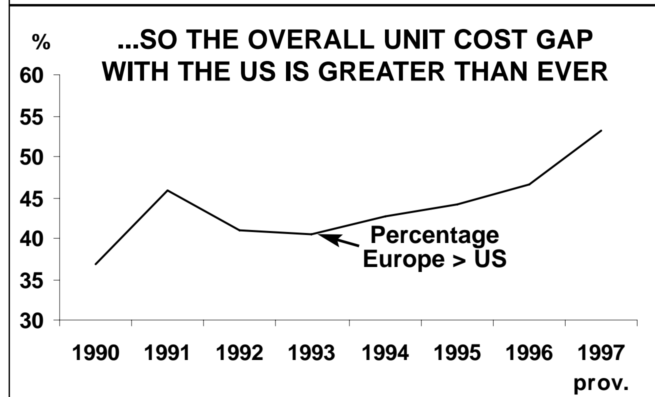
Unfortunately, European overall unit costs have tracked unit revenues quite closely, whereas US unit costs have just edged up. The effect was to cause the unit cost gap, which had shown signs of narrowing in the mid 1990s, to expand again. In 1997 *Aviation Strategy* estimates that unit operating costs for the leading European carriers were 53% higher than for the US carriers, a greater difference than in the early 1990s.

Part of the reason for this unexpected result was a regional divergence in fuel prices. In 1997 the European carriers were paying about 15% more than the US airlines for jet kerosene, whereas in the early 1990s there was scarcely any difference between the two regions.

But the real culprits lie hidden in "other operating costs", which in Europe have been growing at an apparently innocuous 3% p.a. during the 1990s but which have remained completely static in the US. This category includes such diverse elements as rentals, commissions, catering etc, but it is the cost items that lie largely outside the airlines' control that have been causing the most concern - airport charges, en route fees and ground handling costs.







Indeed, over the next few years the key aeropolitical issue within Europe is likely to be the deregulation of the aviation infrastructure.

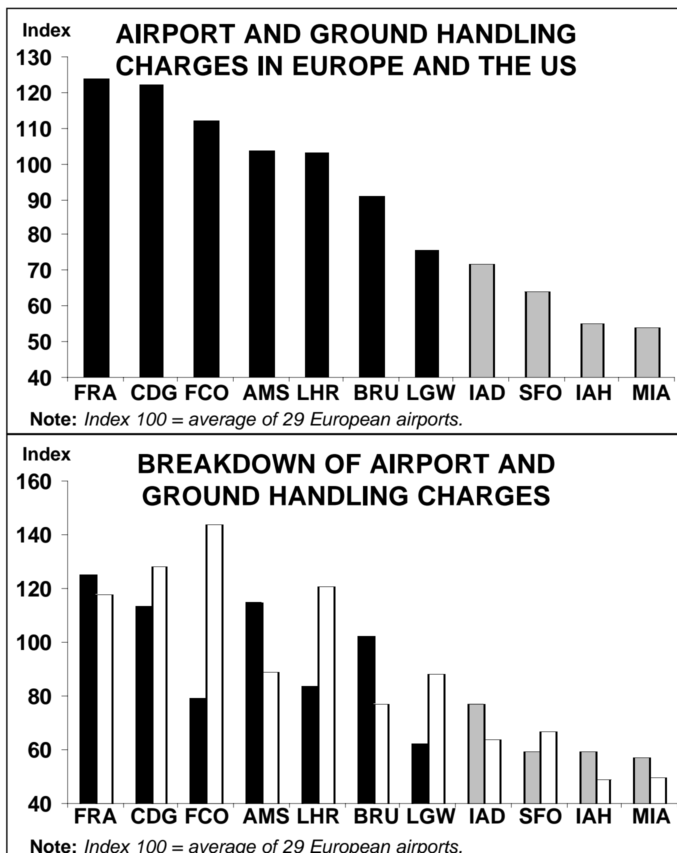
Jürgen Weber, the new AEA chairman, states that he is going to concentrate on high airport charges, protectionist ground handling regimes (Frankfurt has just been given three months to dismantle its near-monopoly on ground services) and an integrated Euro-ATC. Resistance and diversionary tactics from governments and others with vested interest in maintaining the status quo is inevitable.

The taxing question of airport charges

European airport charges appear out of line with the US, but taxes distort the picture. And both systems are full of contradictions and inefficiencies.

The issue of airport charges has been tackled in an AEA-commissioned study conducted by Cranfield University. Both airport charges (for runway, apron and terminal facilities) and handling charges (for passengers, baggage, etc) have been included. So a clearer picture of charges at an airport like Rome Fiumicino, which has low landing charges but very high handling rates, emerges.

Even the most expensive US airport in the sample, Washington Dulles, has unit charges below those of one of the cheapest European airports, London Gatwick, and half those of Frankfurt. Within Europe there is a remarkable and unreasonable variation among airports - charges at Frankfurt are 40% higher than Madrid and 20% higher than Heathrow.



Note: *Index 100 = average of 29 European airports.*

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Problems of comparison arise when government taxes are taken into account: it is argued that US passengers pay for infrastructural costs directly through ticket taxes, and if all the taxes collected by airlines through ticket taxes are taken into account then in theory the US airports become more expensive than the European. But the US 10% ticket tax and international departure tax of $12 per passenger is not a true user fee (and the UK government does not even pretend that its departure taxes are anything to do with aviation funding).

Moneys raised through the US taxes go into the Aviation Trust Fund (ATF) to be spent on ATC (in Europe en route charges are levied separately by Eurocontrol) and on airport development. But there was never any requirement that this money be spent on airports; rather surpluses were diverted to help balance the federal budget. Then, when Washington went on strike at various times in 1996 and 1997, Congress let the ticket tax expire and as a consequence the ATF was depleted.

Ticket taxes are also supposed to be the source of funds for the Airport Improvement Program, and in fiscal 1998 some $1.7bn will be available mainly for primary airports. But to get the funds airports have to battle among themselves and with the Appropriation Committees in Washington.

Changes proposed in the 1988 Tax Reconciliation Bill to the ticket tax - gradually reducing it to 7.5% by 2000 but adding fixed $1-2 fees per segment - have been justified on the grounds that the reformed tax will approximate to a user fee because it will now reflect the costs of connecting flights at a hub. The low-cost point-to-point operators simply see it as a means of transferring money from themselves to the larger hub and spoke operators.

Again though, the definition of user fee hardly applies because it appears that the bulk of the additional $3-4bn this new ticket tax is designed to raise over the next five years will

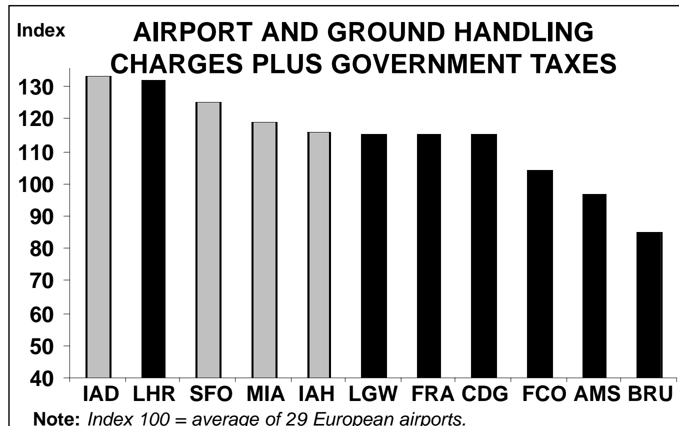
disappear into general funding rather than being used for specific aviation projects.

So while the European airlines see US airport charges as reflecting efficiency and competition, US airlines tend to see their own system as an iniquitous bureaucracy.

Europe has its own unique tax distortion - duty-free sales. The exemption from consumer taxes on sales of alcohol and tobacco at airports and on ferries can be regarded as a subsidy - estimated by Goldman Sachs to be in the order of $2.2bn a year - by European taxpayers to airports and ferry operators. The EC has in effect taken this view and legislation to outlaw duty free sales could come into force as early as July 1999.

The severest impact will be on airport authorities which have developed the concession income side of their business - BAA, for example, which relies on duty free sales for about 29% of its total revenue. It will be allowed to recapture at least some of the lost revenue through increased aeronautical charges, and other airports will follow suit.

The other important piece of European legislation in this field is the Ground Handling Directive, which aims over the next four years to completely deregulate this activity. This year airlines will be allowed to self-handle at all airports without restriction. In 1999 at least one specialist handling company will be allowed to compete.



This at last offers relief to most European airlines (although it is a major blow to airlines like Iberia and Olympic, which operate near-monopoly ground handling services at their home airports) There are two options for the airports. They can sign discounted contracts with their airline customers before the business is deregulated or they can sell off their ground handling businesses to specialist companies. Either way ground handling prices in Europe are going to be forced down.

Unit Costs at Airports in Europe, Asia & US, Cranfield ATG, December 1997

US new entrants mired in deep financial trouble

In sharp contrast to the boom times enjoyed by the majors, the US low-cost new entrant sector is in deep financial trouble. The quarterly results available indicate that the sector as a whole may produce net losses accounting for as much as 24% of revenues for 1997.

Most of the new entrants began operations during 1993-1995, when the barriers to entry were at their lowest ever, and some were verging on profitability by early 1996. But ValuJet's May 1996 crash, its subsequent three-month grounding, the extended debate about maintenance practices and the questions raised about the FAA's competence in overseeing safety had a devastating impact on the new entrants. As they also faced a sharp hike in fuel prices, reinstatement of the ticket tax, fare wars led by Southwest and aggressive expansion or price cuts by other majors in targetted markets, it was hardly surprising that all the start-up carriers incurred substantial financial losses in 1996.

What is surprising is that their losses accelerated in 1997 despite buoyant economic conditions, an easing in fuel prices and a flawless safety record; why?

First, the events of 1996 evidently dealt a severe blow to the former image of the low-cost operator. The US consumer still demands low fares, but established or conventional-type carriers are preferred when the choice exists.

Second, the majors have taken full advantage of the situation and are now financially stronger and keener than ever to defend their hubs. Delta and United are behaving much more aggressively

at Atlanta and Denver respectively. Delta launched its own low-cost venture, Delta Express, in October 1996, while Southwest also began to expand on the East coast.

Third, some of the struggling carriers had little hope of long term survival in the first place, while others have messed up their chances by choosing wrong markets or inappropriate business strategies.

ValuJet, which resumed scaled-down operations at the end of September 1996, was not able to make a comeback. It had to discount heavily to win back passengers and yields plummeted. Costs, in turn, surged due to reduced fleet size, increased maintenance needs and the various structural changes required by the FAA. The airline was not allowed to build up its fleet fast enough - last summer it was still five aircraft short of the 30 considered necessary to restore profitability. A $14.6m net loss in the critical third quarter, following $48m accumulated losses in the previous three quarters, was enough to concede defeat. The company decided to tap into its still-substantial cash reserves to buy AirTran Airways and give up the ValuJet name.

