DG TREN – ANALYSIS OF THE EUROPEAN AIR TRANSPORT INDUSTRY 2001

Final Report

Contract Number: B2-7040B-S07.17962.

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Contents

Glossary

Terms used for Statistical Analysis

ASK – Available Seat Kilometres

ASK is a measure of airline passenger capacity. It is calculated by multiplying the number of passenger seats available for sale on each flight stage by the stage distance.

Example: An airline operates one scheduled international flight per day, of length 1,000 kilometres. The aircraft has 50 seats. Total scheduled ASKs offered in a year = 18,250,000 (1,000 x 50 x 365).

ATK – Available Tonne Kilometres

ATK is a measure of airline overall capacity. It is calculated by multiplying the number of tonnes of capacity available for the carriage of revenue load (passengers, baggage, freight and mail) on each flight stage.

Available Seats

The number of available seats is a measure of airline passenger capacity and is the number of seats on an aircraft multiplied by the frequency.

Frequency

Frequency is a measure of airline capacity, and relates to the number of scheduled departure flights operated within one week. City pair analysis looks at flights in both directions.

Passengers – Revenue Passengers

The number of passengers carried is a measure of airline volume, and are generally taken to mean passengers for whom the carrier receives commercial remuneration.

RPK - Revenue Passenger Kilometres

RPK is a measure of airline passenger volume. It is calculated by multiplying the number of revenue passengers carried on each flight stage by the flight stage distance.

RTK - Revenue Tonne Kilometres

RTK is a measure of overall airline volume. It is calculated by multiplying the number of tonnes of revenue load (passengers, baggage, freight and mail) by the flight stage distance.

Yield

Yield is a measure of unit income. For example, passenger yield is calculated by dividing passenger revenue by volume, usually RPKs or number of passengers.

Key Data Sources

AEA – Association of European Airlines

AEA is an industry body comprising of around 30 full service European scheduled airlines (includes most of the major European full service airlines).

American Express

American Express produces the European Corporate Travel Index, which provides information and analysis of business travel costs and trends. European air fares from 51 Western European cities to ten geographical regions are monitored on a quarterly basis, representing 439 city-pairs or segments.

Airclaims

Airclaims Limited is part of the Airclaims Group of companies, which has three different areas of business - surveying and loss adjusting services to the aviation and space insurance markets; consultancy and aircraft appraisal services; and aviation information products. The Airclaims CASE database provides comprehensive data on fleets, individual aircraft, deliveries, orders and other aircraft data.

IATA – International Air Transport Association

IATA is an industry association containing approximately 280 airlines. Flights by these airlines comprise more than 95 percent of all international scheduled air traffic.

OAG

OAG is a leading independent source of flight schedule information, operating the world's most comprehensive and up-to-date schedules database. The company collects and distributes schedules data from over 930 airlines.

All OAG analysis used in this report is based upon weekly non stop unrestricted operating passenger flights. The exception is destination analysis, which examines both non stop and stopping flights.

Regional Definitions

This study incorporates data from a variety of different sources, where geographical and industry regions can differ.

Domestic

Refers to all scheduled flights within a country

Europe

Unless otherwise specified, Europe is taken to mean the geographical area of Europe.

European Union

Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, Netherlands, Portugal, Spain, Sweden, United Kingdom

EEA – European Economic Area

EEA includes all countries in the European Union and Norway, Iceland and Liechtenstein.

EEA and Switzerland

This is the primary region for the purposes of this report.

European Union Candidate Countries

13 countries that have applied to become members of the European Union:

Bulgaria, Cyprus, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Romania, Slovakia, Slovenia, Turkey

Intercontinental / Long Haul

Refers to all flights operated to/from destinations outside Europe.

Western Europe (IATA definition)

Andorra, Austria, Belgium, Cyprus, Denmark, Faeroe Islands, Finland, France (excluding overseas territories), Germany, Gibraltar, Greece, Greenland, Iceland, Ireland, Italy, Liechtenstein, Luxembourg, Malta, Monaco, Netherlands, Norway, Portugal (including Azores and Madeira), San Marino, Spain (including Canary Islands), Sweden, Switzerland, Turkey, United Kingdom.

Eastern/Central Europe (IATA definition)

Albania, Armenia, Azerbaijan, Belarus, Bosnia-Herzegovina, Bulgaria, Croatia, Czech Republic, Estonia, Macedonia, Georgia, Hungary, Latvia, Lithuania, Moldova (Republic of), Poland, Romania, Russian Federation (West of the Urals), Slovakia, Slovenia, Ukraine, Yugoslavia (Serbia and Montenegro).

Section 1

Key Developments in the European Air Transport Industry in 2001

Contents

1.1 Introduction

The year of 2001 was dominated by the events of September 11th and their aftermath. Any analysis of the European aviation industry will clearly focus heavily on the economic repercussions of this tragic event.

Even before September 11th, the European aviation industry had been experiencing something of a downturn. However, the last quarter of the year saw turmoil in the industry. Post September 11th, there was a dramatic slump in demand. Airlines suffered unprecedented losses, and two well established flag carriers went out of business. Other sectors of the business also suffered from the knock-on impacts.

2001 was also the year where low cost airlines truly established themselves as a major force in European air transport. While the traditional carriers struggled to remain in business, the low cost sector continued to expand and report strong financial results.

This section of the report introduces some of the key European air transport developments from 2001. More detailed analysis of many of the issues is provided in subsequent sections.

1.2 Performance of European Air Transport Industry to September 2001[1]

The full service scheduled airline sector had experienced a difficult year even before the events of September 11th. AEA airlines saw first half year losses increase by almost half compared to the previous year. Much of this poor financial performance has been attributed to the slowdown in the global economy experienced in the first half of 2001.

Financial results from other air transport sectors were healthier. Although the holiday charter sector saw a decrease in profits, a relatively small percentage fall was recorded.

Meanwhile, the low cost sector continued to go from strength to strength, with profits growing by over 150% versus the first half of 2000.

Finally, airport financial results as a whole remained fairly steady, recording a small increase.

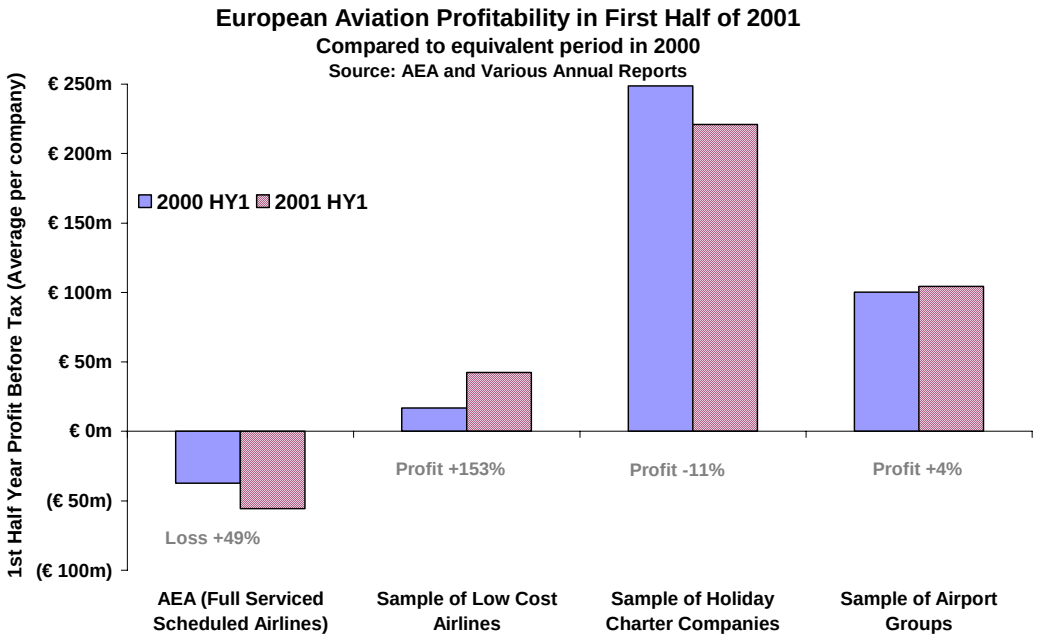

Figure 1

[1] Methodology notes:

a) Conversions to € undertaken at constant exchange rate as at December 2001.

b) Financial reporting periods differ slightly between companies but majority of first half year results relate to Jan-June period, 2nd half year July-December.

c) Sample of low cost carriers – Ryanair, easyJet, Virgin Express

d) Sample of holiday charter companies - Preussag Group, MyTravel, Kuoni Travel Holdings

e) Sample of airport groups – BAA, Fraport, AeroPorti de Roma, Unique Zurich, Kobenhavns Lufthavne (Copenhagen), Schipol Group, Flughafen Vien

1.3 The aftermath of September 11th

The terrorist attacks in the USA caused a number of short and medium term impacts on the European aviation industry.

First of all, US airspace was closed in the immediate aftermath of the attacks, and was not opened for four days. During this period, no flights from Europe to USA could operate, leading to a loss of revenue for airlines and airports in Europe.

When flights resumed, there was a dramatic decrease in demand. This was most severe on North Atlantic routes but was significant across all types of routes. The only market segment that did not appear to be badly hit was the low cost sector.

As well as suffering much reduced traffic and revenue levels, the aviation industry also faced additional costs in the form of increased insurance premiums and additional security costs. However, there was some public sector support for the industry [see Section 1.3.3].

1.3.1 Impact on traffic

Traffic levels declined markedly in September 2001 (19 days impact of September 11th events), but not surprisingly, worsened further in October and November. There was some improvement in December. Full service airlines shouldered the majority of traffic losses, with long haul routes being hit particularly hard. Europe's airports also suffered a similar pattern of traffic losses.

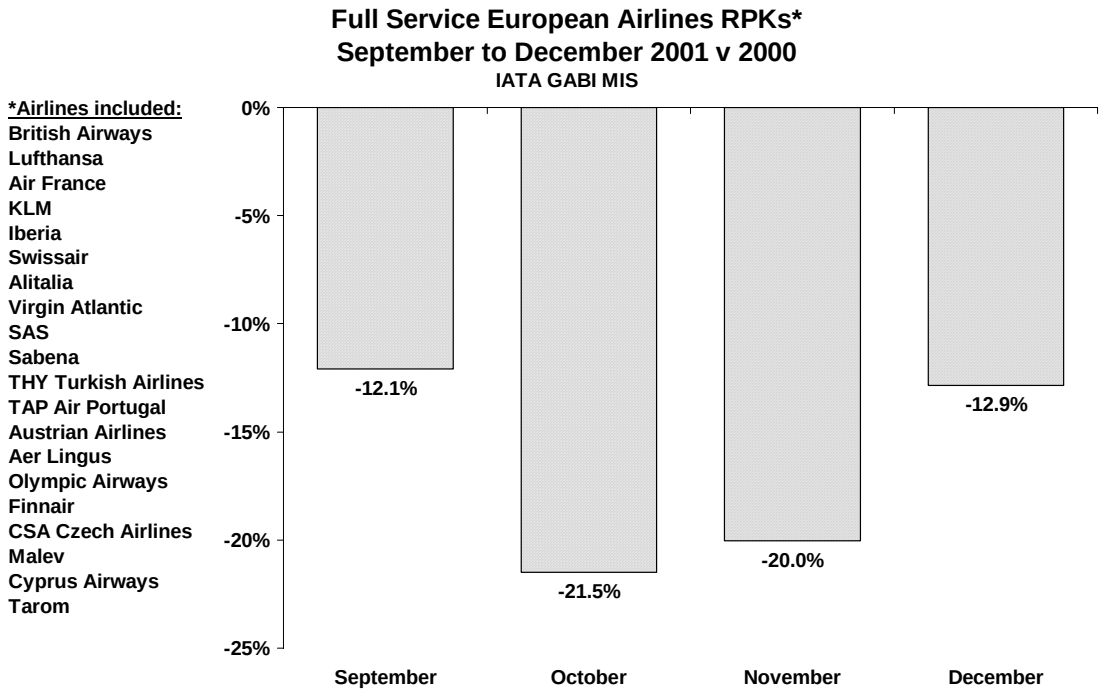

Figure 2

1.3.2 Action taken by the industry

The airline industry response to the crisis facing them post September 11th was centred on withdrawing aircraft from service, cutting staff numbers and renegotiating contracts with suppliers. There were also a number of actions taken to maximise cash reserves, such as deferring investments and sale of non core businesses.

Accurate figures are difficult to obtain, but it is estimated that AEA members withdrew around 130 aircraft from service, which equates to circa 6% of the aircraft fleet.[2]

The North Atlantic market was the main focus for airline cut backs. By November 2001, around 140 daily services, operated by both US and European airlines, had been cut from planned levels (approaching 20% of all North Atlantic frequencies)[3].

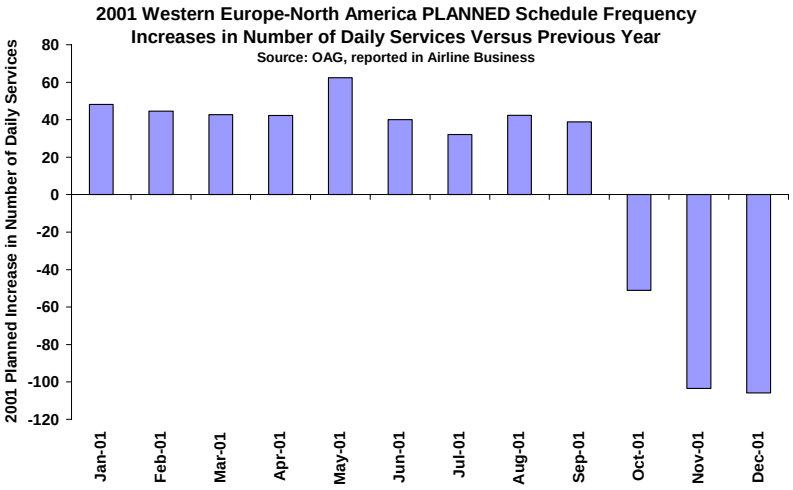

Figure 3

In the months following September 11th, the European Union's surviving flag carriers announced job cuts of circa 25,000 employees. Air France and Finnair were notable as the only major carriers who did not announce job losses. AEA estimated that the traffic losses could lead to as many as 50,000 job losses within their member airlines.[4]

Other parts of the airline sector were also hit. Non flag carriers such as Virgin Atlantic, BMI British Midland and Braathens were not immune from personnel reductions. The charter sector was also impacted, with substantial job cuts reported by Thomas Cook and Air 2000.

Finally, job losses were also experienced at suppliers to the aviation industry. For example, manufacturers Airbus and Rolls Royce trimmed their work force post Sept 11th, while ground handler Aviance axed more than 700 staff.

The only parts of the aviation sector that did not appear to suffer radical cost cutting were Europe's airports and its low cost airlines.

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[2] AEA Yearbook 2002

[3] In November 2001, 103 North Atlantic daily services had been cut compared to November 2000. Prior to Sept 11th, 2001 frequencies were outstripping 2000 frequencies by around 40 per day.

[4] AEA Yearbook 2002

1.3.3 Action taken by European governments

There were various forms of support for the aviation industry from European states and the European Commission. These included a mix of financial and other measures.

The European Commission agreed to allow EU member states to provide the following forms of financial assistance:

- Provision of "last resort" insurance following the withdrawal of cover by commercial insurance companies, including an allowance for some short term waiving of insurance premium charges. This scheme was initially approved for one month but was subsequently extended.
- Compensation to airlines for the four days that US Airspace was closed, subject to complying with strict criteria as to how the compensation amount was to be calculated.
- An emergency €125m Belgian government loan to Sabena.

In addition to the financial measures, the European Commission agreed to calls by major airlines to extend to one year the period that slots could be unused before being reallocated. This move was opposed by some low cost carriers looking for new slots.

Although the above measures were agreed by the Commission, other forms of state aid were firmly opposed. It was reported that a discussed package of assistance for Aer Lingus from the Irish government faced a potential veto from the European Commission. Ultimately, no such package was put forward.

The European Commission expressed their view that many of the airlines facing financial difficulties were already in trouble prior to September 11th. Rather than rescuing failing airlines, consolidation in the sector was to be encouraged.

The European Commission also urged the US government to prevent American carriers from using the US$5bn aid provided by Washington to reduce transatlantic fares.

1.3.4 Impact on profitability

The latter half of 2001 saw some catastrophic financial results from Europe's full service scheduled airline sector.

The third quarter of 2001 contained only 19 days of post September 11th performance. Nevertheless, in Q3 AEA airlines made losses of US$234m. This compares to a US$857m profit in Q3 2000 – a decline of US$1.1 billion.

The results for the final quarter were even worse. AEA airlines lost a record US$1.4bn, almost five times the loss recorded in the final quarter 2000.

The charter sector also suffered vastly reduced financial returns post September 11th. There was a massive decline in profits for the second half year for the sample of companies examined.

Airport groups also saw a decline in profitability in the latter half of 2001 (compared to equivalent period in 2000). However, while the drop in profitability was marked, it was not on the same scale as the declines suffered by both the full service scheduled and charter sectors. Meanwhile the airport sector remained in profit for the period.

The most remarkable aspect of the 2nd half year results was the increase in profitability posted by low cost carriers. Combined profits for the carriers sampled increased by a factor of six versus the equivalent period in 2000. The low cost sector almost appeared to thrive on the wider difficulties in the industry.

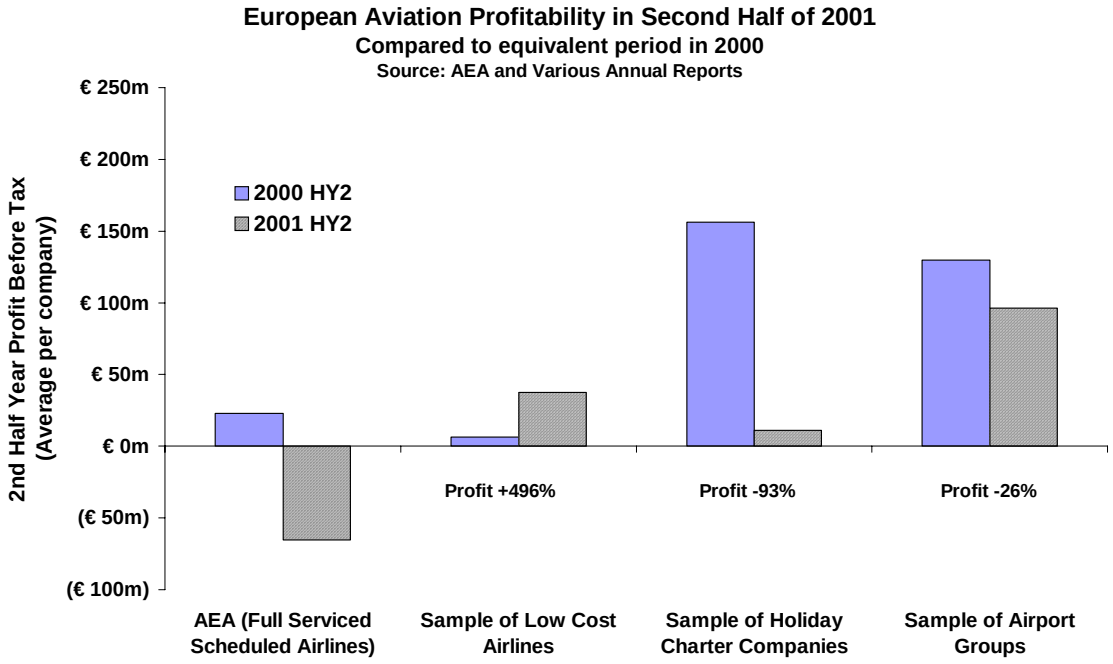


Figure 4

1.4 Financial failure of airlines[5]

1.4.1 Context

2001 was notable for the failure of two major, well-established flag carriers. Both Swissair and Sabena were grounded shortly after September 11th, before rescue packages enabled their regional subsidiary airlines to take over some of the parent company flying.

In both cases, the airlines were in severe financial difficulty for some time prior to the aviation downturn experienced post September 11th.

In fact, the events that led to the financial failure of the airlines were closely linked. Swissair's parent group, SAirGroup owned 49% of Sabena, and had at one stage committed to increase this stake to 85%.

SAirGroup's financial difficulties have been generally attributed to their thwarted ambitions to develop into the "fourth force" in Europe. Historically, the core Swissair airline division and non-airline subsidiaries such as Swissotel and Gate Gourmet air caterers had been profitable.

However, Swissair lacked the scale of the European giants Lufthansa, British Airways and Air France. With a population of just 7 million, Switzerland's market is generally considered too small to support a "major" airline. Therefore, SAirGroup embarked on an ambitious programme to add scale through acquisition of 2nd tier airlines.

To this end, SAirGroup bought stakes in Sabena, LOT Polish Airlines and French airlines AOM, Air Littoral and Air Liberte.

Initially, Sabena seemed to thrive under the influence of Swiss managers, achieving its first ever profit in 1998. However, profits quickly turned into losses following aggressive expansion designed to develop Brussels into a hub airport. Like Swissair, Sabena arguably lacked a home market of sufficient size to justify such expansion. The airline struggled to gain concessions from its workforce as it looked to improve its financial situation by cutting costs.

Even bigger problems occurred as SAirGroup began merging the operations of the three French airlines. In 2000, a combined loss of more than two billion French francs was recorded.

Amongst mounting financial difficulties, in December 2000 the Board of Directors abandoned the strategy to build the "fourth power in Europe". The CEO Philippe Bruggisser was relieved of his duties in January 2001.

1.4.2 Lead up to the financial failure of Swissair and Sabena

At the start of 2001, Sabena required a capital injection as it faced financial crisis. Despite suffering from its own financial problems, SAirGroup joined the Belgian government in committing to recapitalise Sabena, with cash injections of €150m and €100m respectively. Simultaneously, SAirGroup signed an agreement with the Belgium government to increase its stake in Sabena to 85%.

The early part of 2001 saw numerous personnel changes in the team running SAirGroup. Mario A. Corti assumed the office of President and Chairman of the Board of Directors, but 9 out of 10 board directors resigned, and the Group Financial Officer was later relieved of his duties.

[5] Source material for this section is the UK Financial Times and Air Transport Intelligence

In April 2001, the SAirGroup announced a consolidated net loss of CHF 2,885 million for the year 2000. Shareholders were informed that Credit Suisse, Deutsche Bank and Citibank had committed to a CHF 1 billion credit line.

Increasingly, the group tried to extract themselves from their French and Belgium airline investments. However, this proved difficult as open ended commitments had been given and the exit costs were high.

In order to improve the overall group liquidity, at the end of August 2001 SAirGroup announced plans to sell non-airline subsidiaries Swissport and Nuance.

1.4.3 Collapse following September 11th

The severe downturn post September 11th 2001 exacerbated an already fragile financial position. Commenting shortly after September 11th, Swissair chairman Mario Corti said "*The recovery path we had outlined before September 11th was narrow and feasible…the relatively thin margin of safety has dwindled to minimal levels*".

On October 1st, Swissair filed for bankruptcy / creditor protection. Flights were grounded for two days before some services resumed following an emergency cash injection from the Swiss government. After a couple of weeks of negotiations, the Swiss government and Swiss businesses agreed a joint rescue package for Crossair, Swissair's regional subsidiary. Route rights were transferred to Crossair while the rest of the Swissair was allowed to die. Crossair was re-branded as SWISS in early 2002.

Meanwhile, a similar pattern of events followed at Sabena. Following their filing for creditor protection, Swissair failed to pay their share of an agreed capital injection into Sabena. The Belgian government stepped in to provide an emergency loan which was subsequently approved by the European Commission.

However, in early November Sabena's fleet was grounded ahead of filing for creditor protection. As in Switzerland, a joint government and business rescue plan was formulated around DAT, Sabena's regional subsidiary. DAT took over a proportion of Sabena's most profitable routes and became the new Belgium national airline. In early 2002, DAT was re-branded as SN Brussels Airlines.

By the end, the airline had accumulated $2b debt. Sabena's chairman Fred Chaffart[6] blamed "*Swissair's aggressive expansion policy, its sudden 2001 reversal followed by non-payment of a contractually agreed capital increase [60% of a total of €430 million], wild-cat strikes and the aviation industry crisis*" as key factors that contributed to Sabena's demise.

[6] Air Transport Intelligence

Section 2
Capacity and Traffic

Contents

2.1 Introduction and Summary

This section focuses on overall traffic and capacity trends for the European aviation sector. It begins by examining European traffic in relation to global aviation developments. This is followed by an investigation of key trends at a Europe wide level before looking in more detail at traffic performance of individual countries and individual city pairings.

Later sections of the report analyse the impact on different sectors of European aviation, examining individual companies.

Highlights from this section are summarised below:

- The first 9 months of the year saw flat passenger growth in Europe, followed by extremely large year on year declines in the last quarter. However, Europe was less affected post September 11th than the North American region.
- Of the different route areas from Europe, traffic across the North Atlantic was the most badly hit.
- Only three EEA countries started 2002 with more passenger capacity than at the start of 2001 – Portugal, Ireland and Luxembourg. The countries whose scheduled capacity declined furthest were Iceland, Switzerland, Belgium and Greece (with 15%+ declines in all cases).
- EU candidate countries experienced greater capacity cuts than the EU itself.
- 532 city pairs flown from the EEA, Switzerland and EU candidate countries were lost between January 2001 and January 2002, including some previously major North Atlantic routes. US carriers tended to cut back on the North Atlantic more than their European counterparts.
- Barcelona-Madrid became Europe's busiest route (in terms of capacity). Low cost airlines developed a number of new markets but there were drastic cuts in services from Paris to Marseille, Nice, and London.

2.2 The Global Context

2.2.1 Overview

2001 was a very challenging year for the global aviation industry. For the first time in over a decade, international passenger traffic experienced negative growth.

IATA members[1] saw their international passenger traffic shrink by 2.2% compared to the year 2000. This was driven primarily by the combined impacts of the global economic slowdown and the loss of passenger confidence after the September 11th terrorist attacks.

During 2001, world GDP growth slowed to 2.2% (compared to 2.5% the previous year). There are well established correlations between economic growth and the growth of the aviation industry, illustrated in the chart below.

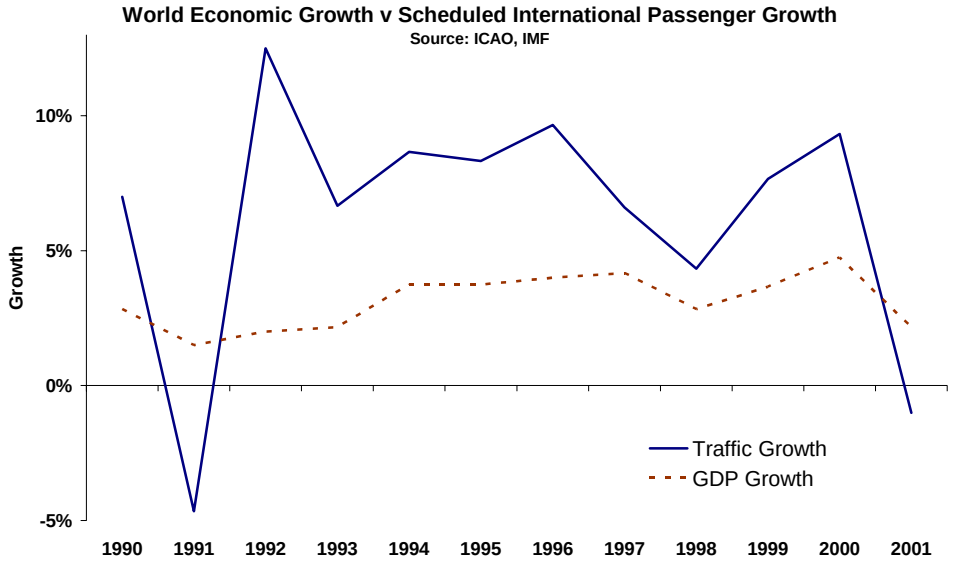


Figure 1

While global airline traffic was already under pressure from broader economic factors, the terrorist attacks of September 11th had a devastating effect on passenger confidence. As with the Gulf War in 1991, traffic fell away immediately, showing little sign of a substantial recovery before the year end.

[1] IATA (International Air Transport Association) is an industry association containing approximately 280 airlines. Flights by these airlines comprise more than 95 percent of all international scheduled air traffic.

2.2.2 European traffic within a global context

Passengers starting or ending their journey within Europe accounted for circa 30% of all global passengers in 2001. More than two-thirds of these passengers were intra-Europe i.e. start and end their flight in Europe.

Europe's share on international traffic, at circa 57%, is much higher than for all traffic. This is due to the huge USA domestic market share of all global traffic.

Major Traffic Flows in Regions and to/from Europe – 2001
Total Scheduled Passenger Flows as a Percentage of IATA Total Scheduled Passengers
IATA WATS[2]

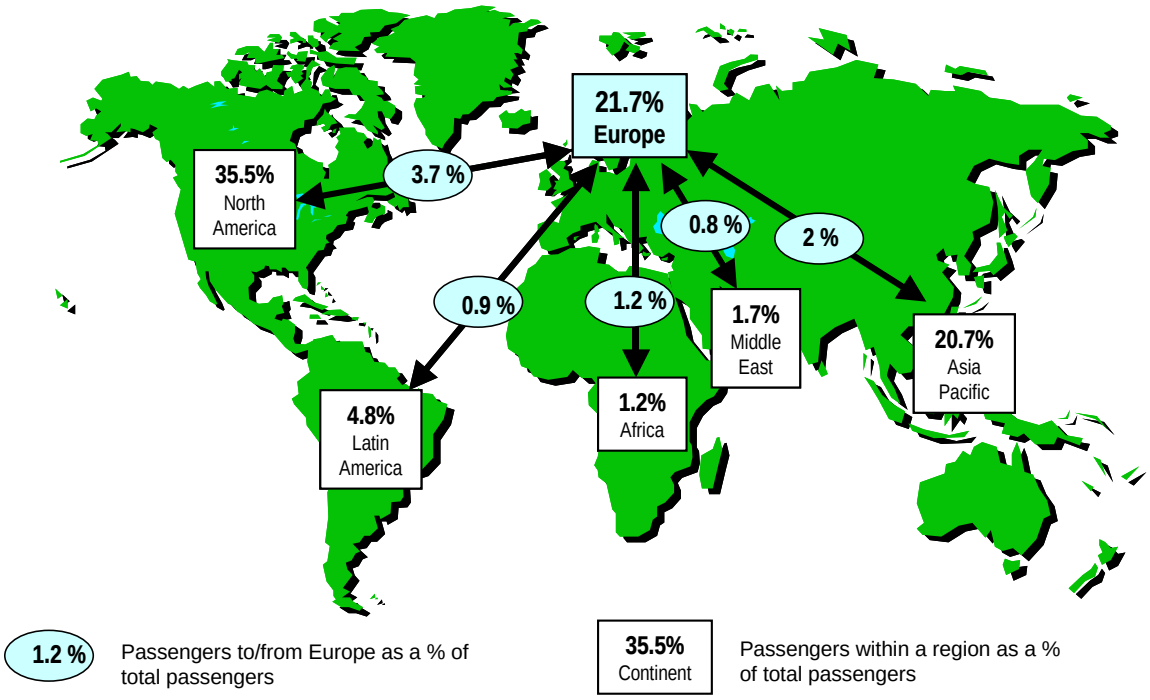


Figure 2

[2] IATA WATS 46th Edition Published 2002 - data from Page 34 – Regional Traffic Flow Statistics. Based on data from 190 airlines who report data for the IATA WATS Regional Flow Statistics. (Does not include Aeroflot Russian Airlines)

2.2.3 Pre and post September 11th trends

For the global industry as a whole, there was minimal growth in international traffic prior to September 11th. January did see substantial growth. However, from February to August growth was just 2.1%[3] (when compared to the same period in the previous year).

In the last four months of the year, traffic fell dramatically - to well below 2000 levels. There was a partial recovery in November, which strengthened in December. Nevertheless, traffic in December 2001 was still substantially below that of December 2000.

The events of September 11th had a much greater impact on North American traffic than on European traffic. This is not surprising.

Firstly, the terrorist attacks took place within the USA, and there was no equivalent attack on Europe. Secondly, resulting upgrades to airport security had the effect of sharply increasing processing times for American passengers. This was less of a factor in Europe, where many of the new security measures introduced in the USA were already present.

Nevertheless, Europe did suffer a very large decrease in passenger numbers.

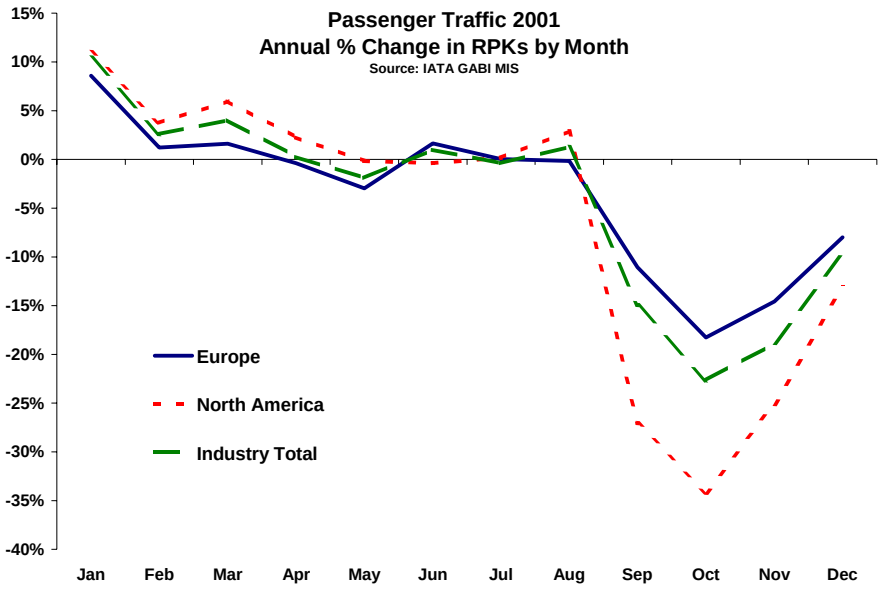


Figure 3

[3] IATA WATS 46th Edition Published 2002

2.3 European Capacity Trends

2.3.1 Europe as a whole

European aviation capacity has expanded steadily over the course of the last decade, with some notable interruptions caused by a combination of economic and political developments.

Following the previous Gulf War, capacity was cutback sharply in 1991. There was also a major reduction in the year 2001.

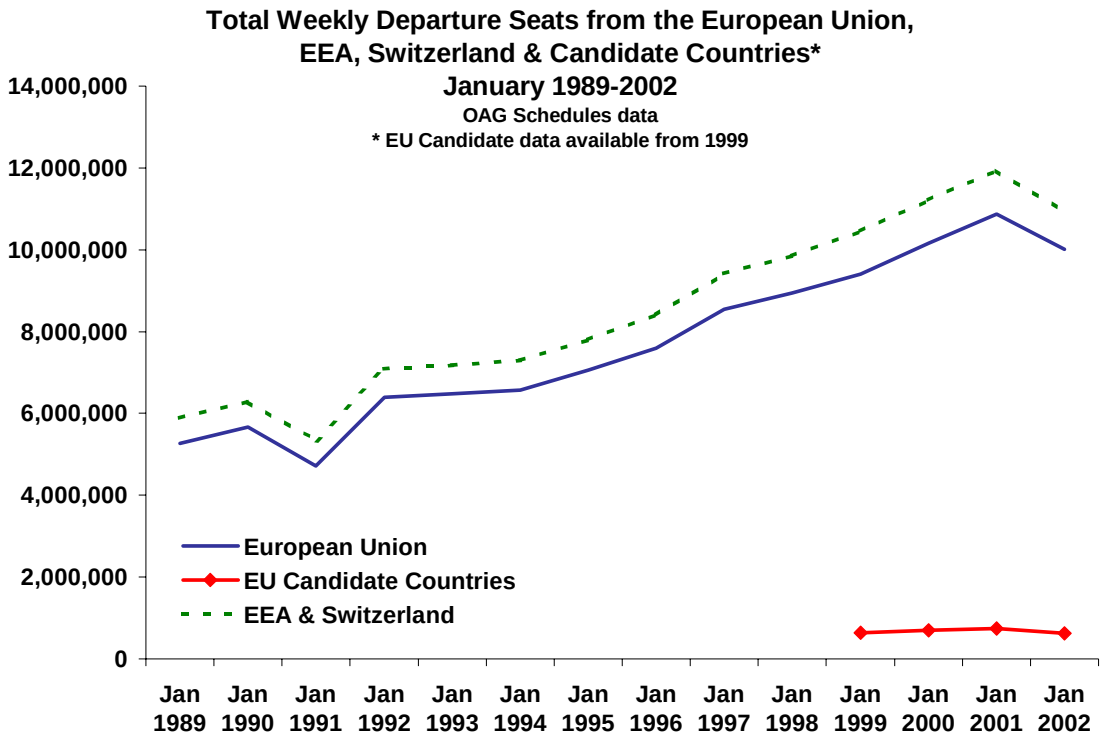


Figure 4

From January 1989 to January 2001, total available capacity for flights departing from the EEA and Switzerland grew by an average of 5.5% per year. Between January 2001 and January 2002, capacity decreased by 8.5%. This had the effect of lowering the annual compound growth rate to 4.9%.

From January 1999 to January 2001, available capacity departing from the European Union candidate countries grew by an average of 8.2% per year. However, this was followed by a decline of 16.2% between January 2001 and January 2002.

2.3.2 Breakdown of Europe's capacity

Historical Context

The different types of European traffic have experienced different rates of growth. Over the last 10 or so years, the previously immature markets of Asia and Latin America had seen the fastest growth rates. Note that traffic growth from the European Union countries as a whole was almost identical to growth from the EEA and Switzerland outlined in the chart below.

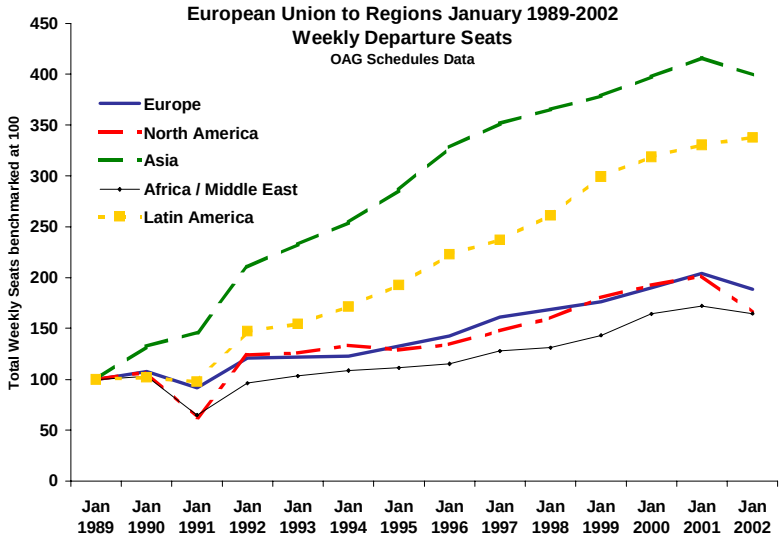


Figure 5

2001 v 2000 – European Union

Capacity from Europe to all destination regions (except Latin America) had fallen by the end of 2001[4]. Capacity to North America was most badly affected, with a massive 19% drop. Intra-European capacity was also markedly impacted.

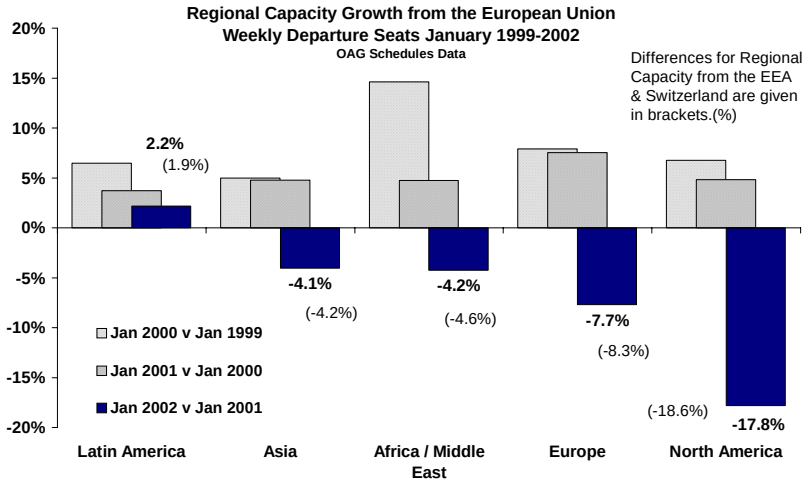


Figure 6

[4] Jan 2002 schedules are being used as a proxy for the end of 2001

North American services were particularly affected as some US consumers lost confidence in flying or visiting abroad. There was also some reluctance from Europeans to visit the USA in the aftermath of September 11th. Finally, businesses in both Europe and USA cut back on discretionary flying in the uncertain economic and political climate.

The traffic losses on the North Atlantic were more substantial than those experienced during the Gulf War in 1991. AEA North Atlantic traffic decreased by 10.8% in 2001 compared to 2000. In contrast, the last Gulf war dip saw passenger traffic fall by 6.3% in 1991 but recover with 13.5% growth in the following year.

The AEA reported that *"The slump in demand which followed September 11 was dramatic. The immediate traffic loss was comparable to the aftermath of the Gulf War in 1991 but the subsequent depression has been much more prolonged"*

Finally, it is worth noting that the rate of capacity growth was slowing prior to 2001 to all destination regions. This indicates a slowdown occurring well before the events of September 11th. However, it should be stressed, capacity growth was positive for all destination regions in 2000.

2001 v 2000 – EU candidate countries

Post September 11th, services cuts at the EU candidate countries were more severe than those experienced in the EEA. In particular, intra-European capacity from candidate countries fell by 16.5% in January 2002, whilst over a quarter of seats to North America were lost. This trend perhaps reflects that some of these markets were at a developmental stage prior to the downturn, and carriers subsequently withdrew to more established markets.

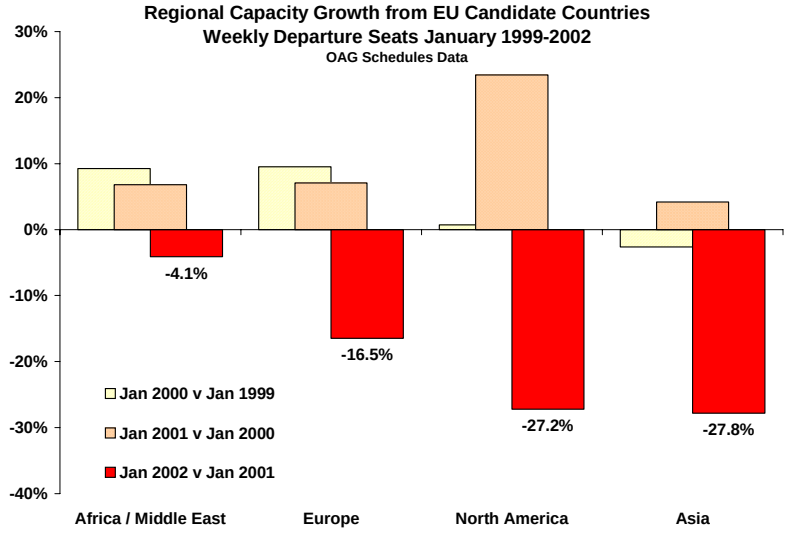


Figure 7

2.4 Focus on key trends at individual country level

2.4.1 Overall market sizes by country

The UK is Europe's largest aviation market, closely followed by Germany. The UK's aviation industry benefits from its island status, as surface modes of travel are more limited than in Germany (for example).

France, Spain and Italy have significantly larger markets than other European countries.

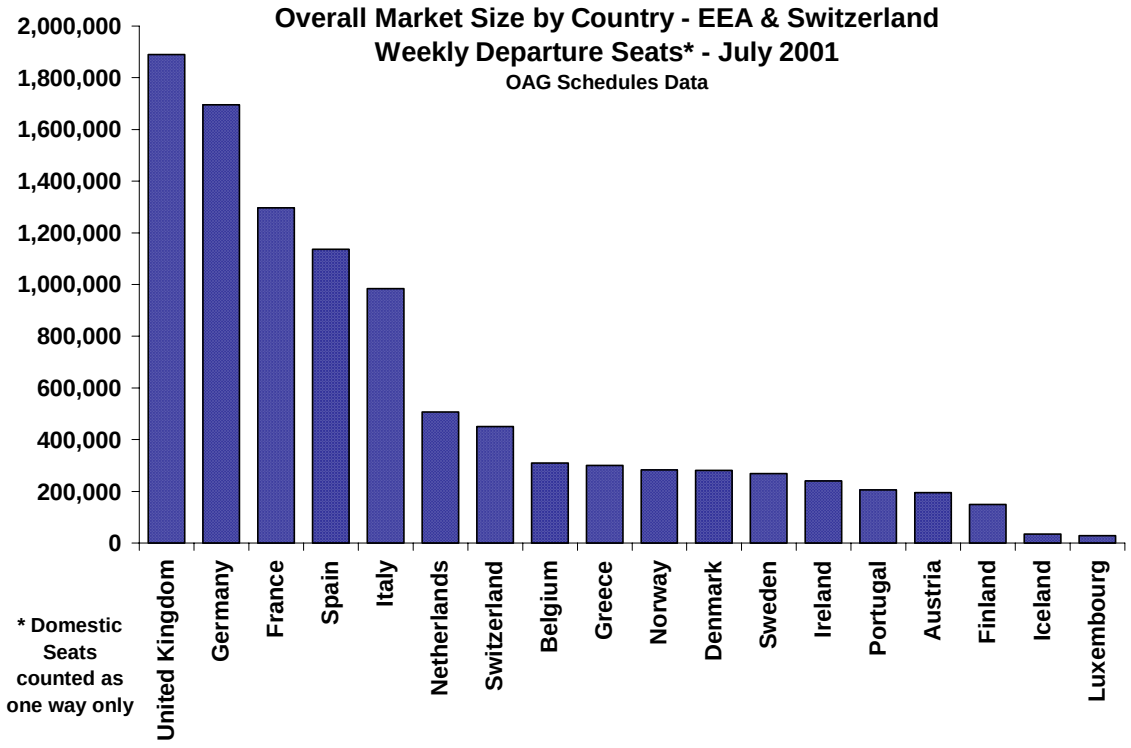


Figure 8[5]

[5] Domestic seats only counted one way to avoid giving undue weight to domestic services – otherwise, seats would be counted at both ends of a route
E.g. a daily international flight from Finland on a 100 seat aircraft would generate 700 departing seats a week. In contrast, the same aircraft operating a daily domestic flight would generate 700 departing seats at both ends of the route = 1400 departing seats for the route in total – therefore, we have divided by two in order to account for domestic services in the same way as international services

Of the 13 EU candidate countries, Turkey has the largest market with 354,000 weekly departure seats. This is a similar size market to Switzerland and Belgium. Of the other candidate countries, only Poland has over 100,000 weekly departure seats.

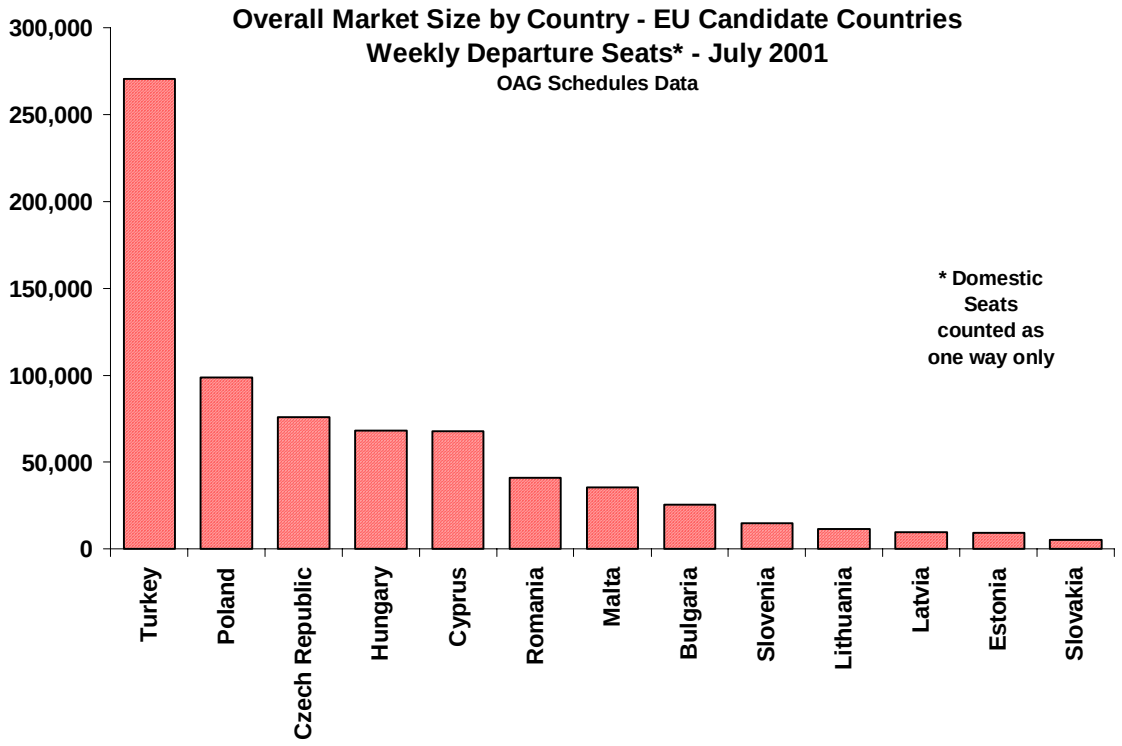


Figure 9

2.4.2 Characteristics of individual markets

The largest European markets tend to have the biggest proportion of intercontinental flights, as local catchment areas are sufficient to support long haul flights.

The exception to this is the Netherlands, where a competitive hub at Schipol generates more intercontinental flying than the size of the Netherlands would normally be expected to support. Of course, due to the size of the Netherlands, there is little need for domestic services.

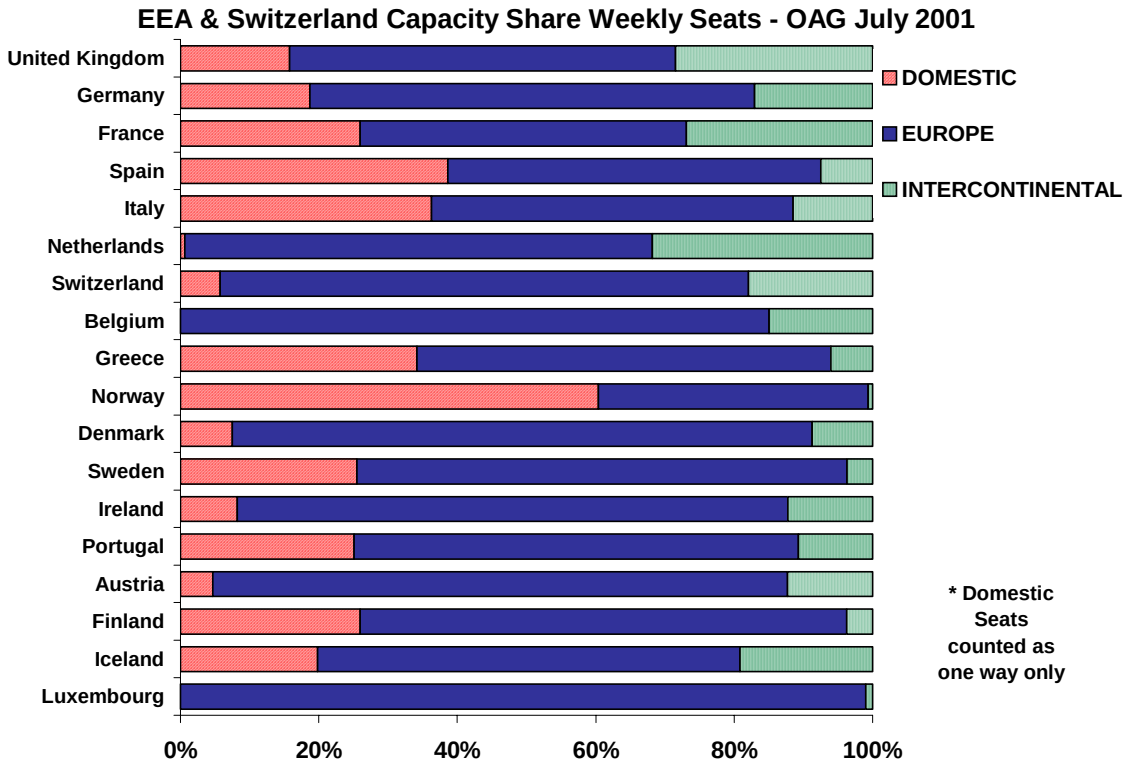


Figure 10

2.4.3 Country % growth 2001 v 2000

The amount of capacity available for individual European countries was examined at two points in the year.

- Mid year point (July 2001 v July 2000)
- End year point (January 2002 v January 2001)

At the mid-point of the year, a number of countries had seen their scheduled capacity decline compared to the previous year, as slowdown in the global economy was experienced. The major markets of Italy, France and Germany all underwent reverses in available capacity. Greater reductions were seen at Norway, Iceland and Austria. However, the biggest capacity decline in the first half of the year was in Switzerland, as struggling Swissair cut back services.

By the end of the year (post September 11th), almost all markets had seen capacity reductions. The exceptions were the relatively small markets of Portugal, Ireland and Luxembourg.

Of the major markets, Germany saw the greatest capacity decline over the course of 2001. Greece, Belgium, and Switzerland all experienced 15%-20% drops in capacity. In all cases, severe financial problems for their flag carriers contributed to this major decline.

The small market of Iceland experienced the biggest percentage decline. A planned 5% cut in Icelandair international services was increased to 18% post September 11th. Icelandair's USA schedule was cut by 32% while the longstanding route to Halifax in Canada was dropped due to high costs and poor revenues.

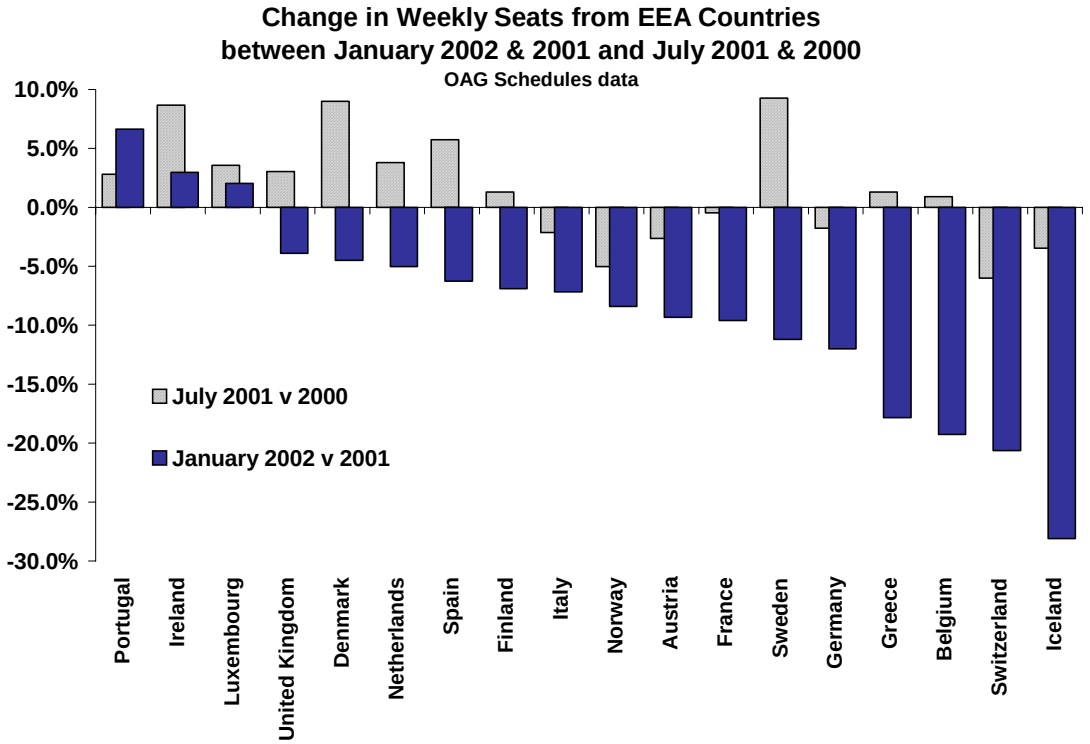


Figure 11

2.4.4 Analysis of capacity from individual EEA & Candidate Countries and Switzerland

Traffic flows from country	Traffic Type	Year on year capacity changes
Austria	Major decreases	Major decreases: Domestic – 4.7%, USA – 32.4%, Switzerland –22.5%, Poland – 17%, Netherlands – 10.8%, Belgium – 10.8%.
	Increases	Notable increases: Czech Republic + 21.4%, Denmark +10.9%,
Belgium	Major decreases	USA – 43.5%, France – 38.6%, Spain – 26.4%, Germany –18.5%, Italy – 12.3%
	Increases	UK +5.3%, Ireland + 5.7%, Switzerland +3.4%
Bulgaria	Major decreases	Domestic –51.6% Austria – 12.6%
	Increases	Germany +12.6%, UK + 10%
Cyprus	Major decreases	Russia – 36.5%, Turkey – 27.6%, Germany – 22.8%, UK – 15.6%
Czech Republic	Major decreases	Switzerland – 12.4%, Netherlands – 7.4%
	Increases	Domestic + 158%, Spain + 138%, Austria + 21.4%, France + 35%, UK + 13.9%
Denmark	Major decreases	Domestic – 11.6%, Sweden – 7.9%, UK – 6.6%, Switzerland – 19.7%, Belgium – 15.8%
	Increases	France + 11.7%, Netherlands + 12.3%, Finland + 10.7%, Norway + 9.4%, USA +7.7%
Estonia	Major decreases	Sweden – 27.5%
Finland	Major decreases	Domestic - 8%, UK – 30.5%, France – 27.4%, Germany – 16%
	Increases	Denmark +9%, Russia +15.1%, Spain + 15.6%
France	Major decreases	Drop in capacity on most major routes Domestic –12.6%, UK – 13.8%, Germany – 13.8%, Italy –11.9%, USA –23.8%,
	Almost Stable	Spain –0.8%, Netherlands +0.3%, Austria –0.5%, Singapore 0%
	Increases	Notable increases included Algeria +8.2%, Denmark +12%, Portugal+20.4%., Thailand +20.9%
Germany	Major decreases	Major decreases to all major markets: Domestic – 11.5%, Spain –12.4%, UK –18.2%, France –13.8%, Italy – 9.5%, USA – 24%, Switzerland –15.1%, Sweden –23%. Major additional decreases included Turkey – 34.7%, Poland – 33.4%.
	Increases	Only notable increases in capacity to Egypt +14.5%, South Africa +20.4%, Hong Kong + 11.6%.Thailand +2.9%
Greece	Major decreases	Domestic –19.2%, Germany – 6.2%, Italy –25%, UK – 20.7%, France – 14.5%, Turkey –25%, US – 47.4%
	Increases	Netherlands +31.6%
Hungary	Major decreases	Switzerland – 44%, Poland – 38.8%, Germany – 20.8%, UK – 11.4%
	Increases	Italy +28.8%
Iceland	Major decreases	Domestic – 33.8%, USA – 35.7%, UK– 17.6
Ireland	Major decreases	The United States –17%
	Increases	Germany + 19.4%, Spain + 19.5%, Italy + 61.7%, France +4.1%, UK +4.1%
Italy	Major decreases	France – 12.1%, Germany – 9.7%, GB – 16.1%, USA – 35.7%, Switzerland – 48.4%, Greece – 23.9%.
	Small decrease	Domestic traffic -2%.
	Increases	Small increases for Thailand +8.7%, Portugal+2%.
Latvia	Increases	Sweden + 33.6%, Czech republic +49.2%, Finland + 12.3%, Denmark + 13.9%

Traffic flows from country	Traffic Type	Year on year capacity changes
Lithuania	Major decreases	Germany – 18.3%
	Increases	Finland +25.8%, Denmark + 11.3%
Luxembourg	Increases	France + 36.3%, Spain + 24.7%
	Small decrease	Netherlands –4.8%
Malta	Small decreases	UK – 5.9%, Italy – 4.1%
Netherlands	Major decreases	Drop in capacity on most major routes: USA – 12.4%, Germany –10.9%, Norway – 10.5%, Sweden – 18.4%, Austria – 11%. Other decreases: Canada –29%, Singapore –25.7%
	Increases	Notable increases included Greece + 31.6%, Spain +31.6%, Denmark +12.8%
Norway	Major decreases	Domestic – 8.6%, Sweden – 22.3%, Germany – 19.4%, UK – 13.8%, Netherlands – 10.5%
	Increases	Notable increases: Spain 154%, France 14.2%, Denmark 13.4%
Poland	Major Decreases	USA –31.2%, Germany – 33.4%, UK –18.9%, Austria – 17.4%, France - 10.1%
	Increases	Domestic + 6.6%, Ukraine + 54.1%, Czech Republic + 29.3%
Portugal	Major decreases	Switzerland –31%, Belgium – 36%
	Almost stable	Germany, Italy + 1.6%, USA –1.9%
	Increases	Domestic +19.4%, France + 20.4%, Notable increases: Cape Verde +42.6%, Venezuela +33.8%
Romania	Major decreases	Netherlands – 19.9%, France – 10.4%, Domestic – 8.3%
	Increases	Italy +28.8%, Germany + 19.8%
Slovakia	Increases	Domestic + 92%, Czech Republic + 8%
Slovenia	Increases	Yugoslavia + 21.8%, Germany + 13.1%
Spain	Major decreases	Domestic – 5.8%, Germany – 12.5%, GB – 6.9%, USA – 28.9%,
	Small decrease	France –1.4%, Portugal –2%
	Increases	Small increases Netherlands +8.2%, Venezuela 121%, Argentina +20.7%
Sweden	Major decreases	Domestic –9.5%, Denmark – 7.7%, UK – 4.3%, Norway – 21.4%, Germany – 22.9%, Netherlands –18.6%, France –5.5%, US – 42.7%
Switzerland	Major decreases	Drop in capacity on most major routes: Domestic 35.8%, USA – 28.9%, Spain – 20.6%, France – 20.6%, Germany – 14.8%, UK – 9.4%
	Increases	Belgium + 4.5%
Turkey	Major decreases	Drop in capacity on most major routes: Domestic –29.2%, USA – 39.3%, Germany – 35.9%, UK - 24.3%, Cyprus - 31.8%, France – 32.4%, Switzerland – 45%, Netherlands – 39.3%
	Increases	Sweden + 33.6%, Czech republic +49.2%, Finland + 12.3%, Denmark + 13.9%
UK	Major decreases	The United States –9.3%, Germany –18.2%, France –7%, Spain –6.8%, Italy –16.7%, Switzerland – 9.3%, Norway – 13.3%United Arab Emirates – 10.5%, Japan –3.8%, Israel –22.7%, Greece –20.7%, Turkey – 28%, Finland – 30.5%.
	Almost stable	Domestic increased slightly at +2.9% kept up by the proliferation of low cost carriers and rail accidents.
	Increases	Ireland +3.7%, Netherlands +2.2%, Belgium + 4.3%, Singapore +3.4%, Portugal +5%, Hong Kong +8.2%, Czech Republic 13.9%, Pakistan +4.1%, Nigeria + 85.8%,.

Figure 12

2.5 Focus on key trends at city pair level

2.5.1 Development of city pairs served from Europe

Introduction

2001 was an exceptional year in the aviation industry. Analysis of new and terminated city pair markets is complicated by the effects of September 11th. Ideally, a basic overall analysis would involve a comparison of the position during a period in 2001 against the same period in 2000. This section will compare July 2001 with July 2000 to give an overall view of the situation before September 11th. We then use data from January 2002 to show the impact of September 11th.

Long term context

Since 1992, the number of international city pairs operated within the EEA and Switzerland had increased from 875 to 1,486 city pairs. This equates to an average annual increase of 5.7%.

This growth in city pairs has been assisted by increased liberalisation within Europe, the growth of low cost airlines and the use of smaller regional jets.

Intercontinental routes also increased but at a slower rate.

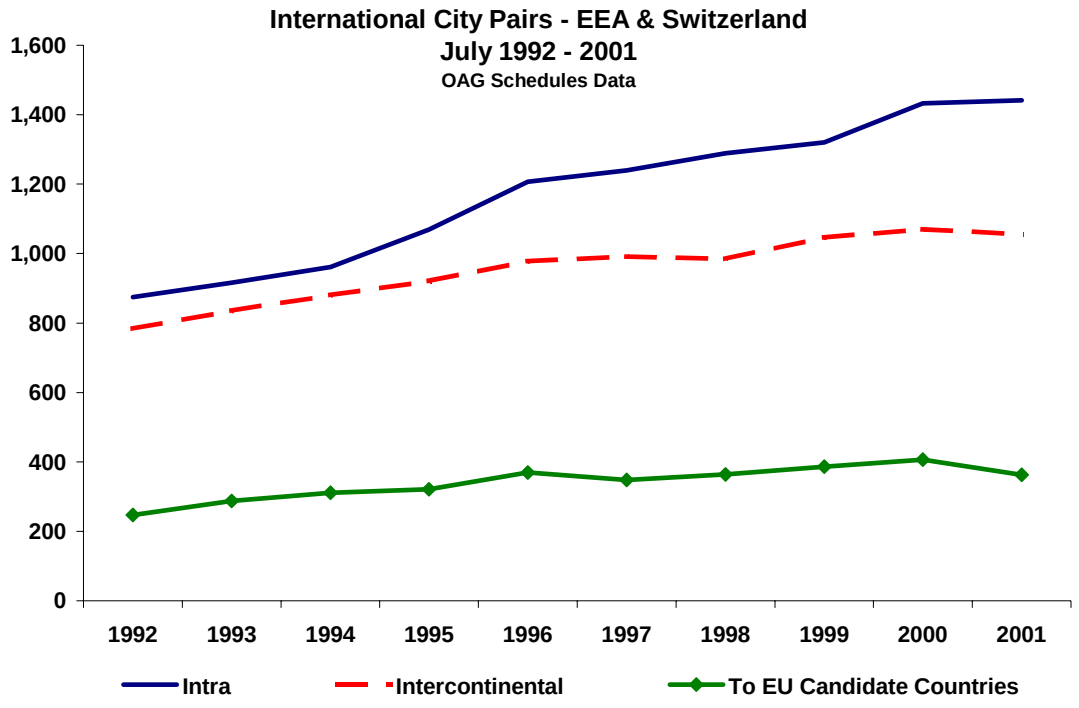


Figure 13

Short term trend

Prior to September 11th, routes had been lost for both intra-Europe (international and domestic) and intercontinental services. However, with the exception of domestic services, the cuts were smaller than the growth in destinations posted the previous year.

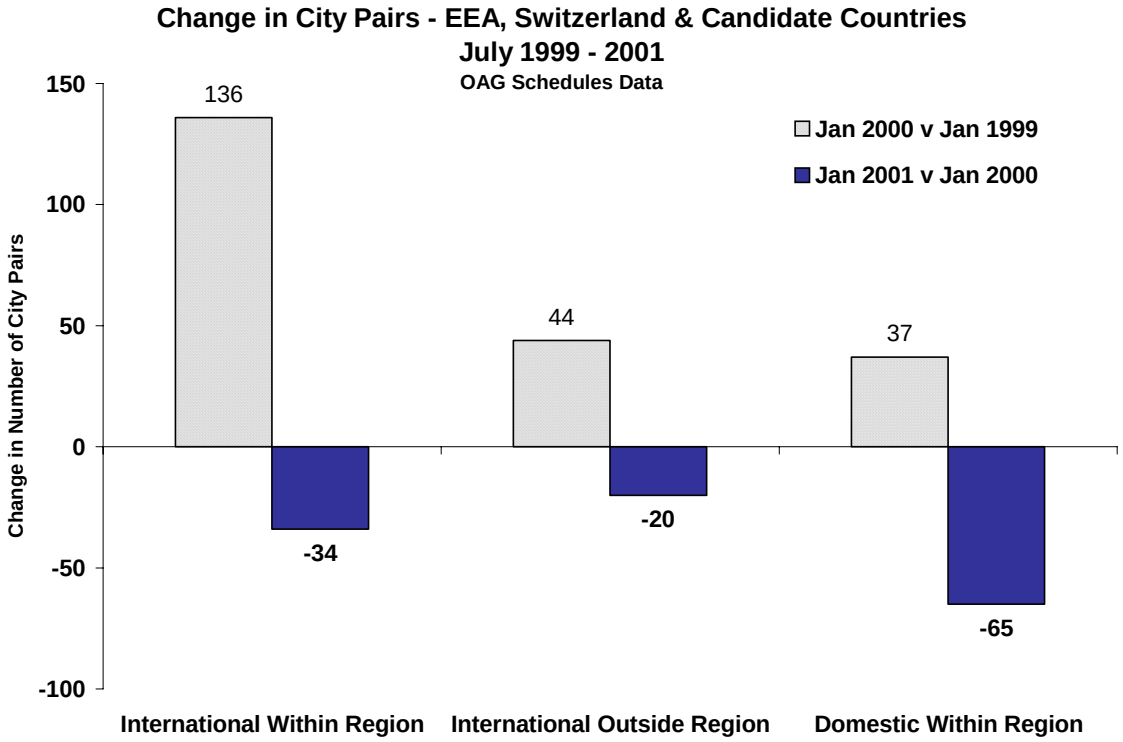


Figure 14

2.5.2 Analysis of major city pair flows

Major domestic EEA city pairs tend to have the highest frequencies per week. Barcelona– Madrid overtook London – Dublin to become the busiest city pair served by scheduled aircraft.

Of the top twenty city pairs, London to Belfast, Edinburgh and Glasgow experienced the most dramatic year on year growth of 27%, 21% and 18% respectively. This was primarily due to the impact of the low cost carriers Go and easyJet.

French domestic sectors Paris to Marseilles and Paris to Nice experienced reduced frequencies of –31.4% and –13.5% due to difficulties experienced by AOM/Air Liberte and the start of new high speed train services.

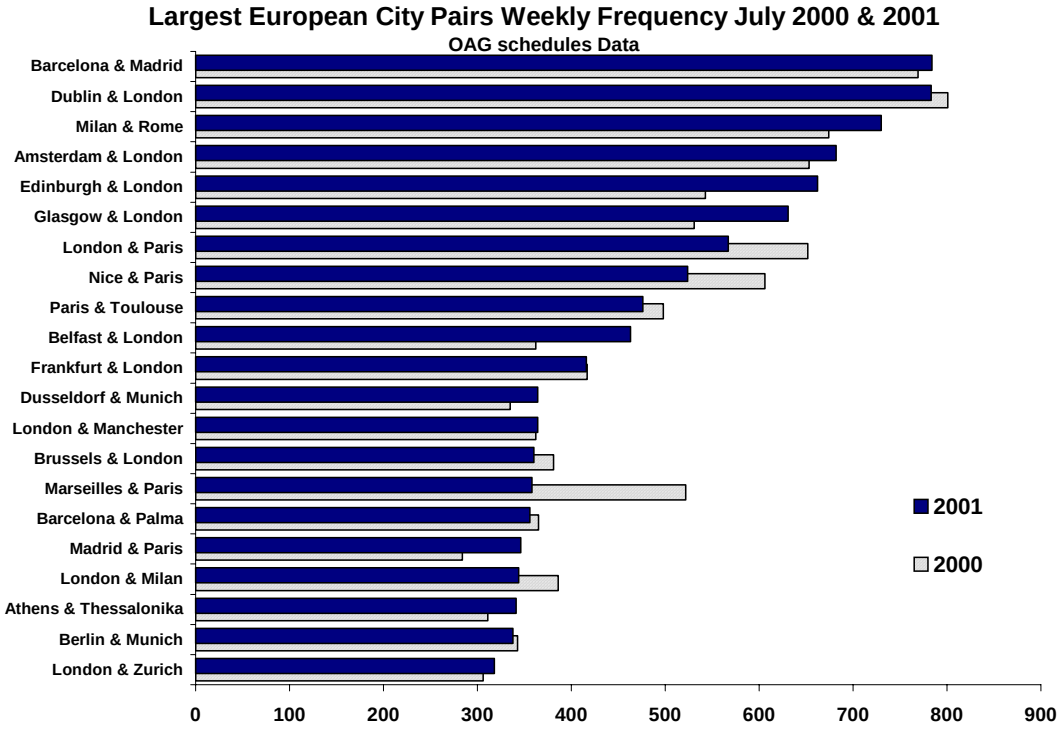


Figure 15

Outside the top 20 city pairs, some of the biggest frequency changes were:

- Rome – Catania +50.5% (198 to 298 frequencies)
- Madrid – Valencia + 31.3% (211 to 277 frequencies)
- London – Barcelona +26.3% (217 to 274 frequencies)
- London – Munich +24.5% (220 to 274 frequencies)
- Munich – Paris +44.5% (146 to 211 frequencies)
- Milan – Munich + 46.5% (142 to 208 frequencies)
- London – Madrid - 10.9% (330 to 294 frequencies)
- Hamburg – London -26.1% (238 to 176 frequencies)

Routes from EU candidate countries

Routes from the EEA to the EU Candidate countries tend to be relatively small in comparison to the major trunk routes within the EEA. In July 2001, London to Prague was the largest route in terms of frequency. In 2000, Go made Prague the first destination for any low cost airline outside of the European Union. In 2001, British Airways responded by adding a third daily flight, resulting in a 15% increase in frequency.

LOT's alliance with Swissair led to a move to develop Warsaw into a Central European hub. This explains the increased capacity and frequency on a number of Warsaw intra European routes in 2001 - including substantial increases to London, Paris, Vienna, Stockholm, Milan, Dusseldorf and Prague. This approach was also adopted on domestic routes, in particular Krakow, Gdansk and Poznan.

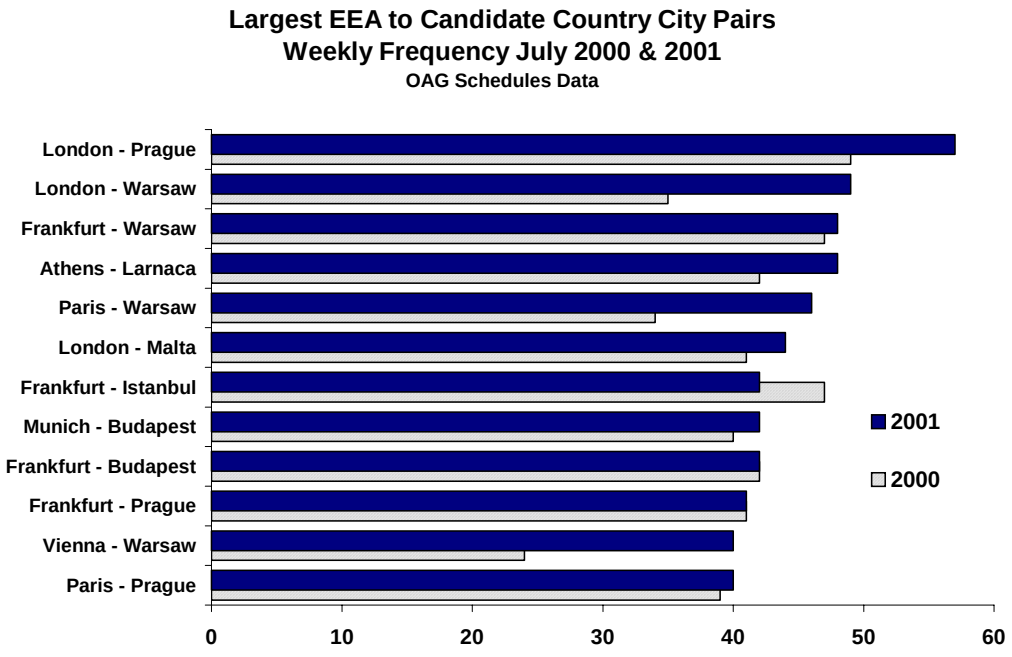


Figure 16

Long haul routes

London-New York was the only long haul route that appeared in the top 20 frequencies. It was by far Europe's busiest long haul city pair. Although July 2000 to July 2001 saw weekly frequencies on this route fall from 426 to 412, by the end of the year a further 78 frequencies were lost as a result of cutbacks after September 11th.

More generally, London was clearly Europe's most important gateway for intercontinental traffic. 12 of the top 21 long haul city pairs departed from London.

Of the long haul destination cities in the top 21, only Montreal and Detroit were not served with most frequency by London. Paris-Montreal had more frequency than London-Montreal, driven by the cultural affinity between France and French speaking Canada. Meanwhile, Amsterdam-Detroit is a major hub-to-hub route for the KLM/Northwest alliance.

North American destinations figured highly in an analysis of Europe's busiest long haul routes. Some Asian / Middle Eastern destinations (Dubai, Singapore, Tokyo, and Hong Kong) also featured. However, no routes to Latin America and only one route to Africa appeared in the top 21.

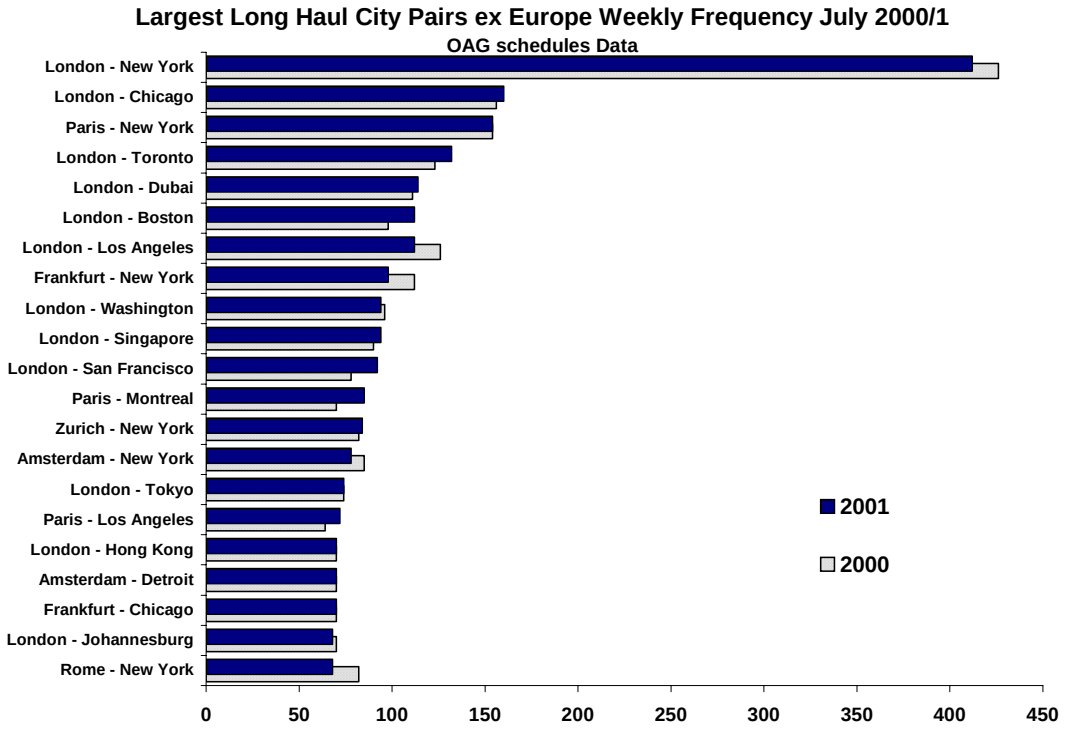


Figure 17

2.5.3 New routes

New Routes by July 2001

In July 2001, there were 441 new city pairs that were not served in July 2000. 18 of these new city pairs were served by two airlines.

The majority of major new routes were to the United States. The most significant new route was Denver-Frankfurt served by alliance partners Lufthansa and United.

Interesting developments involved intercontinental routes served from secondary international airports. These included the introduction of a Lufthansa daily service linking Munich and Los Angeles, the first time the route has been operated on Lufthansa since 1994.

A noteworthy addition to the transatlantic market was bmi British Midland, who started serving Manchester to Washington. Washington was also served for the first time by bmi British Midland's Star Alliance partner SAS from Copenhagen.

Emirates launched a Birmingham-Dubai daily service, increasing their presence in the United Kingdom and exploiting transfer traffic through the Middle East.

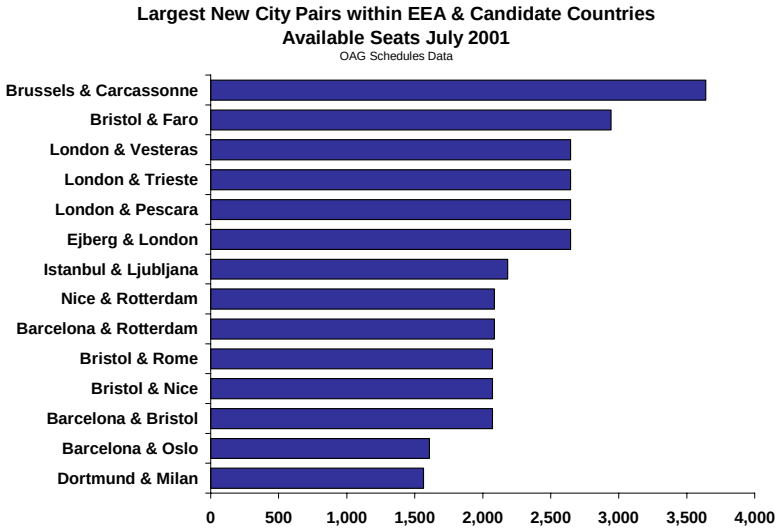


Figure 18

In 2001, the low cost airlines continued to develop new markets, stimulating demand through low fares. They were responsible for many of the new short haul routes found within Europe.

Ryanair began to develop their new base at Brussels Charleroi with a twice daily service to Carcassone, a destination it also served from London Stansted. Other notable new Ryanair routes were from London Stansted to Vesteras (Sweden), Trieste and Pescara (Italy) and Ejberg (Denmark).

Go began operations at their second base, Bristol, with 8 new routes. Faro, Barcelona, Nice and Rome were all new to the wider Go network. Transavia continued to develop Rotterdam as a secondary base with the addition of proven low cost routes to Nice and Barcelona.

One new market commencing within the EU candidate countries was Istanbul to Ljubljana operated by Adria Airways, the first scheduled passenger service between Slovenia and Turkey.

There were 38 new routes between the EEA/Switzerland and the EU Candidate countries, all small. Notable markets were Germany to Bochum and Varna (Bulgaria), with Condor filing weekly schedules from a number of German airports.

New Routes after September 11th

Despite the downturn in the aviation industry, there were 248 new routes added by January 2002 when compared to July 2001. Of these new routes 109 were not served in January 2001 either. Not surprisingly, only two of the new services were on the North Atlantic - a twice weekly LOT service from Warsaw to Toronto and a Malaga to New York service by new entrant carrier Air Plus Comet.

The small number of new intercontinental routes included Frankfurt–Jakarta on Garuda, Brussels-Singapore on Singapore Airlines, Dhaka–London on British Airways, Karachi–London on Pakistan International Airlines, Taipei–Frankfurt on China Airlines and Bangalore–Frankfurt on Lufthansa.

The majority of the new intra European city pair routes were small thin routes with small aircraft of less than 50 seats capacity. The leading low cost airlines tentatively continued to develop new routes. In particular, Amsterdam–Belfast was linked by a direct service again after Air UK had withdrawn from the route in 1999. Other notable additions were the introduction of Air France routes from Clermont Ferrond, once a key airport for Regional Airlines.

New Intra EEA Routes over 1,000 seats
Weekly Frequency & Capacity (both ways) January 2002
OAG Schedules Data

City Pair	Operating Airlines	Frequency	Capacity
Amsterdam - Belfast	easyJet	28	4,144
Malaga - Melilla	Iberia	98	4,060
Forli - London	Ryanair	14	2,646
Helsinki - Milan	Finnair	14	1,988
Clermont-Ferrond - Metz	Air France	48	1,608
Brest - Clermont Ferrond	Air France	24	1,272
Brussels - Clermont Ferrand	Air France	24	1,272
Frankfurt - Genoa	Air Dolimiti	24	1,104
Birmingham - Gothenburg	British Airways	22	1,056

Figure 19

2.5.4 Deleted Routes

Routes deleted by Summer 2001

In July 2001 there were 119 fewer city pairs served than in July 2000, the most significant losses being monopoly routes such as London-Liverpool, Paris-Grenoble, Milan-Bangkok, Marseilles-Zurich, Brussels-Johannesburg, Berlin-Rome and Frankfurt-Manila.

Routes lost after September 11th

1,044 city pairs flown from the EEA, Switzerland and EU Candidate countries lost their services between July 2001 and January 2002. Some of these would be normal seasonal changes and others would have been planned prior to the September 11th. However, many were cut as airlines took action to stem financial losses. 532 city pairs flown in January 2001 were not flown in January 2002.

213 of the deleted city pairs were from the EEA to non European destinations. North Atlantic routes were particularly affected. Many of the routes cut were from secondary European airports such as Munich, Düsseldorf and Barcelona, or to newer US gateways including Charlotte.

Major North Atlantic Routes Terminated after September 11th, 2001
Weekly Frequency & Capacity (both ways) July 2001
OAG Schedules Data

City Pair	Operating Airlines	Frequency	Capacity
Munich - New York	Lufthansa , Delta	28	6,090
Dusseldorf - New York	Lufthansa, Continental	28	5,768
Barcelona - New York	Iberia, Delta	28	5,768
Munich - San Francisco	Lufthansa	14	5,600
Los Angeles - Munich	Lufthansa	14	5,600
Manchester - Orlando	Virgin	12	4,800
Brussels - Montreal	Sabena, Canada 3000, Air Transat	18	4,694
Baltimore - Shannon	Aer Lingus	14	4,578
Chicago - Vienna	Austrian	14	3,822
Munich - Toronto	Air Canada	14	3,808
Detroit - Rome	Northwest	14	3,780
Madrid - Washington	Spanair	14	3,528
New York - Oslo	SAS	14	3,388
Paris - St Louis	TWA	14	3,262
Brussels - Dallas	Sabena	14	3,206
Milan - San Francisco	Alitalia	14	3,192
London - Edmonton	Air Canada, Canada 3000, Air Transat	14	3,068
Birmingham - Chicago	American	14	2,898
Chicago - Rome	American	14	2,898
Paris - San Jose	American	14	2,898
Berlin - Washington	Lufthansa	12	2,880
Charlotte - Frankfurt	US Airways	14	2,842
Charlotte - Paris	US Airways	14	2,842
Paris - Pittsburg	US Airways	14	2,842
Copenhagen - Toronto	Air Canada	14	2,814
Lyons - New York	Delta	14	2,730
Atlanta - Barcelona	Delta	14	2,730
Cleveland - London	Continental	14	2,408
Chicago - Glasgow	American	14	2,310

Figure 20

US carriers, generally in severe financial difficulties, tended to cut back more drastically than their European counterparts. All US majors cut transatlantic routes, while TWA deleted all three of their transatlantic routes (St Louis to Gatwick, St Louis to Paris and New York to Paris). Lufthansa terminated a number of their transatlantic routes from Munich but other leading European airlines maintained their major transatlantic services.

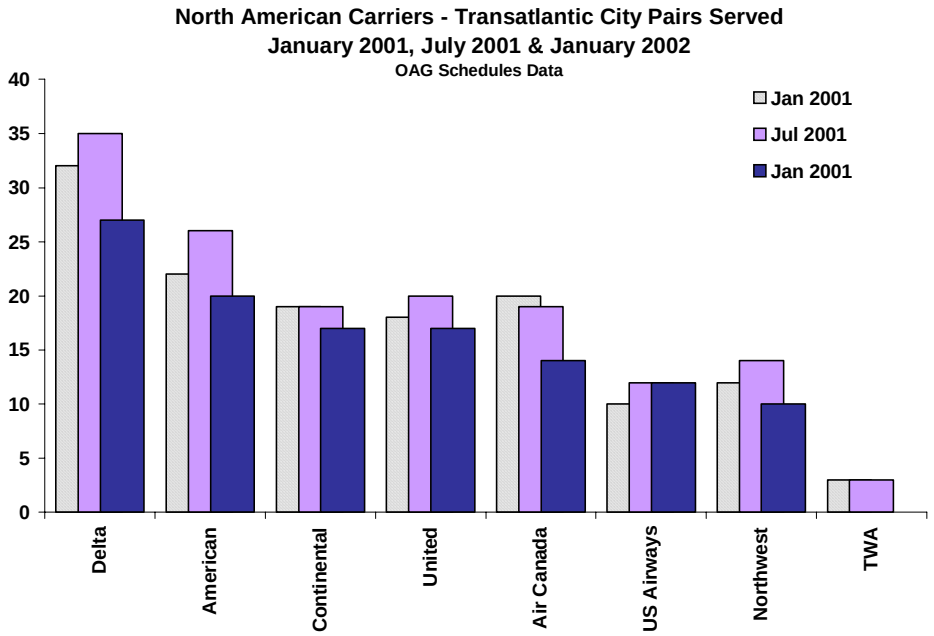


Figure 21

Of the remaining intercontinental city pairs, the major losses were not as pronounced. The exception to this was services lost as a result of the financial crisis experienced by Sabena and Swissair. Lufthansa cut the Frankfurt–Manila and Munich–Sao Paulo services. Both Austrian Airlines and Turkish Airlines cut their services to Osaka and Alitalia cut their Milan–Johannesburg service.

Short haul services were also impacted. Many city pairs only served by struggling airlines such as Swissair, Sabena and Air Littoral disappeared. However, even the expanding low cost airlines showed that they were willing to terminate unprofitable routes. easyJet's three daily services from Liverpool to London Luton and Ryanair's London to Kristianstad and Rimini services were all cut. Eurowings cut 13 city pairs, some of which were monopoly routes.