AirTran itself had been hit hard by the 1996 events, and over the past year it has had Delta Express to deal with on its home turf. Since reporting a $1.2m net profit for 1995, the carrier has lost $12.6m and was close to running out of cash last summer.

Western Pacific, the most promising of the new-generation start-ups, ended up filing for Chapter 11 on October 6. The company had raised $48m in an IPO in December 1995 and developed a unique low-fare niche at Colorado Springs. However, because of its extremely rapid initial expansion, WestPac had little cash left when it plunged into heavy losses in the fourth quarter of 1996. New capital kept coming in, but escalating losses ($33.3m in the first half of 1997) meant a continuous cash crisis last year. Unsuccessful merger talks between WestPac and Frontier also had a negative financial impact. **Frontier** lost $7.4m in January-September 1997.

Air South is unlikely to fly again. The South Carolina-based carrier went into Chapter 11 in late August 1997 after defaulting on lease payments for most of its fleet, and operations were suspended. A year earlier it had been temporarily rescued by San Francisco-based investment bank Hambrecht & Quist. But given the absence of local traffic and the failed attempts in other markets, Air South had little chance of ever making a profit and its majority investor refused to inject more funds.

A similar fate may now await another Hambrecht & Quist-controlled carrier, **Vanguard,** which has never made a quarterly profit despite continuously shifting markets and raising new capital. The Kansas City-based carrier lost $24m in 1996 and $22m in the first nine months of 1997.

Pan Am has lost $80m (including $14.7m pre-operating expenses) since beginning operations in September 1996. This is in part due to the ValuJet factor but also because of mistakes made in the choice of fleet and markets. The company has kept going by raising new capital and is now restructuring and consolidating its operations with Carnival.

Carnival's financial decline over the past two years has been staggering. The old-established, low-profile operator used to be consistently profitable, but since the ValuJet crash it has reported ever-worsening quarterly losses. In the second quarter of 1997 it lost $40m, bringing the 1996/97 financial year net loss to $75.3m. After losing another $28m in the third quarter, the company had virtually depleted its cash reserves.

Kiwi, which was partially grounded over paperwork violations in June 1996, filed for Chapter 11 in September of that year and subsequently suspended scheduled service. The carrier resumed operations in January 1997 with the promise of $16.5m backing from a private investor and has since then been venturing back to its old East coast markets. After a surprise $1.2m net profit in the first quarter of 1997, Kiwi lost $8.9m in the April-September period.

Reno appears to be the only low-cost new entrant carrier of any size to be staging a recovery. After losses totalling $11.3m in the 1996/97 winter period, the carrier became marginally profitable in the June quarter and reported a $4.8m net profit for the third quarter. This is attributable to a young fleet, well-established business class product, full participation in AAdvantage FFP and all CRS systems and codesharing with American.

Are mergers the answer?

Low-cost carriers have increasingly viewed mergers as the answer to their problems in the post-ValuJet era. The idea is to increase scale in order to reduce costs and to make it harder for

the majors to match the low fares in every market. Two companies also saw mergers as a discreet means to change their names.

ValuJet's $62m acquisition of AirTran Airways, completed in late 1997, seemed like a long overdue move. Since the ValuJet name evidently carries lasting stigma, the decision to operate as AirTran Airlines (with ValuJet Inc as the parent) should benefit the Orlando-headquartered company - one recent survey suggested that most passengers do not know that the airline used to be called ValuJet.

Although the two carriers will continue to operate separately for a few months at least, the increased scale of operation (initially about 50 aircraft) puts the combine into a stronger position to take on both Delta and Delta Express. Growth will not be constrained by aircraft availability, because there are still DC-9s in storage and the MD-95 (or rather Boeing 717) deliveries are due to commence in 1999. Financing the $1bn order (50 firm plus 50 options) should not be a problem because of ValuJet's still robust balance sheet. But the one-time expenses associated with the merger and efforts to improve image will mean further substantial losses over the winter, and the earliest return to profitability will be in the June quarter.

WestPac's proposed acquisition of Frontier through a $41m stock swap last year seemed like an even better idea, because the two small carriers need critical mass to compete effectively against United at Denver. WestPac had already started shifting flights from its Colorado Springs base to DIA and it began codesharing with Frontier on August 1. However, both the codeshare arrangement and the merger talks were terminated at the end of September due to financial issues and philosophical differences over scheduling, yield management and suchlike.

Both WestPac and Frontier now intend to make it on their own. Having secured a rescue deal and the bankruptcy court's approval for a reorganisation plan, WestPac looks likely to continue implementing the business strategy introduced in early 1997. Frontier, which has adequate cash reserves, is making schedule changes and gearing up for expansion.

The general view about the late September merger between Pan Am and Carnival, in which Pan Am forwarded Carnival's shareholders 10m Pan Am shares (worth $65m at the time) and Carnival's owner Mickey Arison contributed $30m in cash, is that putting together two cash-strapped and heavily loss-making airlines is unlikely to produce one stronger carrier.

Pan Am has stopped transcontinental service and the merged company will focus on north-south flying (including the Caribbean). The combined A300 fleet will be phased out by the end of 1998 - the aircraft are too large for year-round operation in most markets - and the company will become an all-narrowbody operator. However, its survival through 1998 depends on its ability to raise substantial new funds. A planned $115m private placement has been on hold for months,

LOW-COST NEW ENTRANTS' FINANCIAL RESULTS

	Quarter	1997 operating revenue	1997 net result	1996 net result
Reno Air	1Q	$89.7m	-$5.0m	$0.3m
	2Q	$97.4m	$0.2m	$3.3m
	3Q	$105.2m	$4.8m	$4.7m
	4Q			-$6.3m
Carnival*	1Q	$79.3m	-$12.7m	$2.1m
	2Q	$61.3m	-$40.2m	-$0.8m
	3Q	$63.3m	-$28.1m	-$7.4m
	4Q			-$13.6m
ValuJet**	1Q	$36.9m	-$18.5m	$10.7m
	2Q	$47.8m	-$9.2m	-$9.6m
	3Q	$56.4m	-$14.6m	-$21.9m
	4Q			-$20.6m
Western Pacific	1Q	$35.8m	-$17.8m	-$2.4m
	2Q	$42.6m	-$15.5m	$0.5m
	3Q			-$0.9m
	4Q			-$20.9m
Frontier	1Q	$33.1m	-$3.3m	$0.8m
	2Q	$34.6m	-$2.1m	$1.3m
	3Q	$37.6m	-$2.0m	-$2.2m
	4Q			-$8.9m
Pan Am*	1Q	$21.8m	-$14.6m	
	2Q	$29.5m	-$17.1m	
	3Q	$37.3m	-$21.1m	
	4Q			-$24.9m
AirTran AW	1Q			$0.8m
	2Q			-$0.3m
	3Q	$23.6m	-$5.4m	-$4.1m
	4Q			-$2.9m
Vanguard	1Q	$21.5m	-$7.9m	-$5.9m
	2Q	$21.7m	-$7.2m	-$1.9m
	3Q	$19.3m	-$6.6m	-$3.6m
	4Q			-$12.6m
Kiwi	1Q	$49.6m	$1.3m	
	2Q	$18.7m	-$4.6m	
	3Q	$19.2m	-$4.2m	
	4Q			
Air South	1Q	$13.7m	-$7.4m	-$3.9m
	2Q	$17.8m	-$7.9m	-$5.8m
	3Q			-$8.4m
	4Q			-$8.7m

Note*: *Now merged and operating as Pan Am.*
*** Now AirTran Airlines.*

while SEC filings indicate that existing credit facilities will not sustain operations beyond the immediate future.

Going up-market

The past year has seen a concerted effort by low-cost carriers to focus on the higher-yield passenger segment. The new AirTran has launched a "no-frills" business class which offers larger seats, more legroom and assigned seating but no meals or FFP. It has also joined all major CRS systems and begun paying commissions to travel agents.

This is broadly in line with the strategy that WestPac introduced in early 1997 and what Reno and Frontier have been doing for years, except that the Midwest-based carriers offer also limited meal service and FFPs. Vanguard and others have also joined CRS systems. The strategies are based on the premise that the environment has changed and it is no longer possible to compete as a pure low-cost, low-fare, no-frills, ValuJet-type shoestring operation.

While the experience of many carriers suggests that joining CRS systems is probably a worthwhile move, the business class strategy is very questionable. The key to successful low-cost operation has always been to keep things simple, and the business class fare mark-ups (typically $25, as in AirTran's case) seem too low to compensate for the extra costs involved. In addition to running the risk of ending up as a low-fare, high-cost operation, the new entrants are also more likely to provoke the majors if they go after the business passenger segment too explicitly.

Can the DoT help?

The DoT remains determined to help low-cost carriers surmount some the obstacles erected by the majors. The most concrete new measure implemented so far is the opening up of two key slot-controlled airports, New York's La Guardia and Chicago's O'Hare, to five new entrant carriers (AirTran Airlines, AirTran Airways, Frontier, Reno and St. Louis-based Trans States Airlines).

Since those airports cater primarily for business traffic, the new routes are likely to substantially boost low-cost carriers' revenues. Frontier and AirTran Airlines began serving La Guardia from DIA and Atlanta respectively in December.

By Heini Nuutinen

The DoT and the DoJ are also reviewing a rising number of complaints filed by carriers such as Frontier and AirTran about predatory pricing by the majors. The DoT is considering strengthening the current antitrust regulations.

Who will provide the finance?

Most of the US new entrant airlines have been able to limp through the past two years' crisis essentially because of their continued ability to attract finance. However, there are signs that the market has now tightened up. Raising the capital needed to start a new low-cost airline has become a hopeless undertaking, although in any case a tougher regulatory environment and a tighter supply of second-hand aircraft have meant that new applications have virtually dried up.

Air South's experience showed that even investors with the deepest commitment and pockets will not tolerate persistent losses when an airline has obviously failed to find a promising market niche. Vanguard may find itself talking to a brick wall as it continues to seek its majority investor's approval for a $15m rights offering.

Pan Am may find it impossible to raise the funds that it needs to continue operations until the fourth quarter of 1998, when it tentatively anticipates making its first profit, as the financial markets and individual investors reflect on the scale of Pan Am and Carnival's past losses.

However, as several recent financings suggest, capital continues to be available for carriers that have found promising market niches and have reasonable growth prospects. In October 1997 Reno raised $33m through a private stock offering, which it will use to buy more aircraft and to convert leases to ownership. In November Frontier finalised a $15m loan for expansion purposes from a Connecticut-based investment company, which indicated that it could provide more funds in the future.