Significant Intra EEA Routes Terminated by January 2002
Weekly Frequency & Capacity (both ways) January 2001
OAG Schedules Data

City Pair	Operating Airlines	Frequency	Capacity
London - Liverpool	easyJet	42	6,216
Grenoble - Paris	Air France	48	5,232
Frankfurt - Valencia	Lufthansa	26	3,612
London - Nuremburg	Eurowings	34	3,332
Copenhagen - Malmo	Helikopter Service Euroair	269	3,228
Copenhagen - Vesteras	SAS	52	2,768
Belfast - Shannon	Aer Lingus	8	2,616
Amsterdam - Munster	Eurowings	49	2,254
Berlin - Maastricht	KLM Excel	44	2,200
Reykjavik - Vestmannaeyjar	Icelandair	44	2,152
Carcassonne - Toulouse	Air Liberte	34	1,956
Kristianstad - London	Ryanair	14	1,820
London - Rimini	Ryanair	14	1,820
London - Montpelier	Buzz , British Airways	16	1,816
Amsterdam - Padua	Eurowings	35	1,610
Munich - Strasbourg	Lufthansa	32	1,600
Eindhoven - Rotterdam	Trans Travel Airlines	65	1,600

Figure 22

The EU flag carriers had different responses to the aviation downturn. Air France markedly increased the number of routes operated on all types of route. Iberia also posted a small expansion.

However, most carriers cut routes. Alitalia made drastic cut backs to intercontinental flying, while Lufthansa reduced the number of city pairs served across the board.

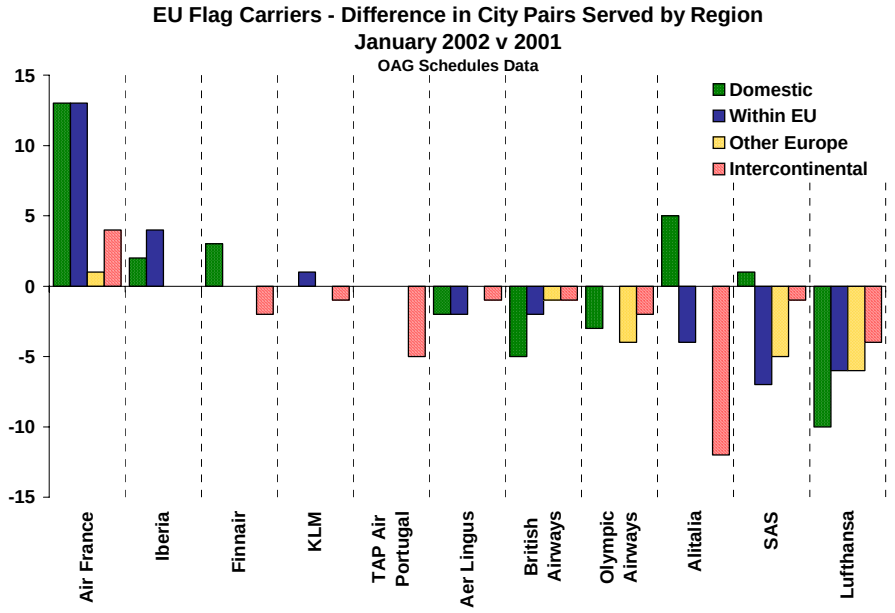


Figure 23

Top Carriers - Changes in Numbers of Destinations Served
January 2002v 2001
OAG Schedules Data

	Africa / Middle East	Asia	Europe	Latin America	North America	Total
Air Europa			-8	-1	-1	-10
SAS	-1		-8		1	-8
Thy	1	-1	-7		-1	-8
Alitalia	-2	-2	-1	-1	-1	-7
Olympic Airways	-1		-5		-1	-7
British Airways		-1	-6	1		-6
Aer Lingus			-3		-2	-5
Lufthansa	-2		-3	-2	2	-5
Hapag Lloyd			-2	-2		-4
British Midland			-4		2	-2
KLM		-2	1	-1	-1	-2
TAP Air Portugal				-2		-2
Finnair	-1					-1
Virgin Atlantic	1		-1		-1	-1
Iberia	-1		1			0
Air France	-1	-1	4		-1	1
Spanair			3		-1	2
Braathens			4			4

Figure 24

Section 3
The Airline Sector

Contents

3.1 Overview of European Airline Sector

3.1.1 Introduction & Summary

The European airline sector contains distinct sub-sectors. In this section of the report, the sector as a whole is analysed as well as the following sub-sectors.

The *full service scheduled airline* sub-sector is primarily (but not exclusively) made up of traditional "flag carrier" airlines. These airlines typically operate scheduled flights to a range of destinations beyond their home country, usually on "thick", busy routes.

Their service will often incorporate a range of products and benefits such as in-flight meals, frequent flyer programmes, premium cabins and airport lounges. Often, a significant proportion of the full service airline business relates to connecting traffic.

Recent years have seen the emergence of the *low cost airline* sub-sector in Europe. Adopting the model successfully pioneered in North America, low cost airlines offer a simple no-frills scheduled product. By avoiding congested, expensive airports and minimising business complexity, low cost airlines are able to offer low fares to the consumer. Initially low cost airlines established themselves in the UK but have started to expand into other parts of Europe.

Regional airlines typically provide scheduled services within a sub-region of Europe. They usually serve "thinner" routes with relatively small aircraft.

Finally, holiday charter airlines fly leisure passengers on "package holidays". Typically, services are from Northern Europe to leisure destinations.

Highlights from this section are summarised below:

- 2001 passenger output for major airlines from the EEA & Switzerland fell by 2.4% versus 2000.
- European full service airlines[1] made a combined loss of US $1.4bn in quarter 4 alone; poor financial performance in the first 3 quarters also contributed to record losses for the year of over US $3bn. In response to the deteriorating operating environment, 25,000 job cuts were announced shortly after September 11th.
- Swissair and Sabena, who were in financial crisis for most of 2001, collapsed shortly after September 11th - the most high profile bankruptcies in European aviation history.
- Air France was the only full service European major to increase passengers and achieve a positive net result in 2001.
- Low cost airlines continued their rapid expansion in spite of the difficulties experienced by the wider airline sector. Passengers and profits grew, with Ryanair in particular posting industry leading returns and briefly achieving the largest market capitalisation of all European airlines.
- Iberia completed their privatisation programme but Greece failed to sell a majority stake in Olympic Airways. Meanwhile, there was continued consolidation of tour operators. C&N Touristic acquired Thomas Cook UK in one of the major acquisitions of 2001.

[1] AEA members

3.1.2 Context

Despite its importance in global terms, in 2001 only 5 of the world's leading 20 airlines were European. The United States had seven of the top 11 airlines, including the top 4. British Airways, the largest European airline in terms of RPKs, recorded the greatest % volume decline of the world's major carriers. Air France was the only top ten airline to record an increase in RPKs.

Top 20 Global Airlines by RPKs - 2001 v 2000
Systemwide Schedule and Charter
Source: IATA GABI - WATS

Rank 2001	Airline	Domicile Country	RPKs (million) 2001	Change
1	United Airlines	USA	187,701	-8.1%
2	American Airlines	USA	170,947	-8.9%
3	Delta Air Lines	USA	156,645	-9.7%
4	Northwest Airlines	USA	117,953	-7.5%
5	British Airways	UK	104,022	-12.9%
6	Air France	France	95,822	4.3%
7	Continental Airlines	USA	92,817	-4.3%
8	Lufthansa	Germany	91,475	-3.0%
9	Japan Airlines	Japan	81,977	-8.3%
10	US Airways Inc	USA	73,994	-2.0%
11	Southwest Airlines *	USA	71,898	5.8%
12	Singapore Airlines	Singapore	68,822	-2.8%
13	Qantas	Australia	67,894	6.8%
14	Air Canada **	Canada	67,027	-2.1%
15	KLM	Netherlands	57,551	-4.6%
16	All Nippon Airways	Japan	53,490	-8.0%
17	Cathay Pacific	China	44,792	-5.0%
18	Thai Airways	Thailand	44,322	4.5%
19	Iberia	Spain	41,265	3.1%
20	Korean Air	South Korea	38,452	-5.3%

Notes: * From Airline Business **2000 includes Canadian Airlines

Figure 1

In terms of revenue, the United States led the world's airline groups with the top three airlines. The USA airlines experienced major revenue losses in 2001, with United Airlines, Delta Air Lines, Northwest Airlines and US Airways all experiencing 10+% revenue declines in 2001. Lufthansa was the leading European airline in terms of revenue, achieving 6.7% revenue growth on 2000.

Top 20 Global Airlines by Revenues - 2001 v 2000
Source: Airline Business

Rank 2001	Group/Airline	Domicile Country	Revenues ($ million) 2000	2,001	change in US$
1	AMR Corporation	USA	19,703	18,963	-3.8%
2	United Airlines	USA	19,352	16,138	-16.6%
3	FedEx Express	USA	15,534	15,327	-1.3%
4	Lufthansa Group	Germany	14,013	14,957	6.7%
5	Delta Air Lines	USA	16,741	13,879	-17.1%
6	Japan Airlines	Japan	15,372	13,824	-10.1%
7	British Airways	UK	13,701	12,113	-11.6%
8	Air France Group	France	11,148	11,234	0.8%
9	Northwest Airlines	USA	11,240	9,905	-11.9%
10	ANA Group/All Nippon	Japan	11,545	9,621	-16.7%
11	Continental Airlines	USA	9,899	8,969	-9.4%
12	US Airways	USA	9,269	8,288	-10.6%
13	Air Canada Corp	Canada	6,263	6,205	-0.9%
14	KLM Royal Dutch Airlines	Netherlands	6,319	5,857	-7.3%
15	Southwest Airlines	USA	5,650	5,555	-1.7%
16	Qantas Airways	Australia	5,710	5,473	-4.1%
17	Singapore Airlines	Singapore	5,729	5,353	-6.6%
18	Alitalia	Italy	5,434	5,274	-2.9%
19	SAS Group	Sweden	5,185	4,984	-3.9%
20	Korean Air	South Korea	4,947	4,418	-10.7%

Figure 2

3.1.3 Change in number of European airlines in 2001

2001 saw a large number of airlines cease operations, and a significant number of new start up airlines begin services. According to the AEA, the level of turnover in airlines was unprecedented, certainly in the post deregulation era.

Between the end of 2000 and May 2002, 40 scheduled airlines exited the European single market. In the same time period, 22 new airlines appeared, reducing the overall number of airlines from 143 to 125.

Number of Scheduled Passenger Airlines witihin European Single Market
Source: AEA 2002 Yearbook

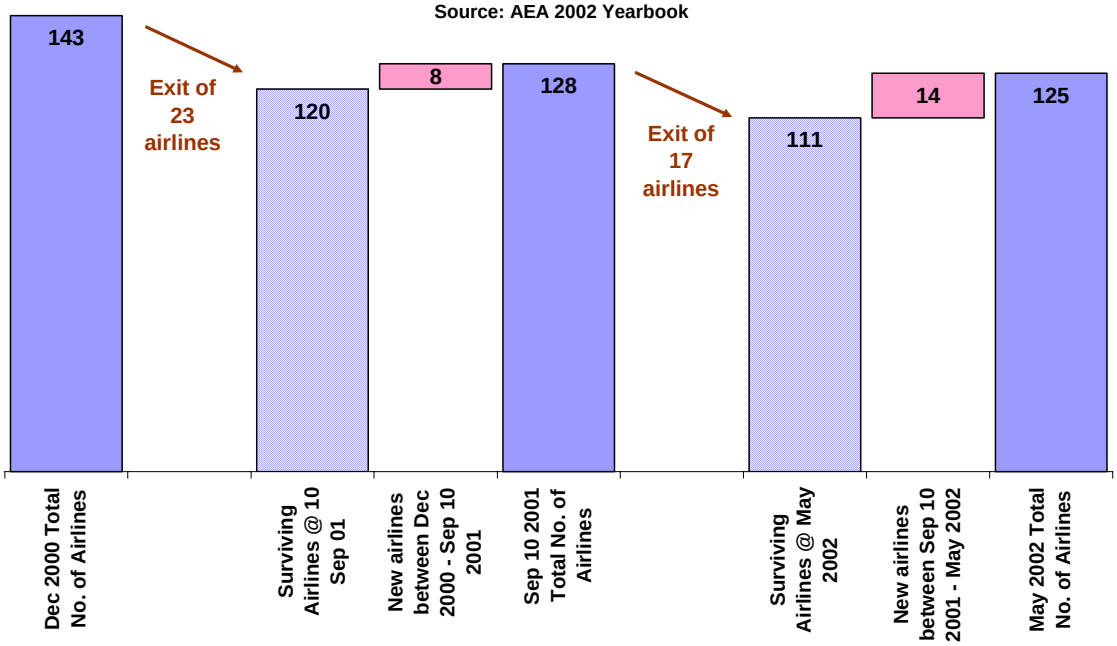


Figure 3

It is thought that there are a number of factors behind this high level of change:

- The deteriorating economic and political environment contributed to a number of airlines ceasing operations (which in a previous era may have been kept flying through public sector support).
- Impact of market liberalisation gradually filtering through, with low cost carriers and niche regional airlines taking advantage of the single market in aviation
- New opportunities for niche players as struggling airlines either ceased operations or cut unprofitable / non mainstream flying (as opposed to continuing to operate the same network at losses)

3.1.4 Traffic and Capacity trends

Major European airlines[2] cut capacity (as measured in Available Seat Kilometres) in the year 2001. There was an overall decline of 0.4% of capacity for airlines from EEA countries and Switzerland.

These overall figures include the large decreases in year on year capacity from both Swissair and Sabena, both of which had their fleets grounded in the latter stages of 2001. Swissair capacity fell 12% compared to 2000, while Sabena's dropped by 23%.

Excluding Swissair and Sabena capacity from the analysis sees the capacity of remaining EEA/Switzerland airlines grow by 1.1%. Traffic (as measured by Revenue Passenger Kilometres) fell even further than capacity, by 2.4% on the year 2000. Excluding Swissair and Sabena reduces the capacity drop to 1.1%.

Therefore, load factors fell compared to 2000. The 2000 overall load factor of 73.4% fell by 1.5 points to 71.9%.

The much smaller group of airlines from EU candidate countries suffered even greater declines in capacity and traffic.

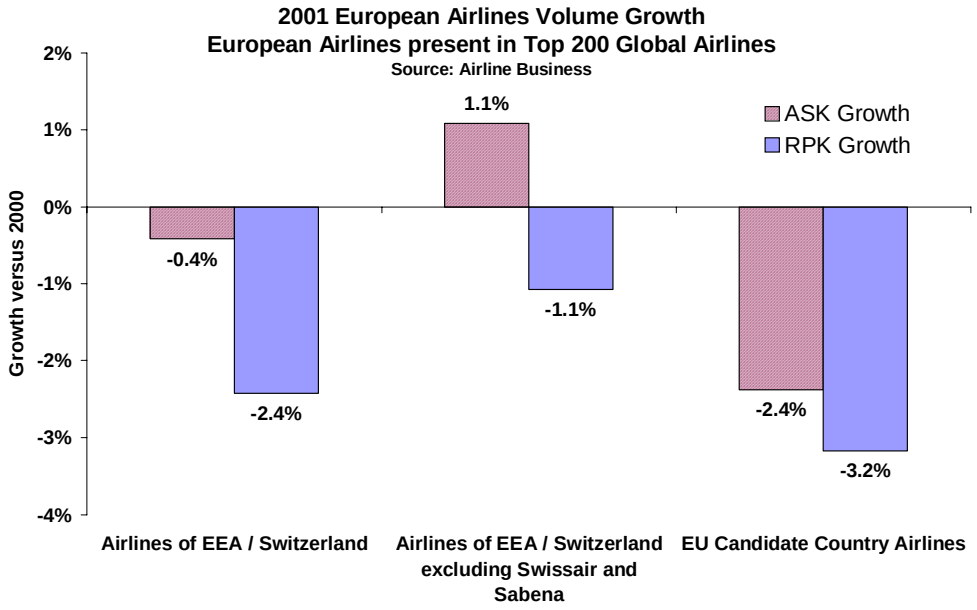


Figure 4

[2] From Airline Business Traffic Rankings – 66 European airlines appear in the global Top 200, although four relatively small European airlines have been excluded for both 2001 and 2000 for data quality reasons.

3.1.5 Financial Performance of European Airline Sector as a whole

Global Context

European airlines account for around 30% of total revenues for major airlines worldwide. The long term trend for Europe's revenue share appears to be declining as less mature markets expand at a faster rate.

European Airlines Share of 2001 Global Airline Revenues
[Breakdown of Revenues of 2001 Global Top 150 Airlines, Source: Airline Business]

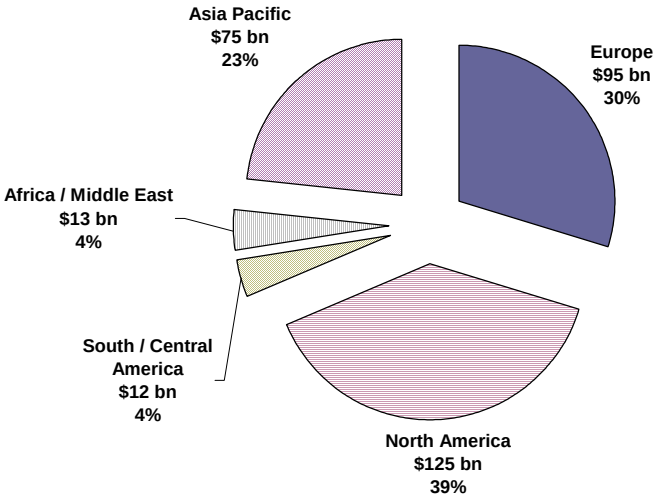


Figure 5

Revenue and Cost performance

It is difficult to establish meaningful revenue and cost trends for the European airline sector as a whole in 2001. This is because different sources of data apply different treatments of issues such as exchange rate impacts, year end dates, airline core revenue versus group revenue, constituents of airline sample etc.

A number of trends do emerge. A large proportion of the airline sector experienced negative revenue growth in 2001. There were some exceptions though:

- Airlines whose non-traffic revenue compensated for contraction in core business.
- Airline companies who grew through acquisition.
- Airline companies with significant exposure to rapidly expanding markets.

Few airlines, however, managed to reduce costs.

IATA provides an analysis of income and cost performance on a route area, based on a sample of circa 50 major airlines from around the world.

The chart below presents airline unit income and revenues for a number of route areas. It should be noted that while the sample of airlines and routes presented below will primarily consist of routes touching Europe and airlines based in Europe, it does also include some non-European routes and airlines.[3]

Clearly, the North Atlantic is the route area where performance deteriorated most markedly. Although unit income did actually rise slightly, there was a large fall in load factor. In turn, this led to a dramatic rise in unit cost (as a result of fixed costs having to be spread over fewer passengers).

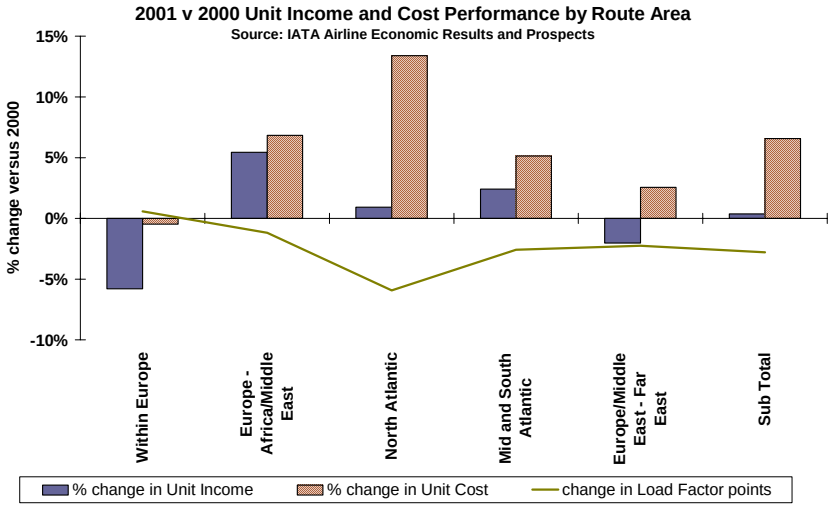


Figure 6

[3] AERP reporting carriers are United Parcel, American Airlines, Air France, Air India, Alaska Airlines, Royal Air Maroc, Finnair, Alitalia, British Airways, bmi British Midland, BWIA, Continental, Cargolux, Cyprus Airways, Delta Airlines, Federal Express, America West Airlines, Iberia, Indian Airlines, Iran Air, Japan Airlines, Adria Airways, JAT, Kuwait Airways, All Nippon Cargo, Lufthansa, El Al, Malev, Malaysia Airline System, Egyptair, Northwest Airlines, Olympic Airways, CSA, Austrian Airlines, Croatia Airlines, Philippine Airlines, QANTAS, Varig, Royal Jordanian, South African Airways, SAS, Singapore Airlines, Thai Airways, Turkish Airlines+, TAP-Air Portugal, Trans World, United Airlines, US Air, Virgin Atlantic

North Atlantic = any flight between North America or Central America or South America and Northern Europe or Southern Europe or Middle East or Eastern Africa or Western Africa or Southern Africa via a gateway (commercial traffic stop) in North America

Mid / South Atlantic – as for North Atlantic except via a gateway in Central or South America

A detailed analysis presented below shows more clearly the impact of falling load factor on almost all route areas affecting Europe. On the North Atlantic, for example, income per unit of volume was up 0.9% in 2001. However, a drop of 5.9 percentage points of load factor resulted in income per unit of capacity falling by 7.4%.

Analysis of Financial Performance by Route Area

Source: Airline Economic Results and Prospects

		ATKs (m)	RTKs (m)		Load Factor	Operating Revenues [US$m]	Operating Expenses (including Interest) [US$m]		Income/RTK [US cents/RTK]	Cost/RTK [US cents /RTK]		Income/ATK [US cents /ATK]	Cost/ATK [US cents /ATK]		Margin
Within	2001	19,612	10,766	=>	54.9%	15,562	16,673	=>	1.45	1.55	x LF=	0.79	0.85	=>	-6.7%
Europe	2000	19,336	10,504	=>	54.3%	16,118	16,346	=>	1.53	1.56	x LF=	0.83	0.85	=>	-1.4%
	% VLY	1.4%	2.5%		0.6%	-3.4%	2.0%		-5.8%	-0.5%		-4.8%	0.6%		
Europe to	2001	15,068	9,607	=>	63.8%	6,003	5,875	=>	0.62	0.61	x LF=	0.40	0.39	=>	2.2%
Africa &	2000	15,695	10,192	=>	64.9%	6,039	5,835	=>	0.59	0.57	x LF=	0.38	0.37	=>	3.5%
Middle East	% VLY	-4.0%	-5.7%		-1.2%	-0.6%	0.7%		5.5%	6.8%		3.5%	4.9%		
North	2001	31,528	20,852	=>	66.1%	10,184	10,385	=>	0.49	0.50	x LF=	0.32	0.33	=>	-1.9%
Atlantic	2000	33,579	24,199	=>	72.1%	11,709	10,627	=>	0.48	0.44	x LF=	0.35	0.32	=>	10.2%
	% VLY	-6.1%	-13.8%		-5.9%	-13.0%	-2.3%		0.9%	13.4%		-7.4%	4.1%		
Mid and	2001	15,092	9,981	=>	66.1%	4,589	4,812	=>	0.46	0.48	x LF=	0.30	0.32	=>	-4.6%
South	2000	13,952	9,589	=>	68.7%	4,304	4,396	=>	0.45	0.46	x LF=	0.31	0.32	=>	-2.1%
Atlantic	% VLY	8.2%	4.1%		-2.6%	6.6%	9.5%		2.4%	5.2%		-1.4%	1.2%		
Europe &	2001	28,014	20,074	=>	71.7%	8,664	9,150	=>	0.43	0.46	x LF=	0.31	0.33	=>	-5.3%
Middle East	2000	27,975	20,680	=>	73.9%	9,109	9,191	=>	0.44	0.44	x LF=	0.33	0.33	=>	-0.9%
to Far East	% VLY	0.1%	-2.9%		-2.3%	-4.9%	-0.4%		-2.0%	2.6%		-5.0%	-0.6%		
Sub Total	2001	109,314	71,281	=>	65.2%	45,003	46,896	=>	0.63	0.66	x LF=	0.41	0.43	=>	-4.0%
	2000	110,538	75,164	=>	68.0%	47,280	46,394	=>	0.63	0.62	x LF=	0.43	0.42	=>	1.9%
	% VLY	-1.1%	-5.2%		-2.8%	-4.8%	1.1%		0.4%	6.6%		-3.7%	2.2%		

Note. Airline sample includes some non European airlines

Figure 7

Profitability

The global airline sector recorded extremely poor financial results in 2001. European airlines were not as badly impacted as airlines in both North and South America. However, areas such as Asia and Africa/Middle East recorded better results.

It should also be noted that the European 2001 results do not incorporate the full impact of the major losses accumulated by both Sabena and Swissair before they ceased operations. If these could be included, no doubt the picture would be even worse.

The longer term trend illustrates that profitability for European airlines had been in decline since the highpoint achieved in 1998. Although other areas of the world were also on a downward trend in the years before 2001, Europe's decline was more marked.

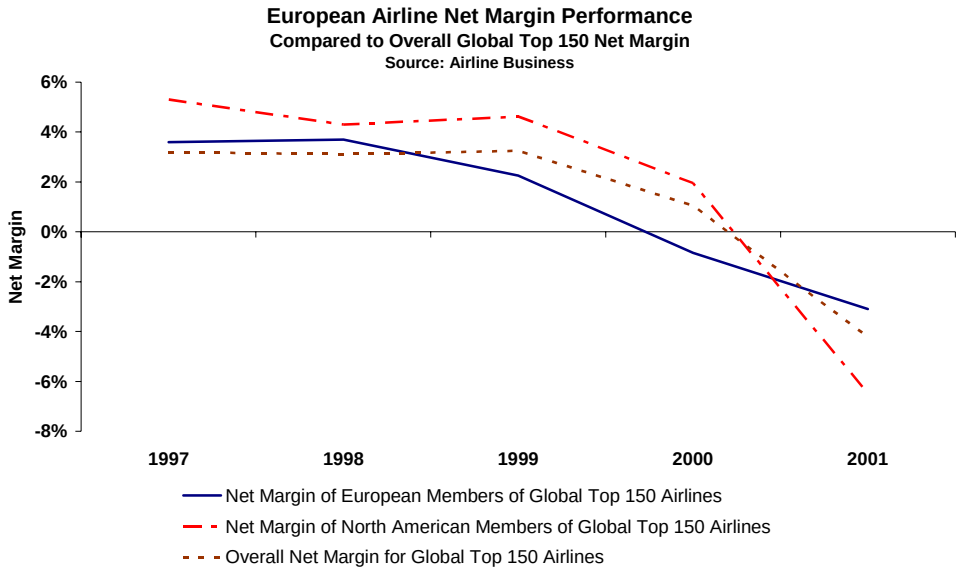
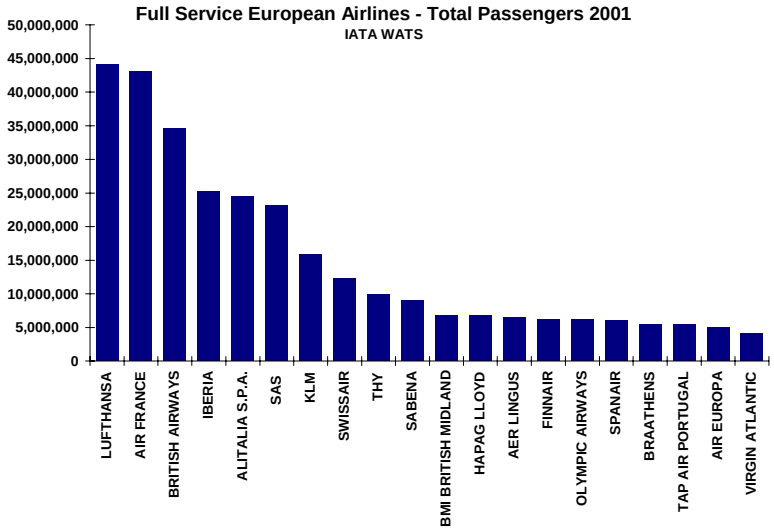


Figure 8

3.2 Full Service Scheduled Airlines

3.2.1 Introduction

Full service scheduled airlines comprise the largest airline sub-sector in terms of traffic or revenue. It includes within its ranks the vast majority of long haul airline services. However, for short haul traffic it competes to some extent with low cost airlines, regional carriers, holiday charter airlines and surface transport providers.



In much of this section, analysis is based on data relating to Association of European Airline (AEA) members. The AEA include most major full service airlines in their ranks and its membership is a good proxy for the sub-sector as a whole.

The leading full service airlines are Lufthansa, Air France and British Airways, flag carriers of Europe's largest economies. These airlines are followed by Iberia, Alitalia, SAS and KLM.

Figure 9

Turkish Airlines are the largest carrier from the EU candidate countries (ranked #9 in geographical Europe). The leading airlines from other candidate countries are relatively small compared to major EEA airlines. In 2001, the Eastern European airlines LOT, Czech Airlines and Malev all recorded traffic of between 2 and 3 million passengers. Three other airlines from candidate countries achieved passenger numbers in excess of 1 million – Cyprus Airways, Air Malta and Tarom.

Of the flag carriers, KLM and British Airways offer the largest proportion of long haul seats. KLM's Amsterdam hub provides feeder traffic to its extensive long haul services, while British Airways has a comprehensive schedule to North America, derived from the economic importance and favourable geographical location of its London base.

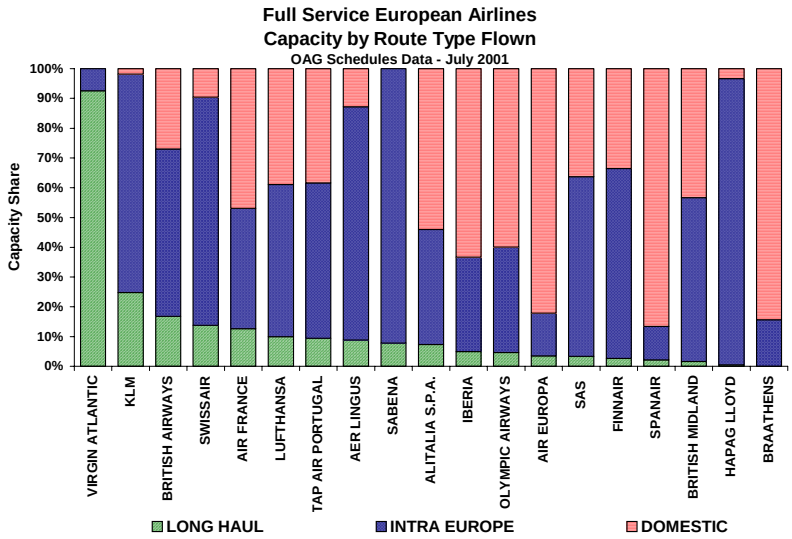


Figure 10

3.2.2 Traffic Performance

Historical Context

Traffic from AEA members has grown steadily in the last quarter century, with the exception of a few years of contraction such as the downturn following the 1991 Gulf War and of course the year 2001.

The long term historic trend has seen passenger growth at 5.2%[4]. Long haul traffic has grown slightly faster than short haul, reaching a 20% share of all passengers in 1996, before dropping back somewhat in recent years.

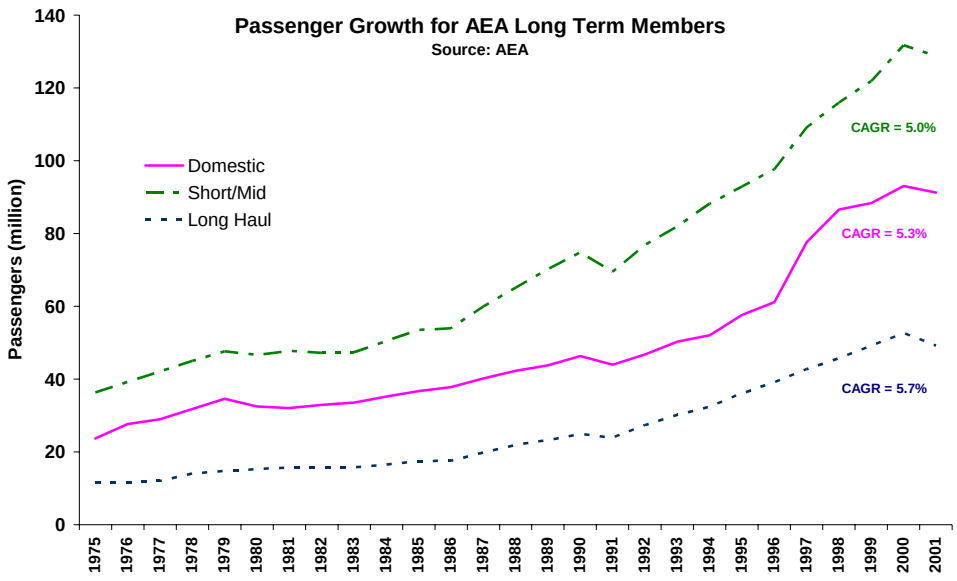


Figure 11

Members of AEA have improved their output efficiency (measured as RPK carried per flight) considerably over the last 25 years. This has come in three forms:

- Improved load factor, which has seen average load factors increase from 56% in 1975 to a peak of 73% in 2000.
- Larger average aircraft size, which, combined with higher load factors, leads to greater passengers per flight (rising from 58 passengers per flight in 1975 to a peak of 87 per flight in 2000).
- Greater average stage lengths, driven by increased distances flown on long haul services (average long haul stage length almost doubling between 1975 and 2001).

Therefore, while RPKs have increased by an average of 6.2% per annum, the number of flights has only increased by an average of 3.8% per annum.

[4] For long term AEA members who have reported traffic data continuously since 1975

2001 v 2000 Traffic

Full service scheduled airlines suffered severe traffic losses in 2001 in both the long haul and short haul market segments. Overall AEA capacity was cut by 1.6%, with RPKs falling by an even greater margin at 4.7% compared to the previous year.

Long haul services were much more greatly impacted than short haul.

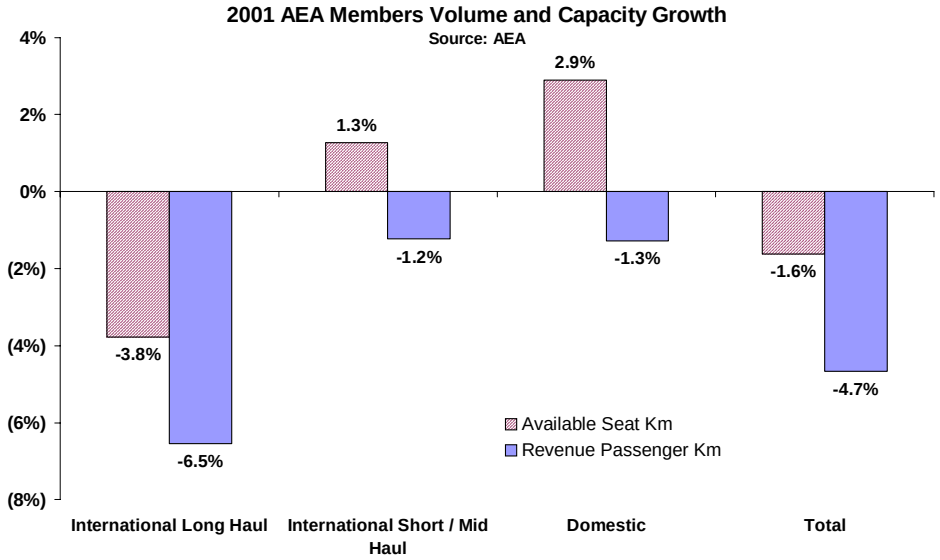


Figure 12

3.2.3 Financial Performance

Historical Context

AEA airlines as a whole have an erratic profitability record. Sustained losses occurred in the early part of the 1990s. From 1995 to 1998, the AEA airlines enjoyed four years of profitability but slipped back into a net loss for 1999 and 2000.

However, 2001 saw record losses as the full service scheduled airline sector was particularly badly hit by both the economic downturn and the September 11th impact. There is also a view that this sector was badly damaged by the concerted competitive challenge emerging from low cost airlines.

In nearly all cases, individual AEA airlines have failed to return their cost of capital on any consistent basis. Even the AEA members that are no longer government owned or controlled have tended to under perform their peer companies on local stock exchanges.

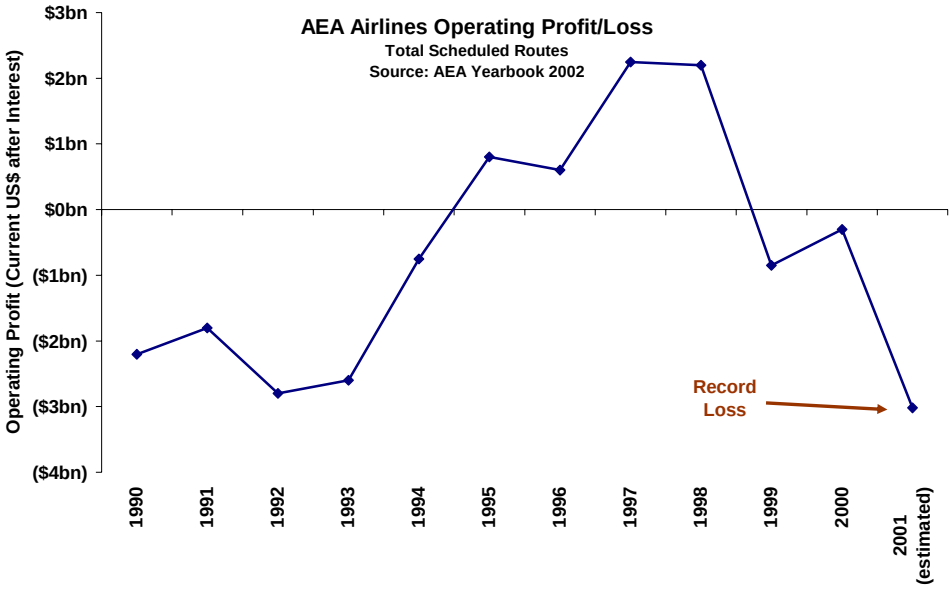


Figure 13

2001 v 2000

The year 2001 was a bleak year for the full service scheduled airline sector. As well as accumulating record losses, two long established flag carriers were grounded. Although the difficulties faced by the industry post September 11th had a massive negative impact on the year's financial performance, it was already proving to be a poor year for AEA carriers prior to September 11th.

The first quarter of 2001 saw combined losses for AEA carriers of US$1.2bn. However, this performance was actually slightly better than the previous year in what is a historically tough quarter.

By the second quarter of the year, financial returns had markedly deteriorated. The third quarter, normally the most profitable of the year, saw a sizeable profit in 2000 converted to a net loss. This quarter included the 19 post September 11th days.

In the final quarter of the year, AEA airlines recorded astronomic losses of US$1.4bn, a result over US$1.1bn worse than the same period the previous year.

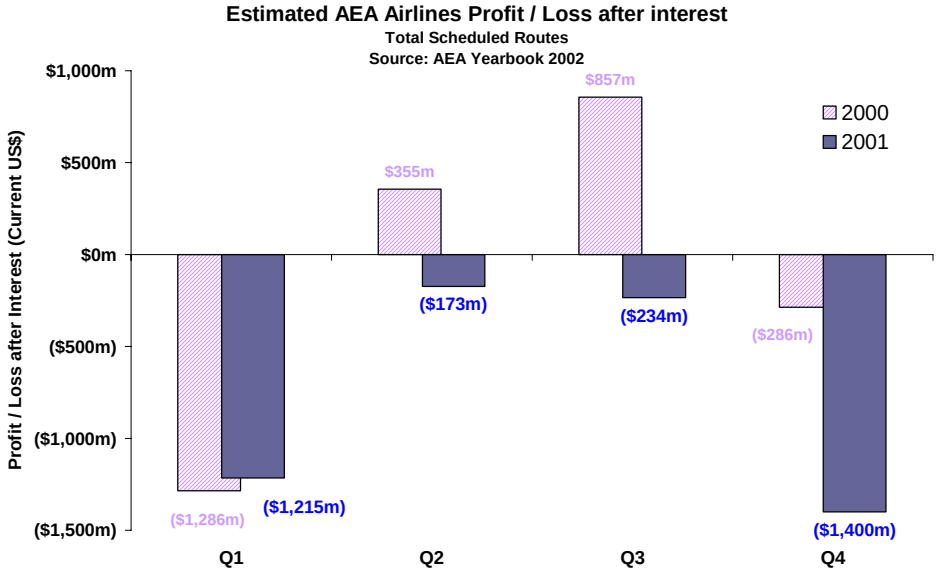


Figure 14

IATA Airline Economic Results and Prospects also provide some interesting insights into the performance of the European airlines sampled.

All measures of profitability declined from 2000 to 2001. Gross margins became negative, while net profit moved from breakeven to circa -5%.

As may be expected from a year where many aircraft were withdrawn from service, asset productivity declined, though not by a large margin.

In 2001, European airlines became significantly more leveraged, with net debt rising substantially as the poor financial results kicked in. However, liquidity was not substantially impacted, suggesting that airlines had managed to place new debt on a long term footing and also reduce the inventory levels they were carrying.

Industry Financial Ratios - European AETF Airlines
(Source: IATA Airline Economic Task Force)

Measure	Explanation	2000	2001	Pts Change
Profitability				
Gross Profit Margin %	Operating Profit / Operating Revenue	2.7	-2.1	-4.87
Net Profit Margin %	Net Profit / Operating Revenue	0.0	-4.9	-4.88
Return on Equity %	Net Profit / Stockholders Equity	0.0	-17.7	-17.68
Total Asset Turnover	Operating Revenue / Total Assets	0.8	0.7	-0.05
Fixed Asset Turnover	Operating Revenue / Net Fixed Assets	1.1	1.1	-0.05
Liquidity				
Current Ratio	Current Assets / Current Liabilities	0.86	0.82	-0.05
Quick (Acid) Ratio	(Current Assets – Inventories) / Current Liabilities	-1.46	-1.35	0.11
Leverage				
Net Debt/Equity Ratio	(Long-term Liabilities + Current Liabilities – Cash/bank deposits) / Stockholders Equity	2.52	3.27	0.75

Figure 15

3.2.4 Traffic Breakdown of Full Serviced Airline Sector

Historic Traffic Trends

Lufthansa and Air France have emerged as Europe's biggest airlines. Lufthansa grew steadily throughout the 1990s. Air France meanwhile saw little traffic growth in the first half of the 1990s as the airline struggled financially. However, huge growth since then saw the French airline emerge as #2 in Europe.

British Airways, who were equal size to Lufthansa for much of the 1990s, saw little traffic growth since the late 1990s. This was a result of capacity constraints at their main base (Heathrow) and a strategic decision to focus on higher yielding traffic by reducing the average aircraft size in their fleet.

Air France's dramatic growth from 1996 to 1997 was due to Air Inter becoming a subsidiary of the French flag carrier and being renamed Air France Europe.

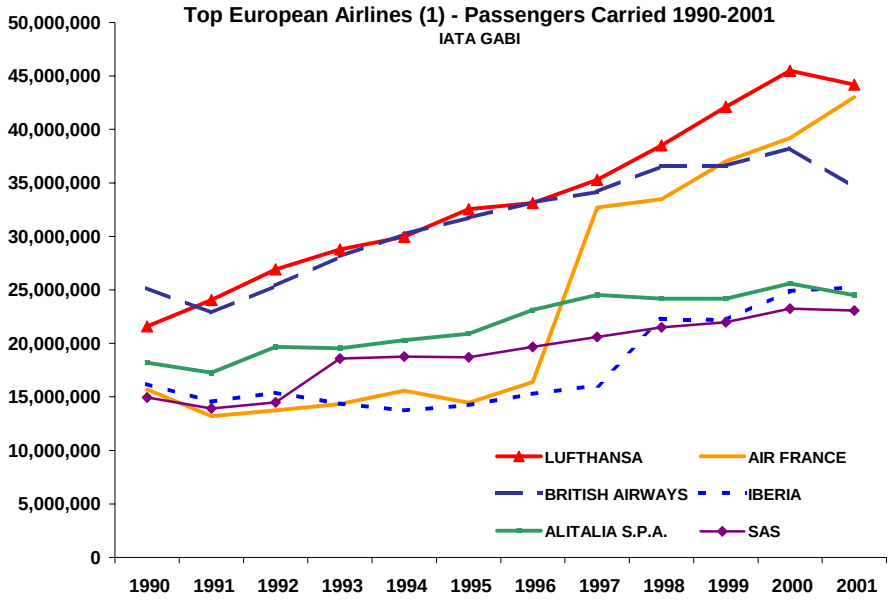


Figure 16

Of the airlines outside the top six, most grew fairly steadily. Noticeably, Sabena grew at above average rates until its recent collapse. The financial pressure associated with this rapid expansion is seen as one of the major factors in its failure.