Contrary to earlier speculation that WestPac would not be able to secure sufficient rescue funding, the carrier received a $10m loan and a commitment for a further $40m investment in the first quarter of 1998 from New York-based investment company Smith Management (which controls Hawaiian Airlines and also helped TWA with its second reorganisation). This should enable WestPac to emerge from Chapter 11, though the of a possible 1998 IPO seems premature.

Italian airlines: the Alitalia family and others

Alitalia is claiming a serious turnaround following the injection of L2.75tr ($1.1bn) in state aid - estimated net profit for 1997 could be L500bn ($275m). While this is a welcome contrast to the rest of the lira-draining 1990s, the recent sale of Alitalia's 30% stake in Malev will have contributed significantly to the result. IRI, the state holding company, has floated the idea that the remaining L750bn in state aid be raised through a public sale of part of IRI's 86% holding in the flag carrier. In return the EU would be asked to relax the conditions imposed on the state aid (for instance, allowing the airline to expand capacity more quickly than the overall market rate).

Alitalia's confidence that it will be able to part-privatise this year (a sale of more than 49% of the carrier is currently illegal under Italian law) is based on some initial successes in curtailing costs, the development of the Malpensa hub and its alliance with KLM (see page 1) - but perhaps its most important asset is its continuing dominance of its domestic market.

With about 18m passengers a year, the Italian domestic market is slightly larger than the UK's and comparable with Germany's. More than 80% of passengers travel on Alitalia or one of its associates. Only two full service airlines (Air One and Alpi Eagles) go against Alitalia on trunk routes, and both of them are doing badly. The start-up carriers are now mostly beholden to or at the mercy of Alitalia. While their strategies may have been naïve, probably the biggest challenge they have had to face is the influence Alitalia has with the government, from slot allocation to traffic data.

Nevertheless, effective local competition to Alitalia may materialise if the northern charter airlines are able to build up their scheduled operations and if another Euro-major takes a stake in and redirects the main domestic competitor, Air One.

Alitalia's subsidiaries

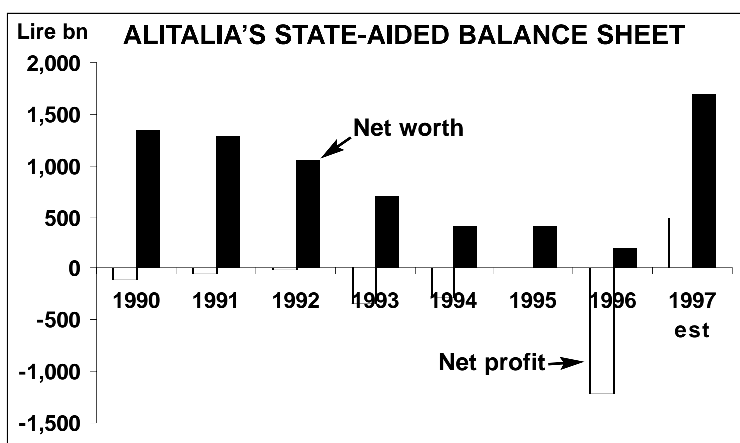
Alitalia Team was created in 1996 in order to absorb the former domestic operator Avianova and create a low-cost subsidiary. Team crews are paid less than in the core airline and they can also be based outside Rome (mainly at Milan). The plan is to transfer all Alitalia employees to Alitalia Team by the year 2000, at which point the name will presumably revert to Alitalia. The Team brand is not emphasised: the name appears in small letters below the Alitalia logo, and the only way for a passenger to differentiate between the subsidiary and the parent is that service tends to be better on Team flights.

Alitalia Express was spun off from Alitalia Team apparently because there were major problems merging pilots' seniority lists. Alitalia Express has taken over the ATR fleet, but its future may depend on how Minerva develops as an Alitalia feeder.

Alitalia also owns a charter company, **Eurofly,** which has now even been given a scheduled route, Bergamo-Rome. Alitalia is committed to supporting this operation now that its stake in Air Europe has been sold.

Alitalia's associates/codesharers

Minerva is a bit of a mystery airline, rumoured to be financed by Alitalia. It earns 50-60% of its revenues by operating Alitalia flights, is losing money and has swallowed a third of its capital in a year of existence. In 1998 it expects to carry 400,000 passengers, 70% of whom will be provided by Alitalia. It has five DO328s, and a sixth is due for delivery, probably wearing Alitalia colours.



Azzurra Air, set up by ex-Alitalia executives with 49% equity ownership from Air Malta, had a difficult beginning, but has now been able to close a deal with Alitalia. It still operates a few flights out of Bergamo and Turin, but two aircraft have been placed in Milan Linate, operating for Alitalia to London City, Valencia, Munich, Geneva and Frankfurt. More destinations will be added in summer 1998, when the fleet will rise to seven, from four BAe 146s at present. This will give Alitalia some relief from its EC-imposed fleet constraints.

Azzurra had initially made a deal with Swissair to operate codeshared flights to Zurich from Turin and Venice. The Turin services are operational but the three planned dailies from Venice have been jeopardised by the agreement with Alitalia. Azzurra also recently signed a codesharing deal with Debonair for services between Bergamo and London Luton.

Air Malta had planned to sell its stake, but the Alitalia deal may have made the future of Azzurra more interesting for the original investors. In 1998 it could be formally integrated into the Alitalia Group.

Alpi Eagles, based at Venice and Verona, is said to have lost $20m since it started flying in June 1996, and has had a turbulent management history as well as being plagued with reliability problems among its six F100s. The latest chairman and MD recently resigned, to be replaced by Sig. Rusconi, the founder of Minerva and previous head of Air Dolomiti.

The airline has never really decided what it wants to be: at first it attacked Alitalia head-on on the Venice-Rome route with a ticketless, low-fare, full-service, two-class operation; then it started codesharing with Alitalia in the winter of 1996/97; then in the winter of 1997/98 it reverted to independent operation, this time with traditional tickets. However, it had also been negotiating a deal to become a feeder for Alitalia at the new Malpensa hub starting in the next summer season, but these talks have stopped.

Meridiana, Italy's second biggest carrier, is under pressure. Its costs are at least as high as Alitalia's. In 1996 management copied Alitalia's strategy by setting up a lower cost subsidiary, Meridiana Express, to which all its routes were to have been transferred. However, this appears to have been little more than a cosmetic exercise, and now its only response appears to be downsizing: its international network is being quietly dismantled.

Somehow Meridiana has managed to keep Alitalia and Air One out of its Olbia niche (Sardinia). And, for the first time in its long history, it started codesharing with Alitalia on its non-stop North-South routes. At least these defensive measures have enabled the carrier to break even again, but its longer-term future is uncertain.

Air Sicilia, based at Palermo, has three years of experience flying three ATR42s, during which time it claims to have broken even. A codeshare deal with Alitalia on routes between Sicily and some smaller islands collapsed the day before service was due to begin.

Med Airlines, set up by former Air Sicilia staff, operates exactly the same routes and aircraft and has been able to gain Air Sicilia's Parma-Rome route, one of those small-city-to-the-capital routes for which lots of cash is available from local government. In effect, both carriers are competing to become Alitalia feeders. Med seems to be better capitalised than Air Sicilia. Two Saab 2000s will soon be delivered.

Italair is another ATR42 operation set up in August 1997 by a group of former Alitalia employees. The plan is to expand the fleet to five aircraft, develop feed to Rome and Milan and eventually international service. It badly wants to become part of the extended Alitalia family.

The Italian independents

Air Dolomiti, a pioneer of regional service in Italy, started operations in 1991 from its base at Trieste. It has had some major positioning problems, but thanks to its major shareholder - the Leali group, an important steel producer, which owns 75% of the stock - it has had the money to survive and now the investment is paying off.

It has now ended its agreements with Crossair and Air Engiadina, and is focusing on feeding Lufthansa at Munich and growing its new focus cities, Verona and Genoa. Of its 24 flights a day (one-way), 15 end up at Munich, and all of them, including those to Barcelona and Paris, carry the LH code. It can claim to be Europe's first regional airline to set up a hubbing operation outside its own country.

Air Dolomiti states that it carried 360,000 passengers in 1997 and that revenues reached L110bn ($60m). It will add four ATR72s and one more ATR42 in the early part of this year, and will later finalise plans for regional jet operations.

Having built up a great reputation for its service, it has been able to resist pressure from Lufthansa to operate in Team Lufthansa livery. It recently completed a successful capital increase, which saw new shareholders - mostly financial institutions from the Trieste region - take 25% of the company. But direct ownership from Lufthansa at some point in the future cannot be ruled out.

Air Europe, based at Malpensa with seven 767s, finally got rid of its unwanted shareholder last year when it bought back the 24.6% owned by Alitalia. This removed the barriers to it becoming a scheduled carrier, a role which Alitalia had previously blocked.

December 18th 1997 was a historic day for Italian aviation: the first ever intercontinental scheduled flight not operated by Alitalia left Milan bound for Havana (although most of the seats were still sold to tour operators). In Italian aeropolitical terms it was a breakthrough; Spain, for instance, has three long-haul scheduled carriers. Moreover, in early January Air Europe started scheduled service to Mauritius after the Italian government stripped Alitalia of the rights.

On the other hand, Air Europe could not go through with its IPO, originally planned for December 1997, mainly because of general stockmarket uncertainty. Although it has developed a passenger base of about 0.8m passengers a year and achieved revenues of L361bn ($200m) in 1996, it depends on operations to countries like Cuba, Dominican Republic, the Maldives and Kenya, which do not appear to offer a suitable base on which to build a scheduled network.

If there is going to be any vertical integration between tour operators and charter carriers in Italy, Air Europe will probably be the right target for a take-over.

Lauda-air Italia, also based at Malpensa, is one-third controlled by the Austrian Lauda-air, and is meant to be the initial step for the Vienna-based career to conquer a much bigger market than its own. Initial results were break-even at best but in 1997 it increased revenues by 40% to L100bn ($55m) and achieved L6bn in profit.

It will operate two 767s this winter and plans to add one more. It has applied for scheduled service on 25 long-haul routes not operated by Alitalia, and very aggressively threatens major legal action should the Italian government not award them. Lauda-air won a case in court against Alitalia regarding scheduled rights to Santo Domingo, even though at the moment Alitalia is still flying the route.

This is all very reminiscent of Lauda-air's emergence as a serious competitor to Austrian ten years ago. Still very small, but with a quality reputation, Lauda-air Italia may yet pose a threat to Alitalia's development of the Malpensa hub.

Air One was the first airline to seriously confront Alitalia in the domestic market, particularly Milan-Rome, having been founded by a group of ex-Alitalia employees and backed by the Toto civil engineering conglomerate. But it lost more than $10m on revenues of $70m in its first full year of operation, 1996; local reports suggest that 1997 revenues will double, but so will its losses.

Air One is usually referred to as a low-cost carrier, but the main reason its labour costs are below Alitalia's is because its experienced managers already enjoy Alitalia pensions in addition to their salaries. The airline has tight turnaround times (40 mins) and it also interlines, maintains normal ticketing and CRS activities, participates in Swissair's Qualiflyer FFP, and offers meals.

Air One added its first international route last spring - Milan Linate to London Stansted - but it has also had to curtail activity from some points, cutting services at Turin, for example. Inevitably there have been talks with Alitalia; last September Air One seemed to have signed a deal with Alitalia under which Alitalia would have used it as a low-cost operation to Brussels, competing against Virgin Express/Sabena. But the agreement was called off at the last minute, perhaps because of pressure from antitrust authorities.

Air One's main asset has been its grip on the Linate slots, and it has strongly opposed the planned transfer of flights to Malpensa from October 1998. But the opening of the new airport will leave the Rome-Milan route isolated in Linate, with Air One continuing to compete rather ineffectively against the Alitalia shuttle. Its fares are generally 20% lower than Alitalia's, but this difference has not been enough to divert sufficient numbers of passengers nor generate new traffic (Air One's load factors hover in the low 50s).

So the Swissair/Air One collaboration agreement signed in December 1997 does not give Swissair a clear inroad into the Italian domestic market, and connecting internationally to Air One will need a redesign of Swissair's operations. Such a redesign will probably be a pre-requisite for Swissair taking up its option to buy 30% of Air One.

Swissair - will tough ROIC target be met?

Swissair, the airline, will return to profit in 1997 after posting a loss (on flight operations) in 1996. But despite major strategic changes over the last two years, the future for an airline that has a high cost base, a non-EU location and, critically, which can now be compared directly with other Swissair group divisions, is far from certain.

Swissair faces the classic problem of mid-sized European airlines - it is not big enough to be considered one of Europe's big players, and it is not small enough to settle for the role of a niche carrier. Substantial changes have been made by the airline and the group's management (Jeffrey Katz is CEO of the airline and Philippe Bruggisser is group CEO) - but will these be enough to solve the fundamental problems that Swissair now faces?

Corporate reshuffling

Among the key changes has been the creation of the SAirGroup in 1996, which comprises four strategic divisions: SAirLines (including Swissair, Crossair and Charter Leisure), SAirServices (maintenance, airport services and IT), SAirLogistics (cargo and logistics) and SAirRelations (catering, hotel management and duty-free). Each division is supposed to be autonomous, responsible for its own bottom-line result and developing its own business strategies under its own brand(s). However, the "Swissair Experience" - defined as all the activities traditionally associated with Swissair - extends throughout the four divisions. So does the company operate truly independent divisions, or do divisional decisions depend on their effect on the "Swissair Experience"?

This is more than just a theoretical question - the ways in which the divisions interact are a key determinant in how Swissair (the airline) is able to carry out its chosen strategy. If the divisions are to attract - and justify a return on - outside capital on an individual basis, then transparent, accurate divisional results are a necessity. According to Katz, divisions "must pay due regard to the overall interest of the Group as a whole". With regards to inter-group trading, Katz adds that divisions offer services at general market rates and that "as a general rule" these rates should be applied to intra-group business. So far so good, but Katz also claims that "companies are expected to make use of their sister companies' services wherever possible, provided they are offered at competitive market rates".

The problem is twofold: just how is the "going" market rate defined (and by whom) and, despite group guidelines, what kind of unofficial pressure do managers feel to buy intra-group services? If Swissair is truly going down the road of divisional autonomy then only one rule must apply - the rule of the market.

SWISSAIR'S FLEET PLANS

	Current fleet	Orders (options)	Delivery/retirement schedule
Long-haul			
747-357	5	-	To be retired from winter 1998/99
A310-300	8	-	To be retired from winter 1998/99
A330-200	0	15 (10)	9 from Oct. 1998 onwards; 6 from 4Q 1999 onwards
MD-11	16	-	Four to be bought from LTU from Nov. 1998 onwards; all 20 MD-11s to be sold to "a US carrier" during 2002-2006
A340-600	0	9 (10)	Delivery from 2002 onwards
Short-haul			
A319	8	-	
A320	18	1	Delivery in summer 1998
A321	8	1	Delivery in summer 1998
TOTAL	**63**	**26 (20)**	

Note: *Figures refer to Swissair fleet only - not Crossair or Charter Leisure.*

Alliances everywhere

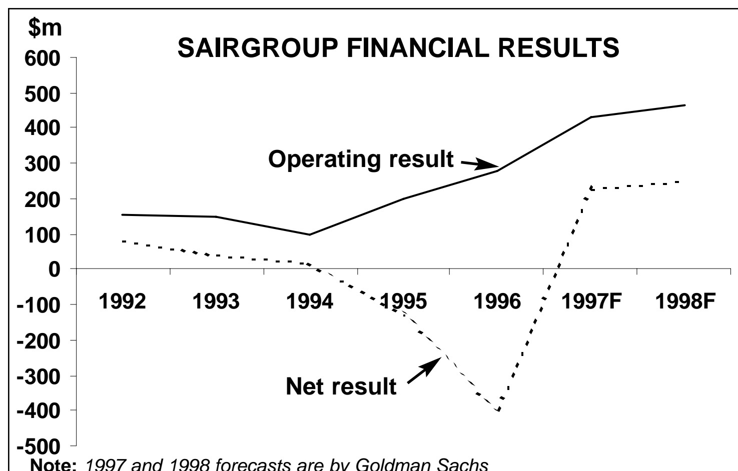
Within Europe, Swissair's alliance strategy is determined by Switzerland's location outside the EU. Until that changes, or until an EU-Swiss transport deal is finally agreed, Swissair can only gain access to EU markets via alliance deals. The most recent was with TAP. Long term, a 10% stake in a privatised TAP (expected in 1999) is a possibility, but short term improved Swiss-Portuguese passenger flows are the main gain. Signing alliances in all the main EU markets is a painstaking process, particularly as flag carriers have other priorities and larger airports have little spare capacity, leaving second-tier airlines or

start-ups based at secondary airports as Swissair's best option. Hence Swissair has been talking to, among others, AOM and Air One (the latter after having being rebuffed by Alitalia, which chose KLM as its main European partner rather than Swissair or Air France - see page 13).

As marginal as some of the increased traffic flows resulting from alliances with smaller European airlines may seem, Swissair has little alternative. At least the airline should not repeat the experience of Sabena, in which its 49.5% stake has been written-down. Swissair, however, does claim that the Sabena link has generated “substantial savings” in a number of areas, and that further constructive collaboration is possible.

While the EU market remains problematical, long-haul alliances become vital to Swissair. Katz says: "A key goal is to maintain our status as the preferred carrier in Europe for long-haul travel." Swissair's Atlantic strategy largely depends on Atlantic Excellence, which combines Delta Airlines, Austrian Airlines, Sabena and, soon, TAP Air Portugal, but Delta also has a rather distracting agreement (from Swissair's point of view) with Air France - and this relationship has yet to be fully developed. And can a Swissair/Delta alliance ever be as beneficial as Lufthansa/United, KLM/NWA or BA/American? Geography says no - Zurich is not as attractive a step into Europe for the North American market as is Amsterdam, Frankfurt or London, and Switzerland compares badly with other European countries in terms of O&D traffic. Switzerland ranks seventh in Europe in terms of international scheduled passengers, and Zurich has less international transfer traffic than Frankfurt, London Heathrow, Schiphol and Copenhagen.

At first sight, however, results from Atlantic Excellence, which was granted anti-trust immunity by the US DoJ in June 1996, have been impressive - over the first eight months of the alliance (February-September 1997) ASKs among the Atlantic Alliance partners across the North Atlantic rose by 10%, and RPKs by 20%, with load factor rising six points to 79%. Yet both Delta and Swissair have been cutting fares to the US, so an increase in passengers flown may not have too great an effect on the bottom line. And the split in benefits of the Atlantic Alliance between Delta and Swissair is not known. It does make sense for Swissair to ally with a major US airline - but how crucial is the link with Swissair to Delta?



Note: *1997 and 1998 forecasts are by Goldman Sachs*

Until the end of 1997, Swissair's Asia links depended largely on Global Excellence - the link between Singapore Airlines, Swissair and Delta that dated back to 1989. Now that Singapore has withdrawn from the accord, Swissair has decided not to seek a direct single-partner replacement but to concentrate on signing individual agreements with Asian airlines for specific routes. The Asia/Pacific market is vital to Swissair. According to estimates by UBS, Asia/Pacific traffic revenue accounted for 19% of total Swissair traffic revenue in 1996; that exposure is greater than Lufthansa (18%) and British Airways (16%), and only just behind KLM (21%). Existing codeshare deals with carriers such as Malaysia Airlines will be followed by others in 1998, and Swissair is talking to airlines in south-east Asia, Japan and China.

Alliance activity will therefore take up a fair proportion of management time at Swissair this year and, according to Katz, Swissair realises that it cannot survive long term without "being part of a larger system". But as Katz adds, "Without core profitability, alliances do not matter" - and that is at the heart of the challenge that Swissair faces.

Profits, costs and yields

The company has posted a ragbag of results over the last few years (see graph, above). The airline division's weak 1996 results were due partly to rising fuel prices, the strong Swiss franc, reorganisation costs and, alarmingly, to yield erosion. Despite a 5% decrease in airline unit costs in 1996, lower fares and an adverse change in the traffic mix led to a 6.5% reduction in yields.

The fall in unit costs (a similar fall to 1996 is expected for 1997) stems from concerted cost-cut-

ting over the last two years. Labour costs have been a high priority, and measures have included revision of collective working agreements, the switching of some pay to profit-related bonuses, and voluntary redundancy or early retirement for 1,200 staff through mid-1996 to mid-1997. The airline also introduced foreign (i.e. cheaper) flight attendants on some long-haul routes in 1997, and the group employs up to 14,000 part-time workers.

Costs have also been reduced via new scheduling, seat configurations, product innovation, yield management systems and fleet harmonisation. Swissair has gradually switched from a McDonnell Douglas-dominated fleet to an Airbus-dominated one (see table, page 14). European operations are now flown entirely by A320 family aircraft, which replaced MD-81s and A310-200s over a three-year period. A330-200s and A340-600s will form the core of the long-haul fleet, although MD-11s will remain until 2002-2006. The average age of the Swissair fleet is now less than 5 years.