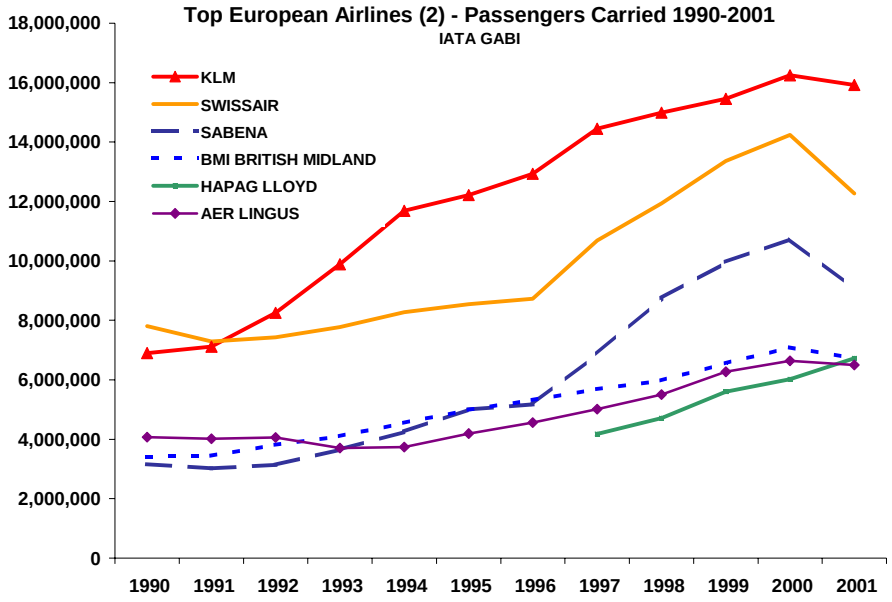


Figure 17

Elsewhere, Braathens, Air Europa and Virgin Atlantic all expanded from small bases to become top 20 European airlines. Olympic Airways did not grow significantly over the last decade as it struggled financially.

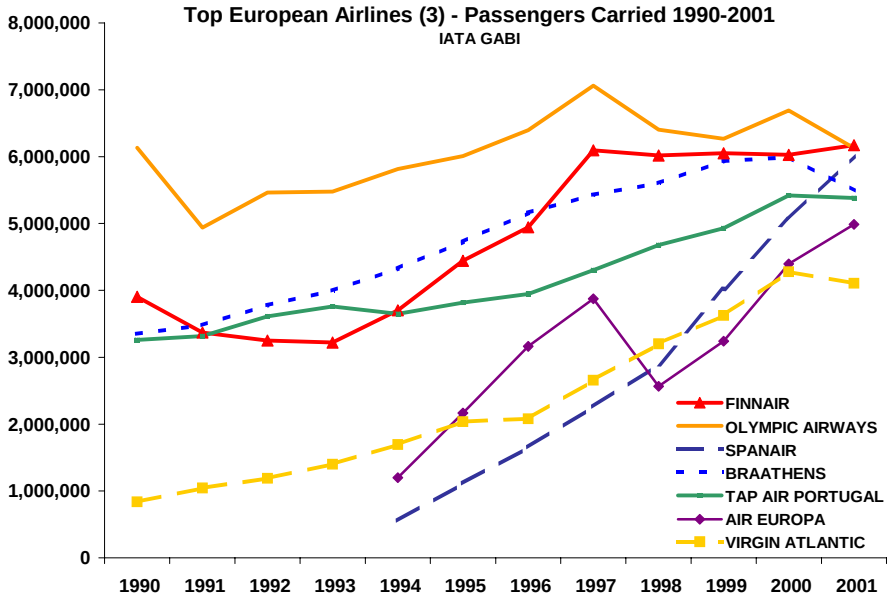


Figure 18

Historic Network breadth

Although the number of destinations served by Europe's full service airlines has historically grown, in recent years many airlines have cut the number of points served. These include British Airways, Lufthansa, KLM, Alitalia and SAS. There are various reasons for this, including:

- Cutting back of less profitable routes in times of financial difficulty.
- Capacity constraints at main base (resulting in transfer of slots from "thin routes" to provide additional services on "thick routes").

British Airways led the way in terms of number of destinations. Many of these destinations were offered on a franchise basis rather than being operated by BA themselves. BA has a well developed set of franchisee partners.

For other carriers, the number of destinations served is roughly proportionate to their overall size (as measured by passengers carried).

Full Service European Airlines Destinations Served
January 1992 to 2002- OAG

	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
British Airways	154	162	170	197	207	220	225	230	231	220	214
Air France	162	158	187	171	160	151	170	172	168	179	180
Lufthansa	161	161	163	162	161	167	159	159	163	161	156
KLM	145	149	148	146	140	141	127	127	126	114	112
Iberia	79	73	77	76	72	77	97	97	95	99	99
Alitalia	96	93	95	111	112	110	109	101	98	94	87
SAS	74	82	99	93	95	102	98	102	95	95	87
Olympic Airways	72	75	79	76	78	81	81	81	78	83	76
Finnair	49	53	54	66	54	57	64	64	60	57	56
TAP Air Portugal	62	59	63	51	47	53	53	51	44	40	38
Hapag Lloyd					28	30	32	33	39	35	31
British Midland	19	15	16	19	22	21	24	29	30	31	29
Spanair				6	6	13	17	20	28	27	29
Braathens	17	18	21	20	20	22	22	31	30	25	29
Air Europa				18	20	34	35	26	32	38	28
Aer Lingus	29	27	27	27	30	28	29	31	29	30	25
Virgin Atlantic	8	10	11	15	12	16	14	17	20	22	21

Figure 19

2001 v 2000

Most full service airlines saw traffic contraction in 2001, as a result of adverse economic conditions and loss of consumer confidence following September 11th.

Air France was the only major flag carrier to grow significantly, adding circa 10% traffic versus the year 2000. Iberia also experienced some slight growth. Non flag carriers Spanair, Air Europe and the scheduled arm of Hapag Lloyd saw fairly healthy traffic growth.

Not surprisingly, traffic at both Sabena and Swissair was down heavily. Their difficulties are documented later in this section.

In addition, British Airways, Olympic Airlines and Turkish all suffered large traffic declines.

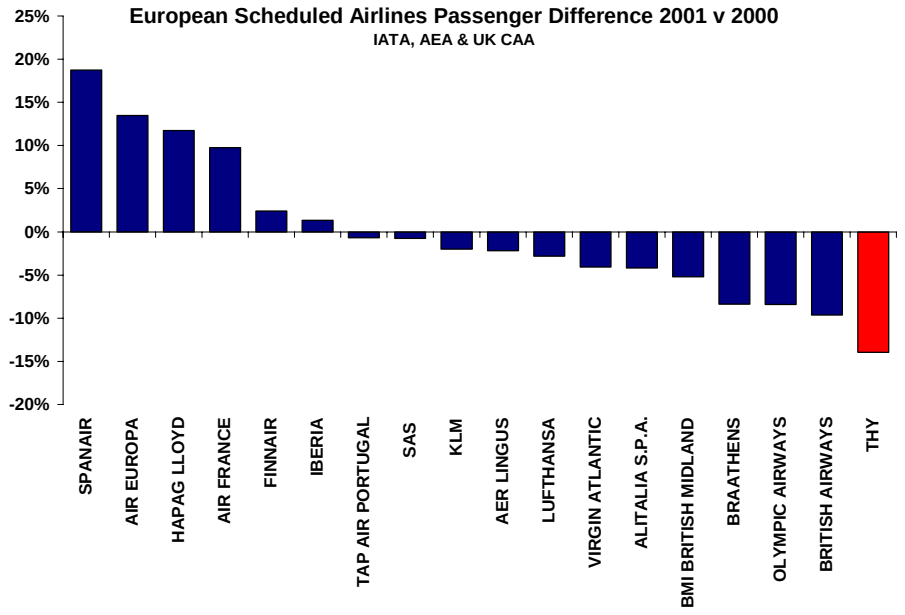


Figure 20

2001 was a mixed year for the airlines of EU candidate countries. LOT and Czech Airlines both experienced strong passenger growth in 2001.

LOT's traffic rose by 14.1% to 2.7 million passengers. This was primarily due to rapid network expansion following their alliance with Swissair, and moves to develop Warsaw as a central European hub. However, capacity was reduced by the end of 2001 as a response to the impact of September 11th.

CSA Czech Airlines' traffic grew by 15.5% to 2.6 million passengers. This continued the strong growth achieved since the mid 1990s, since when traffic doubled. In 2001, the growth can be attributed to small increases in capacity across the network. In particular, additional frequencies to New York were added along with new routes to Vilnius, Birmingham, Thessalonika and Ljubljana. Growth can also be attributed to CSA joining the Skyteam alliance and Prague's growing reputation as a leisure destination.

Other EU candidate country airlines had a more difficult time in 2001. Malev experienced a passenger decline of 5.6%, while Tarom saw a passenger loss of 4.9%.

Cyprus Airways and Air Malta managed to sustain small amounts of positive passenger growth, as did the Baltic State's flag carriers Estonian (+2.5%), Air Baltic (+13.9%) and Lithuanian Airlines (+7.2%).

September 11th Impact on Traffic

All leading full service airlines saw traffic fall in the immediate aftermath of September 11th. In the month of September, traffic falls of between 10% and 30% were typical. Apart from Swissair and Sabena, the major carriers with significant exposure to the North Atlantic market were most badly hit.

There was a recovery of sorts in November, with some further improvement visible by December. However, only three airlines (TAP, Iberia and Finnair) recorded positive growth in December 2001 when compared to December 2000. The majority of airlines were still substantially down on the previous year.

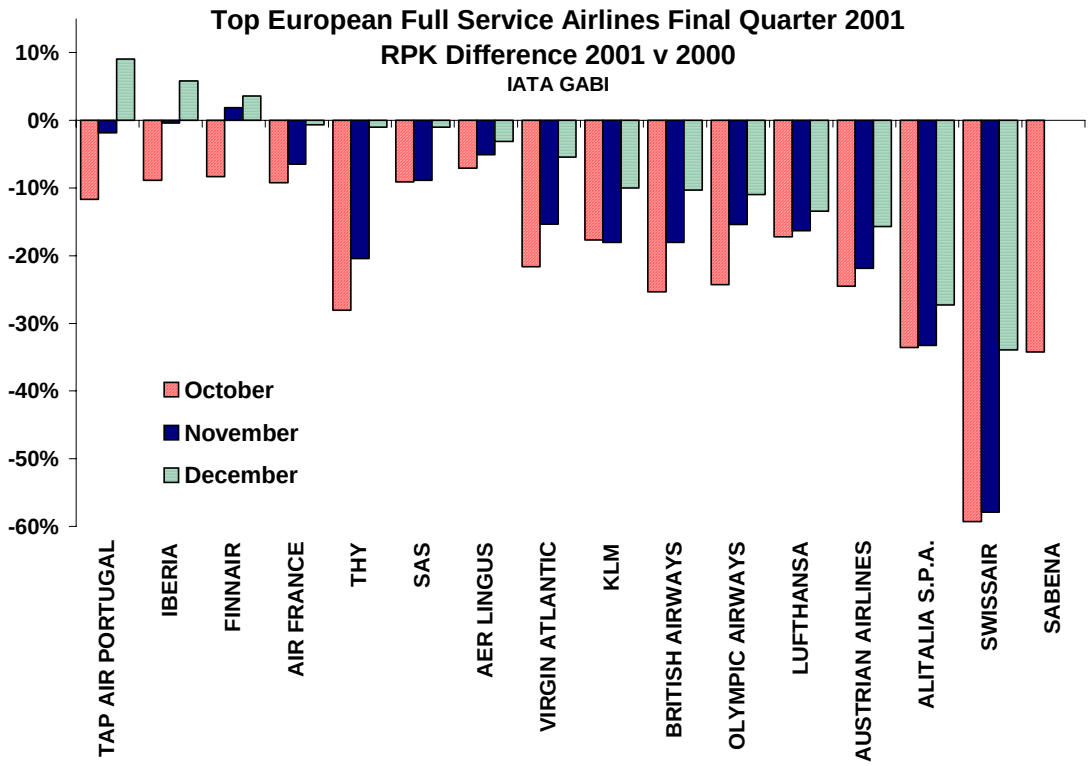


Figure 21

North Atlantic

The North Atlantic market was severely impacted by the events of September 11th. Immediately after September 11th, US airspace was closed for four days. Furthermore, demand fell away substantially as many consumers both sides of the Atlantic avoided travelling.

While most AEA carriers enjoyed strong growth on the North Atlantic in 2000, this was reversed in 2001. AEA carriers recorded a total deficit of -10.8%, decreasing from 26.6 million passengers to 23.8 million. Of these airlines, British Airways experienced the biggest decline, followed by KLM, Alitalia, Iberia and Lufthansa.

Most of the other airlines also experienced major decreases. However, Air France, SAS and Aer Lingus recorded broadly similar passenger levels for 2000 and 2001. Czech Airlines and Austrian actually managed to grow in 2001, though from a fairly small base.

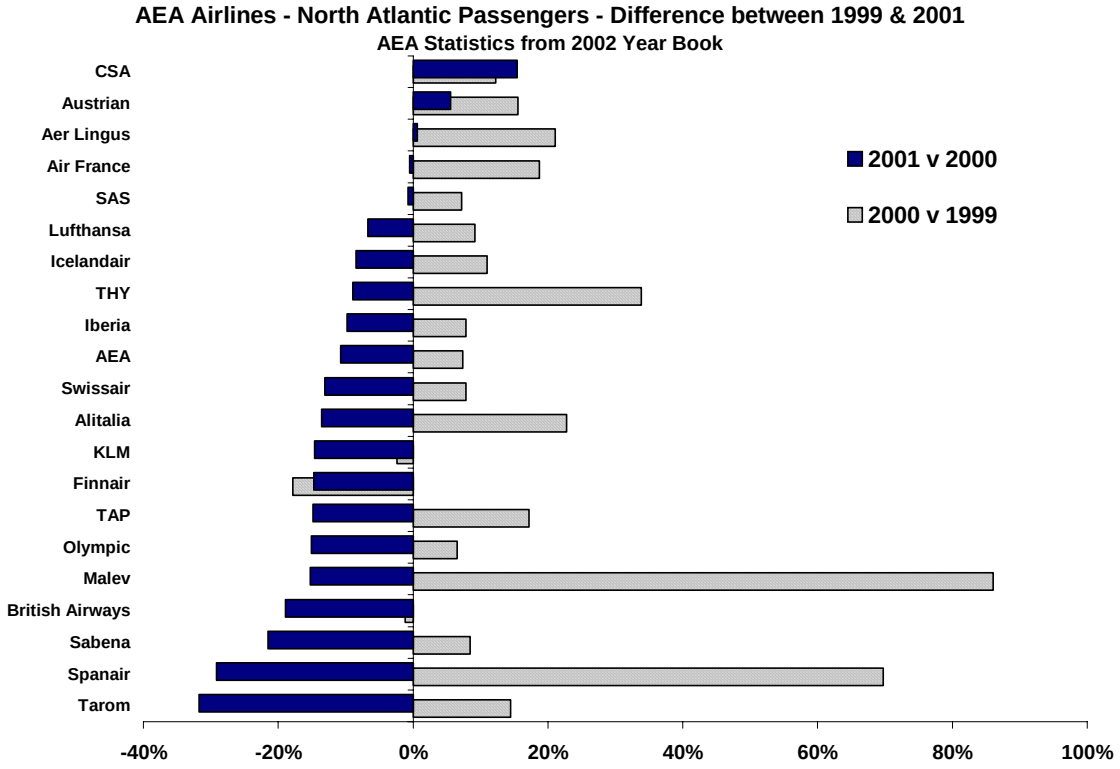


Figure 22

3.2.5 Financial Breakdown of Full Serviced Airline Sector

Historic Financial Performance

The leading airlines (as measured by revenue) have a mixed profitability record. Even in good years, none of the top 6 airlines managed to get close to a 10% return on revenue. However, only Swissair recorded significant losses in any of the years between 1996 and 2000.

Only Air France managed to record a profit in 2001. Excluding the bankrupt Swissair, Lufthansa suffered the biggest loss, reversing years of steady results.

Swissair published extremely poor results in 2000 prior to their recent bankruptcy. British Airways financial results had also been declining prior to 2001, with a small loss recorded in 1999.

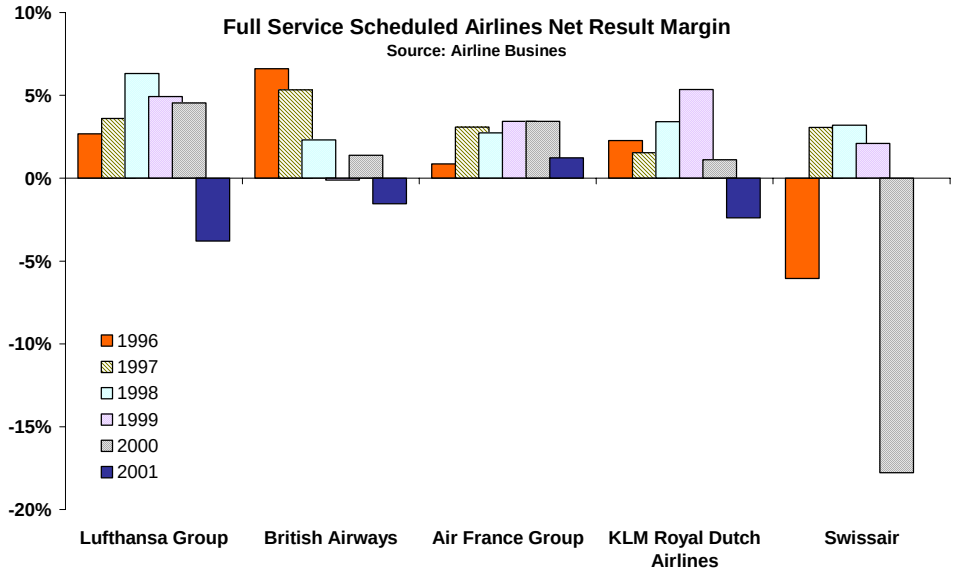


Figure 23

The financial returns of carriers outside the top six have traditionally been worse than for the leading carriers. Prior to 2001, the exception to this was Virgin Atlantic who achieved 5%+ margins between 1996 and 1999. Meanwhile, Sabena and Alitalia reported fairly regular losses, often substantial.

In 2001, only Iberia managed to make a positive return. Alitalia, Virgin and Austrian Airlines all experienced strongly negative results.

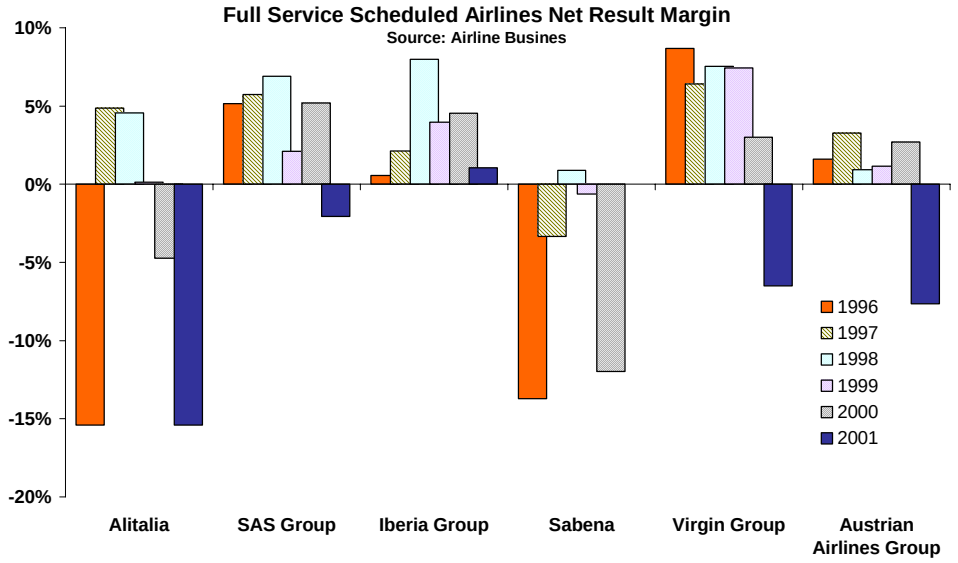


Figure 24

Historic financial performance is worse once again for the next tier of carriers. Turkish, Aer Lingus, TAP and Olympic had all reported substantial losses in at least some of the years leading up to 2001. In the case of TAP and Olympic, positive results were few and far between.

2001 saw some major losses recorded, although both Finnair and Turkish Airlines did produce small positive returns.

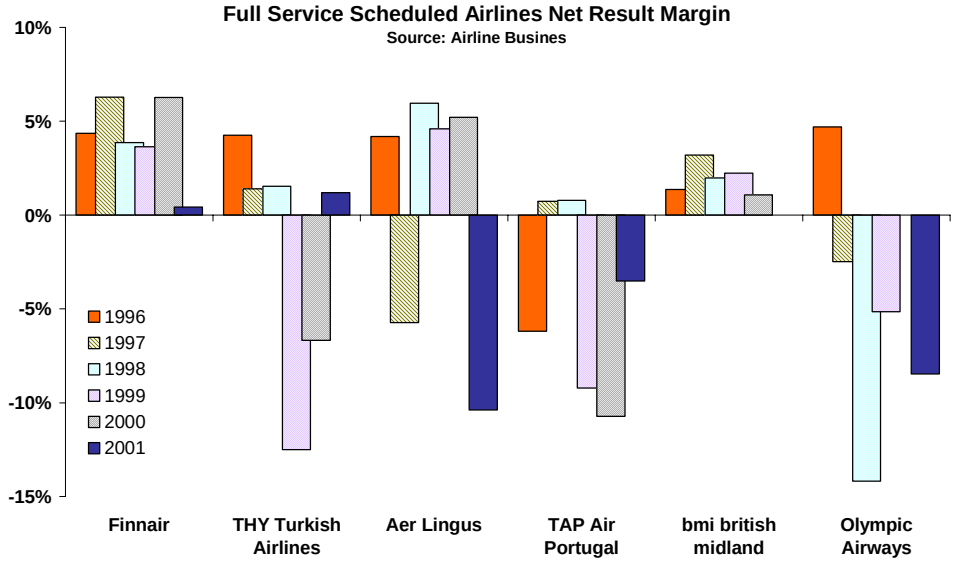


Figure 25

2001 v 2000 Financial Performance

Overall, very few airlines managed to make a profit in 2001. Often losses were very large, with LOT Polish Airlines recording the worst return of airlines analysed.

This compared to 2000 when a slim majority of airlines made a profit, although in all cases the profit margin was fairly modest.

Full Service Scheduled Airlines Net Result Margin 2001 v 2000
Source: Airline Business

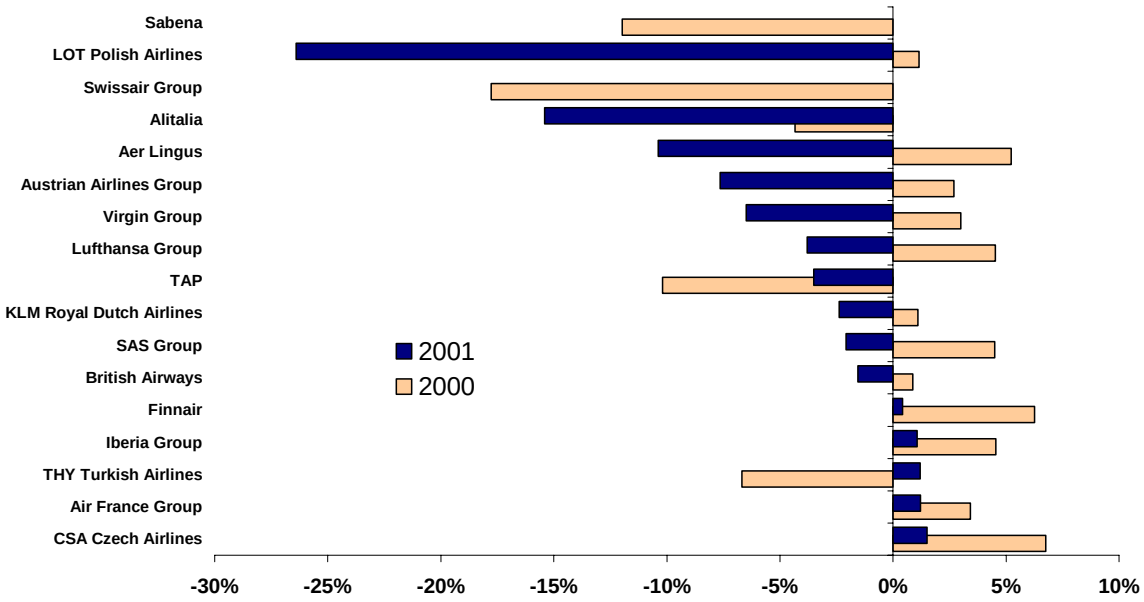


Figure 26

To isolate the specific impact of September 11th from other factors, "rolling 12 months" of profits has been analysed for major full service airlines. This analysis illustrates that, for most of the airlines investigated, the financial situation was deteriorating markedly prior to September 11th.

KLM and BA slipped into a loss for the 12 months up to end September 2001, where there were 19 days of post September 11th impact. However, the impact of the final quarter results was more substantial. All airlines recorded major losses compared to the previous year. Most hard hit were Lufthansa, whose Quarter 4 result slipped by well over €1 billion in 2001 compared to 2000.

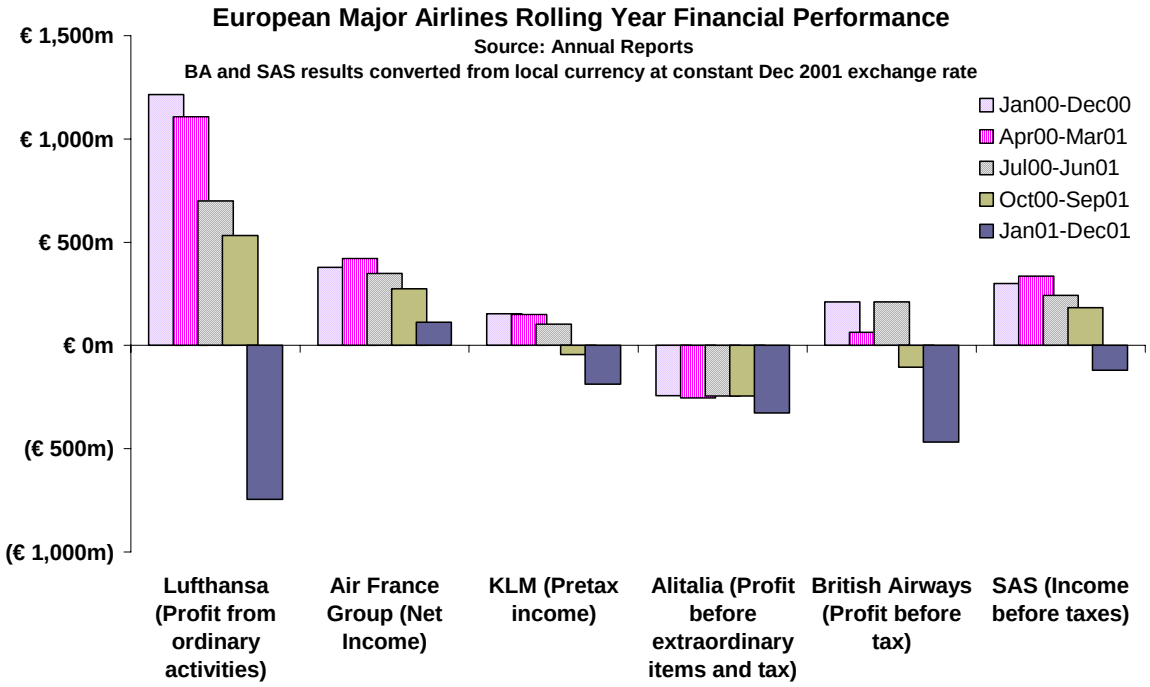


Figure 27

In their annual report, Lufthansa analysed the direct damage to their overall September 2001 results. In the period September 11th-15th, there was a negative impact of €70m. In the remainder of September (Sept 16-30th), a further negative impact of €108m was calculated. The majority of these impacts were felt in their passenger business, but the catering segment also suffered significant damage.

Meanwhile, Air France reported an 8.3% drop in revenue in the final quarter of the year. On the North Atlantic, revenue fell 25% below the Q4 2000 level. Yet Air France was one of the few carriers who managed to record a profit for the 12 months Jan-Dec 2001.

3.2.6 Key Developments at Full Service Individual Airlines

Introduction

The following section provides commentary relating to significant events experienced by some of the major European airlines in 2001. Smaller airlines are excluded unless there were particularly notable developments during 2001.

Aer Lingus[5]

Aer Lingus faced a battle for its survival in 2001. In July, the airline had already issued a trading statement forecasting a loss for the year due to the effects of the Foot and Mouth outbreak and the downturn in the United States economy.

The airline identified intensifying competition, downward pressure on fares and high costs as the main issues facing them. Of course, the impact of September 11th increased the difficulties Aer Lingus faced.

Within weeks of September 11th, the Aer Lingus board approved a "Survival Plan". After prolonged discussions with unions and government, the Irish conciliatory service (Labour Relations Commission) endorsed the employee elements of the plan by the end of November and implementation was underway before the end of 2001.

The survival plan implementation subsequently[6] led to a reduction in the annual cost base of over €200m and resulted in nearly 2,000 staff leaving the airline. It also involved extensive changes in work practices.

Distribution costs were also addressed:

- Trade commissions were cut.
- Focus on promotion of direct sales through Aer Lingus telesales centre.
- Re-launch of website aerlingus.com.

Aer Lingus declared that their strategy going forward was to simplify their business (focussing on the core airline), work assets harder and keep costs to a minimum. In turn this would enable the airline to offer lower fares in the market place, which they anticipated would stimulate the market.

<u>Highlights of 2001 performance</u>

- Turnover down by 1.8% versus 2000
- Operating loss of €50m, a deterioration of €130m compared to 2000
- Loss for the year of €140m, compared to profit of €72m the previous year

Air France[7]

Although certainly affected by the economic slowdown and September 11th, Air France coped much better than the industry as a whole. In fact, the airline claimed its financial results for the fiscal year April 01-March 02 gave them the "*number one performance in Europe and number three worldwide*".

Prior to September 11th, Air France showed strong volume growth. Even after September 11th, when operating capacity was reduced by eighteen aircraft, capacity matched the previous winter (originally a 5% increase was planned).

Air France was successful in switching capacity from North America to other regions of the world. Fiscal year turnover on North America routes fell by 9.5% and Asian routes also suffered a decline. However,

[5] Main source of information is 2001 Aer Lingus annual report
[6] Achieved in 2002
[7] Main source of information is 2001/02 Air France annual report

10%+ increases in turnover were recorded on French, Caribbean/Indian Ocean and Africa/Middle Eastern routes, leading to positive revenue growth overall.

The passenger business of Air France was the only division that increased turnover in 2001/02. Cargo, Maintenance and Other businesses all saw declines. However, such is the size of the passenger business (83% of revenues) that the company as a whole recorded a 2% increase in revenue.

Operating income fell in all divisions but none of the divisions incurred a loss. Overall, company wide operating income almost halved compared to 2000/01.

Other developments in 2001 included:

- European members of Air France's alliance applied for anti-trust immunity with Delta for operations across the North Atlantic. This was subsequently granted by the US DOT in January 2002.
- Cargo joint venture launched between Air France, Delta and Korean.
- Concorde resumed flights between Paris and New York in November for the first time since the accident.

Highlights of 2001/02 performance

- Air France managed to maintain its debt-to-equity ratio at the same level as 2000 and boasted "*the best ratio of the European industry*" at 0.79 on 31 December 2001.
- The Air France share price fell from a peak of €27 in January to €18 in August. Post September 11th, the share price declined to a low of €9 before climbing back to €17 by December.
- Group net income declined from €421m in 2000/01 to €153m in 2001/02 (-64%).

Alitalia[8]

The aviation downturn in 2001 hit Alitalia as it was trying to resolve long standing financial difficulties. Prior to 2001, Alitalia had suffered from the unexpected collapse of their alliance with KLM and continuing problems with the Malpensa hub.

However, during the earlier part of 2001, Alitalia reported that the impact of these issues seemed to be lessening. Furthermore, various operational and commercial measures, including suspension of some loss making routes, were having the desired impact. On a less positive note, the company suffered from industrial action taken by pilots and flight attendants.

Alitalia entered into an alliance with Air France in July and then joined Sky Team in September.

The 2002-2006 business plan that was developed during the year had to be greatly revised post September 11th. Restructuring measures were put in place recognising "*the desire, clearly expressed by the majority shareholder [the Italian Government] ….to maintain Alitalia's strategic position as a global carrier even in the current situation*".

The company made an operating loss of €291m for 2001, a 14% increase in losses versus 2000. However, the net loss was far worse at €907m, compared to €256m in 2000. It should be noted, though, that 60% of the net loss was derived from extraordinary items – the restructuring measures taken as well as significant accounting write downs.

[8] Main source of information is 2001 Alitalia annual report

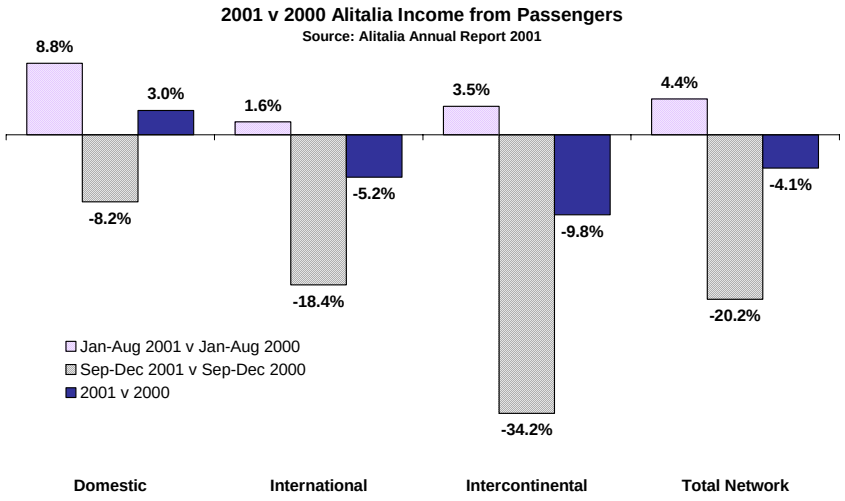


Figure 28

Developments in 2001

- May 2001 - appointment of Francesco Mengozzi as Director and Managing Director of the Company confirmed.
- May 2001 - Alitalia deposited its "Statement of Claim" with regard to the termination of its alliance with KLM.
- July 2001 - Alitalia signed alliance contractual agreements with Air France and Delta Airlines on 27 July 2001.
- July 2001- the European Commission issued a new decision in relation to the recapitalisation operation foreseen in the Business Plan 1996-2000, however confirming the "State 43 Assistance" definition. This verdict was appealed by Alitalia in November 2001.
- September 2001 – Contingency plan drawn up which included suspension of various short haul routes and of intercontinental services to Hong Kong, Beijing, San Francisco and Rio de Janeiro. Frequency and seating capacity were reduced on various other services, resulting in reductions to both short haul and long haul fleets.
- October 2001 - Alitalia began applying a "crisis surcharge" of Euro 6 (Lire 11,618) per flight to each ticket issued and of Euro 0.15 (Lire 290.4) for each kilogram of cargo carried.
- November 2001 - Two Year Plan 2002-2003 approved:
    - Partial or total suspension of routes operated at a severe loss.
    - 2500 "excess" employees identified as well as provision for redundancy incentives for a further 900 employees.
    - Investments in the fleet totalling around €1.5bn.
- November 2001 - Alitalia became a full member of the SkyTeam Global Alliance after it was certified that it had met all necessary requirements (anti-trust immunity subsequently granted by US DOT in early 2002).
- December, 2001 - the Ministry for the Economy and Finance paid €258m into a reserve for future share capital increases. This represented the second instalment of the share capital increase approved by the decisions of the European Commission dated 15 July 1997 and 18 July 2001.

Balkan Bulgarian Airlines[9]

The Zeevi Group, an Israeli company, acquired a 75% stake in Balkan Bulgarian Airlines in 1999. Difficulties surfaced in September 2000 when it was reported that the Zeevi Group claimed the Bulgarian government was not fulfilling its obligations.

On 14 February 2001, Balkan Bulgarian Airlines ceased operations after the Zeevi group stopped funding the carrier. Two days earlier Zeevi filed a $230 million suit against the Bulgarian Government, claiming it had been misled before its decision to buy 75% of the airline. Zeevi acquired the stake in 1999 after agreeing to take on $30million of Balkan's debts and provide $100 million funding within five years.

By May the airline began gradually resurrecting its network under the receiver appointed by the Bulgarian court. The receiver submitted a recovery plan that enabled the resumption of a limited timetable using a single Tupolev Tu-154M.

British Airways[10]

British Airways had endured several years of disappointing financial results (when compared to performance in the mid 1990s). However, 2001/02 was a particularly bad year, when the first annual pre-tax loss was recorded since 1982 (when the airline was still in public ownership).

Even before September 11th, the airline identified several factors that were causing them difficulty – the economic downturn, the effect of foot and mouth disease on UK tourism, the high value of UK £ sterling and the grounding of Concorde.

Post September 11th, the decline in business travel (especially on the North Atlantic, a key market for the airline) and increasing competition from low cost carriers hurt financial performance. British Airways responded with a strategic review, "Future Size and Shape", mainly focussed on radically reducing the airline's cost structure.

Financial Highlights for 2001/02 (April 2001 – March 2002)

- Turnover fell by 10.1% on the previous year, with routes to the Americas seeing turnover fall by 17% (capacity was reduced prior to September 11th).
- Operating loss of UK £110m, a worsening of UK £490m compared to the previous year. UK £326m of this decline was attributed to routes to the Americas, with Far East and Australasia routes also badly hit.
- The pre-tax loss of UK £200m compared to a profit of UK £150m the previous year.
- Gearing (net debt/equity) increased in 2001/02 but not massively.

Finnair[11]

Finnair made a slight loss in 2001, but considered itself "*one of the best European airlines in terms of operational quality and financial soundness*".

Passenger numbers were down by just 0.1%, although this hid a shift of passengers from North America (-15.7%) to Asia (+17.2%) and from domestic services (-3.8%) to European international services (+2.8%).

Turnover declined by 1.6% over the year 2000. Excluding capital gains, Earnings Before Interest and Tax were negative at € -8m, compared to a positive result of €52m the previous year.

[9] Main source of information is Air Transport Intelligence and Financial Times Power search
[10] Main source of information is 2001/02 British Airways Annual Report
[11] Main source of information is 2001 Finnair annual report

Iberia[12]

2001 was a significant year for Iberia. It was publicly listed, marking the last stage of its privatisation programme. Financial performance was certainly impacted by September 11th and the wider economic downturn but Iberia were less exposed to the worst hit market sectors.

Considerable capacity expansion was planned for 2001. The 7.6% capacity actually recorded was lower for several reasons – sluggish traffic demand experienced in the early part of 2001, damage caused by industrial unrest and finally the impact of September 11th which triggered the application of an "anti-crisis" plan.

Nevertheless, passenger numbers increased by 1.7% over 2000 (RPKs up by 3.3% reflecting longer average stage lengths).

The Iberia Group also saw income for the year improve by 5.6% on 2000. Passenger ticket revenues increased by 7.0% and Cargo income rose by a similar amount (7.1%). However, other areas of the group saw revenue fall in activities such as handling and technical assistance to airlines.

A geographical analysis of revenues also highlights some interesting trends. In contrast to many airlines, long haul revenues were up very strongly year on year (+7.5%). Although North American income fell by 8.6%, it only represented around a quarter of Iberia's long haul income. Large turnover increases on South and Central American routes were much more significant to the overall long haul business.

Following September 11th, the Directorate-General of Employment partially approved the Spanish Labour Force Reduction Plan submitted by IBERIA, providing for the voluntary redundancy of 2,515 employees of all categories.

At an operating profit level, the group only just broke even (€ 5m in 2001 versus € 66m in 2000). A pre-tax loss of € 85m was recorded, a worsening of €306m compared to 2000 result.

<u>Key Developments in 2001</u>

- March 2001 - the Spanish Council of Ministers approved a Royal Decree for the application of a "golden share" to Iberia. The golden share will be retained by the Spanish government for a period of 5 years and apply to corporate resolutions in areas such as change of corporate purpose; voluntary dissolution, the spin-off or merger of Iberia.
- April 2001 – SEPI, Iberia's state owned holding company, sold 48.51% of the Company's capital stock through a public offering. Iberia shares were admitted to listing on the Spanish stock exchange, finalising the privatisation of the airline. One year earlier SEPI had sold 40% of Iberia's capital stock to various institutional investors. Following the public offering, the Company's shareholder structure was as follows:
    - Free-Float, 54.6%;
    - British Airways and American Airlines, 10%;
    - Caja Madrid, 10%; BBVA, 7.3%; Logista, 6.7%; El Corte Inglés, 3%; Ahorro Corporación, 3%;
    - SEPI retained a holding of 5.4% as a non-strategic financial investment.
- Iberia suffered labour unrest with their pilots (between February 26 and March 7), and with the labour union SEPLA, who staged ten one-day strikes in June, July and August.
- Iberia entered into several agreements with airlines (both with members of the Oneworld alliance and other airlines), most notably with British Airways. This included an extension of the existing code-sharing agreement and the implementation of joint operations in Latin American markets.
- Iberia achieved a doubling of sales through Iberia.com, consolidating its position as the leader in e-commerce in Spain. As a result of growth in direct sales and other initiatives, the company was able to reduce sales costs by 0.9 percentage points versus 2000 (to 10.1% of traffic revenues).

[12] Main source of information is 2001 Iberia annual report

KLM[13]

The fiscal year of 2001/02 (ending March 2002) was challenging for KLM, in line with the sector as a whole. Even before September 11th, the KLM Group had already decided to cut capacity in the winter schedule by 5% to address the threat of economic slowdown. After September 11th, measures were intensified with planned capacity reduction increased by a further 10%.

Capacity for the entire fiscal year fell by 3.9% (as measured in ASKs). Passenger numbers were down by 1.0% but RPKs fell much further (- 5.2%), reflecting a shift in passenger mix away from long haul. Cargo weight carried also declined, by 2.4% over 2000/01.

A total of 1,200 FTEs were shed in the 'flexible skin' created in part by the temporary workers. In addition, working hours were cut for a period of 12 weeks, in the first six weeks for more than 8,400 employees and in the remainder for just over 6,700 employees.

Income for the year suffered a large decline (-6.1%). Of the different divisions, revenue from cargo and other revenue fell more greatly than revenue from the passenger business. The Engineering & Maintenance business was affected by the reduced flying hours of the aircraft it maintained.

Financial highlights

- Operating result was a €94m loss, versus a €277m profit the previous year.
- Pre-tax result before extraordinary items saw a €224m loss, a worsening of €393m compared to 2000/01.
- Net debt to equity ratio not adversely impacted.

Lufthansa[14]

Lufthansa managed to record a small operating profit of €28m in 2001. However, this was against an original target of €1bn (which was achieved in 2000). This target was reduced to €700-750m in the summer of 2001, as a result of poor economic conditions and the damage caused by labour disputes and strikes. The aftermath of September 11th led to almost all operating profit being eliminated.

In the spring of 2001, the planned take-over of partner Sky Chefs was brought forward in order to speed up its integration with LSG. However, the merged entity, LSG SkyChefs, was heavily exposed to the US market and post September 11th experienced vastly reduced demand while experiencing higher costs through the need to implement new security measures.

Also in spring 2001, the "D-Check" programme was launched with the aim is to optimise business processes and generate an extra €1bn in cash flow by 2004. The programme was adapted after September 11th to take account of the new operating environment.

A total of 45 aircraft were grounded and cost-cutting measures were implemented such as a recruitment and investment freeze as well as the postponement and cancellation of planned projects. However, at the end of 2001, firm orders for 15 new Airbus 380 superjumbos were placed, with delivery scheduled from 2007.

Traffic revenue for the year was down by 1.5% on 2000. Although total revenue for the group increased by 9.8%, this was driven by changes in the group companies, not organic growth. In fact, on a like-for-like basis, revenues for the group would have fallen by 1.0%.

A net loss of €633m was incurred for the group, compared to a profit of €689 the previous year. Despite this disappointing result, Lufthansa claimed their financial position had the best rating of all European airlines.

[13] Main source of information is 2001/02 KLM annual report
[14] Main source of information is 2001 Lufthansa annual report

This followed assessments in December 2001 of both long term liabilities and short term debts from agencies Moody's and Standard & Poor's[15].

Although most of the businesses within the group recorded poor financial results, the Maintenance Repair Overhaul segment (Lufthansa Technik) produced its best results to date.

Olympic Airways[16]

Olympic entered 2001 in serious difficulty. In 2000, it struggled with huge debts, and a potential acquirer of equity, British Airways, withdrew from discussions about taking a 20% stake. At the end of 2000, Greece officially launched the tender for a majority stake in Olympic Airways.

In February 2001, Greece's financial advisors CSFB announced a shortlist of four bidders. These were consortia led by Cyprus Airways, Greek carrier Axon Airways, Greek ship owner Stimitas Restis and Australian consultancy company Capital Integrated Airline Solutions.

In March, Greece's parliament passed legislation clearing the way for a foreign investor to take a majority stake in the national carrier Olympic Airways.

Of the four short listed bidders, three submitted bids after the deadline for submission was extended to the middle of May. Capital Integrated Airline Solutions did not take their interest further.