Other measures included, from autumn of 1996, the switching of long-haul departures from Geneva (where they made a loss) to Zurich. There is now a Geneva-Zurich shuttle, and the switch has stimulated long-haul demand. However, there may be a costly side-effect - new entrant carriers may target Geneva. Yet Zurich does have more transfer opportunities than Geneva, and this has helped Swissair to improve its load factor (68% in the first six months of 1997, compared with 62% in 1996, and which may reach close to 70% for the whole of 1997). In addition, Crossair, SAirLines' regional airline, has been growing fast, taking over many short-haul charter and scheduled services; and long-haul charter operations have been regrouped under the Balair/CTA Leisure brand, renamed Charter Leisure from autumn 1997.

The end result is that airline unit costs will have declined by double figures over 1995-97, but the problem for Swissair is that if, like other European airlines, it cannot slow the pace of yield erosion, further cost-cutting will be needed - and cost-cutting opportunities are not limitless for an airline based in Switzerland. Selling and distribution must be the next target, to be accompanied by attempts to increase productivity and even outsourcing.

JANUARY-JUNE 1997 RESULTS BY DIVISION

	Revenue	Operating profit	Operating margin	Op. return on invested capital	Operating profit per employee
SAirLines	$1,787m	$62m	3.5%	2.7%	$6,100
SAirServices	$606m	$49m	8.1%	8.2%	$7,600
SAir Logistics	$385m	$19m	4.9%	84.8%	$10,200
SAirRelations	$1,122m	$43m	3.8%	4.1%	$2,400

The future

The write-down of the Sabena stake and other provisions means that the 1996 result is an unfair basis on which to judge the company. The 1996 figures were also calculated according to International Accounting Standards for the first time, so historical comparisons are not particularly valid.

The 1997 half-year results were encouraging, and were helped by economic upturn in Switzerland and Europe. Swissair's load factor rose from 62% to 68% for January-June 1997. But it is the 1997 results that will reveal just how effective the measures adopted by management have been. The group will return to net profit in 1997, and Goldman Sachs estimates a turnover of $6.6bn, operating profit of $428m and net profit of $225m. UBS estimates an operating profit of $408m and *Aviation Strategy's* estimate for operating profit is $420-430m. The 1997 results will be helped by lower fuel prices (jet kerosene has fallen by $100 per tonne since the high of October 1996) and the weaker Swiss franc (in 1996 $1=1.24Sfr; in 1997 $1=1.46Sfr). Indeed, some analysts believe that the group's stock has a correlation with the strength of the Swiss franc. If the currency becomes stronger in 1998, it will affect the bottom line.

However, the airline's contribution to group results is less certain, and comparisons between the divisions will be revealing. According to Swissair, the rationale behind the changes adopted in 1996 was to improve return on invested capital (ROIC) from the 5% the group achieved in 1995 to a target of 12%. In 1996 ROIC improved to 6.3%, but in the first-half of 1997 the return fell to 4.7%, and there were wide differences between the divisions (see table, left, and graph, right).

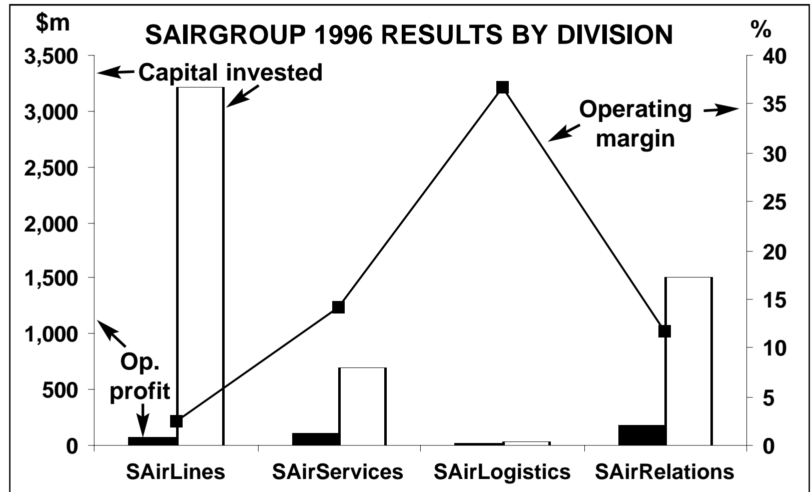
According to Katz, SAirLines has a target ROIC of 8%, but the division did not improve ROIC at all in the first half of 1997. It is unlikely that it will catch up with the ratios of its fellow divisions for the whole of 1997. SAirLines' failure to increase ROIC comes despite all the cost-cutting and changes that have occurred over the last two years. And if the airline division cannot achieve a better ROIC now, what will happen when the next aviation recession arrives, particularly as continu-

ing fleet renewal will be capital intensive? What more can the airline do? EU membership for Switzerland or an EU/Swiss airline accord would be a major boost for European traffic, but Swissair cannot change geography and the alliance with Delta may not last long term.

Some analysts are getting concerned. In mid-January Swiss Bank Corp. cut its recommendation for Swissair from buy to hold. Therefore over and above the current cost-cutting measures, the airline may need some radical thinking from management. While Crossair specialises in low-capacity, short-haul routes at present, why not expand its activities to jets and let it serve all existing Swissair European routes, leaving Swissair to fly long-haul only? Or how about exploiting more fully the Swissair brand, which Katz describes as a "killer brand". The airline could consider reverse outsourcing, via the use of Swissair as a branding for First or Business Class throughout the Atlantic Excellence alliance - i.e. even on non-Swissair flights. This would be a logical extension of Swissair's goal of being the preferred carrier in Europe for long-haul travel, and true alliance management means subjugating airlines, and their brands, to the needs of the alliance as a whole.

Yet the brand can only be exploited if it remains strong. Bruggisser says: "Swissair has a high-price image ... we must work on that perception." That may be a mistake - even if service standards remain the same, reducing fares runs the danger of altering customers' expectations. The link between price, quality and brand is a complex one, and reducing fares may improve revenues short term at the cost of reducing Swissair's ability to exploit its brand long term.

Without innovation, the airline will struggle to meet the returns on capital the other divisions are now delivering, and it will be trapped in a cycle of managing yield decline and adopting cost-cutting programmes until costs can be cut no further. Although SAirGroup may disagree, the message to an impartial investor from the divisional results is clear: develop other revenue streams wherever possible (and not necessarily airline-related activities). For example, Swissport International, part of SAirServices, now has ground handling contracts everywhere from Puerto Rico and Brazil to Kenya and Egypt, while SAirRelations is acquiring European airport restaurants. At the very least SAirGroup cannot afford to sell off prof-



itable non-airline assets in order to release further capital for the airline.

The airline and the group face a dilemma. If SAirLines follows the "Swissair Experience" maxim too rigidly, there may be danger of mirroring SAS's "Total Travel" concept. What should link Swissair's divisions should *not* be the serving of a single customer's interest - i.e. the airline passenger. That is because - as SAS found out to its cost - other companies can better provide parts of the travel experience than Swissair can. Instead, SAirGroup's divisions should uniquely serve the interests of the customer in their particular market, whether it is hotels, catering etc. Only when the divisions are leaders in their own markets in their own right should links across divisions be exploited.

At present, an impartial investor could even make a case for the group selling off the airline division, as it is still the poorest performer. Of course SAirGroup will never do that, as most of the other divisions depend on the Swissair airline branding. Yet a brand is an asset in its own right and does not necessarily need further assets (such as aircraft) behind it. But perhaps that is too radical a step for any airline at present, let alone Swissair.

Given the "Swissair Experience" doctrine, SAirGroup still sees itself as an airline-dominated group. If it wants to stay that way, the results of SAirLines - and in particular Swissair airline - must be drastically improved. And that means Jeff Katz or someone must introduce radical changes and shake up the Swiss-dominated management thinking. Playing safe may no longer be an option for Swissair if it wants to remain an important airline in Europe.

The CorpExpress challenge to first/business class

A key trend in the aviation industry is the way in which first and business class markets are beginning to change in ways that most had not predicted. **Louis Gialloreto** looks at the lessons that can be learnt from changes that are occurring in the US market.

Many people will remember the much vaunted threat to business air travel posed by the fax, express delivery services, teleconferencing, the web and the like (the so-called telco/tech systems). According to forecasts made three or four years ago from business lobby groups and think-tanks, it was predicted that between 8-15% of business air travel volumes would be deflected away by these technologies. But as some analysts now realise, the predicted hemorrhage due to these specific factors has not transpired at the anticipated pace.

Of course there are factors that tend to reduce business travel, such as the current Asian economic debacle or improving short haul rail infrastructure in Europe, but the predicted 15% downturn in business air travel does not appear to have happened. In fact, one could argue that globalisation of business together with increased joint venture/M&A activity has produced a stimuli to an otherwise lethargic market.

A new threat

However, just before airline strategists settle comfortably back into their chairs they should take note of several other phenomena that are posing the threat of change to first and business air travel markets.

The end of 1997 saw the creation of a US-based airline called Access Air, which is funded directly by a several US corporations, including Caterpillar Corporation and Pioneer Hi-Bred International (the world's largest seed company). The initial strategy of the airline bears a striking resemblance to that given at the launch of now established carrier Midwest Express. That airline was funded heavily by Kimberly Clark, otherwise known as the Kleenex company - thus giving rise to "the Kleenex airline". Based at the then underutilised Milwaukee airport, Midwest Express has grown to the point where it now operates 26 DC9/MD80 type aircraft in a consistent single class 2x2 configuration - in what is the equivalent to a US domestic first class service standard.

It seems that Access Air may follow a similar strategy, in particular through offering better value to customers (i.e. better service at business class fares that are as much as 60-65% less than what the majors offer). Could this be the start of something new in generic corporate involvement in passenger air travel? Might one eventually see Air GM, Air P&G, Air Unilever and the like? One could speculate that Ford's mini-fleet of BAC-1-11s at Cologne, or Air Fiat at Turin and the like, could form the basis for one of several Euro-based CorpExpress-type carriers.

In fact, the benefits of a CorpExpress airline can be substantial, especially since these niche-based carriers tend not to be driven by unduly strong growth intentions, are conservatively operated, place a premium on community involvement and development, and can usually dominate their main base (mini hub) operation, bypassing the major hubs with point-to-point service.

Given the fact that these airlines usually carry employees of their corporate parents for free - and residual asset values cover any major risk - the overall net result for the corporate parent can be free air travel, break-even or even better for the airline, and all of the intangible community benefits that come from fostering local economic development.

One might ask what series of circumstances led to the formation of Midwest Express and now Access Air - and can these circumstances be repeated elsewhere? Lack of interest by major airlines that are concentrated in and out of their major hub

points is one reason. A second is the reduction of point-to-point air services that strong hub based networks imply - thus forcing the Milwaukee-located businesses of this world to fly via somewhere else. Thirdly, the fact that the majors have been unable to deliver a consistently memorable service experience because of their size, far flung operations etc, has also helped create the market gaps that these small CorpExpress niche players can maximize. The result is lower fares that are near impossible for the majors to match for any protracted period of time.

Timeshare jets

There has also been a relative explosion of corporate quarter/half ownership and timeshare business jet programs, to which more and more business jet assets are being pledged. In fact, all the major manufacturers either have their own or have partnered with some of the larger Jetnet-clone type organisations that exist. One might suspect that the business jet market is cannibalising itself by allowing corporations or individuals to rent or own pieces of aircraft. Instead, the volume of direct sale business jet transactions does not seem to have suffered all that much, if at all.

Therefore, one must presume market stimulation - but from where are these "new" customers corning? As more and more small and medium sized companies see that they too can own/rent a piece of a business jet, and that this is more cost effective and flexible than relying on airlines, there will be an impact on first and business class cabins at the majors.

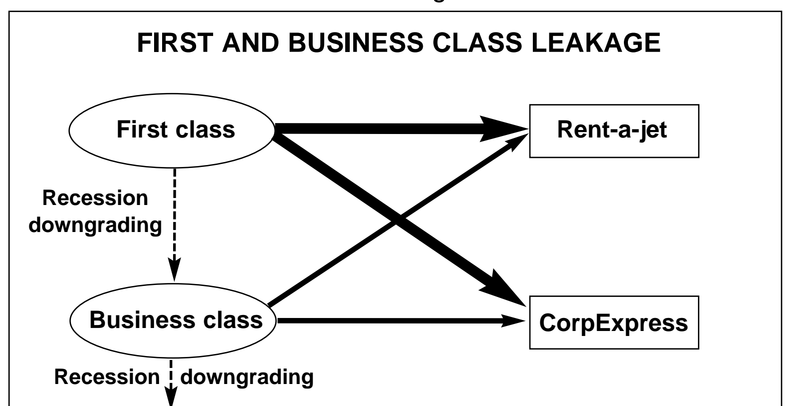
Already larger corporations can now have a 1.5 or 2.5 net jet capacity to cover their travel needs, using a combination of wholly-owned and part owned/rented jets - and the quarter/half ownership scheme is encouraging many other medium and smaller corporations to get into the game. Timeshare ownership can also offer substantial tax benefits.

When one combines the net effect of the two aforementioned phenomena, plus: the impact of the Asian downturn; telco-tech systems (fax, web, teleconference etc); stronger short haul multimodal competition in some areas; and the smaller size of middle and upper management travel markets in this cycle versus the last, then one has to wonder what airlines can do to preserve first and business class volumes.

Super business class, better hublink and some point-to-point services with regional jets are some responses. Simultaneously, airlines have seen fit to try and reduce the unwieldy burden of distribution channel costs by capping commissions. But while from the airlines' perspective the attempt to reduce distribution costs is long overdue, the negative consequence from the corporate travellers' perspective is that they are now directly paying for travel agency services - and this on top of quickly inflating air fares. If this effect is filtering through in a period of economic upturn, except for Asia, then what of the recessionary phase of the cycle?

Indeed, to state the obvious, business travel is cyclically impacted and many of the higher fare paying passengers slide back to the next level during downturn (first to business, and business to economy). Therefore when the next downturn happens, first and business cabins will feel the effects of two trends - cyclical downgrading and a continuing switch to timeshare jet programmes and CorpExpress airlines (see diagram, below).

The message to strategists is clear - first and business class leakage is increasing. Although the effects of recession and telco/tech systems have been anticipated, the effects of CorpExpress airlines and timeshare jets have not been. Airlines therefore have a long way to go before they can truly claim to have solved first and business leakage.



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 %
1990	113.4	70.9	62.5	128.8	89.7	69.6	80.5	57.6	71.6	272.6	191.7	70.3	405.8	274.9	67.7
1991	114.8	65.2	56.8	120.9	84.3	69.7	80.0	53.1	66.4	267.6	182.0	68.0	397.8	257.9	64.7
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
Nov 97	14.3	8.4	58.6	13.6	9.8	71.8	11.3	8.0	71.0	34.2	24.8	72.4	50.8	34.7	68.2
Ann. chng	7.2%	13.5%	3.3	7.6%	9.6%	1.2	8.9%	7.1%	-1.2	8.0%	8.6%	0.4	7.8%	10.0%	1.3
Jan-Nov 97	160.7	102.9	64.0	162.7	128.5	79.0	119.0	89.2	75.0	383.7	295.8	77.1	570.2	416.1	73.0
Ann. chng	5.8%	10.1%	2.5	8.3%	9.8%	1.1	7.5%	9.6%	1.4	7.1%	9.9%	1.9	6.7%	9.9%	2.2

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 %
1990	863.1	523.2	60.6	121.3	84.2	69.4	106.7	75.8	71.0	42.2	26.6	63.0	270.2	186.5	69.0
1991	835.1	512.7	61.4	108.0	75.2	69.6	117.0	78.5	67.1	44.3	27.4	61.8	269.2	181.0	67.2
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 1st half	469.7	325.4	69.3	64.6	50.2	77.7	59.7	44.3	74.2	34.3	22.5	65.6	158.6	117.0	73.8
Nov 97	76.9	51.4	66.8										27.8	19.5	70.0
Ann. chng	1.8%	6.2%	2.8										6.1%	6.1%	0.0
Jan-Nov 97	873.3	608.9	69.7										312.0	233.1	74.7
Ann. chng	3.1%	4.9%	1.2										3.8%	5.1%	0.9

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

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 %
1990	1,270	795	62.6	1,527	1,062	69.5	2,797	1,857	66.4	5.8	5.0	9.4	8.9	7.8	7.0
1991	1,267	800	63.2	1,487	998	67.1	2,754	1,798	65.3	-0.3	0.6	-2.6	-6.1	-1.6	-3.2
1992	1,300	840	64.6	1,711	1,149	67.2	3,011	1,989	66.1	2.7	5.0	15.0	15.2	9.4	10.7
1993	1,347	856	63.6	1,790	1,209	67.5	3,137	2,065	65.8	3.6	1.9	4.6	5.2	4.2	3.8
1994	1,403	924	65.8	1,930	1,326	68.7	3,333	2,250	67.5	4.2	7.9	7.8	9.7	6.3	9.0
1995	1,477	980	66.3	2,044	1,424	69.7	3,521	2,404	68.3	5.3	6.1	5.9	7.4	5.6	6.9
1996	1,526	1,046	68.6	2,163	1,537	71.1	3,689	2,583	70.0	3.3	6.7	5.8	7.9	4.8	7.4
***1997**	1,587	1,110	70.0	2,290	1,661	72.5	3,877	2,771	71.5	4.0	6.2	5.9	8.1	5.1	7.3
***1998**	1,667	1,167	70.0	2,462	1,773	72.0	4,129	2,940	71.2	5.1	5.1	7.5	6.8	6.5	6.1
***1999**	1,751	1,221	69.8	2,630	1,889	71.8	4,381	3,111	71.0	5.0	4.7	6.8	6.5	6.1	5.8
***2000**	1,839	1,271	69.1	2,807	2,002	71.3	4,646	3,273	70.5	5.1	4.1	6.7	6.0	6.1	5.2
***2001**	1,910	1,304	68.2	2,960	2,082	70.4	4,870	3,386	69.5	4.8	2.5	5.4	4.0	4.8	3.4
***2002**	1,928	1,295	67.2	3,027	2,099	69.3	4,955	3,394	68.5	1.8	-0.6	2.3	0.8	1.8	0.2

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

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
1991	99	98	101	101	104	106	99	112	104	105	99	95	113	103	97
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	113	108	107	107	111	146	134	128	128	126	150	123	127	116	132
***1997**	117	112	110	109	112	160	142	138	138	140	166	132	134	122	137
***1998**	120	115	113	113	113	170	150	149	148	155	178	141	142	130	148

Note: * = Forecast; Real = adjusted for inflation. **Source:** OECD Economic Outlook. Real GDP forecast from The Economist poll of forecasts

COST INDICES (1990=100)

	Europe						US					
	Unit revenue	Unit op. cost	Unit lab. cost	Efficiency	Av. lab. cost	Unit fuel cost	Unit revenue	Unit op. cost	Unit lab. cost	Efficiency	Av. lab. cost	Unit fuel cost
1990	100	100	100	100	100	100	100	100	100	100	100	100
1991	106	109	103	105	108	88	100	102	102	101	103	84
1992	99	103	96	119	114	80	98	100	101	107	108	75
1993	100	100	90	133	118	82	101	98	99	116	115	67
1994	100	98	87	142	123	71	98	94	101	124	125	62
1995	99	97	86	151	128	67	99	93	98	129	127	61
1996	100	101	88	155	135	80	102	94	98	129	126	72
***1997**	110	107	85	161	136	84	107	96	102	124	126	71

Note: * = Provisional. European indices = weighted average of BA, Lufthansa and KLM. US indices = American, United and Southwest. Unit revenue = airline revenue per ATK. Unit operating cost = cost per ATK. Unit labour cost = salary, social charges and pension costs per ATK. Efficiency = ATKs per employee. Average labour cost = salary, social costs and pension costs per employee. Unit fuel cost = fuel expenditure and taxes per ATK.

FINANCIAL TRENDS (1990=100)

	Inflation (1990=100)						Exchange rates (against US$)				LIBOR
	US	UK	Germany	France	Japan		UK	Germany	France	Japan	6 month Euro-dollar
1990	100	100	100	100	100	**1990**	0.56	1.62	5.45	145	8.27%
1991	104	106	104	103	103	**1991**	0.57	1.66	5.64	135	5.91%
1992	107	107	109	106	105	**1992**	0.57	1.56	5.29	127	3.84%
1993	111	109	114	108	106	**1993**	0.67	1.65	5.66	111	3.36%
1994	113	109	117	110	107	**1994**	0.65	1.62	5.55	102	5.06%
1995	117	112	119	112	107	**1995**	0.63	1.43	4.99	94	6.12%
1996	120	114	121	114	107	**1996**	0.64	1.51	5.12	109	4.48%
***1997**	122	117	123	115	109	**1997**	0.61	1.74	5.84	121	5.85%
***1998**	125	121	126	117	109	**Jan 1998**	0.60	1.79	5.99	126	5.63%

Note: * = Forecast, from The Economist. **Source:** OECD Economic Outlook.