By the end of May, it was announced that none of the three initial firm bids received met the Greek Government's requirements. CSFB subsequently invited all four groups short-listed in February to submit new bids by 18 June.

CSFB commented that "*None of the offers received were compliant with the terms of the Hellenic Republic's request for binding offers and, as a result, this stage of the privatisation process could not lead to the selection of a preferred bidder*."

All four groups subsequently submitted new bids. In July 2001, Athens-based Axon was named as preferred bidder for Olympic, ahead of Cyprus Airways and Integrated Airline Solutions (IAS) of Australia. Axon then began what it said would be a month of talks on acquiring a 51% share in the national carrier. At the same time, discussions and clarifications continued with Cyprus Airways and IAS.

Olympic Airways bid evaluation	Axon Group	Cyprus Airways	IAS	Restis Group
Financial strength of bidder	4	2	3	0
Management capability of bidder	3	4	2	0
Viability of 'new' Olympic Airways	3	4	2	0
Reduced investment risk for govt	3	4	2	0
Max revenue potential for govt	4	0	0	3
Total	**17**	**14**	**9**	**3**

Source: CSFB (in Airline Business)

Figure 29

In late August, Axon president commented that two to three months would be needed to try to reach agreement on a range of details - one of the most sensitive being job cuts. "*The gap between costs and revenue is too big, and we must minimise costs and increase revenue if Axon is to buy into Olympic*."

On September 7th, it was reported that CSFB were about to recommend a bid to the Greek Government. CSFB announced that it had concluded negotiations with initially favoured bidder Axon Airlines, and had also received clarification on the rival proposals from the Cyprus Airways-led consortium and Australia's Integrated Airline Solutions (IAS).

[15] For its long-term liabilities, Lufthansa was given the ratings BBB+ by Standard & Poor's and Baa1 by Moody's Investor Services, while its short-term financial debts were rated at A-2 and P-2, respectively.
[16] Main source of information is Air Transport Intelligence and Financial Times Power Search

On September 13th, CSFB made the following statement "*Credit Suisse First Boston hereby announces that, following its recommendation to the Hellenic Republic, it has been authorised by the latter to continue negotiations with Axon Airlines, following the progress made, for a further 35 days commencing on 13 September, 2001*."

At the same time, Cyprus Airways withdrew its binding bid from the selection process.

After further delays caused by various factors, including cabinet reshuffles in Greece, on November 15th, CSFB recommend re-opening the bidding to a second investor, Australia's Integrated Airlines Solutions. Exclusive negotiations with Axon Airlines were stopped.

In a further twist, Axon Airlines ceased operations in early December after its parent group decided to withdraw support for the airline in the light of the post September 11th crisis in the air transport sector.

Also in early December, it was reported that the Greek prime minister gave the two ministers responsible for Olympic Airlines' future two months to save the airline from bankruptcy. The carrier was reported as needing at least 720 billion drachmas ($1.85 billion) to survive.

At the end of December, Greece's Government launched the "final phase" of its privatisation of Olympic Airways when it concluded a fixed negotiating period with leading bidder Integrated Airline Solutions Consortium. The period was scheduled to last until 31 January 2002.

In February 2002, it was announced that talks with IAS had broken up.

SAS[17]

SAS endured a traumatic year in 2001. As well as the economic difficulties experienced by much of the industry, on October 8th SAS suffered from the worst air disaster in its history. 118 people lost their lives when a flight from Milan Malpensa airport crashed on takeoff.

In addition, the entire SAS board resigned after the European Commission imposed a fine for illegal market cooperation with Danish Maersk Air.

For the SAS airline division as a whole, passenger numbers declined by 0.8% compared to 2000. For the 9 months to the end of September, passengers had increased by circa 1.5%. However, a big post September 11th fall in the last quarter (- 7.8%) resulted in volumes being down for the year as a whole.

Scandinavian, European and intercontinental routes all experienced dramatic passenger reverses in the final quarter. However, Scandinavian routes had suffered from a large drop in passenger numbers prior to the final quarter, while other route areas had grown.

Revenue for the SAS airline actually increased in 2001, by 4.9%. Within the airline division, though, cargo revenue fell by 62%.

Other divisions also saw revenue rise, giving the SAS group an overall revenue increase of 8.2%.

However, pre-tax profits were significantly worse for all divisions. The airline division made a pre-tax loss of SEK 1.5bn – compared to a profit of SEK 2.0bn the previous year. At a group level, pre-tax losses were smaller due to positive results from other divisions. However, the loss of SEK 1.1bn was almost SEK 4bn worse than the equivalent result in 2000.

Key developments in 2001

- The shareholders of the three SAS parent companies were invited to exchange their shares for the same number of newly issued shares in SAS AB, the newly formed holding company for the SAS Group.
- Jørgen Lindegaard took over as President and CEO on May 8, 2001.

[17] Main source of information is 2001 SAS annual report

- SAS announced, in agreement with the principal owners of the Norwegian company Braathens, its intention to acquire Braathens' airline operations, excluding Malmö Aviation,
- The first day for listing and trading with shares in SAS AB was July 6, 2001.
- The European Commission fined the SAS Group and Maersk Air €39m and €13m respectively for infringement of the EU's competition rules.
- Following criticism of its handling of the SAS/Maersk affair, the Board of Directors of SAS AB decided to convene an extraordinary general meeting to elect a new Board.
- The Norwegian Competition Authority approved the SAS Group acquisition of Braathens.
- The SAS Group announced that an agreement had been concluded to increase its holding in Spanair from 49% to 74% of the shares.
- A new Board of Directors was appointed at an extraordinary general meeting held on November 6.
- Airport buildings were sold to Nordisk Renting and GE Capital for SEK 3 billion.
- The acquisition of Braathens ASA was completed.

TAP Air Portugal[18]

In many respects, 2001 was a relatively successful year for TAP. Having endured a financial crisis that threatened the company's existence in 2000, TAP made a small operating profit in 2001, exceeding its targets established in the recovery programme. This was achieved in spite of the wider problems suffered by the industry both before and after September 11th.

Operating income increased by 7.0% in 200l. Passenger income rose by slightly more at 7.7%, much of the rise attributable to achieving significantly better yields. The Maintenance and Engineering Business Unit achieved a record result, with a 32% increase in income from services rendered to third parties. Finally, the Handling Business Unit struggled somewhat. It identified both the liberalisation of the sector and the termination of Qualiflyer Group client companies as factors.

Key developments

- On 23 January 2001, the Board of Directors of SAirGroup announced its intention to reconsider its investment policies as a result of internal problems, having decided not to invest further in Air Transport;
- On 1 February 2001 the agreement entered into by SAirGroup with the Portuguese Government was terminated. Consequently, the SAirGroup gave up its intention to participate in 34% of the Company's capital, initiating the first phase of the planned privatisation process. Under the termination agreement
    - TAP was free to review its alliances strategy, while remaining in the Qualiflyer Group
    - SAirGroup guaranteed the Company's short term financial operations and the refinancing of an A310 aircraft
    - Contacts to determine the compensation resulting from SAirGroup's decision were to be established;
    - TAP remained in the Qualiflyer Group, benefiting from the resulting synergies;
- On 2 May, TAP submitted, to the European Commission, a Restructuring Plan approved by the Portuguese Government, establishing the guidelines for recovery of the Company, to be implemented independently of the privatisation process
- In 2001, TAP selected two financial institutions to value its assets, under the financial recovery process which includes privatisation of up to 39% of its capital. Upon completion of the final valuation report, a road show was started in September to present the Company to potential investors.
- The Qualiflyer Group was broken up at the end of the year as a result of the bankruptcies of Swissair (October 2001) and Sabena (November 2001).

[18] Main source of information is 2001 TAP annual report

3.3 Low Cost Carriers

3.3.1 Introduction

By the end of 2001, the five main low cost players carried 23 million passengers, continuing their rapid growth since their launch in Europe in the 1990s.

Ryanair were the biggest low cost carrier, carrying 41% of the sector's traffic. Ryanair 's passenger numbers are comparable to the medium sized European flag carriers.

easyJet were in second place with a 26% share, followed by Go (16%), Virgin Express (11%) and Buzz (6%).

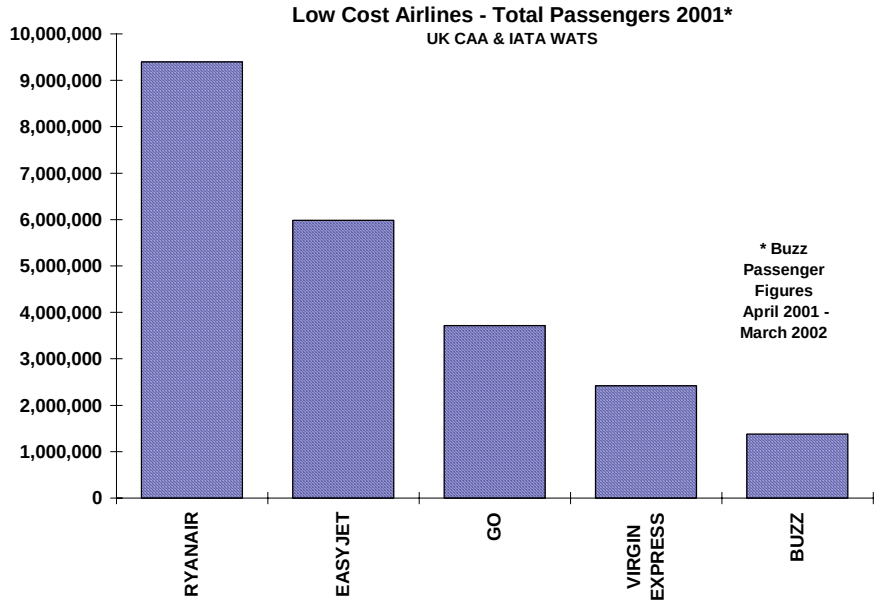


Figure 30

3.3.2 Sector Traffic Growth

The low cost model has proved a very successful one so far. The simple product and distribution mechanisms have proved attractive, as of course have the low fares with few of the restrictions historically found with flag carriers.

The simple business processes and avoidance of congested and expensive airports has given the low cost sector a major cost advantage compared to their full service competitors.

The low cost airline sector has enjoyed huge rates of growth since its introduction to Europe. The sector as a whole posted 20%+ growth rates in each of the four years up to and including 2001. Although growth slowed substantially in 2001, this appears to have been only a temporary slowdown as airlines paused before accelerating growth once more.

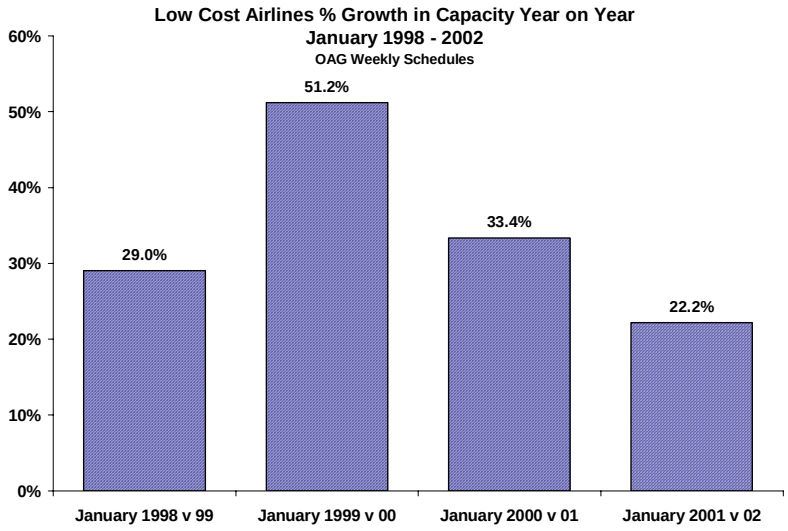


Figure 31

Although the reasons are not clear cut, low cost carriers appeared less impacted by the events of September 11th. In fact, there is some evidence to suggest that the low cost sector actually benefited from the subsequent problems affecting their more traditional competitors. The International Labour Office in Geneva[19] highlighted some potential reasons why low cost airlines continued to be successful post September 11th:

- No exposure to most badly impacted North Atlantic market.
- Perception that low cost airlines were less likely to be subject to any attacks as they are not flag carriers.
- Secondary airports that low cost airlines operate from are less congested and may have found it easier to implement additional security requirements without causing widespread disruption. In any case, low cost airline passengers tend to be less time sensitive and therefore may have found the additional time required for security checks less disruptive.
- As the economy slowed down, travellers (especially business travellers) became more cost sensitive and switched to low cost airlines.
- Low cost airlines benefited from withdrawal of full service airlines from routes as losses can no longer be accommodated.
- Candidate airports for low cost expansion were under more pressure to make a deal as growth looked unlikely from other airline sectors.

[19] The impact of 11 September on the aviation industry: Traffic, capacity, employment and restructuring (Jan 2002)

3.3.3 Historical Traffic Growth by airline

Since the latter part of the 1990s, Ryanair, easyJet and Go all grew at similar (very large) rates of growth. Virgin Express saw flat traffic followed by a decline in 2001.

Ryanair continued to be substantially larger than their competitors up to and including 2001.

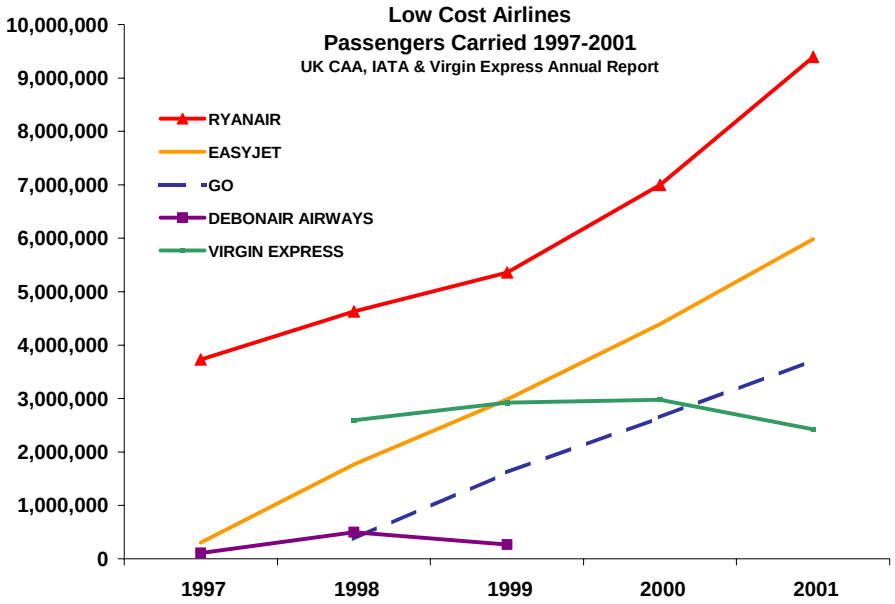


Figure 32

The compound effect of this growth was for low cost weekly seats to rise from 100,000 in July 1996 to more than 600,000 in July 2001. Between them, the two largest players Ryanair and easyJet provided more than 50% of seats, although their share had been declining.

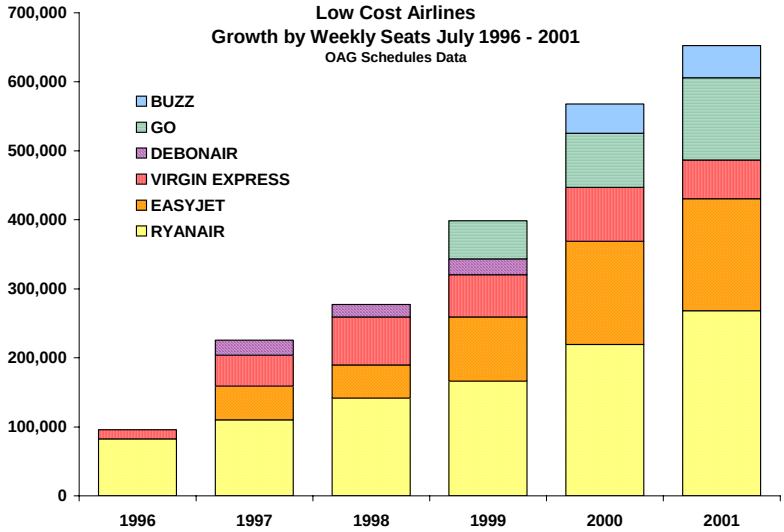


Figure 33

NB. Virgin Express schedules data includes flights shared with Sabena. These flights include an agreement whereby both airlines sell a percentage of the seats. Where possible, the analysis attempts to give an accurate indication of Virgin Express's seating capacity based upon the aircraft type flown.

The number of destinations served by low cost carriers expanded dramatically. By July 2001, 92 points in Europe were served by at least one low cost carrier.

Ryanair has the most extensive network. Their approach differed from easyJet who concentrated somewhat more on serving individual routes with high frequency and also operating a number of routes from most points on their network.

For example, in July 2001, only a quarter of Ryanair routes were served with more than two daily services. In contrast, the equivalent figure for easyJet was 60%.

The main exception to this general trend is Ryanair's London-Dublin route which had 21 daily services, spread between Stansted and Luton airports.

JULY
Low Cost Carriers Destinations

	1996	1997	1998	1999	2000	2001
Buzz					16	19
Debonair		7	7	11		
EasyJet		8	11	16	18	17
GO				13	20	22
Ryanair	13	18	26	33	42	45
Virgin Express	7	10	10	10	12	9
Total DESTINATIONS	**20**	**43**	**54**	**83**	**108**	**112**

Low Cost Carriers City Pairs

	1996	1997	1998	1999	2000	2001
Buzz					14	18
Debonair		11	10	11		
EasyJet		8	12	19	26	25
GO				12	20	30
Ryanair	11	16	24	32	43	52
Virgin Express	6	9	9	11	12	8
Total CITY PAIRS	**17**	**44**	**55**	**85**	**115**	**133**

Low Cost Weekly Frequency

	1996	1997	1998	1999	2000	2001
Buzz					361	400
Debonair		226	187	243		
EasyJet		328	324	628	1,010	1,097
GO				371	531	805
Ryanair	663	878	1,102	1,229	1,517	1,777
Virgin Express	88	370	474	472	550	386
Grand Total	**751**	**1,802**	**2,087**	**2,943**	**3,969**	**4,465**

Figure 34

3.3.4 2001 v 2000 traffic performance by airline

In 2001, the relatively new Go grew faster than the more established airlines Ryanair and easyJet (who still recorded strong growth rates). Buzz and Virgin Express actually saw capacity fall.

Virgin Express was involved in restructuring their business, resulting in implementation of a 27% decrease[20] on the network, which included the closure of its Shannon based operation.

In Winter 2001/02, Buzz scaled down capacity by removing BAE 146 aircraft from some of their seasonal French routes.

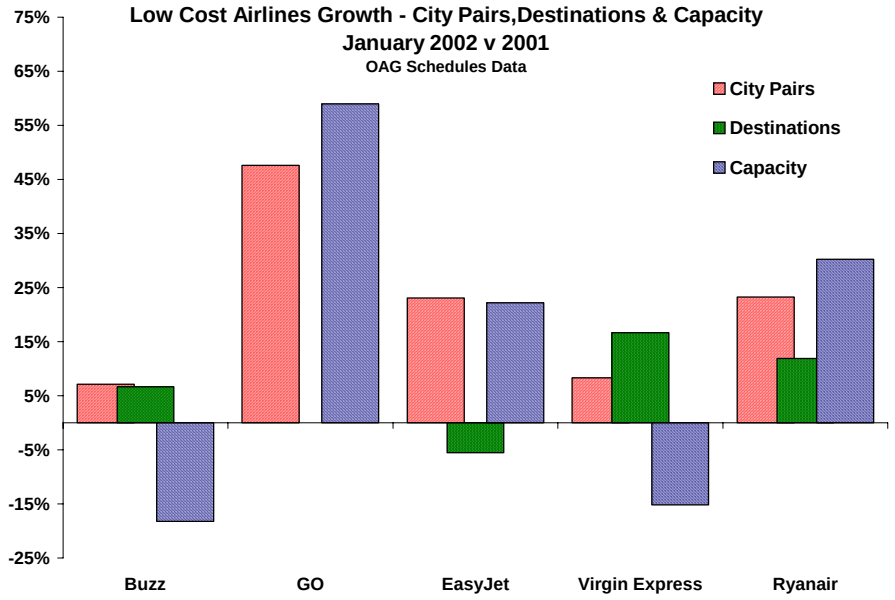


Figure 35

[20] ATI, 17 October 2001

3.3.5 Financial Performance by airline

The low cost sector has produced some of the most impressive financial returns in the European aviation sector. In particular, Ryanair consistently recorded retained profit margins far greater than their airline competitors. Margins of 20%+ were virtually without precedent for European airlines.

easyJet's profitability was some way short of Ryanair but still excellent in comparison to the majority of airlines financial returns. They have also been steadily improving.

Meanwhile, Virgin Express struggled to produce profits, though recovering somewhat in 2001 from a very poor 2000 result.

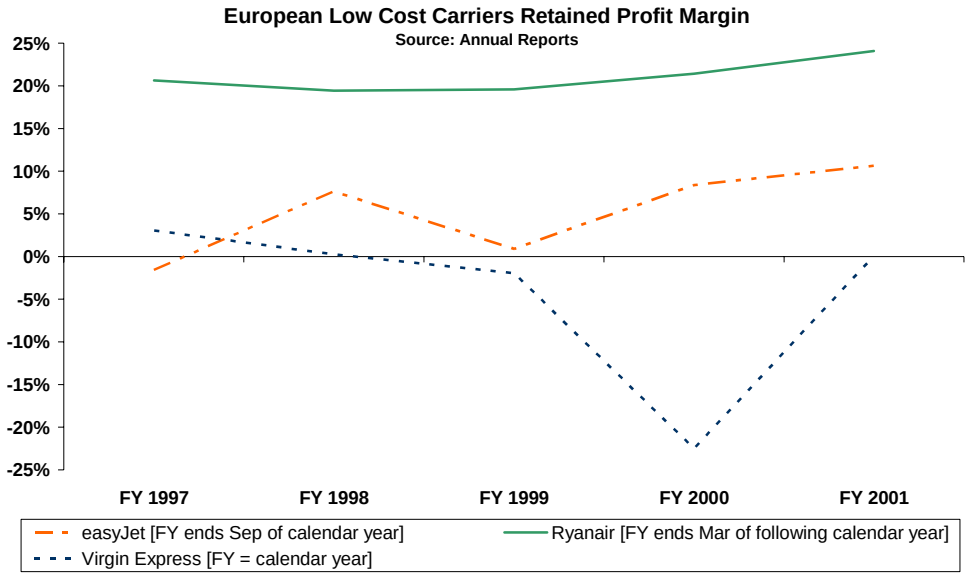


Figure 36

In financial terms, the low cost sector appeared barely affected by the events of September 11th. All three airlines with publicly available results improved their performance in the six months from Oct 2001-Mar 2002 (compared to the same period the previous year). Only easyJet showed some signs of a slow down in the rate of profit growth.

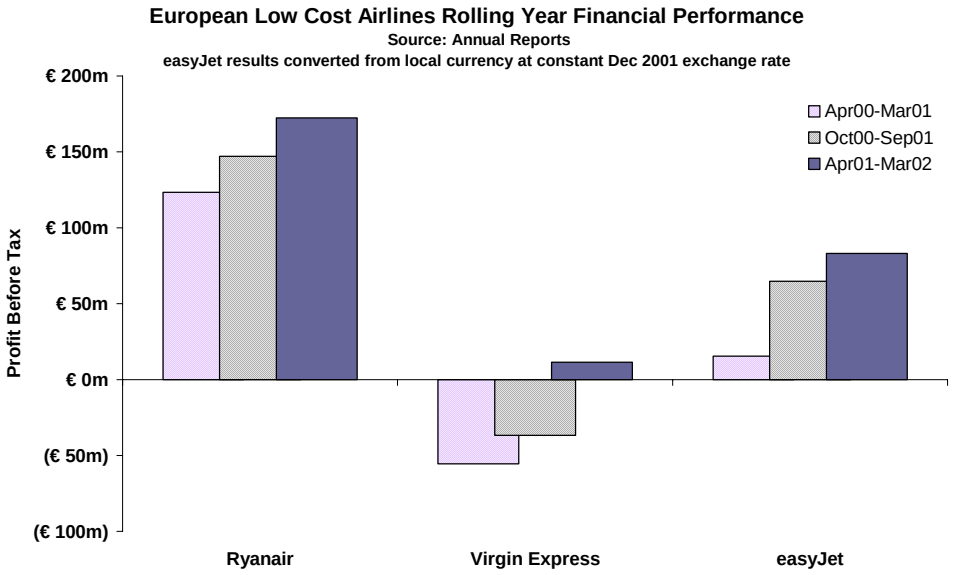


Figure 37

In 2001, Ryanair recorded the best profit margin of any major airline in the world[21]. In November 2001, Ryanair briefly became Europe's #1 airline in terms of market capitalisation, displacing the much larger Lufthansa. The growth in the value of Ryanair is remarkable and mirrors a downward trend for most full service airlines.

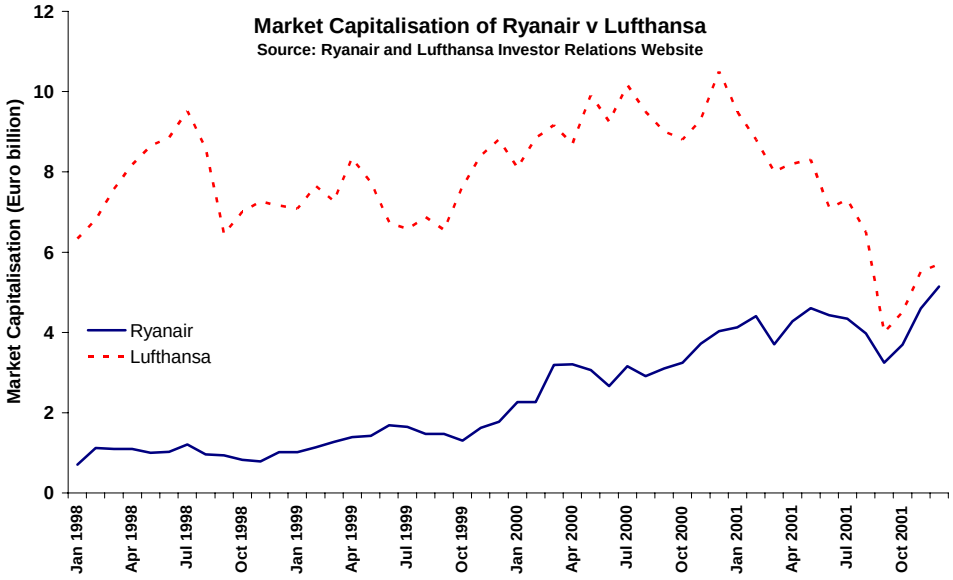


Figure 38

[21] Airline Business Top 150 Airlines Financial Rankings

3.3.6 Key developments at individual low cost airlines

easyJet[22]

Along with other low cost airlines, 2001 was a positive year for easyJet. Although easyJet's financial year ended in September, meaning that only minimal post September 11th performance was included in the results, there is plenty of evidence that the airline was not unduly hurt by the crisis affecting the wider industry.

The year to 30 September 2001 saw continued rapid growth and improvement in profitability:

- 26% increase in passenger numbers (with increase in average number of aircraft operated from 17.3 to 21.1).
- 35% increase in revenue.
- Pre-tax profit of UK £40m, up 82% on previous year.
- Internet sales penetration up to 91% by the end of the financial year (compared to 78% at end of previous financial year).

In the 2001 fiscal year, Amsterdam was established as a "major focus city". More generally, the airline concentrated on linking existing network points. To this end, nine new routes linking existing cities were inaugurated.

The airline stated that "*Our strategy remains unaltered by the attacks in the USA on 11 September 2001 and we believe that the business model remains robust*". easyJet also identified opportunities to capitalise on the wider problems facing the industry.

Ryanair[23]

Ryanair reported its 12th consecutive year of increased profitability in the fiscal year 2001/02 (ending March 2002). 2001/02 was another year of massive growth, achieving industry leading profit margins.

During the year Ryanair opened two new European bases at Brussels Charleroi and Frankfurt Hahn. The airline also launched 22 new routes in total, increasing the 36 aircraft operated at the start of the year to 41 by the year end.

The airline also claimed that their website, Ryanair.com, had grown to be the largest internet travel site in Europe. During the year, initiatives to make tickets more flexible were also launched.

<u>2001/02 financial highlights</u>

- 38% increase in scheduled booked passengers.
- 28% increase in revenue (an 8% decline in income per passenger).
- 44% increase in net profit, up to €150m euros (resulting in an industry leading revenue margin of 24%, up from 21% the previous year).

One of the remarkable aspects of the financial results was that the already excellent margins were improved further while volume was grown massively and average fares were reduced by 8%. This was achieved by reducing unit costs as the volume throughput increased. Employee numbers only rose by 4%, meaning that passengers per employee had risen to 7,250 by year end (compared to 5,487 the previous year).

Looking forward, the airline signed an order with Boeing for 100 next generation 737-800 aircraft, with further options to buy up to 50 additional aircraft. These aircraft were to be delivered over a seven year period.

[22] Main sources of information is easyJet annual report and interim results
[23] Main source of information is 2001/02 Ryanair annual report

Virgin Express[24]

2001 was a very eventful year for 2001, even when compared to the general state of flux across the industry as a whole. Virgin Express (Ireland) was closed. Sabena, with whom Virgin Express had a commercial agreement accounting for 40% of its revenues, were declared bankrupt. The airline was also involved in sustained merger discussions with Sabena's successor. These merger talks were not concluded, though subsequently a commercial agreement with SN Brussels Airlines was reached.

After incurring fairly large losses in previous years, Virgin Express were able to announce a small operating profit in 2001. The €1.5m operating profit compared to a €61m loss in 2000.

As a result of the Brussels consolidation strategy undertaken and the unexpected Sabena bankruptcy, passenger numbers fell by 34% on 2000. Revenues were reduced by 27% but operating expenses were cut by 40%, leading to an improved result.

At the end of 2000, Virgin Express announced a three pronged strategy which was mostly implemented over the course of 2001.

- Phase 1 of the strategy was to refocus and restructure the Virgin Express business at Brussels. In the early part of 2001, this was implemented by cutting capacity from 23 to 13 aircraft, by withdrawing from time based charter business and by closing down Irish operations.
- Phase 2 sought to "*improve the quality of the Virgin Express product and deliver profits*". This initially focussed on improving on-time performance, and more generally, staff morale.
- The final phase of the strategy was to expand the Brussels network. To this end, an extra 5 destinations were added over the course of the year, bringing the network from Brussels up to 13 points.

2001 also saw load factor, a key driver of the low cost business model, increase by 8.4 percentage points to 81.7%. Internet and direct sales increased, especially after the demise of the Sabena commercial agreement.

Unlike most low cost airlines, Virgin Express entered into agreements with the four major Global Distribution System (GDS) providers at the beginning of 2001. This distribution channel subsequently accounted for 21% of bookings.

[24] Main source of information is 2001 TAP annual report

3.4 Regional Airlines

3.4.1 Introduction

There are many regional scheduled airlines operating in Europe. While some airlines are subsidiaries of full service airlines, the majority are independently owned.

The largest three regional airlines in 2001 were subsidiaries of larger airlines:- Lufthansa CityLine, Crossair and KLM uk.

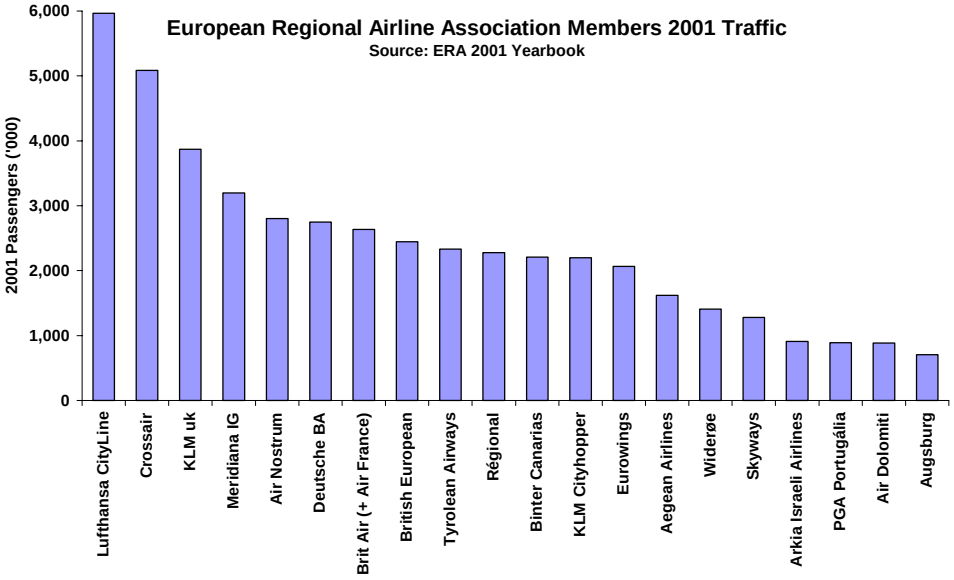


Figure 39

3.4.2 Historic Traffic Growth

Historical Growth

Up until 2001, airline members of the ERA (European Regions Airline Association) reported very strong year on year traffic growth, generally surpassing the full service airline sector although below the rates of growth recorded by the low cost sector.

The ERA identified the liberalisation of the aviation factor as a key factor in the high level of growth achieved by its members and "*perceives that liberalisation has enabled many new services to open*"[25]

This growth declined sharply in 2001, although passengers did rise by 3.1% on the year 2000. There was a small decline in seat factor as the new capacity introduced was not accompanied by equivalent new traffic.

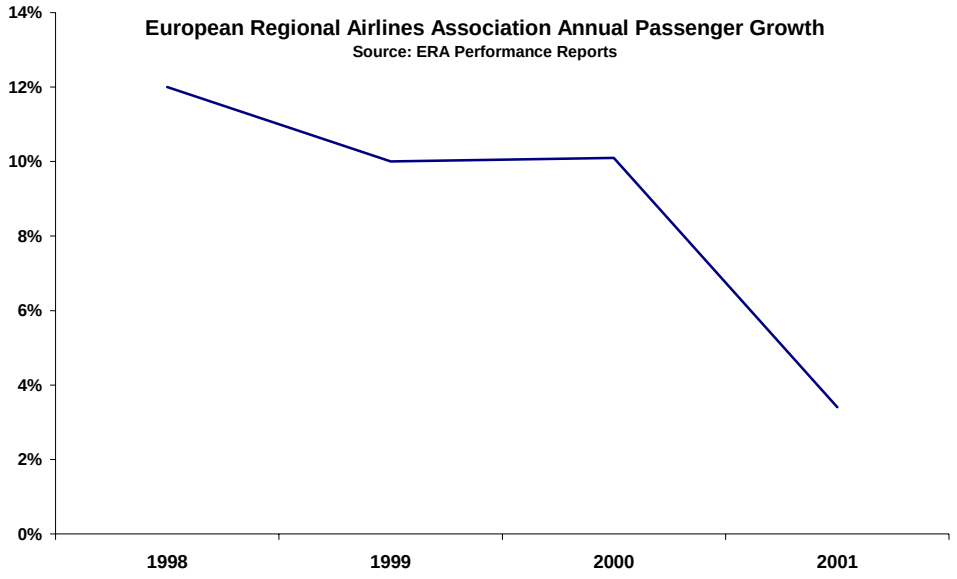


Figure 40

[25] ERA views on UK Government's Consultation Document on Air Transport Policy, from ERA website

2001 v 2000

There was a large variation in traffic performance across leading regional airlines. A number of carriers posted large year on year increases, while some recorded substantial decreases.

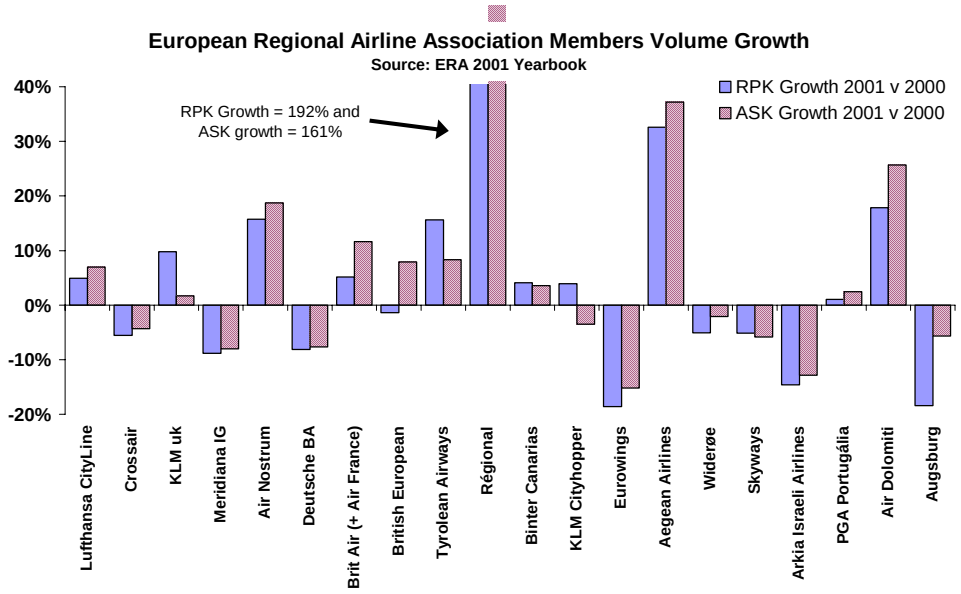


Figure 41

In the first half of the year, traffic growth slowed for ERA airlines as a whole, though respectable year on year increases were still being achieved.

Traffic from regional airlines suffered a large loss in October 2001, following on from the events of September 11th. However, the recovery was fairly rapid. By November 2001, traffic was back above November 2000 levels, with a further improvement in December. Nevertheless, growth was still below the levels of pre-September.

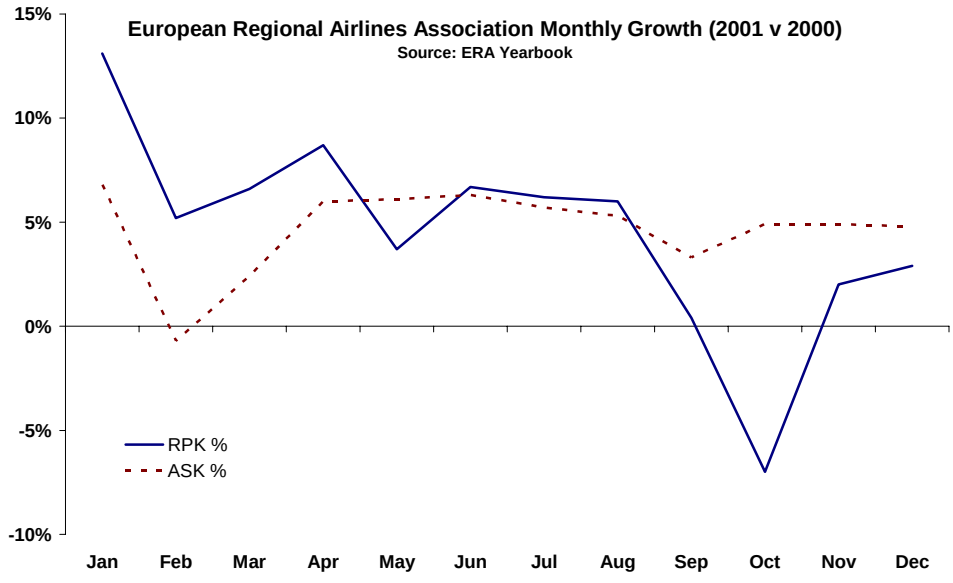


Figure 42

3.4.3 Financial Performance

Revenue performance

Most regional airlines achieved revenue increases in 2001, despite the challenging environment. At least some of this was achieved by filling some of the extra capacity added during the year.

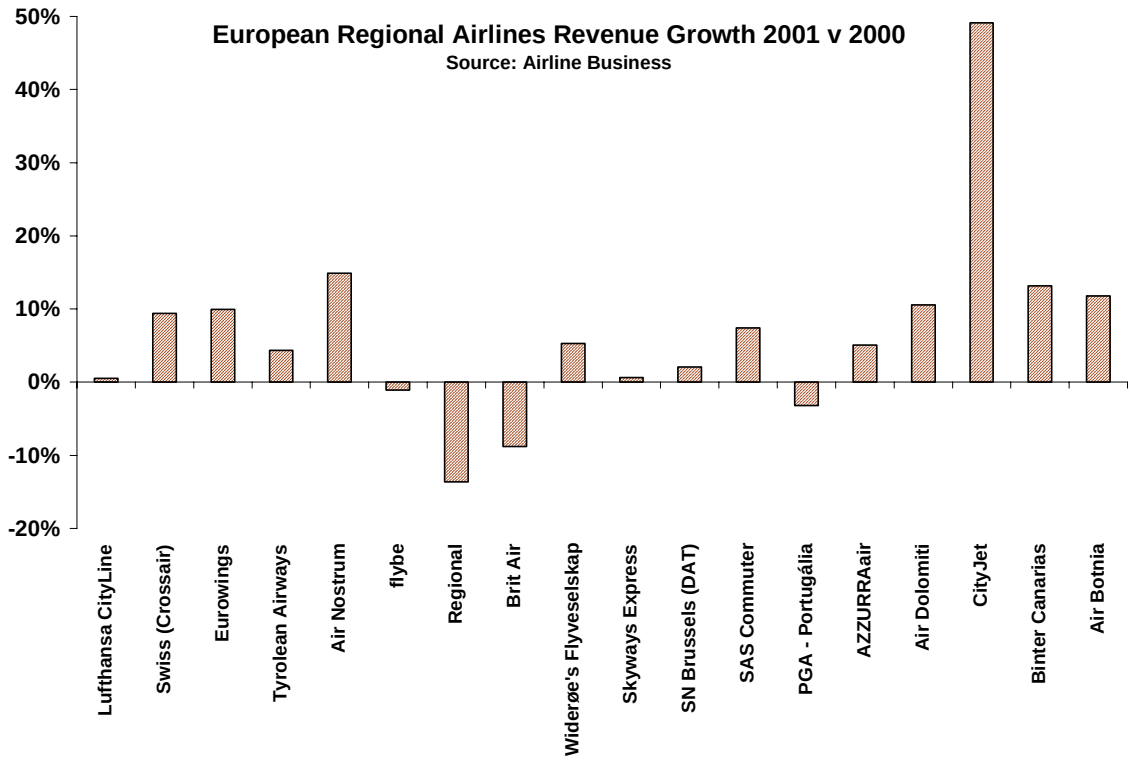


Figure 43

Profitability

The profitability of airlines with publicly available results was extremely mixed in 2001. Almost half the sample of 9 airlines made profits, a much higher proportion than in the full serviced sector. However, some of the airlines made huge losses. The problems with the Swissair Group are well documented, but in addition to Crossair, French airlines Regional and Brit Air made large losses.

Interestingly, the September 11th events do not appear to have had a major impact on the results of certain regional airlines. However, overall, net margin fell to -12.8% in 2001 from -2.3% in 2000. However, there are many airlines for which data is not available, so caution must be used interpreting overall sector results.

3.5 Analysis of performance of airlines in charter airlines sector

3.5.1 Size of European tourism market

Before examining the European charter market it is important to understand the importance of tourism within Europe. Although tourists travel on all forms of transport, international tourism statistics provide a good indication of trends in the travel market.

Globally, international tourist arrivals[26] amounted to 693 million in 2001, 4 million down from 2000. This was due to the weakening economies of major tourism generating markets and the impact of the terrorist attacks of September 11. Tourists shifted their travel habits during this period of time, choosing closer and less expensive destinations.[27]

Europe is the largest international tourism market worldwide. In 2001, there were just over 400 million tourist arrivals, a slight reduction on the previous year. Europe as a whole accounted for 57.8% of world's international tourist arrivals and 49.8% of international tourism receipts[28] - worth €257bn in 2001.

Figure 44

[26] WTO - The unit of measure generally used to quantify the volume of International Tourism for statistical purposes is the number of International Tourist Arrivals.

[27] WTO – Data provided by Secretariat in June 2002

[28] WTO International tourism receipts are defined as expenditure of international inbound visitors including their payments to national carriers for international transport. They should also include any other prepayments made for goods/services received in the destination country.

The European tourism market is divided into five sub regions by the WTO. In 2001, Western Europe had a 35% share of the European international tourist arrivals while Southern Europe had 31.9%.

Since 1995 growth has been 3.6% annually, with Southern Europe experiencing the largest growth of 5.6% per year.

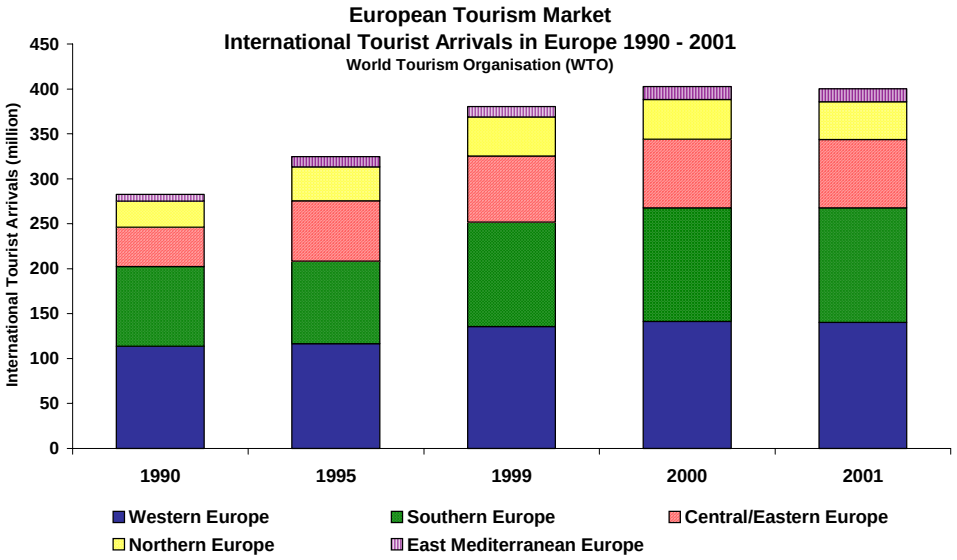


Figure 45

Europe contains many of the world's top destinations, led by France, which had 76.5 million international tourist arrivals in 2001. Spain was in second place.

European Tourism Market
Europe's Top Tourist Destinations 2001
World Tourism Organisation (WTO)

World Rank	Destination Country	International Tourists Arrivals (millions) 2000	2001*	Change (%) 2001 v 2000	Global Market share (%) 2001
1	France	75.6	76.5	1.2%	11.0%
2	Spain	47.9	49.5	3.4%	7.1%
4	Italy	41.2	39	-5.3%	5.6%
6	United Kingdom	25.2	23.4	-7.4%	3.4%
10	Austria	18	18.2	1.1%	2.6%
11	Germany	19	17.9	-5.9%	2.6%
12	Hungary	15.6	15.3	-1.5%	2.2%
13	Poland	17.4	15	-13.8%	2.2%

Figure 46

3.5.2 Size of European Charter Airline market

Europe is the largest charter airline market in the world. In 2001, 36 out of top 50 charter airlines worldwide were based in Europe. Within Europe, the market is dominated by Germany and the UK, who between them provided the 10 largest European charter airlines.

In 2001, the charter market in EEA, Switzerland and the EU candidate countries accounted for an estimated 86 million passengers[29]. This is equivalent to a 20% share of the overall passenger market.

Size of EEA, Switzerland and Candidate Countries Charter Market
Major Charter & Schedule Airlines* 2001
IATA Gabi & Airline Business

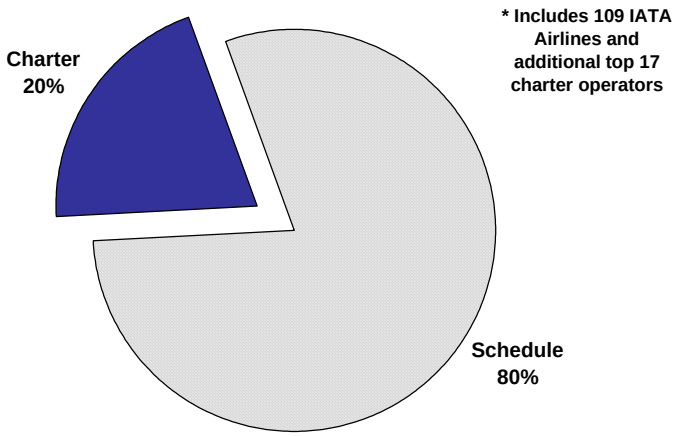


Figure 47

There are essentially three types of charter airline:

- Charter airlines that act as 'in-house' carriers for tour operating organisations e.g. Hapag-Lloyd controlled by TUI or JMC owned by Thomas Cook
- Airlines who provide both charter and scheduled services e.g. Finnair, or are the charter arm of an airline group e.g. Transavia 80% owned by KLM
- Independent charter airlines not controlled by either tour operators nor scheduled airlines e.g. Air Berlin

The charter airline market is increasingly being controlled by tour operators – 6 of the top 10 European charter airlines were owned by tour operators.

[29] Based on publicly available passenger data for European airlines – however, data is not available for all carriers – charter or schedule.

3.5.3 Leading Charter Airlines

The charter airline sector is increasingly dominated by tour operators or scheduled airlines, who held major stakes in 33 out of the top 38 European charter carriers in 2001.

TUI Group controls the #1 and #3 European charter carriers – Britannia Airways and Hapag-Lloyd. The other carriers in the top 5 are owned by other leading tour operators.

Air Berlin (#8), closely followed by Monarch Airlines and Aero Lloyd, are the largest independent charter airlines.

Finally, a number of charter airlines owned or partially owned by scheduled airline groups appear just outside the European top 10.

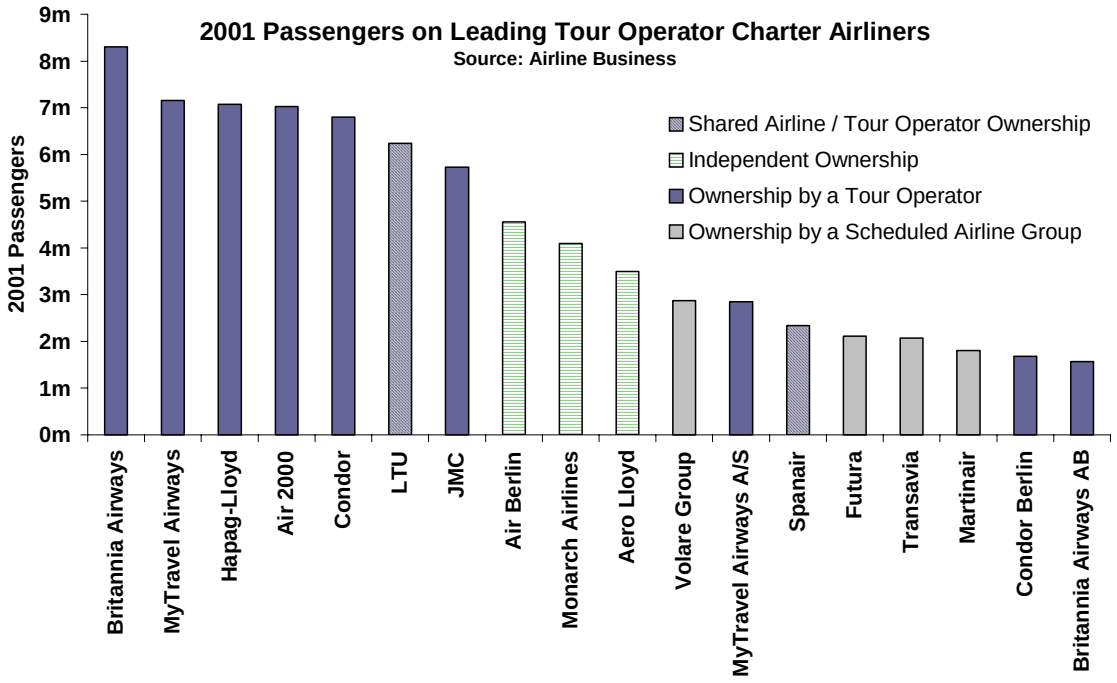
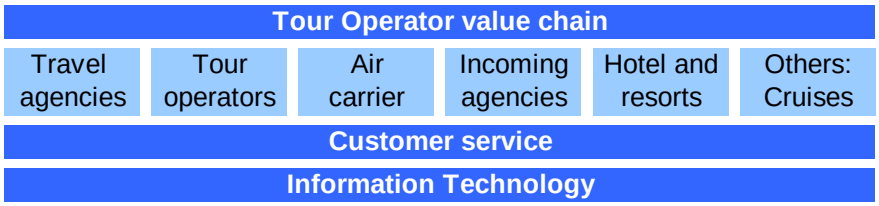


Figure 48

3.5.4 Leading Charter Airlines

The sector is increasingly subject to vertical integration within tour operator organisations. Tour operators now often control all steps in the Inclusive Tours (IT) or 'tour package' industry. This includes accommodation (hotels and resorts), air travel (charter airlines), incoming agencies (ground transportation, local tours and representation) and distribution (travel agents). Some even have interests in other tourism related activities such as cruise companies.

The following figure shows all the components of the IT industry, which are increasingly being controlled by single organisations.



Tour operators claim there are many benefits for pursuing vertical integration:

- Controls all players within the IT value chain
- Simplifies customer relationship: customers deal with only one organisation throughout the holiday experience
- Enhances brand awareness
- Reduces costs: rather than achieving profits at each level of value chain, profits are sought on a group basis
- Purchasing power: able to negotiate better deals with independent providers.

Following recent consolidation within the sector, the market is dominated by a few leading players. After MyTravel (formerly Airtours) and First Choice failed to obtain regulatory approval for their proposed merger in 2000, the focus moved to trans-national European mergers (where impact on level of competition is less).

TUI Group (formerly Preussag) purchased the UK's largest tour operator (Thomson Group) in late 2000. TUI Group is now the world's largest tour operator.

As a competitive response, C&N Touristic in Germany purchased Thomas Cook in the UK and started integrating all group companies under the Thomas Cook brand.

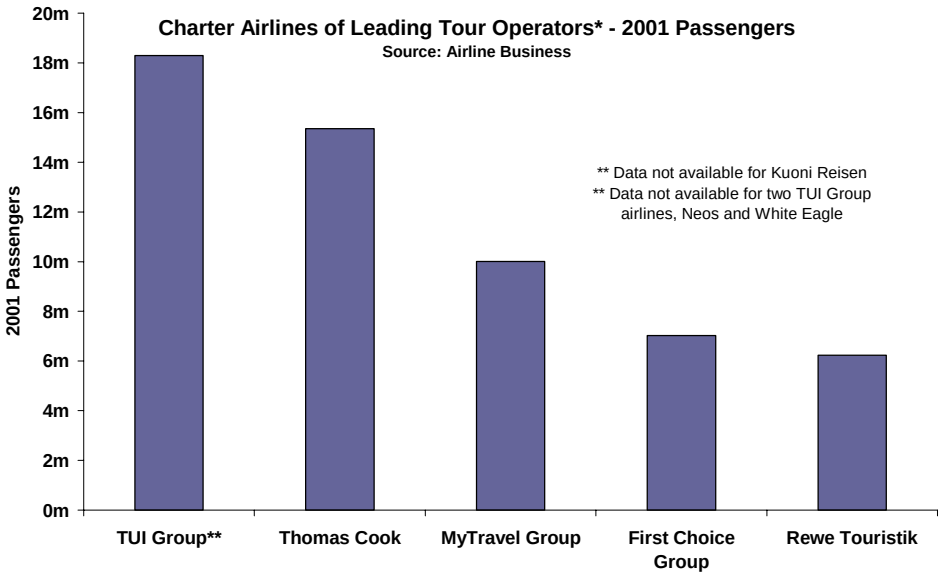


Figure 49

Largest European Travel Groups

Group	TUI	Thomas Cook	MyTravel	First Choice	Rewe Touristik	Kuoni Reisen
Country	Germany	Germany	UK	UK	Germany	Switzerland
Revenues (EUR billion)	14.2	8.7	9.1	4.3	4.7	3.0
Operating margins	4.1%	1.2%	2.6%	3.3%	n/a	-0.5%
Main tour operators	Thomson TUI Nordic TUI Schone Ferein	Neckermann Kretzer Terramar Air Marin	Airtours Holidays Going Places Travel World	First Choice	Dertour LTU Touristik	Kuoni
Main travel agents	Lunn Poly Nouvelles Frontieres Hapag-Lloyd	Thomas Cook	Going Places	Bakers Dolphin Travelchoice Hays Travel	DER Derpart Atlas Reisen	Kuoni Helvetica Tours
In-house charter carriers	Britannia Airways Hapag-Lloyd Britannia Airways AB Corsair Neos White Eagle	Condor JMC Condor Berlin Sun Express	MyTravel Airways UK MyTravel Airways A/S	Air 2000	LTU	Edelweiss Air Novair

Source: Airline Business

Figure 50

There are other smaller charter airlines owned by travel organisations. For example, Spanish charter airline Spanair is 51% owned by Teinver S.A., the holding company that owns Viajes Marsans. Similarly, charter carrier Iberworld is fully owned by Spanish tour operator Iberostar.

More generally, tour operators now account for 62% of all European charter airline throughputs.

Tour operator financial performance

The charter airline sector is characterised as a high volume, relatively low margin business. Until 2001, leading charter companies produced consistent profits, although profits were quite low relative to turnover.

In 2001, Kuoni Group recorded a major loss although other companies maintained profitability. MyTravel's operating result in 2001 was actually much better than the 2000 result (UK £132m v £ UK £84m). However, in 2000, the Profit After Tax result was boosted by UK £134m in exceptional items and goodwill while the 2000 result was adversely impacted by UK £49m of negative exceptional items / goodwill.

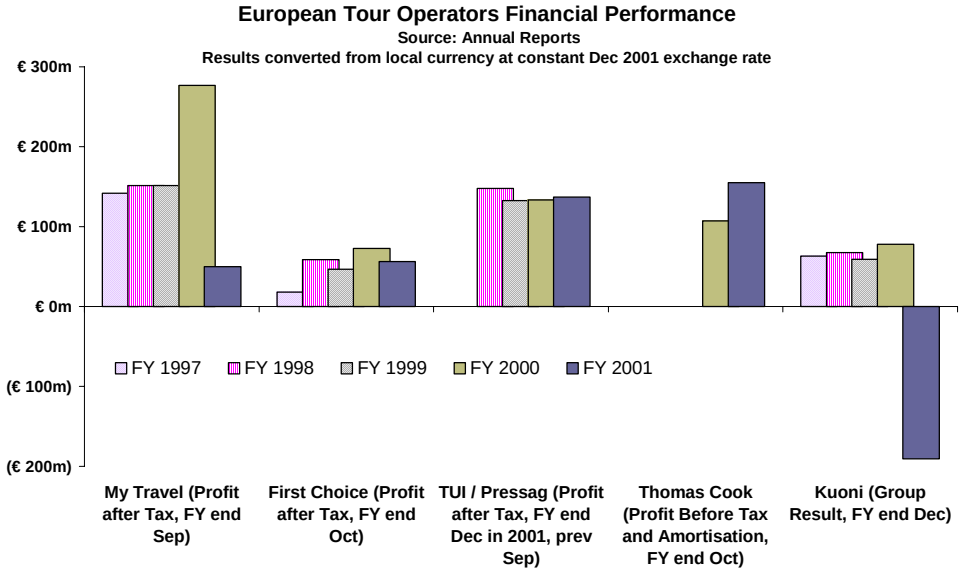


Figure 51

The interim results of three leading charter companies were analysed to investigate the impact of September 11th (interim results are unavailable for other charter companies). While the Preussag Group did not see much movement in profits, both MyTravel and Kuoni saw results worsen significantly. In both cases, though, other factors played a significant role in the decline in profits.

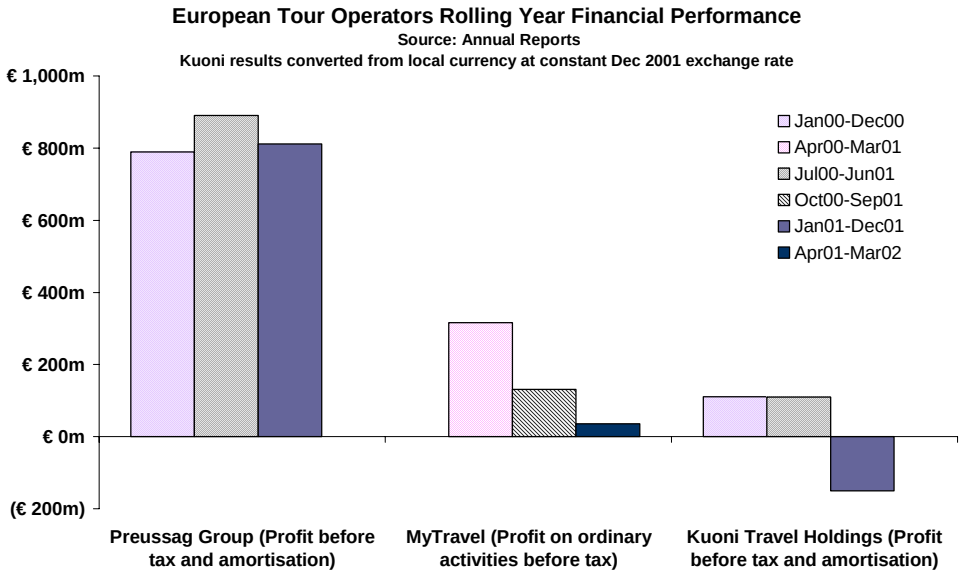


Figure 52

3.5.5 Traffic Trends

The major charter airlines managed to achieve reasonable passenger growth in 2001 compared with 2000. Britannia, the largest airline with 8.3 million passengers recorded 2.5% growth. MyTravel Airways grew by 14.7% to 7.15 million passengers.

LTU and JMC saw minimal growth of 2.3% to 6.23 million passengers and 0.5% to 5.73 million passengers respectively.

Transavia's passenger numbers decreased by 23.4% in 2001. This was mainly due to a switch of focus to scheduled operations, which increased by over 50%.

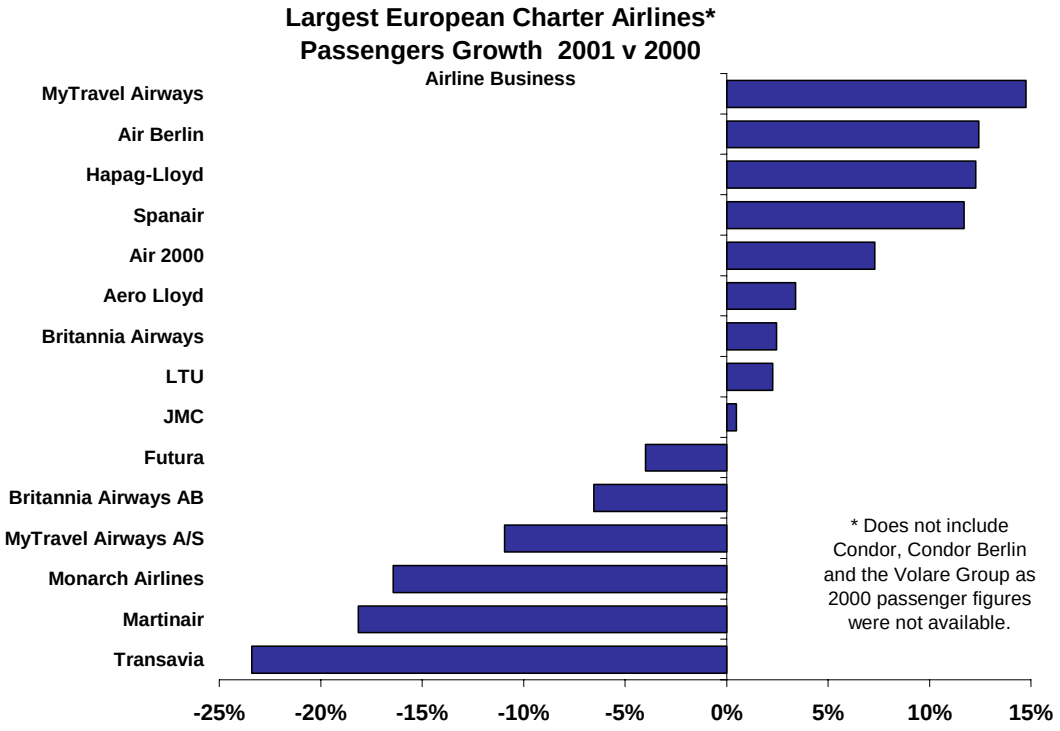


Figure 53

Impact of low cost scheduled carriers on London-Malaga market

The European charter market has recently been affected by competition from low cost scheduled airlines. Traditionally, the market overlap between charter and full service scheduled airlines was fairly small. However, scheduled low cost airlines have targeted major European leisure markets from the UK including Spain, southern France and Italy. The new entry low cost airlines have been able to increase passenger traffic on many existing routes by up to 40%.

The London – Malaga route is a primary leisure route served from the UK. Up until 1998, the flag carriers British Airways and Iberia were the only scheduled airlines on the route operating alongside the traditional charter carriers. In 1999, Go started operations from Stansted followed by easyJet from Luton. Between 1999 and 2000, the number of scheduled passengers grew by 114% to 847,000 passengers, whilst charter traffic stayed the same at 800,000 passengers.

In 1997 charter passengers made up 69.3% of the London to Malaga route. By 2001, the charter share had been reduced to 45.8%.

The charter carrier's response has been to lower their own costs as well as introducing "scheduled" seat only services in the distribution systems in an attempt to compete with the low cost airlines.

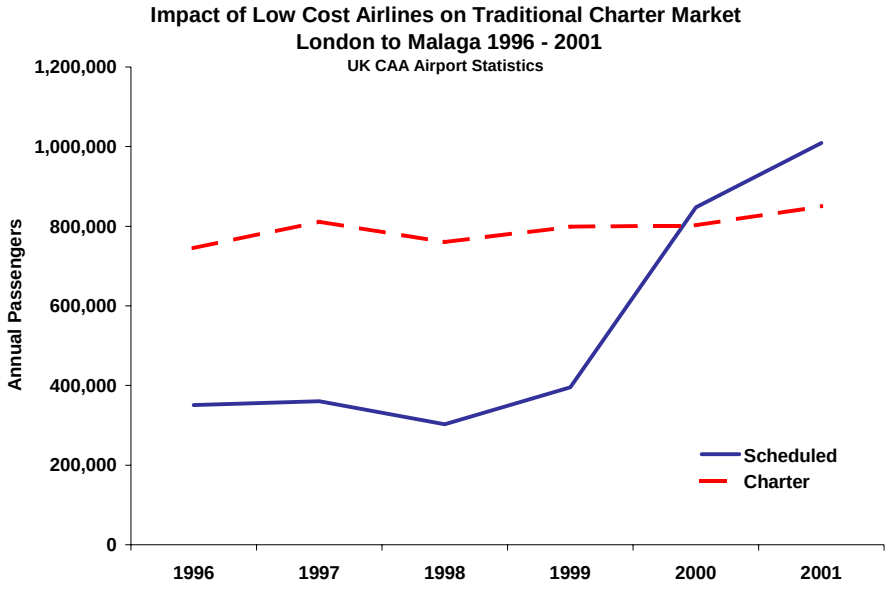


Figure 54

3.5.6 Developments at individual companies

TUI Group (formerly Preussag) [30]

Preussag continued to further consolidate and expand their presence in the European tourism market in 2001. The integration of the companies newly acquired in 2000 and 2001 were integrated into a single tourism division. At the same time, some of the non-tourism parts of the business were divested.

The various acquisition activities were:

- Entry into the Italian travel market through acquisition of a 10% share in NHT New Holding for Tourism II B.V., the holding of the Alpitour Group, entering into a strategic alliance with the Italian market leader for organised tours.
- Acquisition of a 51% share in Austrian Magic Life International Hotelbetriebsgesellschaft mbH. The company operates 24 club facilities under the Magic Life brand, complementing the Group's club holiday offering.
- Purchase of a 40% share in EVS Euro Vacances System Beteiligungsgesellschaft mbH to gain presence in new distribution channels in the direct selling segment (subject to regulatory approval).
- Acquisition of a 51% share in the Anfi Group marked the entry in the time-sharing business.
- Alliance with Polish airline White Eagle Aviation S.A., backed by a shareholding of 29.3%.
- The takeover of the Thomson Travel Group plc. in May 2000 was approved by the EU Commission on condition that both Preussag and Westdeutsche Landesbank dispose of their respective shareholdings in the British Thomas Cook Holdings, Ltd. These transactions were completed with effect from 30 March 2001, with the acquisition of the Thomas Cook Holdings Ltd. by C&N Touristik.

<u>Financial Results (including impact of Thomson Travel acquisition)</u>

- 2001 turnover in tourism division up 20.8% on 1999/00 (last full financial year)
- 2001 tourism division result up 25.1% on last full financial year

Finally, group re-branding to TUI was announced.

Thomas Cook (formerly C&N Touristic) [31]

2001 was an important year in the development of Thomas Cook / C&N Touristic. The acquisition of Thomas Cook UK was part of a total investment programme of € 1.1 billion in the financial year ending October 2001.

Thomas Cook UK was the biggest single investment the group had made to date. It shifted the distribution of sales from 75% German market to 51%.

In addition, a further € 68 million was invested in hotel complexes and stakes in incoming agencies while € 107 million was spent on infrastructure and EDP development.

Financial results for the year showed a strong improvement on the previous year. Sales, profits and margins all increased.

- Turnover rose 13.7% on a like for like basis (+58.3% including impact of acquisitions)
- Profits before tax rose by 149% on a like for like basis to € 58.7m (+289% to € 91.9m including impact of acquisitions)
- Profit before tax margin improved from 0.5% to 1.2% for new group structure

[30] Main source of information is 2001 TUI annual report, for year ending September 2001
[31] Main source of information is Thomas Cook press releases

The events of September 11th had only a limited impact on the results as the financial year ended in October. However, in response the "Triple T" revenue protection program was launched. Group-wide flight capacity for the winter season 2001/2002 was reduced by about 17 percent and the workforce cut by some 2,000. Stefan Pichler commented "*We are right on course with the implementation of the more than 400 individual measures concerned. Despite the palpable changes in structure, our margins remain stable. This shows that our program is working. Despite a fall in sales, our profits for the first quarter of the current financial year (1.11.2001 to 31.1.2002) are holding up well*".

MyTravel (formerly Airtours Group) [32]

MyTravel produced a much improved financial performance in the fiscal year to 30 September 2001. Profits were just ahead of the group's previous best ever results and markedly ahead of the previous year.

As well as good performance from the traditionally strong areas of the UK and Scandinavia, underlying results in Germany improved by 77%. After taking control of the German business the previous year, a complete reorganisation was undertaken resulting in significant reductions to the workforce and closure of the FlyFTi, the German charter airline.

Various other reorganisations took place. The UK operation was consolidated into a single site while the Scandinavian and Nordic business moved from a brand based to a country based organisation. The consolidation of the North American Leisure Group and its charter operations within the TSI organisation under the name Airtours North America was also completed.

Because the financial year ended in September, the downturn post September 11th had only a limited impact on the financial results of the group. In response to the downturn, capacity was adjusted, discretionary spend was reduced and the workforce was cut by a further 1,600 positions.

Finally, the group announced plans to re-brand as MyTravel (replacing Airtours).

Financial Highlights

- Turnover up 15%
- Operating profit up 58% to UK £132.2m (giving an operating margin of 2.6%)
- Net profit before tax up to UK £129.8m (+69%)

First Choice[33]

Prior to September 11th, it was widely reported in the press that First Choice were achieving the best margins in the UK charter holiday industry. The company also reported that forward sales were significantly ahead of the previous year. This was achieved on the back of a shift in focus to higher margin specialist travel, reducing exposure to the mass market dominated by the industry giants.

Post September 11th, First Choice announced a series of measures:

- Widespread reductions in planned tour operating capacity for both Winter 2001/02 and Summer 2002 seasons;
- Reduction of in-house Air 2000 fleet from 32 to 26 aircraft;
- Implementation of a major restructuring programme across all divisions resulting in 1,100 planned redundancies;

[32] Main source of information is 2001 Airtours annual report, for year ending September 2001
[33] Main source of information is 2000/01 First Choice annual report, for year ending October 2001

- Extensive cost-reduction programme in all non-payroll cost areas and reductions in levels of planned capital spend.

Despite their financial year ending October 31, First Choice estimated they incurred costs and loss of contribution of £10.5m from the September 11th impact.

In 2001, First Choice continued their acquisition programme. Notable acquisitions during the year included:

- I Viaggi del Turchese (Italy)
- Sunrise BV (Netherlands)
- Tourinter (France)
- CIT Holidays Limited (UK)
- Virgin Sun (UK)

2000/01 Financial Highlights (year ending October 2001)

- Turnover before acquisitions up by 23% on 1999/00 (up 27% including impact of acquisitions)
- 50% organic turnover growth for specialist business
- Profit before tax, goodwill and exceptional items of £79.6m, up 6.4% on previous year, giving a 3.3% profit margin
- Profit before tax down 19.7% as a result of £9m exceptional redundancy costs and increase in goodwill write downs

Rewe Touristik

Rewe Trading Group's travel and tourism business ranked #4 in Europe.

The group embarked on an ambitious acquisition programme since 2000. This included, in January 2001, the purchase of a 40% stake (through a joint holding with SAirGroup) in the airline LTU Fluggersllschaft, the holding company of charter airline LTU International Airways.

As result of the collapse of SAirGroup later in 2001, the Rewe Group actively sought a potential buyer for the 49.9% stake in LTU held by Swissair Group. The German savings bank Stadtsparkasse Dusseldorf stepped in to the rescue of LTU in November 2001. The 49.9% stake in LTU was subsequently held by VBE Beteillgungsgesellschaft, a trustee of Stadtsparkasse Dusseldorf.

Other relevant acquisition transactions include the followings:

- Purchase of Deutsches Reisebüro GmbH (DER) from Deustchen Bahn AG, Germany's National Railway Company, on 1st January 2000. This included tour operator DERTOUR, the DER travel agencies and DER Business Travel.
- Acquisition of LTU Touristik GmbH, a large tour operator based in Düsseldorf including its subsidiaries and travel agencies country-wide.
- Purchase of Tourcontact GmbH through LTU Touristik.
- Establishment of Reisebüro Service Gesellschaft (RSG).
- Launch of the Atlas Reisen franchise system with 50 branches registered by year-end.
- Establishment of Atlas Reisen Österrich and tour operator LTU Touristik in Austria.

Financial Results

- 2001 turnover in tourism division up 21% over 2000

Kuoni Group [34]

Kuoni described 2001 as "*an exceptionally turbulent year*". The company experienced considerable difficulties in the first six months of the year, issuing a profits warning in July. Following its acquisition of Scandinavian-based Apollo on January 1st, much of the company's focus was spent getting to grips with its new subsidiary.

Major problems with Apollo's business processes in the first half-year, and overcapacity at Novair produced a first-half negative EBITA of Swiss CHF 30 million for the Scandinavian part of the business. A further focus was provided by the restructuring of the Group's Italian operations, where it became the sole owner of the former Kuoni Gastaldi joint venture.

The third quarter of the year was much better, recovering some of the ground lost in the first half of the year. However, the aftermath of September 11th lead to a Swiss CHF 80m fall in profits in the final quarter (compared to the previous year).

Financial Highlights 2001

- Turnover down by 1.2% on 2000
- EBITDA loss of CHF 19m, a deterioration of CHF 194m on the previous year (partially attributed to a CHF 80.5 million provision for the excess flight capacity offered by the Group's Scandinavian-based Novair charter airline)
- Market capitalisation at year end of CHF 1.41bn, down from 2.24bn at start of 2001

SAirGroup and Sabena charter airline interests

Prior to its collapse of Swissair, SAirGroup controlled four European charter airlines - German LTU, Italy's Volare Airlines and Air Europe, and Swiss' Balair CTA. Similarly, Sabena fully owned Sobelair, a Belgium charter carrier. Besides operating charter flights to Mediterranean and North African resorts, Sobelair was also a capacity provider on Sabena's scheduled network. For example, Sobelair operated SN flights to West Africa (Dakar) and Israel (Tel Aviv). City Bird, another Belgium charter airline, had close links to Sabena.

By the end of 2001, these interests had been sold to a variety of buyers

[34] Main source of information is 2001 Kuoni annual report, for year ending October 2001

3.6 Investigation into collapse of Swissair and Sabena

3.6.1 Introduction

2001 was notable for the demise of two of Europe's long established flag carriers. Since the European Community's Third Package of measures designed to complete the aviation single market came into effect on 1 January 1993, commentators have forecast that the landscape of European aviation would change drastically.

Certainly, since the early 1990s, substantial change has taken place, including the rise of low cost carriers not tied to any one country. However, forecasts that national flag carriers would disappear have proved premature.

Swissair, although awaiting entry into the single aviation market, pursued a strategy of developing a pan-European airline through acquisition of smaller airlines from around Europe. Although many flag carriers had bought interests in other airlines outside their country, none made acquisitions to the extent that Swissair did.

Many of the reasons for Swissair's effective demise can be traced back to the failure of their expansion strategy. Swissair's demise also contributed directly to financial crises at other European airlines reliant on cash injections from Swissair.

Swissair became the first flag carrier of significance to disappear post 1993, and was followed closely by Sabena.

The first section of this report provided an overview of the events that led to the collapse of Swissair and Sabena, one of the most notable events in recent European aviation history.

In this section, more detail and background is provided, including analysis of some of the underlying factors that caused the collapse.

3.6.2 Context of Swissair and Sabena difficulties

One of the factors commonly perceived to be behind the financial difficulties experienced by both Swissair and Sabena was their inability to compete with Europe's major carriers. Swissair had an explicit strategy to become Europe's "fourth force" behind Lufthansa, British Airways and Air France. Sabena also developed Brussels into a significant size connecting hub and spoke operation.

However, Switzerland and Belgium are much smaller countries than Germany, UK and France. Therefore, Swissair and Sabena lacked underlying strong markets to sustain their ambitious growth plans.

A comparison of flag carrier traffic and the population of their base country provide some interesting results. 2000 data was taken as it was the last full year of traffic prior to the collapse of Swissair and Sabena

It can be seen that both Sabena and Swissair had a high passenger to population ratio, suggesting that they were heavily reliant on traffic from outside their own country. In the case of Swissair and Sabena it indicated a dependence on connecting traffic (rather than inbound point-to-point traffic). In fact, Zurich and Brussels had been developed as connecting hub operations.

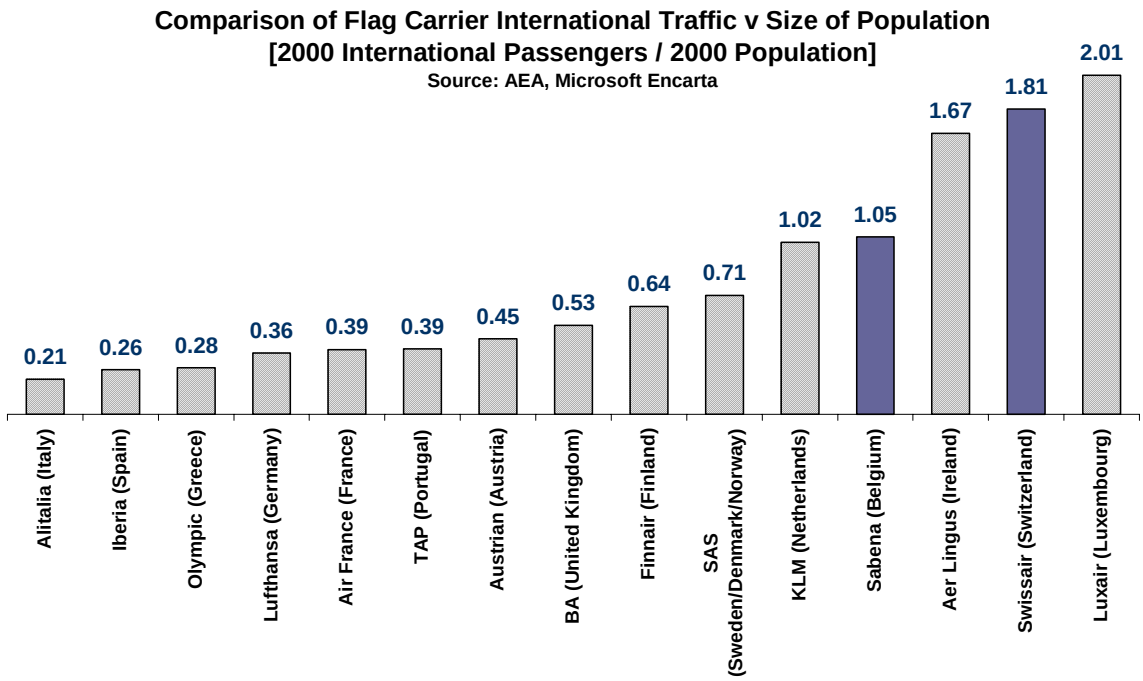


Figure 55

Swissair and Sabena both had a much higher proportion of connecting traffic than most of their airline competitors. Obtaining growth from "foreign" connecting traffic has more risks than for point-to-point traffic.

Firstly, connecting traffic is fundamentally less profitable than point-to-point traffic. There is much more competition for connecting traffic, so yields achieved tend to be lower. Costs are higher as two flight legs are needed and there is significant complexity in transferring passengers and their baggage at the connecting hub.

Secondly, flag carriers can usually extract a premium for point-to-point traffic originating in their own country as they enjoy significant sales advantages in areas like frequent flyer programmes, lounge access and corporate / travel trade dealing.

A recurring theme amongst failed airlines is over rapid expansion. Rapid growth can cause both revenue and operational challenges. The pressure to fill extra capacity often results in price cutting while the management of a smooth operation becomes much more complex.

The chart below shows that Sabena's passenger growth in the 1990s was far in excess of the general growth trends for other European airlines.

Swissair growth also exceeded the industry average, especially since 1996. However, it was much closer to industry norms than Sabena.

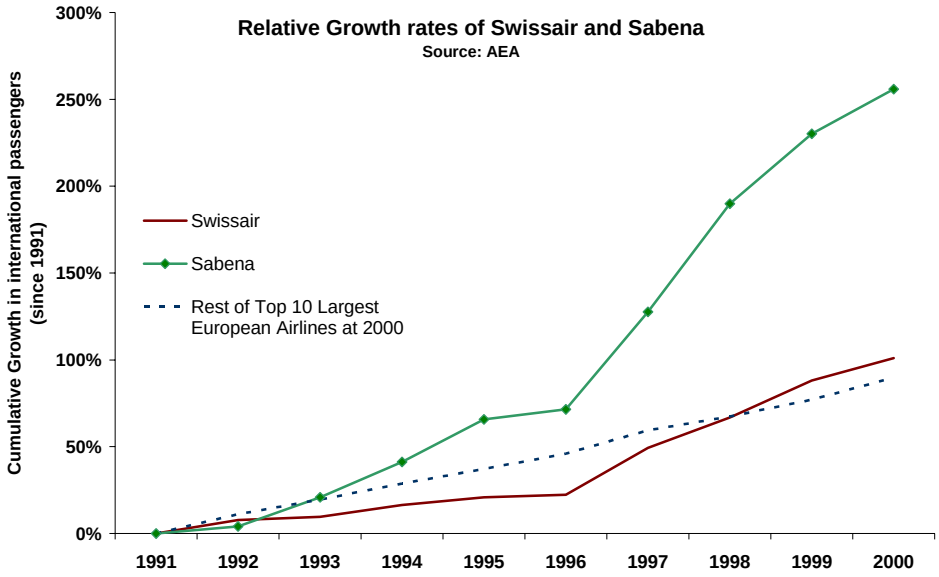


Figure 56

This growth put strains on the profitability of Swissair and Sabena. In Swissair's case, profitability was further impacted by the huge losses made in their various airline investments. These investments are analysed later in this section of the report.

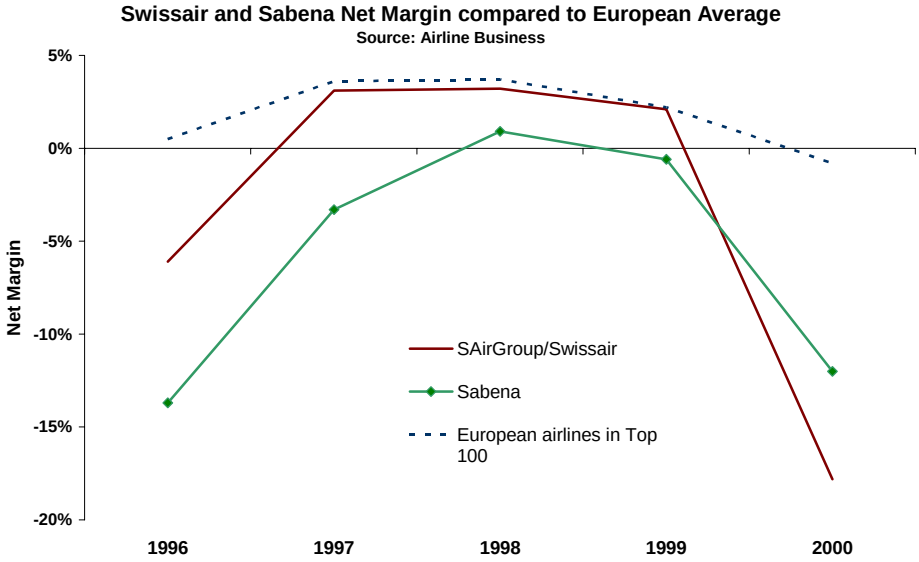


Figure 57

3.6.3 Developments at Swissair and Sabena

Developments at Swissair and Sabena in the run up to September 11th 2001

Both Swissair and Sabena were facing financial crisis before the downturn post September 11th pushed them over the edge.

This section summarises some of the key events in the run up to September 11th at both airlines. Information is sourced primarily from London Financial Times Archives, Air Transport Intelligence and Swissair administrator documentation.

Swissair Timeline

Date	Development
Jan 19, 1998	▪ SAirGroup's adopt the "hunter strategy" developed by McKinsey & Co.
Mar 20, 1998	▪ The "Qualiflyer Group" is formed, and the alliance agreement is signed.
Mar 06, 2000	▪ 1999 net income =CHF 273m (US$163m), a 24% decline on 1998.
Aug 17, 2000	▪ The "Shield" report prepared by McKinsey & Co. reveals a financing gap of CHF 3.25 to 4.45 billion (US$1.9 to 2.6bn).
Aug 22, 2000	▪ 2000 HY1 net profits = CHF 3m (US$1.7m), down CHF85m (US$50m) ▪ Airline operations loss of CHF 155m (US$90m).
Nov 22, 2000	▪ Based on the project "Chess" from the consulting firm Roland Berger, the Board of Directors discuss exit scenarios for their airline investments.
Dec 14, 2000	▪ The Board of Directors decides that the SAirGroup lacks the funds necessary to build the "fourth power in Europe".
Jan 20, 2001	▪ The Board of Directors resolves to refrain from further investments, ▪ CEO Philippe Bruggisser is relieved of his duties.
Mar 15, 2001	▪ Mario A. Corti assumes the office of President and Chairman of the Board of Directors.
Apr 02, 2001	▪ 2000 net income = loss of CHF 2.89bn (US$1.7bn), compared to a CHF 273m (US$159m) profit in 1999. ▪ Group earnings before interest, tax & write-offs fell 10.5% to CHF603m (US$350m), helped by non-airline business. ▪ Worst performance ever, includes CHF3.7bn (US$2.1bn) charge to cover all costs involved in investments in European loss making airlines. ▪ Plans announced to sell 10% stake in Austrian, 7% in Galileo CRS, holding in Equant (telecommunications group). ▪ Group equity has now shrunk from CHF 4.2bn to 1.2bn (US$2.4bn to 0.7bn). ▪ Group net debt has risen from CHF 4.3bn to 6.3bn (US$2.5bn to 3.7bn). ▪ Debt equity ratio increases from 1.01 to 4.68, primarily due to CHF3.7bn write down of airline investments. ▪ Plans to change group name back to Swissair are announced.
Apr 23, 2001	▪ CHF 500m (US$290m) raised from sale of 23 luxury Swissotel properties to Raffles Holding.
Apr 26, 2001	▪ CHF 1bn (US$581m) credit line negotiated with consortium of banks.
May 2001	▪ Group's Chief Financial Officer is relieved of his duties.
Jun 05, 2001	▪ Plans announced to cut costs by CHF 500m (US$280) by slimming management structure.
Jun 20, 2001	▪ Announcement that Swissair are to pull out of aircraft leasing business in order to release cash.
Jul 12, 2001	▪ Plans announced to raise CHF 1.7bn (US$968m) through sale of non core assets over next 18 months. ▪ Net debt rose by CHF 1bn (US$569m) to CHF 7.8bn (US$4.4bn) in first 6 months of 2001 despite sale of CHF 900m (US$512m) of assets - due to cash drain of loss-making airline investments.
Aug 30, 2001	▪ HY 2001 loss = CHF 234m (US$139m). ▪ Equity ration now 2.55%. ▪ Agree to sell 80% stake in Swissport, its ground handling business, to private equity group Candover Partners. . ▪ Appoints SSSB to auction Nuance, airport retail operation .

Sabena Timeline

Date	Development
1992	▪ EC agrees $1.8bn in state aid from Belgian government.
Feb 02, 2000	▪ 1999 results = net loss €14m (compared to 1998 profit of €22m).
Aug 28, 2000	▪ 2000 HY results = €83.6m loss (a six fold rise).
Apr 03, 2001	▪ 2000 results = €325m loss. ▪ Forecast loss for 2001= €100m.
Aug 09, 2001	▪ Plans announced to reduce fleet by 9 aircraft and cut 8 routes announced, with loss of 1600 jobs.

Developments at Swissair and Sabena post September 11th 2001

Post September 11th, the financial crisis engulfing both Swissair and Sabena worsened significantly.