AIRCRAFT VALUES

	Mid-life value ($000)		Mid-life value ($000)		Mid-life value ($000)		Mid-life value ($000)
727-200 Adv (HK)	5,450	767-300ER	56,760	L-1011-200/250	11,138	BAe 146-200	7,140
737-200 Adv (HK)	5,702	777-200B/IGW	126,000			BAe 146-300	12,420
737-300	19,723			A300B4-200	8,418	RJ-85	19,670
737-400	25,223	MD-82	16,423	A300-600R	58,850	RJ-100	22,670
737-500	18,826	MD-83	22,198	A310-300	26,707		
737-600	30,000	MD-90-30	32,589	A319-100	29,680	F-100	13,437
737-700	36,000	MD-95	34,600	A320-200	33,258		
737-800	43,000	DC-10-30	16,412	A321-100	40,195	Canadair RJ-600	14,680
747-400	108,700	MD-11	79,870	A330-300	97,566		
757-300	63,000			A340-300	106,000	EMB-145	14,650

Note: Values are for the oldest aircraft of this series, in clean "half-life" (i.e. mid way between D checks) condition. **Source:** MBA

JET ORDERS

	Date	Buyer	Order	Price	Engines	Delivery	Other information
Airbus							
Boeing	Jan 22	Southwest AL	59 737-700s			by 04	
	Dec 29	Olympic AW	8 737-800s	$408m	CFM56-7	00+	
	Dec 23	Lufthansa	5 747-400s	$825m			
Aero Int. (Reg.)							
Bombardier							
Embraer							

Micro-trends

	Airline revenue	Airline costs	Airline operating profit	Group net profit	Sched. ASK	Sched. RPK	Load factor	Airline rev. per schd. ASK	Airline costs per schd. ASK	Scheduled 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														
Apr-Jun 96	3,865	3,418	447	293	61,724.2	42,826.5	69.4	6.26	5.54	20,200	9,539.9	5,128.8	53.8	92,316
Jul-Sep 96	3,890	3,446	444	282	62,922.5	44,722.1	71.1	6.18	5.48	20,806	9,726.6	5,265.6	54.1	91,476
Oct-Dec 96	3,640	3,441	200	284	60,677.9	41,138.5	67.8	6.00	5.67	19,528	9,366.1	4,969.5	53.1	91,476
Jan-Mar 97	3,683	3,484	199	152	60,301.3	40,659.1	67.4	6.11	5.78	19,363	9,283.2	4,848.4	52.2	93,246
Apr-Jun 97	3,965	3,521	444	302	62,277.2	43,934.5	70.5	6.37	5.65	20,697	9,482.2	5,241.2	55.3	92,248
Jul-Sep 97	4,115	3,635	480	323	63,311.6	45,837.2	72.4	6.50	5.74					94,100
Oct-Dec 97														
America West														
Apr-Jun 96	464	402	62	28	8,540.1	6,175.7	72.3	5.43	4.71	4,569	1,079.0	659.2	61.1	10,553
Jul-Sep 96	423	476	-53	-46	8,842.6	6,391.2	72.3	4.78	5.38	4,665	1,119.4	682.3	61.0	10,617
Oct-Dec 96	440	415	25	12	9,213.7	6,385.1	69.3	4.77	4.50	4,607	1,162.4	688.1	59.2	10,866
Jan-Mar 97	462	429	33	14	9,292.5	6,399.7	68.9	4.97	4.61	4,584	1,168.8	686.7	58.8	11,442
Apr-Jun 97	478	427	51	23	9,370.8	6,660.2	71.1	5.10	4.56	4,666	1,180.1	712.8	60.4	11,690
Jul-Sep 97	462	425	37	18	9,589.7	6,749.9	70.4	4.82	4.43					11,330
Oct-Dec 97				**20**										
Continental														
Apr-Jun 96	1,379	1,190	189	166	21,723.5	15,204.7	70.0	6.35	5.48	9,183	2,647.0	1,723.7	65.1	31,891
Jul-Sep 96	1,385	1,360	25	18	23,110.8	16,210.3	70.1	5.99	5.89	9,296	2,785.9	1,830.0	65.7	32,706
Oct-Dec 96	1,323	1,231	91	47	22,718.2	14,964.7	65.9	5.82	5.42	8,879	2,803.4	1,732.3	61.8	33,468
Jan-Mar 97	1,436	1,308	127	74	22,782.9	15,698.9	68.9	6.30	5.74	9,081	2,820.6	1,790.5	63.5	33,766
Apr-Jun 97	1,533	1,319	213	128	24,061.3	17,597.9	73.1	6.37	5.48	9,829	3,032.6	1,996.8	65.8	34,672
Jul-Sep 97	1,615	1,449	166	110	26,157.6	19,450.3	74.4	6.17	5.54					35,700
Oct-Dec 97				73										
Delta														
Apr-Jun 96	3,360	3,069	291	161	53,879.8	38,863.5	72.1	6.24	5.70	24,896	7,460.1	4,439.4	59.5	61,771
Jul-Sep 96	3,432	2,990	442	238	55,273.7	40,838.2	73.9	6.21	5.41	25,242	7,677.8	4,623.5	60.2	63,862
Oct-Dec 96	3,197	2,973	224	125	54,982.5	37,638.0	68.5	5.81	5.41	24,625	7,606.7	4,421.2	58.1	63,862
Jan-Mar 97	3,420	3,077	343	189	54,175.8	37,317.3	68.9	6.31	5.68	24,573	7,489.7	4,354.8	58.1	67,851
Apr-Jun 97	3,541	3,025	516	301	55,562.9	41,440.0	74.6	6.37	5.44	26,617	7,777.3	4,798.9	61.7	69,118
Jul-Sep 97	3,552	3,121	431	254	57,389.2	42,763.8	74.5	6.19	5.44					66,800
Oct-Dec 97				190										
Northwest														
Apr-Jun 96	2,489	2,100	389	203	37,746.8	28,256.9	74.9	6.59	5.56	13,556	6,033.6	3,722.2	61.7	46,184
Jul-Sep 96	2,688	2,203	485	254	40,452.8	31,071.2	76.8	6.65	5.45	14,368	6,445.2	4,045.4	62.8	46,994
Oct-Dec 96	2,296	2,204	92	26	37,209.8	26,050.1	70.0	6.17	5.92	12,723	5,965.7	3,566.9	59.8	47,631
Jan-Mar 97	2,290	2,144	146	65	37,094.7	26,697.3	72.0	6.17	5.78	12,661	5,800.7	3,471.3	59.8	47,628
Apr-Jun 97	2,467	2,167	300	136	38,967.4	29,184.0	74.9	6.33	5.56	13,780	6,175.7	3,817.3	61.8	48,025
Jul-Sep 97	2,753	2,234	519	290	41,470.5	32,215.3	77.7	6.64	5.39					47,996
Oct-Dec 97				105										
Southwest														
Apr-Jun 96	908	765	142	85	16,357.6	10,959.3	67.0	5.55	4.68	14,014	2,099.4	1,137.8	54.2	21,559
Jul-Sep 96	889	785	103	61	16,863.5	11,802.9	70.0	5.27	4.66	14,478	2,164.7	1,224.4	56.6	22,844
Oct-Dec 96	829	780	49	28	16,776.0	11,431.8	68.1	4.94	4.65	14,285	2,148.9	1,188.4	55.3	23,395
Jan-Mar 97	884	797	87	51	16,923.1	10,515.0	62.1	5.22	4.71	13,329	2,163.7	1,097.2	50.7	23,980
Apr-Jun 97	953	797	156	94	17,671.9	11,289.6	63.9	5.39	4.51	14,049	2,264.0	1,180.6	52.1	24,226
Jul-Sep 97	997	846	152	93	18,494.5	12,176.9	65.8	5.39	4.57					23,840
Oct-Dec 97				81										
TWA														
Apr-Jun 96	925	863	62	25	16,204.8	11,315.6	69.8	5.71	5.33	6,046	2,239.5	1,310.4	58.5	25,194
Jul-Sep 96	952	926	26	-14	18,426.6	12,918.4	70.1	5.16	5.02	6,381	2,550.6	1,476.5	57.9	26,332
Oct-Dec 96	771	1,005	-233	-259	15,909.2	9,985.2	62.8	4.85	6.31	5,517	2,201.5	1,195.1	54.3	26,578
Jan-Mar 97	744	844	-100	-70	13,769.7	9,129.7	66.3	5.41	6.13	5,345	1,898.2	1,054.3	55.5	25,662
Apr-Jun 97	821	815	6	-14	14,740.1	10,272.2	69.7	5.57	5.53	5,958	2,051.9	1,169.5	57.0	23,490
Jul-Sep 97	860	796	64	6	15,922.1	11,446.5	71.9	5.40	5.00					24,200
Oct-Dec 97														
United														
Apr-Jun 96	4,023	3,623	400	196	64,851.6	47,405.6	73.1	6.20	5.59	20,736	9,330.4	5,696.9	61.1	83,347
Jul-Sep 96	4,344	3,731	613	340	68,560.8	51,669.2	75.4	6.34	5.44	22,241	9,868.5	6,134.8	62.2	84,579
Oct-Dec 96	3,817	3,764	54	19	65,806.0	45,557.2	69.2	5.80	5.72	19,948	9,505.3	5,615.2	59.1	86,008
Jan-Mar 97	3,971	3,782	189	105	64,828.6	45,292.9	69.9	6.13	5.83	19,683	9,386.1	5,530.0	58.9	86,443
Apr-Jun 97	4,222	3,817	404	242	67,458.5	48,894.6	72.5	6.26	5.66	21,271	9,917.6	6,032.1	60.8	88,939
Jul-Sep 97	4,491	3,928	563	579	71,375.5	53,721.3	75.3	6.29	5.50					90,300
Oct-Dec 97														
US Airways														
Apr-Jun 96	1,933	1,726	207	201	22,728.0	16,163.4	71.1	8.50	7.59	14,961	3,067.2	1,744.6	56.9	41,864
Jul-Sep 96	1,866	1,769	97	68	23,510.7	16,416.8	69.8	7.94	7.53	14,329	3,297.6	1,806.1	54.8	42,192
Oct-Dec 96	1,898	1,823	74	27	23,591.5	16,074.3	68.1	8.04	7.73	14,412	3,182.8	1,755.7	55.2	43,144
Jan-Mar 97	1,923	1,749	174	153	23,304.6	15,931.4	68.4	8.25	7.50	13,733	3,141.2	1,734.3	55.2	42,225
Apr-Jun 97	2,041	1,782	259	206	23,921.1	17,626.2	73.7	8.53	7.45	15,533	3,234.0	1,911.0	59.1	42,320
Jul-Sep 97	1,964	1,879	85	187	23,984.2	17,606.4	73.4	8.19	7.83					41,980
Oct-Dec 97				**479**						14,178				
ANA														
Apr-Jun 96	SIX MONTH FIGURES													
Jul-Sep 96	4,060*	3,846*	214*	75	36,248.3*	23,421.2*	64.6*	11.20*	10.61*	20,104*				15,914
Oct-Dec 96	SIX MONTH FIGURES													
Jan-Mar 97	3,090*	3,160*	-69*	-40	41,442.7*	26,945.8*	65.0*	7.46*	7.62*	24,721*				15,996
Apr-Jun 97	SIX MONTH FIGURES													
Jul-Sep 97	3,928*	3,829*	99*	50	39,702.7*	25,742.0*	64.8*	9.89*	9.65*	20,730*				
Oct-Dec 97														
Cathay Pacific														
Apr-Jun 96	1,944*	1,766*	178*	211							4,752.0	3,234.0	68.1	
Jul-Sep 96	SIX MONTH FIGURES													
Oct-Dec 96	2,207*	1,899*	308*	279							5,266.0	3,838.0	72.9	
Jan-Mar 97	SIX MONTH FIGURES													
Apr-Jun 97	2,022*	1,858*	164*	138							5,074.0	3,613.0	71.2	
Jul-Sep 97														
Oct-Dec 97														
JAL														
Apr-Jun 96	SIX MONTH FIGURES													
Jul-Sep 96	5,406*	5,269*	137*	24	54,783.8*	38,491.2*	70.3*	9.87*	9.62*	15,046*	8,254.3	5,406.0	65.5	19,046
Oct-Dec 96	SIX MONTH FIGURES													
Jan-Mar 97	4,797*	4,882*	-86*	-138	61,639.1*	43,455.6*	70.5*	7.78*	7.92*	18,890*	8,868.0	6,225.0	70.2	19,046
Apr-Jun 97	SIX MONTH FIGURES													
Jul-Sep 97	5,325*	5,016*	309*	169	56,060.9*	39,748.3*	70.9*	9.50*	8.95*	16,020*	8,556.0	5,705.0	66.7	
Oct-Dec 97														