This section reports on the chronology of events that saw Swissair and Sabena disappear to be (partially) replaced by their regional subsidiaries.

Swissair Timeline

Date	Event
Oct 1st 2001	▪ Swissair files for bankruptcy / creditor protection. ▪ Flight are suspended shortly afterwards as fuel suppliers refuse to make further deliveries and aircraft are seized at Heathrow over fears of non payment of landing fees.
Oct 2nd	▪ Swissair's 70% stake in Crossair transferred to UBS and Credit Suisse for CHF 260m (US$160m). ▪ Foreign creditors angered by the plan for Crossair to take over Swissair's most profitable routes from October 27th. ▪ Plan emerges for Crossair to take 52 aircraft from Swissair 75 strong fleet.
Oct 3rd	▪ One third of Swissair flights resume after emergency injection of CHF 450m (US$277m) from Swiss government. ▪ European Commission signals displeasure at cash injection as under the yet to be ratified EU-Swiss treaty, Swiss government aid for airlines has be approved by the European Commission.
Oct 15th	▪ Swiss government press Swiss business leaders to contribute to the recapitalisation of Crossair. ▪ Crossair indicates that CHF 1.9bn (US$1.2bn) of new capital is required, plus CHF 1.7bn (US$1.0bn) to keep Swissair long hail jets flying until April. Finally, CHF 650m (US$398m) has been identified as being needed to cover redundancy payments for 9,400 employees. ▪ Plan for Crossair to take 52 aircraft from Swissair's fleet of 75 at end of October is in doubt.
Oct 22nd	▪ CHF 4.24bn (US$2.59bn) rescue plan for Crossair is announced. The Swiss government is to provide CHF 1bn (US$612m) in bridge financing and take a 20% stake in Crossair. Swiss cantons and the city of Zurich will buy an 18% stake while private companies will invest CHF 1.7bn (US$1.04bn).
Jan 31st 2002	▪ Crossair re-branded as SWISS.

Sabena timeline

Date	Event
Oct 1st 2001	▪ Following Swissair filing for creditor protection, Sabena do not receive agreed cash injection from Swissair of circa €130m. Belgian Government still pay their circa €90m share and provide bridging loan to plug the gap.
Oct 3rd	▪ Sabena follow Swissair in filing for creditor protection, the equivalent to US Chapter 11.
Oct 5th	▪ Belgian commercial court grants Sabena creditor protection until end of November, conditional on European Commission approval for €125m bridging loan made by the Belgian government.
Oct 17th	▪ European Commission approves €125m emergency bridging loan to Sabena.
w/c Oct 29th	▪ Sabena begin transferring slots to its regional subsidiary DAT and substantially cutting the number of destinations served.
Nov 5th	▪ Sabena grounds all its flight ahead of expected filing for bankruptcy. The move is preceded by strike action amongst the Sabena work force over potential loss of jobs. ▪ Virgin Express announces it is unable to reach agreement with the Belgian government to participate in a rescue package for Sabena. ▪ European Commission indicates concern at possible "hidden subsidy" in any rescue of DAT.
Nov 6th	▪ Sabena files for bankruptcy, suffering from €2.2bn debt and continued operating losses.
Nov 7th	▪ Belgian government announce plan to launch a new airline around DAT. ▪ Discussions are being held with 12 companies to provide €155m, with state controlled investment funds providing a further €45m.
Nov 9th	▪ European Commission approves transfer of €125m loan from Sabena to DAT.
Nov 10th	▪ DAT unveil initial schedule of 35 destinations served by a fleet of 32 short and medium haul aircraft. Prior to bankruptcy, Sabena's fleet stood at 86 aircraft, flying to 75 destinations.
Feb 15th 2002	▪ DAT announces new name - SN Brussels Airlines.

3.6.4 Details of Swissair airline investments

Perhaps the most important factor behind the failure of Swissair was the large sums of money lost investing in other airlines.

Swissair invested in minority stakes in a succession of airlines in financial trouble. As well as not achieving a return on their initial investment, Swissair also spent large sums of cash covering operating losses at these airlines or restructuring them. In many cases, the exit cost of their investment was also very high.

Without controlling stakes, Swissair was often limited in what it could do to stem losses.

This section highlights the detail of some of Swissair's main airline investments.

Sabena

Date	Event
1995	▪ Swissair pay BFr 6bn ($140m) for 49.5% of Sabena.
1996	▪ Investment for 49.5% stake written off after heavy losses.
Apr 27, 2000	▪ Swissair agree to increase holding from 49.5% to 85% in a share swap deal valuing Sabena at €375m.
Oct 30, 2000	▪ SAirGroup approach Belgian government for help in covering sharply higher losses at Sabena.
Jan 22, 2001	▪ Tentative agreement between Belgian government and SAirGroup to €750m rescue package. ▪ Includes €150m injection from SAirGroup, €100m from Belgian government, €350m cost saving package announced last October plus €150m from sources to be identified.
Feb 20, 2001	▪ SAirGroup/Belgian government agree to proceed with recapitalization after management agree cost cutting package with unions.
Jun 26, 2001	▪ Swissair look to renegotiate agreement for Swissair to increase stake to 85% as soon as EU-Swiss treaty comes into force. ▪ Belgian government insist Swissair honour commitments and reject Swissair offer to inject further €137.5m into Sabena if matched by the Belgian government and to make available a €30 subordinated loan.
July 04, 2001	▪ Belgian government says it will sue Swissair for €529m in financial commitments and €354m in damages. ▪ Separately, Sabena announce plans to sue Swissair for €500m.
Jul 18, 2001	▪ Swissair reach solution with Belgian government to be released from commitment to increase stake to 85%. ▪ As part of agreement, Swissair to pay 60% of cash injection €430m in 4 payments over next 2 years; Belgian government to pay remaining 40% (1st instalment due in October).

French Airlines

Date	Event
Sep/Oct, 1998	▪ Purchase of 49% stake in Air Littoral for FRF 132m (€20m).
Feb, 1999	▪ Purchases of 49.5% stake in AOM Participations S.A. FRF 422m (€64m).
Sep16/17, 1999	▪ Swissair approve FRF 600m (€91m) recapitalisation of Air Littoral.
Aug 23, 2000	▪ Provision of CHF 360m (US$210m) made to cover cost of restructuring French airline interests.
Dec, 2000	▪ AOM Participations S.A. carries out a capital increase in the amount of FRF 1,994m (€304m) for the purpose of acquiring an investment in Air Liberté and as a restructuring measure. ▪ This capital increase is financed proportionally by the shareholders, with Swissair contribution of FRF 987m (€150m).
Feb 20, 2001	▪ French airline operations lose €381m in 2000.
Apr 03, 2001	▪ Mr Corti, Swissair Group chairman, announces that there is *"no way we can continue with CHF 80m (US$47m) a month cash drain from French airlines".*
Apr 26, 2001	▪ Swissair agree to provide €76m assistance to support restructuring of AOM and Air Liberté.
Jun 14, 2001	▪ Swissair signals that it is not prepared to increase CHF 460m (US$258m) contribution to rescue, which accounts for two-thirds of total package. ▪ It is estimated that bankruptcy could cost up to FFr6bn (€915m), which is equivalent to the current Swissair market capitalisation.
Jun 2001	▪ Air Liberte / AOM file for insolvency because of dwindling cash reserves.
June 30, 2001	▪ SAirGroup commits to participation in a restructuring plan for Air Littoral with a total contribution of FRF 850m (€130m). ▪ At the same time, SAirLines sells its 49 % interest in Air Littoral for a nominal price of FRF 1 to Marc Dufour.
Jul 27, 2001	▪ Holco are chosen as rescuer of AOM / Air Liberte by the commercial court. ▪ In order to end their obligations, Swissair agree to pay FFr 1.5bn (€229m) in cash and provide 4 x A340s on favourable leasing terms.

LTU Group

Date	Event
Oct, 1998	▪ SAirLines acquires 49.9% of the struggling German charter airline for a purchase price of DEM 1,098m (€557m).
Dec 16, 1999	▪ SAirGroup approve DEM 300m (€153m) credit line for LTU.
Aug 17, 2000	▪ Restructuring of LTU approved, which results in a restructuring contribution of CHF 498m (US$290m) at the expense of SAirGroup.
Apr 02, 2001	▪ 2000 loss of €224m reported.
Aug 30, 2001	▪ Further provision of €251m made to cover losses.

Volare / Air Europe

Date	Event
July, 1998	▪ SAirLines purchases a 34% interest in the airline Volare for the price of ITL 5bn (€2.5m).
Oct 26, 1998	▪ SAirLines purchases an indirect investment of 49.9% in Air Europe for CHF 150m (€93m).
Jul 18, 2000	▪ Minority owned Italian charter carriers Air Europe and Volare Airlines to be combined under a single holding company, Volare Group. ▪ Will be 49.9% owned by SAirGroup and 35.1% by Volare Airlines shareholders, with Volare Group president Gina Zoccai and other investors holding the balance.

Other airline investments

- **South African Airways** (Jun 30, 1999) – US$ 230m paid for a 20% stake.
- **LOT Polish Airlines** (Nov 1999) – 37.6% stake acquired for US$ 183m.
- **TAP Air Portugal** (Feb 04, 2000) - agreement to buy 34% for €155m as part of rescue of TAP-Air Portugal from imminent financial collapse. In Jan 2001, Portugal warned they will seek damages if SAirGroup pull out of Feb 2000 agreement to acquire 34% stake.

Postscript

Since Swissair went under administration, some of their stake holdings have been sold off in order to raise money to pay creditors. The details of transactions to date are:

- **South African Airways** - sold 20% stake back to the South African Government for US$ 33.3m.
- **LTU** - 49.9% stake in German charter airline LTU transferred to tour company REWE for the token sum of €1.
- **Volare Airlines** - 49.9% shareholding in Italian carrier sold for a reported CHF 70m (US$40m).
- **Air Littoral** - won a lawsuit claiming €15 million of outstanding payments that were supposed to be made when airline chief Marc Dufour took over the company.
- **Air Lib** – was claiming €500 million in damages.
- **Atraxis** – assets sold to EDS Information Business for an undisclosed sum.
- **Gate Gourmet Group** – sold to Texas Pacific for CHF 1.075bn (US$686m)
- **The Nuance Group** – sold for CHF 395m to Gruppo PAM.
- **Swissport Group –** sold for CHF 580m to Candover Group.

The Portuguese and Belgian governments also pursued claims against Swissair for failure to meet agreed commitments.

In June 2002, the Swissair administrator, Karl Wuthrich, said that there are billions of Swiss francs being claimed against the companies. In his statement the administrator said: "*Depending on the assessment made, the SAirGroup dividend will come to something between 4% and 12%. SAirLines dividend to between 3% and 48% and the Flightlease AG dividend to between 1% to 7%.*"

3.7 Other developments in the airline sector

3.7.1 Privatisation programmes

2001 was a year where there was considerable privatisation activity involving European airlines but with little end result. Privatisation programmes were abandoned or postponed both before and after September 11th.

The one exception was the completion of the last stage of the Iberia privatisation programme[35].

The Greek government spent much of 2001 on an ultimately unsuccessful privatisation programme for Olympic Airways. Bidders were asked to resubmit after none of the bids were deemed to meet minimum criteria. In July 2001, Athens-based Axon was named as preferred bidder for Olympic. However, after extensive negotiations with Axon, the bid process was reopened and Australia's Integrated Airlines Solutions were selected as the new preferred bidder. With Olympic in severe financial difficulties, the privatisation programme was abandoned early in 2002[36].

At the start of 2001, the Hungarian government were forced to shelve plans to partially privatise its flag carrier, Malev. The stake of up to 47% failed to attract any bidders. Four companies, believed to be major European flag carriers, had initially expressed a “real interest”. A similar lack of interest had led to the abandonment of Romania’s privatisation plans for Tarom at the end of 2000.

Elsewhere in Eastern Europe, Poland’s government delayed the second stage of LOT’s privatisation. The further sale of shares, following Swissair’s purchase of a 37.6% stake in 1999, was put on hold in August 2001 following an assessment of the legislative requirements of such a move.

The Turkish government received little interest from the aviation industry after inviting bids for 24% of equity of Turkish Airlines. It subsequently planned to seek non aviation strategic investors but delayed this process post September 11th.

Finally, the early stages of privatisation discussions for both Alitalia and TAP took place. Near the beginning of the year, Swissair pulled out of an agreement to buy 34% of the Portuguese carrier. At the end of the year, the Portuguese government presented to potential Portuguese investors, who had been approached about the sale of the tranche of shares (39%) ahead of a planned flotation.

The Italian government meanwhile explored different mechanisms for the privatisation of Alitalia, including discussions with Air France and KLM about purchasing a strategic shareholding.

[35] More detail is provided in Section 3.2.6
[36] More detail is provided in Section 3.2.6

3.7.2 Fleet

The sharp reduction in demand experienced post September 11th filtered through to the aircraft fleets operated by Europe's civil aviation industry. Aircraft were sold, retired early or temporarily withdrawn from service.

The overall fleet of operators based in EEA countries fell by 115 aircraft over the course of 2001. The majority of these reductions were in wide body jets, while narrow body jets remained essentially stable. A fall in non-jet aircraft accounted for the remaining short fall.

Operators from EU candidate countries maintained roughly the same level of aircraft fleet, although there was a shift from wide bodied jets to narrow bodied jets.

Total Civil European Fleet
Source: Airclaims

Type	Manufacturer	Fleet at end of 2001			Change since end of 2000		
		EEA / Switzerland	Candidate Countries	Total	EEA / Switzerland	Candidate Countries	Total
Wide Body Jet	Airbus	226	37	263	-20	-4	-24
	Boeing	470	6	476	-48	-2	-50
	Other	4		4			
	Total	**700**	**43**	**743**	**-68**	**-6**	**-74**
Narrow Body Jet	Airbus	561	17	578	32		32
	Boeing	1,129	148	1,277	-81	18	-63
	Other	989	115	1,104	43	-11	32
	Total	**2,679**	**280**	**2,959**	**-6**	**7**	**1**
Non-jets	Other	**1,069**	**143**	**1,212**	**-41**		**-41**
All	Total	**4,448**	**466**	**4,914**	**-115**	**1**	**-114**

Figure 58

Aircraft fleet developments in 2001 varied by type of operator. In particular, low cost airlines continued to grow their fleet while the sector as a whole contracted.

EEA/Switzerland's narrow body jet fleet was fairly stable, falling by just 6 aircraft. However, Europe's top 20 airlines dropped 61 narrow body jets from their operation. Low cost carriers added 13 while other operators added a total of 42, suggesting some short haul flying switched from majors to regional airlines and low cost carriers.

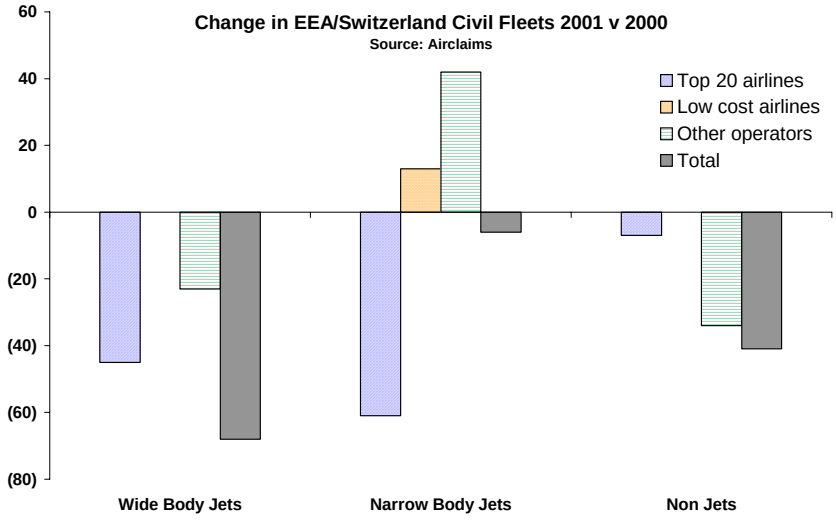


Figure 59

In 2001, the number of aircraft no longer in service (but not scrapped) rose markedly. The rise applied to all types of aircraft, but the scale of it varied.

The number of wide bodied aircraft that were “parked” increased by 44, 88% up on 2000. Similarly, parked regional jets grew by 110% (22 aircraft).

In 2001, a further 57 narrow bodied aircraft were parked, in addition to the 61 aircraft parked in 2000. Although number of parked narrow bodies increased by 48% in 2001, a smaller rate than other types, the cumulative increase since 1999 was a massive 203%.

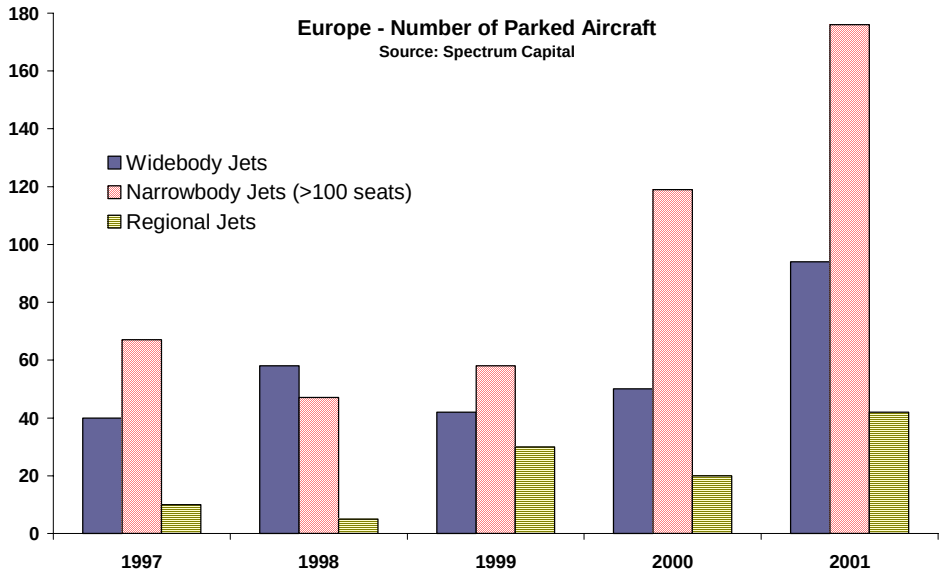


Figure 60

3.7.3 Employment

As discussed in Section 1.3.2, the industry took a number of actions in response to the crisis felt post September 11th. One of the key cost saving measures was cutting back on staff numbers.

Summarised below[37] are some of the key staff cut backs announced by Europe's larger airlines in the aftermath of September 11th. Of course, on top of the job cuts below, the collapse of Swissair and Sabena also led to substantial job losses, though many former employees transferred to successor airlines Swiss and SN Brussels.

Airline	Headline Staff Cuts - Planned
Lufthansa	Total staff numbers in Germany to be around 1,700 fewer in 2002 than originally anticipated. This figure includes 700 at LSG Sky Chefs in Germany.
British Airways	7,000 jobs to be cut
Air France	"*We do not intend to lay people off at this stage*"
KLM	Equivalent of 2,500 jobs to be cut
Iberia	2,500 jobs to be cut from 29,000 workforce
Alitalia	3,400 job losses announced
TAP Air Portugal	Workforce to be cut by 10% to 8,200.
Aer Lingus	2,000 to be cut from 6,000 strong workforce
SAS	Circa 3,500 job cuts from 25,200 airline division
Braathens	900 personnel axed
Finnair	No redundancies announced.
Austrian Airlines Group	800 job losses announced (10% of workforce)
BMI British Midland	600 personnel to be cut from staff of 5,500
Virgin Atlantic	1,200 staff to be cut
Turkish Airlines	800 job losses announced, employees take 3 month 10% wages cut
Malev	14% cut in labour force envisaged
Thomas Cook (parent of JMC Airlines and Condor)	2,600 jobs cuts anticipated (from 26,500 strong workforce)
First Choice Holidays (parent of Air 2000)	Plans announced to cut workforce by around 1,100

[37] Based on articles in Air Transport Intelligence, Airline Business and Flight International

However, in most cases, job losses were not immediate, and there is little evidence of substantial job cuts having already being implemented by the end of the year. Airlines which did see reductions in number of employees in 2001 had already embarked on cut backs prior to September 11th. It is to be expected that the effect of the majority of staff cuts announced would appear in 2002 figures.

Airline	Measure	2001 employees versus previous year[38]
Lufthansa	Average number employees on a like for like basis (i.e. excluding impact of acquisitions)	- 1,190 (-1.7%)
British Airways Group	Average number of employees in year ending March 2002 fell	-715 (-1.1%)
Air France	Average number employees	+ 3,426 (+5.4%)
KLM	Average number of employees in year ending March 2002	- 498 (-1.5%)
Iberia	Average number employees	- 78 (-0.3%)
Alitalia	Average number employees	+ 1,431 (+6.8%)
TAP Air Portugal	Employee numbers at end of 2001	- 625 (-7.1%)
Aer Lingus	Average number employees in 2001	+ 259 (+3.9%)
SAS (Airline)	Average number employees in 2001	+ 312 (+1.4%)
Finnair	Average number employees in 2001	- 204 (-1.8%)
Ryanair	Employee numbers at end March 2002	+ 55 (+3.7%)
easyJet	Average number of employees in year ending September 2001	+ 459 (+40.3%)
Virgin Express	Average number employees	- 392 (-32.3%)
First Choice	Average number employees in year ending October 2001	+ 3,828 (+34.2%)
TUI (Tourism Division)	Employee numbers at end 2001 (including substantial impact of acquisitions)	+ 5,268 (+11.9%)
MyTravel	Average number of employees	+ 3,652 (+15.0%)

[38] Source: Annual Reports

3.7.4 Impact of fluctuations in fuel price

Historical context

In 2001, average fuel prices were lower than the previous year, with average prices falling by 17% on 2000 prices. However, 2001 fuel prices were still very high by historical standards. In fact, 2001 fuel prices were higher than any time in the previous decade – with the exception of the year 2000.

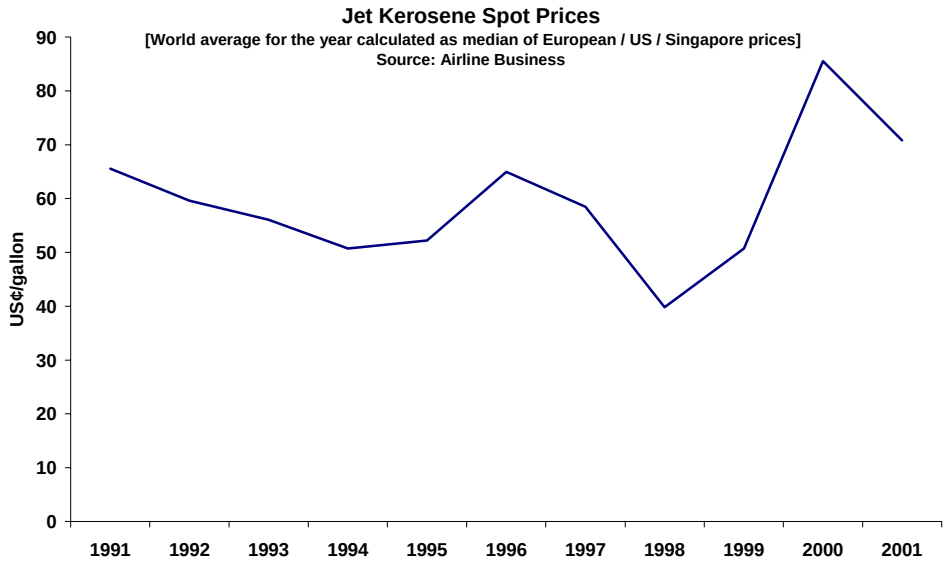


Figure 61

For the first half of the year, 2001 prices tracked 2000 prices. Whereas in 2000 prices rose in the second half of the year, they remained steady in 2001 before falling markedly amidst the political and economic turmoil following the events of September 11th.

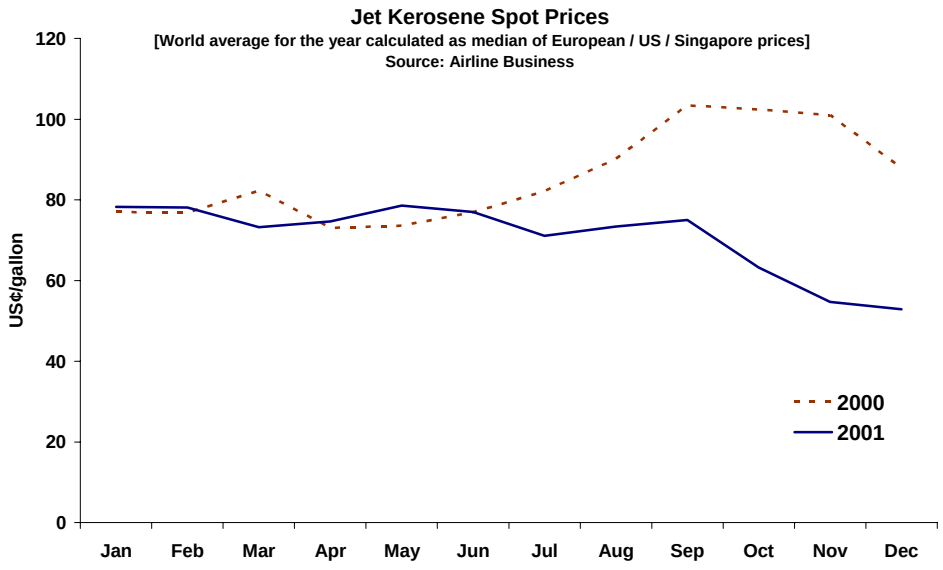


Figure 62

Fuel and oil costs as a proportion of total costs

Fuel and oil costs make up a significant and unpredictable proportion of airline operating costs. In the period 1993 to 2001, the percentage varied from a low of 10.9% in 1995 to a high of 17.0% in 2000.

In 2001, the proportion of operating costs accounted for by fuel and oil costs was still high by historical benchmarks at 16.1%.

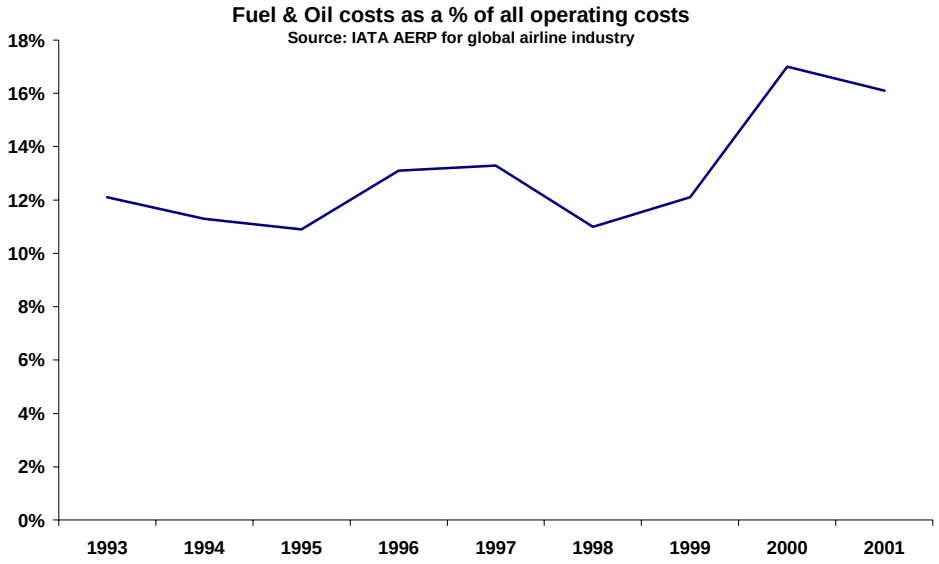


Figure 63

The inherent instability of fuel prices leads many airlines to adopt a “hedging” policy with regards to future purchases – in effect, a third party guarantees to sell future fuel requirements for a fixed price (typically up to 12 months), regardless of the prevailing spot price. Fuel hedging transfers some of the risk associated with short term fuel price fluctuations away from the airline. However, hedging is usually expensive as a risk premium is applied. Nevertheless, it allows an airline some certainty in their short term financial planning.

Because many airlines adopt a hedging approach, there is often a lag between rises or falls in spot prices and the impact of this filtering through to the financial accounts of the airline.

Fuel price impact by route area

The importance of fuel costs vary by type of route.

On short haul routes, use of fuel is less efficient as:

- Aircraft are cruising for only a small part of their flight.
- "Spare" fuel required for contingency is a larger proportion of overall fuel load.
- Smaller aircraft (typically used for short haul) are less efficient on a per ATK basis.

Despite this, fuel costs for short haul routes are a lower overall proportion of operating costs than for long haul. This is because other costs such as airport related costs are relatively more important on short sectors.

Reductions in fuel cost per ATK were registered as a result of drops in the average fuel price in 2001, as well as slightly more efficient usage of fuel.

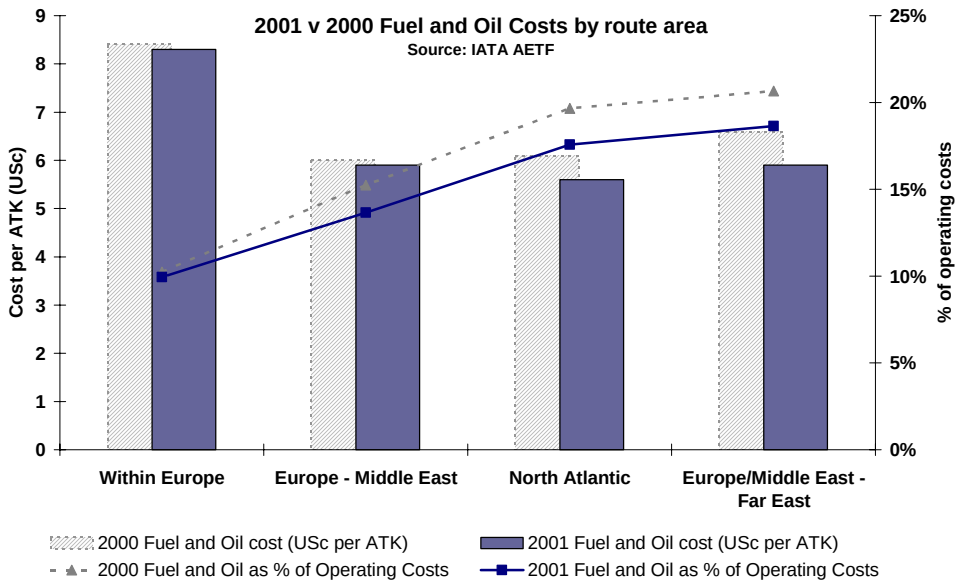


Figure 64

3.7.5 Insurance

Premiums were rising in the airline hull and liability aviation market before the events of September 11th. This was almost inevitable following losses in the three previous years, as claims exceeded premiums received.

The events of September 11th had an immediate impact on the hull and liability market. The final quarter of the year saw a rapid escalation of rate and premium increases for renewals and the introduction of significant coverage restrictions. The war and terrorism market utilised existing cancellation provisions to introduce limited third party terrorism cover subject to the payment of a Special Surcharge Premium. This limited cover fell short of the required level for airlines to operate and as a result governments around the world stepped in to provide indemnity until commercial insurance again became viable.

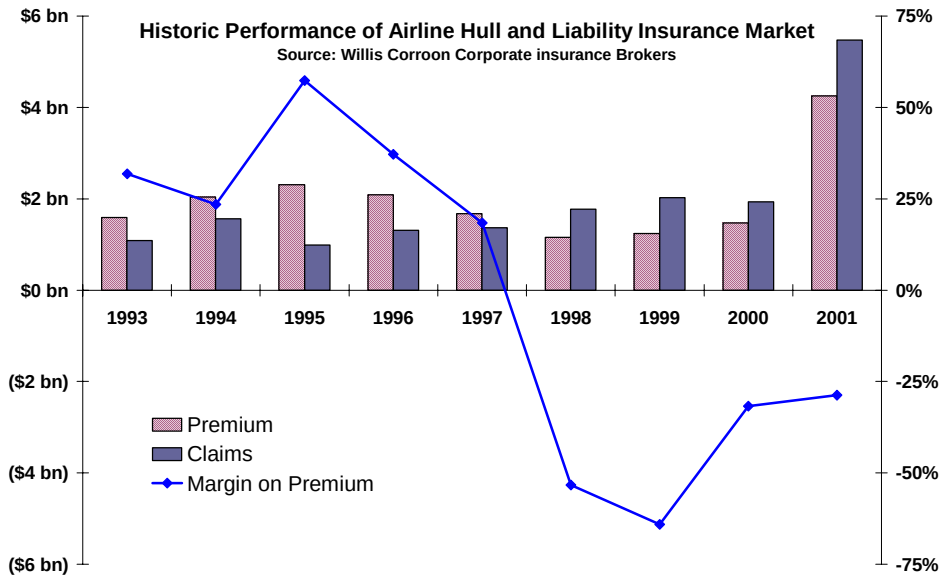


Figure 65

Other sectors of the aviation industry also suffered from increased cost of insurance, including airports, airport service companies, air traffic control providers, repair & overhaul operations and manufacturers.

Section 4
The Airport Sector

Contents

4.1 Overview of European Airport Sector

4.1.1 Summary

Highlights from this section are summarised below:

- Passenger traffic at European airports grew by 3.5% in the first half of the year. However, traffic for the year as a whole declined by 0.6% following low passenger throughput in the final quarter.
- Clear leaders in traffic growth for 2001 were London Stansted (+15%) and Milan Linate (+18%). London Stansted benefited from the continuing rapid expansion of low cost carriers while Milan Linate saw flights switch back from Milan Malpensa following changes to traffic distribution rules.
- The biggest year on year traffic declines were experienced at Milan Malpensa, Brussels and Paris Orly. At the latter airports, the financial crisis engulfing key base carriers was a major contributory factor.
- Traffic volumes at Zurich fell 30% in the final quarter as Swissair faced bankruptcy. As a result, Unique Zurich's recorded a 7% negative net return, becoming the only leading European airport group to have a negative result in 2001.
- Profitability of the combined European airport sector declined on 2000, though not on the same scale as the fall experienced by the airline sector. Retained earnings were still positive while the EBITDA[1] margin was 30%.
- The new Athens airport opened for business ahead of schedule.
- An Initial Public Offering of Fraport shares took place, and the company was listed on the German stock exchange.

[1] Earnings Before Interest Tax Depreciation & Amortisation (Source: ACI)

4.1.2 Context

Europe hosts a number of the world's leading airports. Four of Europe's airports made the 2001 global top 10 in terms of passenger throughput. London Heathrow, at #4, is the world's busiest international airport – the three US airports with greater passenger throughput all have substantial domestic traffic.

Top 20 World Airports by Passengers - 2001 v 2000
Source : ACI

Rank 2001	Airport	Country	Passengers 2001	Change on 2000
1	Atlanta Hartsfield	USA	75,858,500	-5.4%
2	Chicago O'Hare	USA	67,448,064	-6.5%
3	Los Angeles	USA	61,606,204	-8.5%
4	London Heathrow	UK	60,743,084	-6.0%
5	Tokyo Haneda	Japan	58,692,688	4.1%
6	Dallas Fort Worth	USA	55,150,693	-9.2%
7	Frankfurt	Germany	48,559,980	-1.6%
8	Paris Charles de Gaulle	France	47,996,529	-0.5%
9	Amsterdam Schiphol	Netherlands	39,531,123	-0.2%
10	Denver	USA	36,092,806	-6.9%
11	Pheonix Sky Harbor	USA	35,439,031	-1.7%
12	Las Vegas McCarran	USA	35,180,960	-4.6%
13	Houston George Bush	USA	34,803,580	-1.3%
14	San Francisco	USA	34,632,474	-15.6%
15	Minneapolis	USA	34,308,389	-6.7%
16	Madrid Barajas	Spain	34,047,931	3.5%
17	Hong Kong	USA	32,546,029	-0.6%
18	Detroit Wayne County	USA	32,294,121	-9.1%
19	Miami	USA	31,668,450	-5.8%
20	London Gatwick	UK	31,182,364	-2.8%

Figure 1

The three biggest airports in Europe are the main airports of Europe's largest economies.

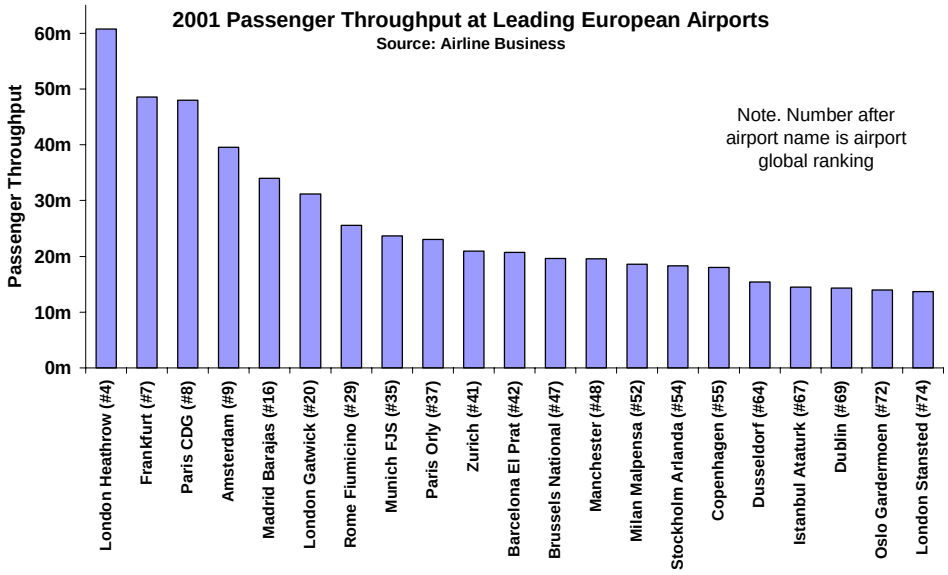


Figure 2

There appears to be a relationship between size of an airport and the % of long haul flights. Almost half of Heathrow's departing seats are on intercontinental flights. The #2 and #3 airports in Europe, Frankfurt and Paris CDG, have 40%+ intercontinental seat share.

Meanwhile, primary airports from some of Europe's smaller countries and secondary airports in large European countries tend to have far fewer intercontinetal flights.

Madrid and Rome airports, though, have relatively few intercontinental flights considering the size of the airport and the countries / economies they serve. They perhaps suffer from the fact that Spain and Italy also contain other major cities that compete for traffic.

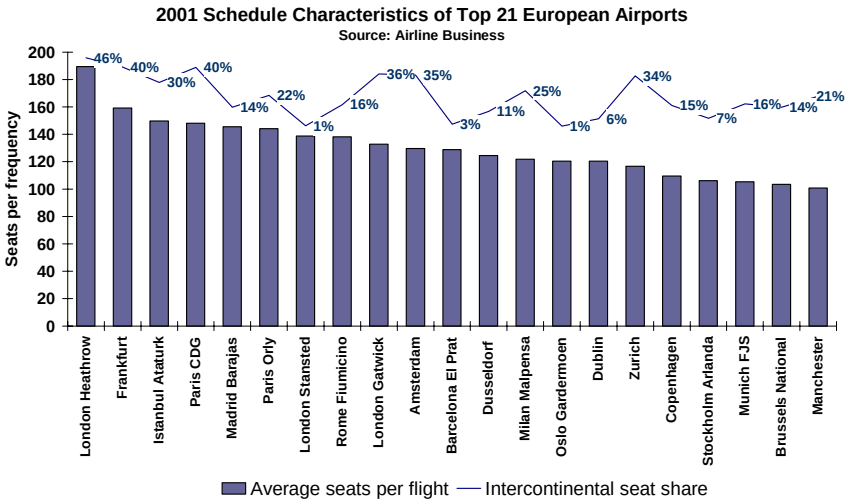


Figure 3

4.1.3 Long term traffic trends

Traffic from Europe's airports had grown fairly steadily through the latter half of the 1990s before declining in 2001. In 2001, ACI member airports based in the EEA/Switzerland had a combined traffic of 906 million passengers.

The combined size of airports in EU candidate countries is much smaller, with ACI members recording 68 million passengers in 2001. However, airports in EU candidate countries saw slightly higher traffic growth [CAGR of 6.7% since 1994 compared to 5.5% for EEA/Switzerland], reflecting the less mature market.

The traffic fall in 1999 can be explained by the loss of traffic to Turkey following two earthquakes.

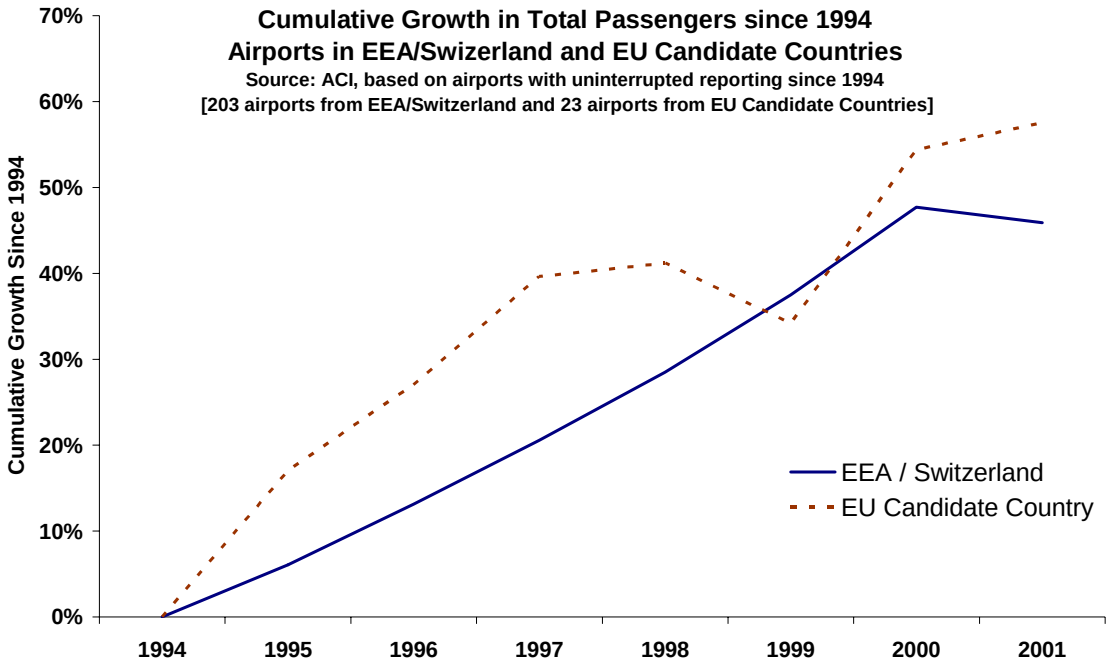


Figure 4

4.1.4 Traffic trends during 2001

Passenger growth rates at Europe's airports were in decline prior to September 11th, though growth rates were still positive. Post September 11th, traffic in the last quarter fell well below 2000 levels, by 10%+ in each of the last three months of the year.

The large traffic decline in the last quarter of the year saw passengers for the year 2001 as a whole fall below the 2000 total.

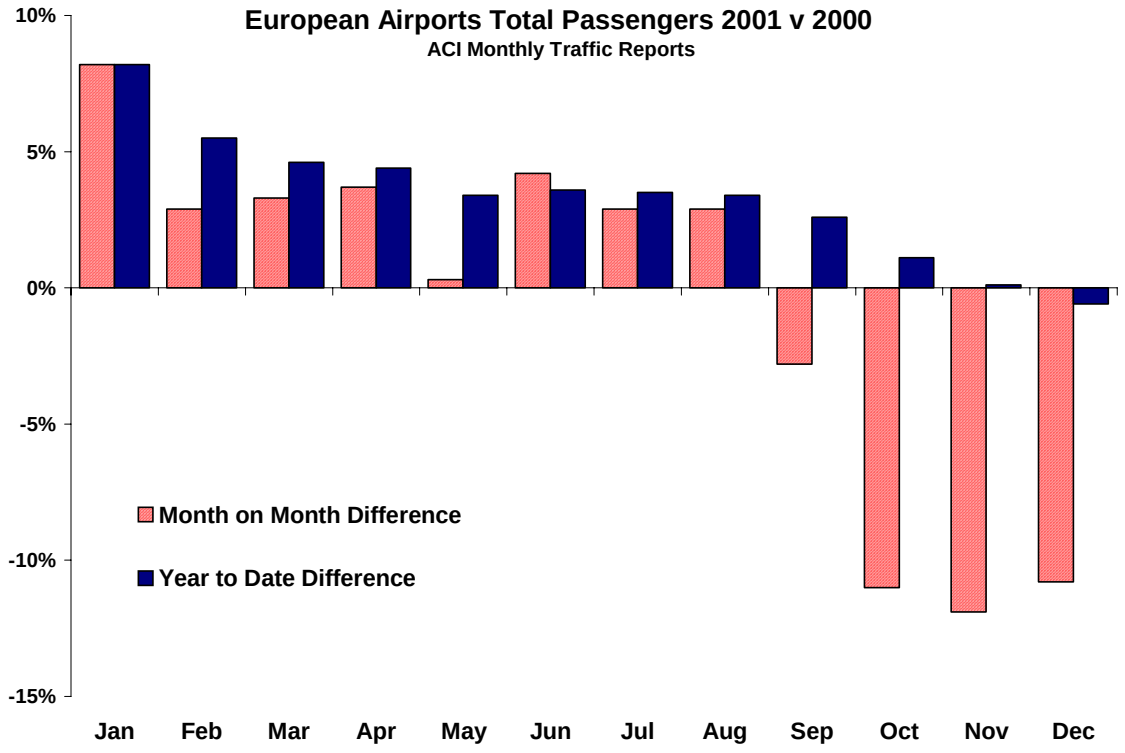


Figure 5

It is worth noting that Europe's airports suffered smaller volume declines than Europe's airlines. This is because the intra-European traffic, which touches European airports at both ends of the flight, declined less than intercontinental traffic. Intercontinental traffic of course touches European airports only at one end of the flight.