Note: *Group total (i.e. scheduled & all others)

Micro-trends

	Airline revenue US$m	Airline costs US$m	Airline operating profit US$m	Group net profit US$m	Sched. ASK m	Sched. RPK m	Load factor %	Airline rev. per schd. ASK Cents	Airline costs per schd. ASK Cents	Scheduled pax. 000s	Total ATK m	Total RTK m	Load factor %	Group employees
Korean Air														
Apr-Jun 96														
Jul-Sep 96	TWELVE MONTH FIGURES													
Oct-Dec 96	4,341*	4,314*	27*	-249	54,071.5*	38,136.6*	70.5*	8.03*	7.98*	23,741*	10,953.3	8,253.2	75.3	17,139
Jan-Mar 97														
Apr-Jun 97														
Jul-Sep 97														
Oct-Dec 97														
Malaysian														
Apr-Jun 96														
Jul-Sep 96														
Oct-Dec 96	TWELVE MONTH FIGURES													
Jan-Mar 97	2,581*	2,459*	122*	132	40,096.9*	27,903.7*	69.6*	6.44*	6.13*	15,371*	6,149.2	3,706.8	60.3	22,546
Apr-Jun 97														
Jul-Sep 97														
Oct-Dec 97														
Singapore														
Apr-Jun 96	SIX MONTH FIGURES													
Jul-Sep 96	2,263	2,037	226	398	36,152.9	27,202.4	75.2	6.26	5.64	5,930	6,599.8	4,632.9	70.2	27,259
Oct-Dec 96	SIX MONTH FIGURES													
Jan-Mar 97	2,249	2,022	227	316	37,354.4	27,490.1	73.6	6.02	5.41	6,092	6,901.3	4,879.1	70.7	27,223
Apr-Jun 97	SIX MONTH FIGURES													
Jul-Sep 97	2,298	2,010	288	402	38,125.4	28,216.7	74.0	6.03	5.27	6,135	7,231.0	5,091.5	70.4	27,777
Oct-Dec 97														
Thai Airways														
Apr-Jun 96	TWELVE MONTH FIGURES													
Jul-Sep 96	3,090*	2,717*	373*	134	42,099.0*	29,226.0*	69.4*	7.34*	6.45*	14,308*	5,789.0	3,940.0	68.1	22,136
Oct-Dec 96														
Jan-Mar 97														
Apr-Jun 97	TWELVE MONTH FIGURES													
Jul-Sep 97				68										
Oct-Dec 97														
Air France														
Apr-Jun 96														
Jul-Sep 96														
Oct-Dec 96	TWELVE MONTH FIGURES													
Jan-Mar 97	8,780*	8,563*	217*	75	77,333.0*	58,586.0*	75.8*	11.35*	11.07*	16,733*		5,036.0		36,173
Apr-Jun 97														
Jul-Sep 97														
Oct-Dec 97														
Alitalia														
Apr-Jun 96														
Jul-Sep 96	TWELVE MONTH FIGURES													
Oct-Dec 96	5,223*			780	50,960.4*	34,131.5*	68.9*	10.25*		23,138*	8,167.7	5,674.0	69.5	16,507
Jan-Mar 97														
Apr-Jun 97														
Jul-Sep 97														
Oct-Dec 97														
BA														
Apr-Jun 96	3,206*	2,908*	297*	175	36,302.0*	26,047.0*	71.8*	8.83*	8.01*	9,603*	5,130.0	3,535.0	68.9	58,578
Jul-Sep 96	3,560*	3,068*	493*	427	37,693.0*	29,179.0*	77.4*	9.44*	8.14*	10,432*	5,299.0	3,851.0	72.7	59,160
Oct-Dec 96	3,301*	3,087*	215*	154	35,976.0*	25,417.0*	70.6*	9.18*	8.58*	9,075*	5,056.0	3,494.0	69.1	58,911
Jan-Mar 97	3,179*	3,130*	49*	113	36,211.0*	25,416.0*	70.2*	8.78*	8.64*	9,070*	5,057.0	3,456.0	68.3	60,188
Apr-Jun 97	3,624*	3,395*	229*	260	39,697.0*	28,756.0*	72.4*	9.13*	8.55*	10,613*	5,589.0	3,875.0	69.3	60,083
Jul-Sep 97	3,646*	3,319*	327*	244	40,909.0*	30,884.0*	75.5*	8.91*	8.11*	11,194*	5,711.0	4,098.0	71.8	61,321
Oct-Dec 97														
Iberia														
Apr-Jun 96														
Jul-Sep 96	TWELVE MONTH FIGURES													
Oct-Dec 96	4,385*	4,120*	265*	28	36,975.9*	25,931.2*	70.1*	11.86*	11.14*	14,623*	5,252.3	3,216.3	61.2	26,280
Jan-Mar 97														
Apr-Jun 97														
Jul-Sep 97	TWELVE MONTH FIGURES													
Oct-Dec 97					37,797.6*	27,679.2*	73.2*			15,432*				
KLM														
Apr-Jun 96	1,441*	1,394*	47*	159	15,980.0*	11,729.0*	73.4*	9.02*	8.72*		2,892.0	2,045.0	70.7	31,398
Jul-Sep 96	1,680*	1,569*	111*	154	17,296.0*	13,820.0*	79.9*	9.71*	9.09*		3,075.0	2,373.0	77.2	31,836
Oct-Dec 96	1,483*	1,494*	-11*	-4	16,806.0*	12,346.0*	73.5*	8.82*	8.89*		3,010.0	2,203.0	73.2	31,869
Jan-Mar 97	1,361*	1,444*	-83*	-153	16,279.0*	12,455.0*	76.5*	8.36*	8.87*		2,838.0	2,090.0	73.6	31,912
Apr-Jun 97	1,692*	1,566*	126*	99	17,310.0*	13,663.0*	78.9*	9.77*	9.05*		2,999.0	2,338.0	78.0	34,804
Jul-Sep 97	1,842*	1,592*	250*	438	18,798.0*	15,747.0*	83.8*	9.80*	8.47*		3,233.0	2,589.0	80.1	34,928
Oct-Dec 97														
Lufthansa														
Apr-Jun 96	2,272	2,230	42	110**	22,243.0	14,922.0	67.1	10.21	10.03	8,039	5,293.0	3,603,0	68.1	57,999
Jul-Sep 96	2,349	2,209	140	265**	23,221.0	17,180.0	74.0	10.12	9.51	8,578	5,420.0	3,909.0	72.1	57,999
Oct-Dec 96	2,356	2,250	106	111**	22,278.0	15,293.0	68.6	10.58	10.10	7,886	5,230.0	3,762.0	71.9	57,999
Jan-Mar 97	1,980	1,980	0	12**	21,820.0	14,932.0	68.4	9.07	9.07	7,209	4,985.0	3,477.0	69.7	57,291
Apr-Jun 97	2,165	2,075	90	221**	24,194.0	17,559.0	72.6	8.95	8.58	8,587	5,505.0	3,893.0	70.7	57,901
Jul-Sep 97	2,264	2,100	164	456**	25,296.0	19,429.0	76.8	8.95	8.30	9,204	5,787.0	4,298.0	74.3	58,178
Oct-Dec 97														
SAS														
Apr-Jun 96	1,313	1,189	124	129**	7,585.0	5,046.0	66.5	17.31	15.67	5,198				22,883
Jul-Sep 96	1,239	1,211	28	32**	8,084.0	5,390.0	66.7	15.32	14.97	5,111				23,622
Oct-Dec 96	1,122	1,080	43	64**	7,678.0	4,688.0	61.1	14.62	14.06	4,948				25,530
Jan-Mar 97	1,076	1,109	-34	-36**	7,443.0	4,335.0	58.2	14.45	14.91	4,551				23,340
Apr-Jun 97	1,310	1,141	168	178**	7,962.0	5,392.0	67.7	16.45	14.33	5,617				23,904
Jul-Sep 97	1,180	1,104	76	83**	8,084.0	5,598.0	69.2	14.60	13.66	5,227				24,168
Oct-Dec 97														
Swissair* **														
Apr-Jun 96	2,257	2,128	130	-42	16,439.3	10,155.0	61.8	13.73	12.94	4,227	3,035.5	1,994.2	65.7	33,998
Jul-Sep 96	SIX MONTH FIGURES													
Oct-Dec 96	1,285	1,348	-63	-355	16,372.6	11,074.0	64.4	7.85	8.23	4,506	3,156.9	2,187.4	69.3	36,050
Jan-Mar 97	SIX MONTH FIGURES													
Apr-Jun 97	1,787	1,724	63	76	17,464.4	11,880.7	68.0	10.23	9.87	5,019	3,340.6	2,291.9	68.6	36,818
Jul-Sep 97														
Oct-Dec 97														

Note: *Group total (i.e. scheduled & all others). **Pre-tax. ***Airline figures refer to SAirLines.

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