4.1.5 Financial Performance of European Airport Sector as a whole

Global Context

Europe's leading airport companies are bigger (in terms of revenue[2]) than Europe's share of air travel would suggest.

Twenty of the top 50 global airport companies are European. Europe holds both the #1 and #2 global positions in BAA plc and Fraport. In addition, Aena, Aéroports de Paris and the Schiphol Group also occupy positions in the top 10.

There are two primary reasons why European airport companies are so significant on a global level.

Firstly, airport companies in Europe often have economic interests at more than one airport. For example, BAA owns 7 UK airports and has interests in a number of non-UK airports. This contrasts with common practice in North America where major airports are usually owned by the local municipality, and tend to focus on one airport or one metropolitan area only.

Secondly, some airports in Europe derive revenue streams from activities such as ground handling, which are typically undertaken by airlines in North America. In addition, commercial revenue streams from activities such as car parking, retailing and property development are greater in Europe.

Headline profitability

In 2001, European airport profitability declined slightly, with some evidence of the decline being related to the aftermath of the events of September 11th. However, the European airport sector was less affected than other parts of the aviation sector or indeed North American airports.

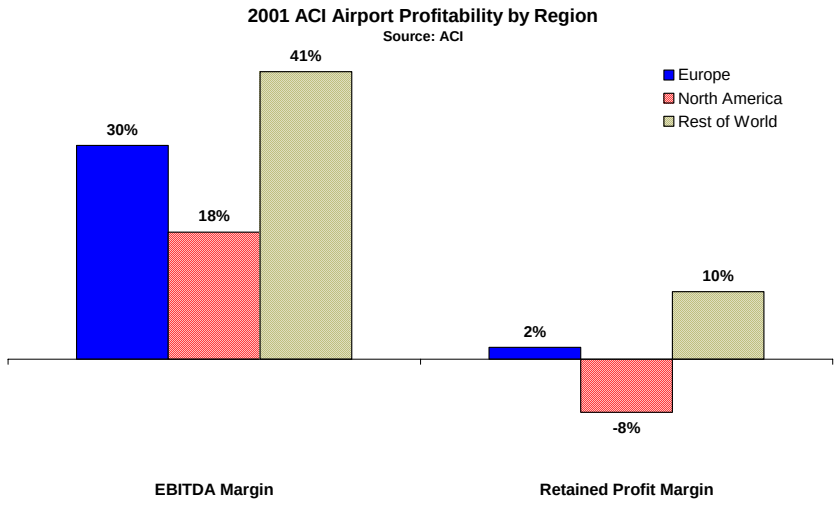


Figure 6

European profitability was a reasonably healthy 30.1% EBITDA[3]. This was a small decline from 30.6% in 2000. Aggregate net profit fell from US$ 640m in 2000 to US$ 270m in 2001.

The margin at retained profit level was just 2%, reflecting (amongst other factors) the capital investment intensive nature of the airport business.

North American profitability was significantly below these levels, but the airports from other parts of the world as a whole posted higher results.

[2] Revenue rankings and average revenue per airport are taken from Airline Business rankings
[3] Earnings Before Interest Tax Depreciation & Amortisation.
Source: ACI survey of 196 airports covering 76% of European traffic

Revenue and Cost performance[4]

There were mixed financial trends for the airport sector in 2001. There was a small decline in traffic, accompanied by a small gross revenue decline.

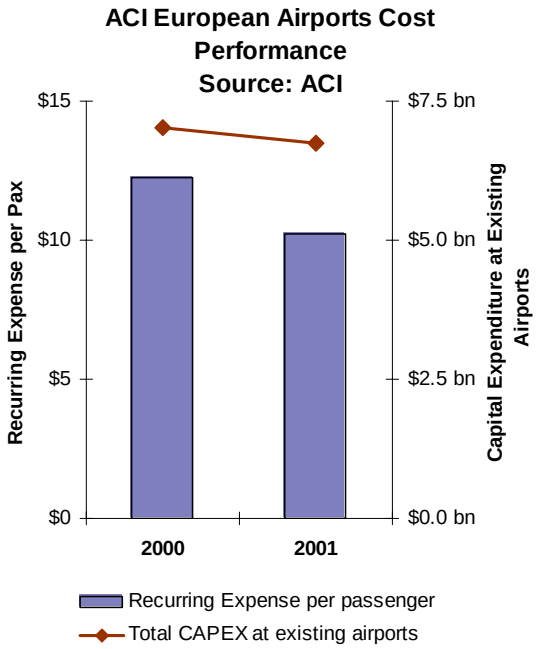


Figure 7

However, expenses per passenger fell by more than US$2. Capital expenditure fell slightly on 2000 levels. ACI found about half of the 60 largest airports in Europe had taken some cost-cutting measures post September 11th. These included hiring freezes, or in some cases, layoffs. On occasion, however, these reductions were offset by higher security costs.

Also noticeable was that the share of non-aeronautical revenues climbed back above 50% for the first time since the ending of intra-Europe duty free in July 1999 and the liberalisation of ground handling. In 2000, the non-aeronautical share stood at 45.7%.

ACI discuss anecdotal evidence that some sources of non-aeronautical income actually increased as a proportion of total revenue after September 11. As travellers were encouraged to arrive at airports very early for new security procedures, passenger dwell times subsequently lengthened. This led to increased discretionary purchases, particularly of food and beverages. ACI quote the example of London's largest airports where per passenger revenues were up considerably after September 11, more than compensating for the reduced number of passengers.

[4] Source: ACI survey of 196 European airports covering 76% of European traffic

4.2 Passenger Traffic Breakdown of the Airport Sector

4.2.1 Historic Traffic Trends

Major European Hubs

London Heathrow is Europe's largest passenger airport by some distance. It maintained a clear lead over the next three airports – Frankfurt, Paris CDG, and Amsterdam. However, the three airports behind Heathrow have gained ground in recent years.

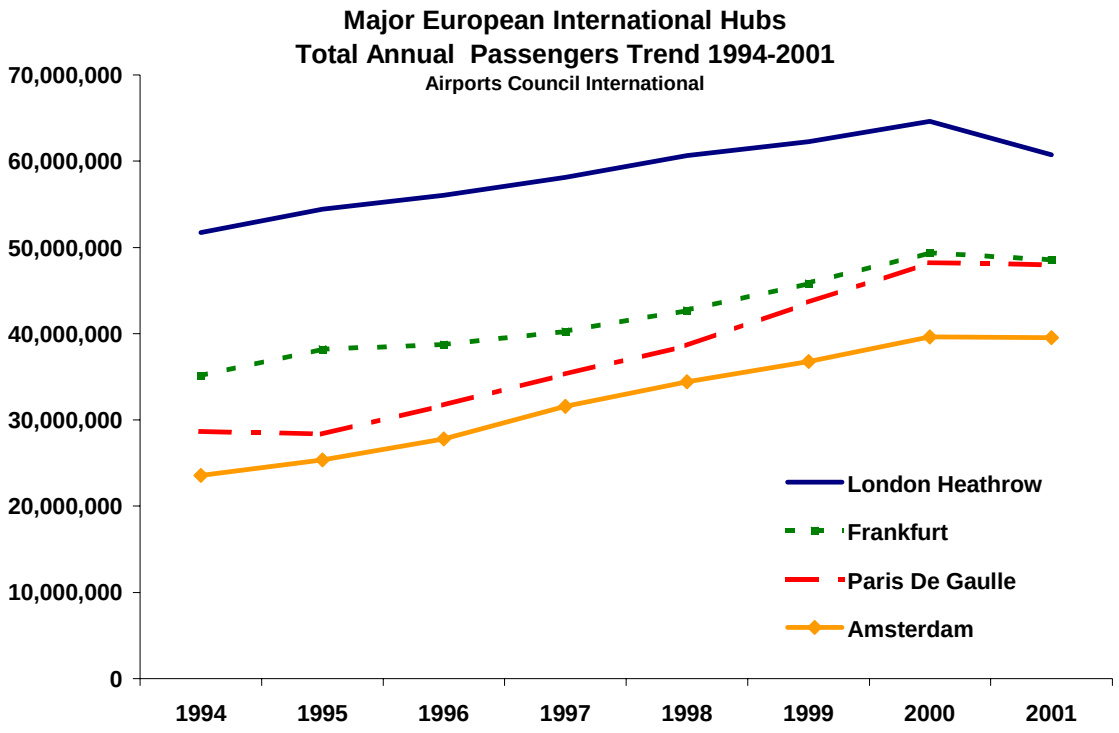


Figure 8

An analysis of schedules of Europe's airports provides further insight. London Heathrow was the clear leader in terms of the number of departures in the early 1990s. However, growth in departures has been limited by severe runway capacity constraints. Departure frequency[5] grew by only 14% between 1994 and 2001.

Paris CDG departure frequency caught up with Heathrow by early 2001. This followed a major capacity expansion programme in the late 1990s. Other close competitors, Frankfurt and Amsterdam, also narrowed the gap considerably.

Although London Heathrow is the leading airport in terms of traffic, it is only in #4 position in terms of destinations served. The size of some of the "thick" routes at Heathrow means they can sustain a lot of services from a number of different airline competitors. Given the capacity constraints at the airport, airlines have found it more profitable to be competitive on "thick" routes by providing many frequencies rather than using scarce slots for serving secondary destinations. Secondary destinations are either served from London's second airport, Gatwick, or not served at all if the routes prove uneconomic away from the main hub.

Consequently, Frankfurt had the greatest range of destinations of any European airport, a full 43 destinations ahead of Paris CDG at the end of 2001.

With the exception of Heathrow, the long term trend is for a gradual increase in destinations served at each airport. However, this is by no means a consistent year on year growth – destinations served tend to fluctuate from year to year. Growth in destinations is more marked at smaller airports compared to larger, more mature airports.

Major European International Hubs - Scheduled Destinations Served
January 1993 - 2002
OAG Schedules Data

	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Frankfurt	249	239	252	249	267	294	256	260	265	266	260
Paris Charles De Gaulle	204	209	211	207	223	253	226	235	231	236	217
Amsterdam	195	207	204	211	220	233	231	229	228	224	211
London Heathrow	206	202	215	214	208	204	197	193	187	183	195

Figure 9

[5] Based on OAG schedules in July of each year

Other leading European airports

Madrid, Munich, Barcelona and Zurich had all grown traffic at a steady rate until 2001.

However, Paris Orly had experienced continual traffic decline over most of the last decade, including a 9.3% decrease in 2001. Rome Fiumicino struggled to increase its passengers since reaching 25 million passengers in 1997. In the cases of Orly and Rome, the reason can probably be found in flag carrier hub strategy; Air France increasingly concentrated on their Paris CDG hub following development of new runway capacity. Similarly, much of Alitalia's growth in the late 1990s was at the revamped Milan Malpensa airport.

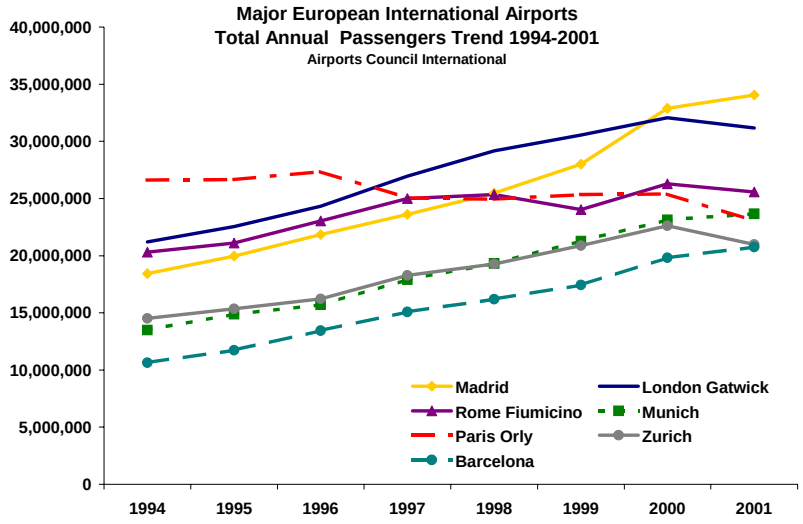


Figure 10

When analysing growth in services, some interesting differences emerge. Munich and Barcelona airports are the second airports in their respective countries but the main airport for a large city. Both these airports enjoyed fairly strong, sustained growth over the course of the last decade.

In contrast, London Gatwick and Paris Orly, are second airports in the city they serve (not just second airports in their country). In recent years, these two airports have experienced flat or even negative growth. This is largely driven by the flag carriers in the UK and France increasingly concentrating their operation at their main bases (Heathrow and Charles De Gaulle airports).

A similar pattern is also present in the growth of destinations from these airports.

Major EEA Airports - Scheduled Destinations Served
January 1993 - 2002
OAG Schedules Data

	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Munich International	87	114	112	112	124	173	142	141	146	159	150
Zurich	153	151	156	162	162	159	159	165	163	160	141
London Gatwick	145	133	116	130	138	164	167	167	173	171	140
Madrid	127	133	136	143	144	178	142	135	139	138	134
Rome Fiumicino	144	149	156	166	157	199	155	145	146	152	131
Barcelona	79	78	85	106	113	115	114	110	110	110	107
Paris Orly	165	152	158	172	140	131	119	105	106	101	90
Manchester	72	64	81	86	74	72	70	76	75	82	81

Figure 11

Leading airports from EU candidate countries

With the exception of Istanbul, the major airports of EU candidate countries are all relatively small when compared to EEA's leading airports. They displayed strong growth in recent years.

Prague in particular grew, emerging as an important leisure destination for short breaks.

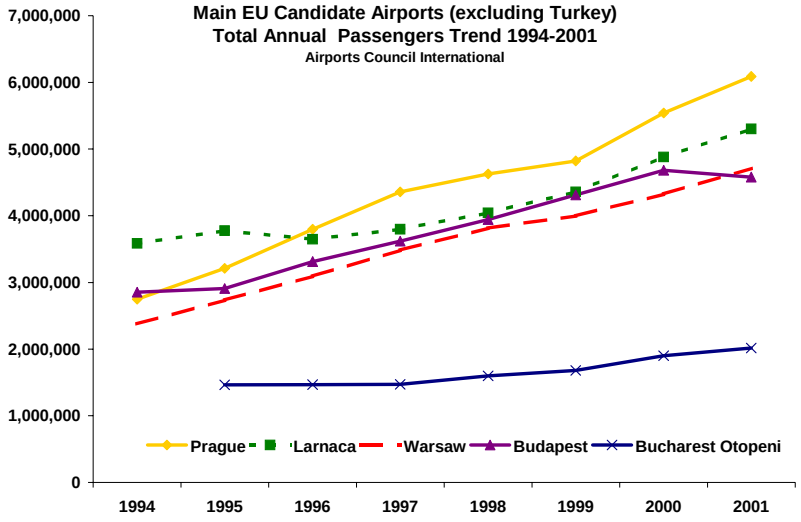
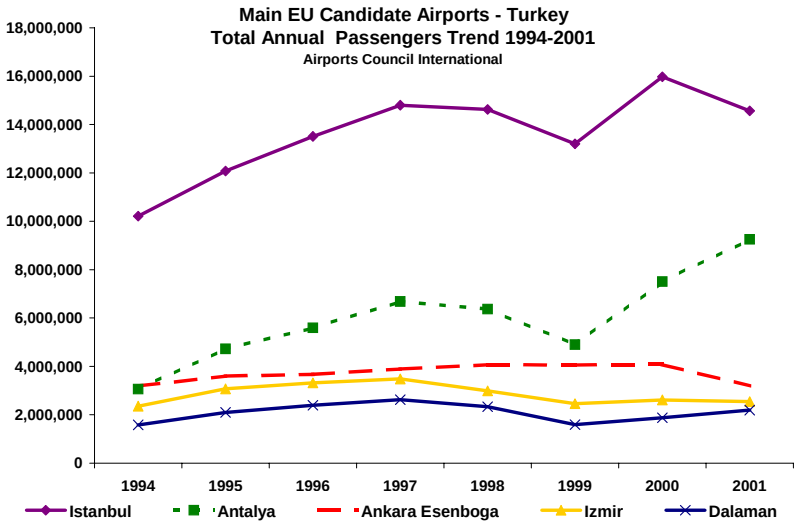


Figure 12 Figure 13

Turkey is the largest EU candidate country in terms of scheduled air passengers. Five of the ten largest EU candidate country airports were Turkish. All the Turkish airports were recovering after a dramatic decline in traffic experienced in 1998 and 1999 following a number of large earthquakes. In August 1999, over 10,000 lost their lives and tourists were strongly advised not to travel to Turkey.



In 2000, Istanbul achieved 16 million passengers before declining by 8.8% in 2001. Antalya, primarily a seasonal leisure destination, was experiencing consistent growth, which continued in 2001 with a dramatic 23.3% rise. The largest Turkish International market is Germany with 8.5 million passengers travelling between the two countries[6], particularly Antalya to Dusseldorf and Frankfurt.

Izmir and Dalaman continued to show growth, whilst Ankara traffic declined.

[6] Eurostat: Statistics in Focus – Air Transport in the Candidate Countries 2001

Low Cost Airports

Some of Europe's secondary airports have benefited from the recent boom in low cost traffic. The growth rate posted by London Stansted, home to leading low cost carriers Ryanair, Buzz and Go, was greatly in excess of the European average. London Stansted was originally developed as a third London airport for the full service and charter sector. However, after a number of years of flat growth, it has been transformed by the arrival of low cost carriers who now dominate the airport.

Regional low cost bases have also enjoyed large growth rates. Liverpool, London Luton, Glasgow Prestwick, Brussels Charleroi and Hahn were all struggling to grow before the arrival of low cost airlines.

Since 1996, London Stansted passenger traffic had increased by 23% per year, London Luton by 22%, Liverpool by 29% and Prestwick by 19%[7].

More recently, Bristol, Brussels Charleroi and Hahn started expanding rapidly after entry by low cost carriers.

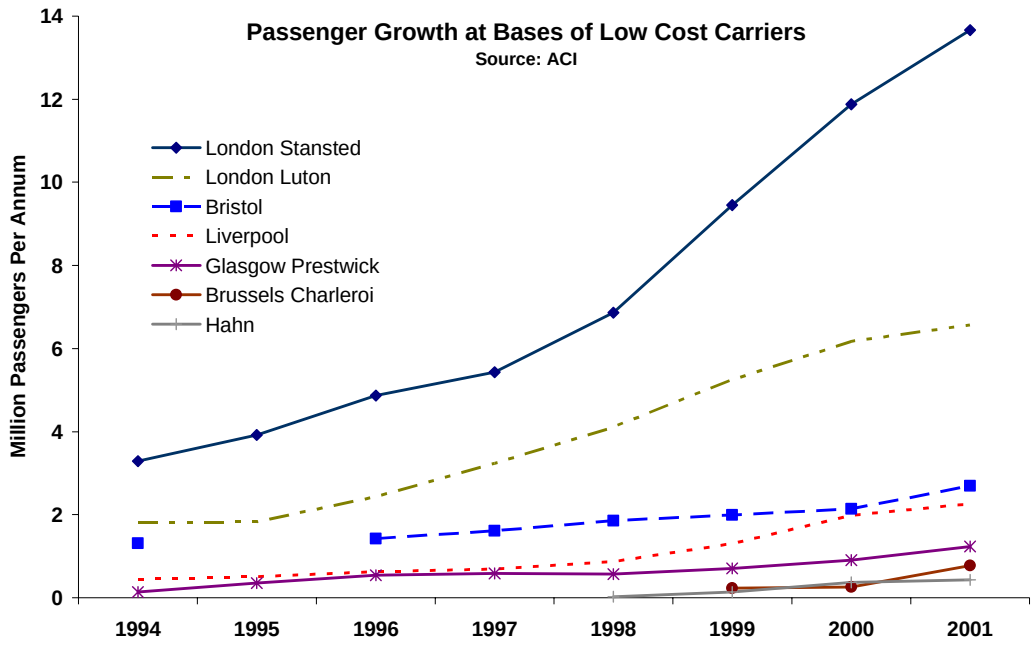


Figure 14

[7] UK CAA Terminal Passenger Statistics 1987 – 2001 Table 10.3

4.2.2 2001 v 2000 Traffic

The economic downturn and the events of September 11th had a major impact on traffic at Europe's airports. However, the scale of impact differed from airport to airport.

London Stansted, dominated by low cost carriers, continued to enjoy rapid growth. In general, secondary airports with little exposure to North Atlantic traffic either posted year on year growth or suffered only minor declines.

Leading airports with significant long haul programmes all posted declines in traffic (London Heathrow, Paris CDG, Frankfurt, and Amsterdam). Heathrow, with Europe's most developed North Atlantic schedule, was most affected.

Brussels and Zurich airports posted large traffic losses as they were affected by the severe financial difficulties experienced by their flag carrier, which led to temporary grounding of flights and huge cutbacks in flying post September 11th.

Paris Orly was also impacted by the financial difficulties experienced by secondary French airlines Air Liberte and AOM.

Finally, Milan Malpensa airport posted the largest traffic decline as flights were switched back to the "city centre" Linate airport following changes to traffic distribution rules. In addition, base carrier Alitalia cut back heavily on its Malpensa schedule, redistributing aircraft to other parts of Italy.

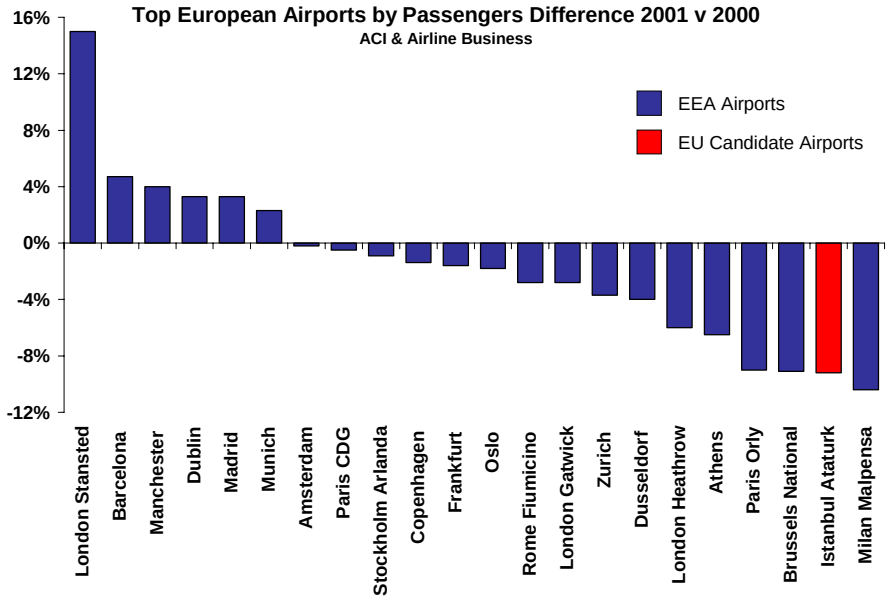


Figure 15

In addition to the airports analysed above (in the top 21 airports), a number of smaller airports also experienced large year on year traffic declines. These include Cologne/Bonn, Istanbul and Marseille.

Marseille suffered from a number of factors in 2001. As well as the September 11th impact, 2001 also saw the inauguration of the high-speed TGV rail service to Paris. Prior to September 11th, air traffic from Marseille to Orly dropped 24.9%

In addition, the liquidation of French air operator AOM-Air Liberte and the difficulties faced by Air Littoral led to the withdrawal of about 30 flights a day from Marseille.

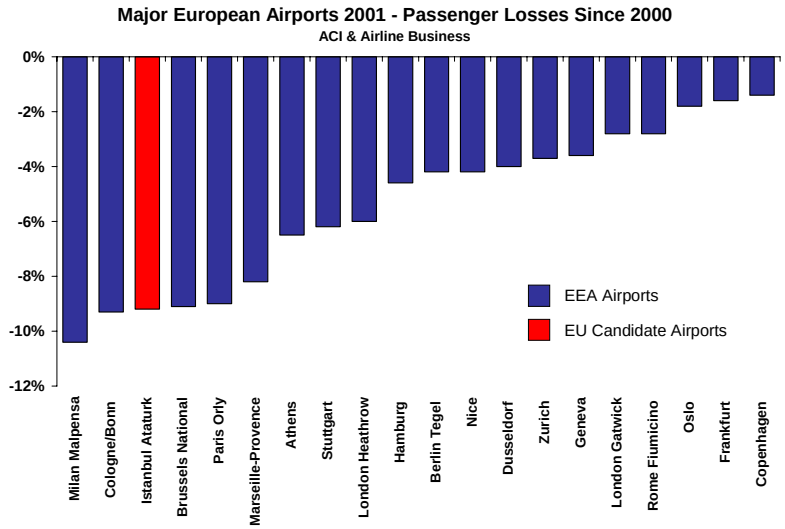


Figure 16

In contrast, some smaller airports enjoyed large traffic growth. These are highlighted below and include Milan Linate (as flights switched back from Malpensa).

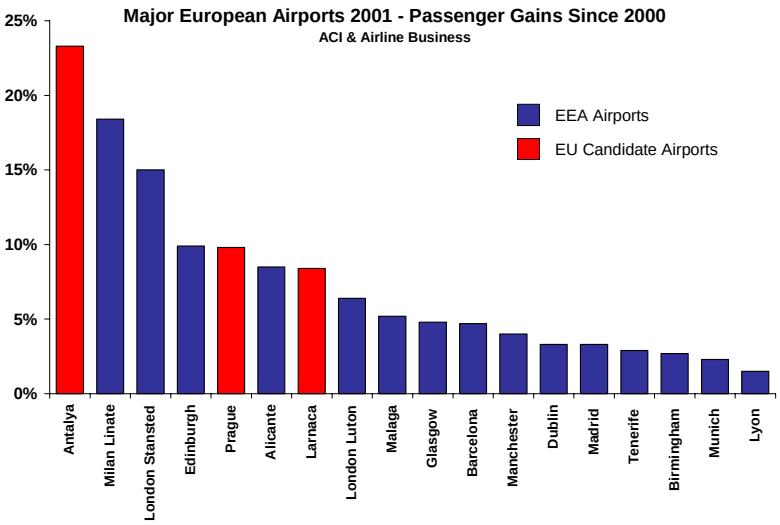


Figure 17

Analysis of the change in number of destinations served produces some interesting trends. Despite London Heathrow experiencing a sizeable decline in traffic, the number of destinations served increased over the course of 2001. Heathrow is the only major airport to actually serve more destinations in Jan 2002 than Jan 2001.

At the same time, Gatwick (London's second airport) saw a big fall in the destinations served. In fact, as airlines cut frequency on "thick" routes at Heathrow, this freed up scarce slots. These slots were used to operate routes previously served at Gatwick.

Zurich and Brussels were also notable for the number of destinations shed as their national airlines struggled to survive.

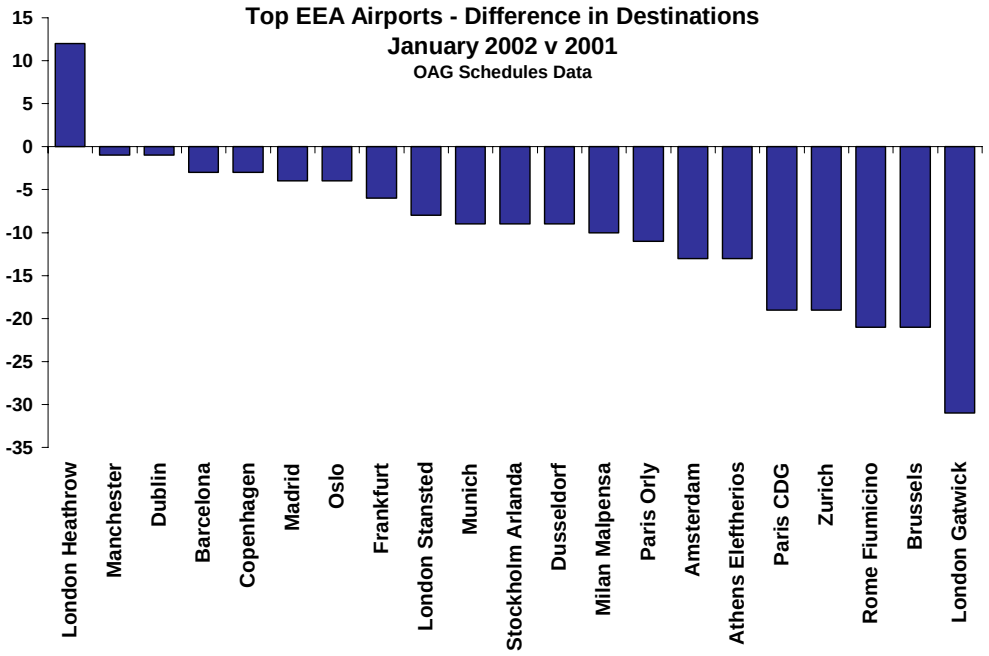


Figure 18

4.2.3 September 11th Impact on Traffic

All but two of Europe's leading airports posted lower traffic in the final quarter of 2001 than at the same time the previous year. The exceptions were London Stansted and Dublin, although neither of these airports matched the growth rates posted in the first nine months of the year.

The airports with the biggest declines in Quarter 4 were Zurich and Brussels, as Swissair and Sabena effectively ceased to exist in their previous form.

For London Heathrow and Paris Orly, September 11th accelerated a decline already present in the first nine months of the year. London Heathrow was suffering from the already existing North Atlantic downturn while Paris Orly was affected by financial problems with some of its main carriers and a move of services to Paris Charles De Gaulle.

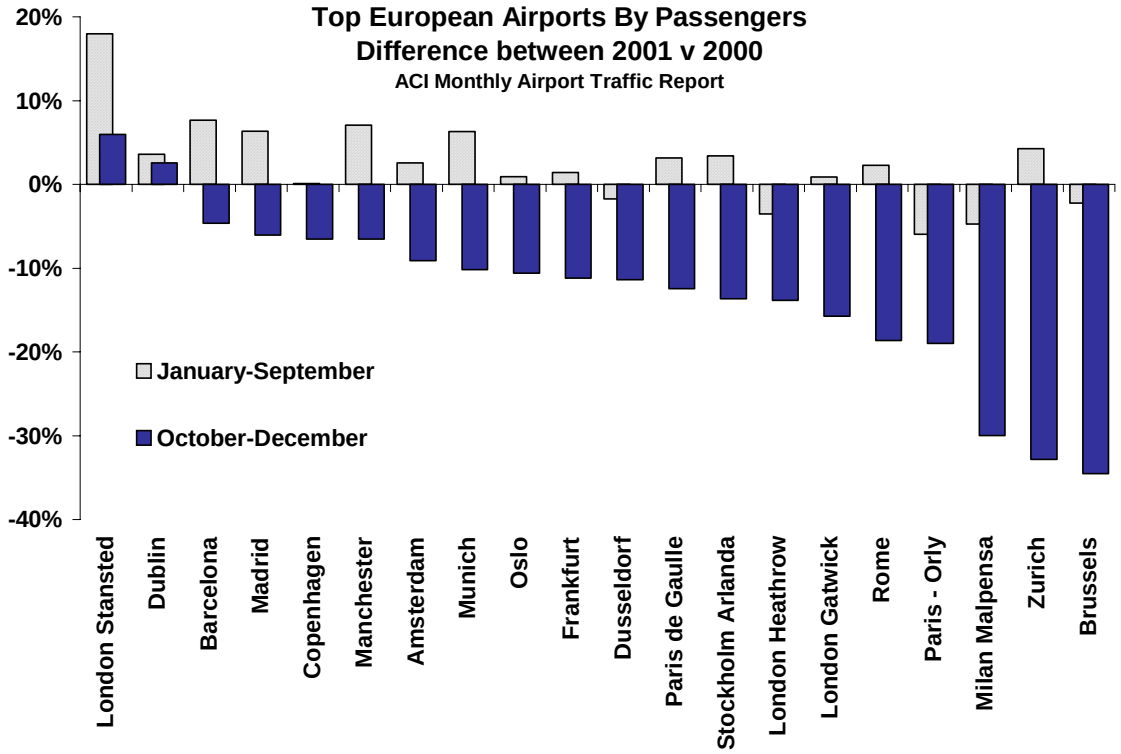


Figure 19

4.3 Financial Breakdown of Full Service Airline Sector

4.3.1 Historic Financial Performance

Europe's leading airport groups have produced fairly consistent returns, certainly less prone to the fluctuations experienced by Europe's airlines. Returns are generally much higher than those experienced by their airline customers, though to a certain extent significant returns are required to fund capital expansion programmes.

Of Europe's top 6 airport groups, BAA and Schipol Group produced the best returns on a regular basis. However, while Schipol group saw financial returns on an upward trend, BAA margins slipped in recent years.

Returns from other leading airport groups were much lower, but in the case of Fraport and Aeroports de Paris, gradually improving prior to 2001. Meanwhile, Aena (Spain) and Aeroporti de Roma failed to match levels of profitability produced at the end of the 1990s.

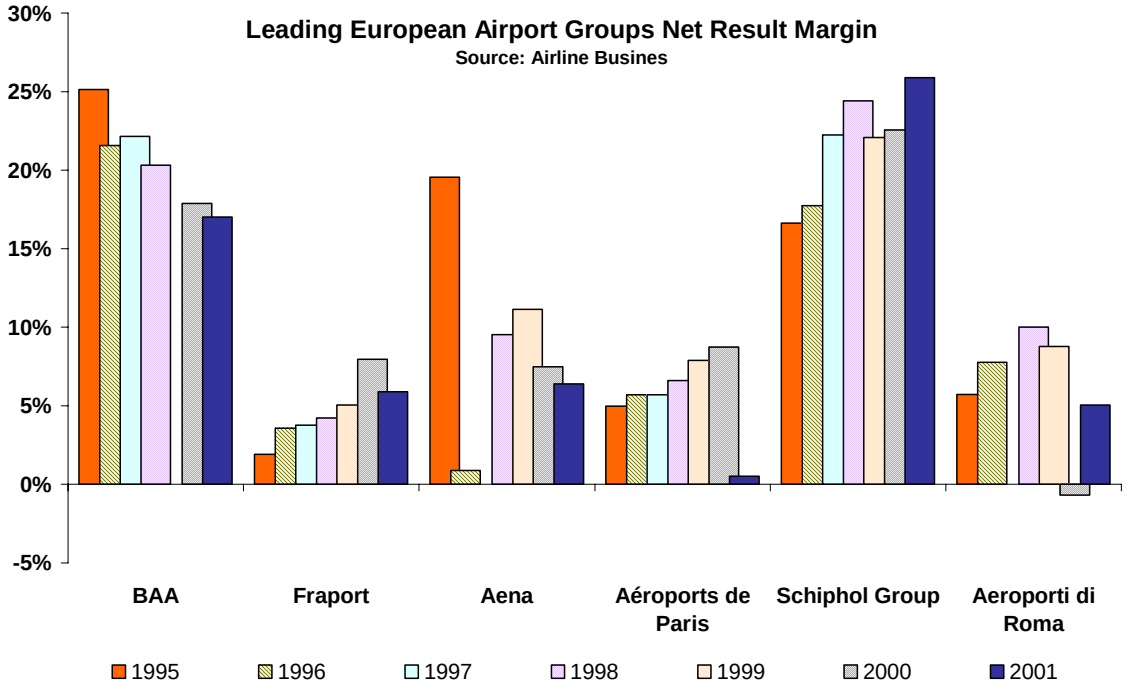


Figure 20

For most airports, the impact of the loss of intra EU duty free (from July 1999) was a significant negative influence on financial performance.

Financial results from the next tier of airports appear to be more variable, with returns fluctuating year to year. Nevertheless, returns in excess of 10% were not uncommon, often out performing results from the biggest European airport groups.

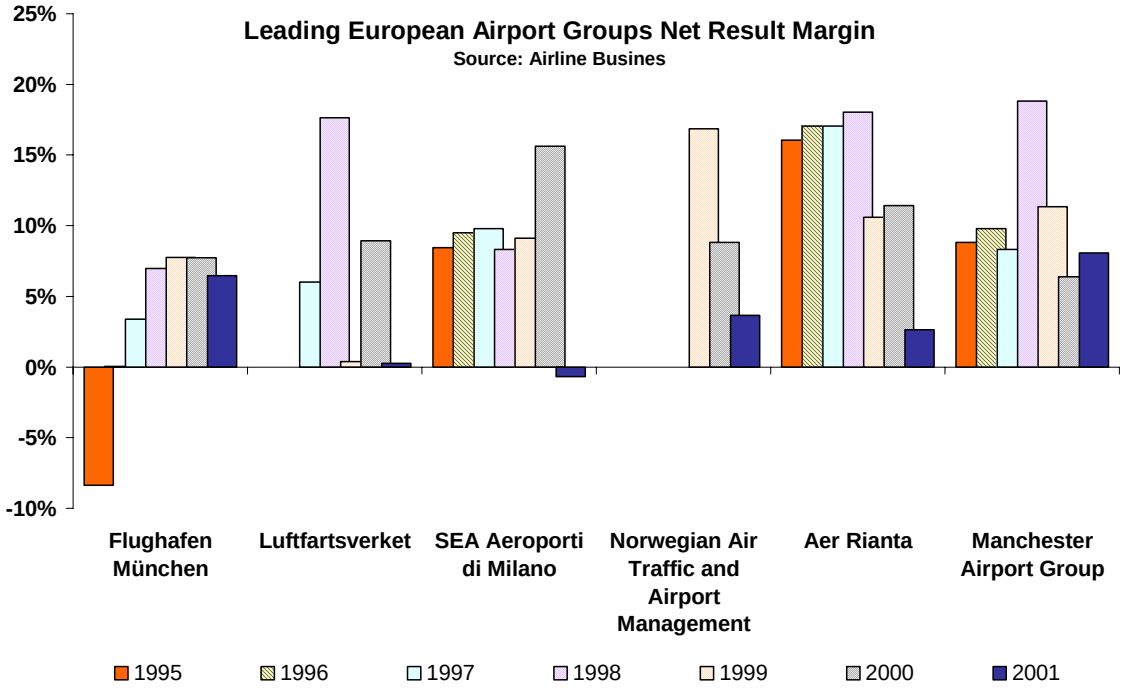


Figure 21

4.3.2 2001 v 2000 Financial Performance

One of the most interesting aspects of the 2001 European airport sector financial results is the discrepancy between results posted for the major airport groups and so called "second tier" airport groups.

Major airport groups have been defined in this case as groups whose airport portfolio contains the primary airport of one of Europe's main aviation markets. Second tier airport groups were defined as groups containing secondary airports of Europe's main aviation markets or primary airports in Europe's smaller markets.

In the year 2000, second tier airport groups outperformed major airport groups by a considerable distance. However, in 2001 major airport groups seemed less impacted from the downturn in demand. Second tier airport groups saw returns cut by almost a factor of three. The return posted of 11% was only just above that achieved by the major airport groups.

The reasons for this are not immediately apparent. However, larger airports tend to have better developed commercial income streams, which as discussed earlier, may have softened the blow of falling traffic.

Comparison of Net Margin of
Major European Airport Groups vs Second Tier Groups
Source: Airline Business Airport Rankings

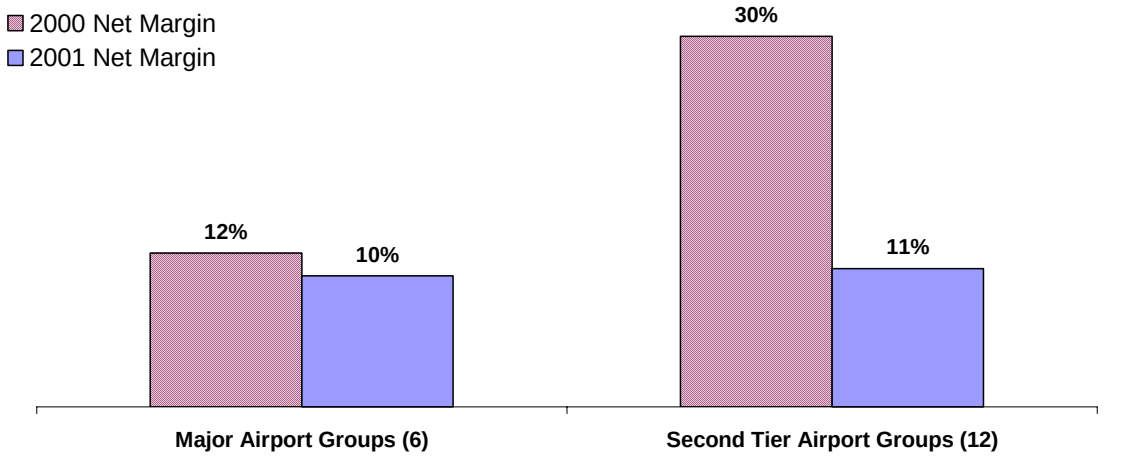


Figure 22

When analysing individual airport results, it can be seen that a sizeable proportion of airport groups were only marginally impacted by the aviation downturn in 2001.

In fact, Schipol Group, Flughafen Wien, Manchester Airport Group and Aeroporti di Roma actually improved their net margin compared to 2000. Other groups such as Klobenhavns Lufthavne, BAA, Manchester Airport Group, Flughafen Munich, Aena and Fraport saw only small declines in profitability.

At the other end of the scale, Unique Zurich saw an industry leading profit in 2000 converted to the only major loss experienced by Europe's big airport groups. This was, of course, connected with the financial problems afflicting Swissair, the #1 carrier at Zurich airport.

A number of other airport groups saw large deterioration of profits, though only SEA Aeroporti di Milano slipped into losses from a previously profitable position.

Europe's Leading Airport Groups Net Result Margin 2001 v 2000

Source: Airline Business

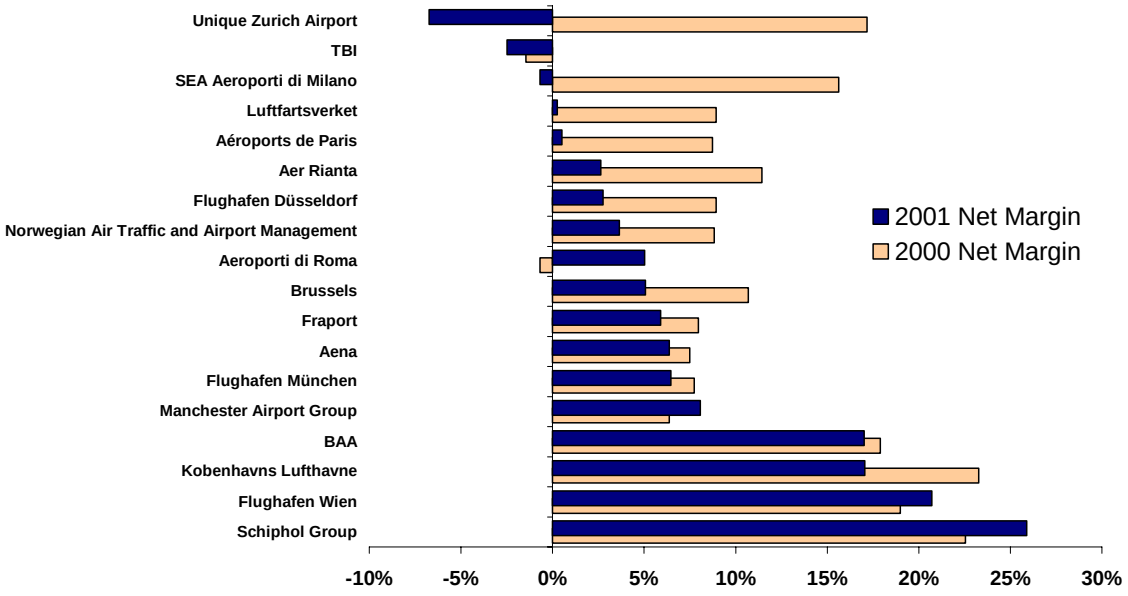


Figure 23

Finally, an investigation of interim financial results reveals that there was little sign of financial deterioration in the first half of 2001. Generally results were fairly stable. Airport exposure to the downturn in aviation demand was limited.

Post September 11th, there was deterioration in financial performance in the latter half of 2001. However, some airports were affected far more than others. Flughafen Wien, Aeroporti di Roma and Kobenhavns Lufthavne only saw marginal declines in profitability. Schipol Group even improved 2nd half performance compared to 2000.

In contrast, Unique Zurich saw a substantial decline in profitability as the group was affected by Swissair's problems. Fraport, with a large intercontinental programme, also saw a significant fall in profitability. BAA, whose portfolio includes London Heathrow, recorded a reduction in profits.

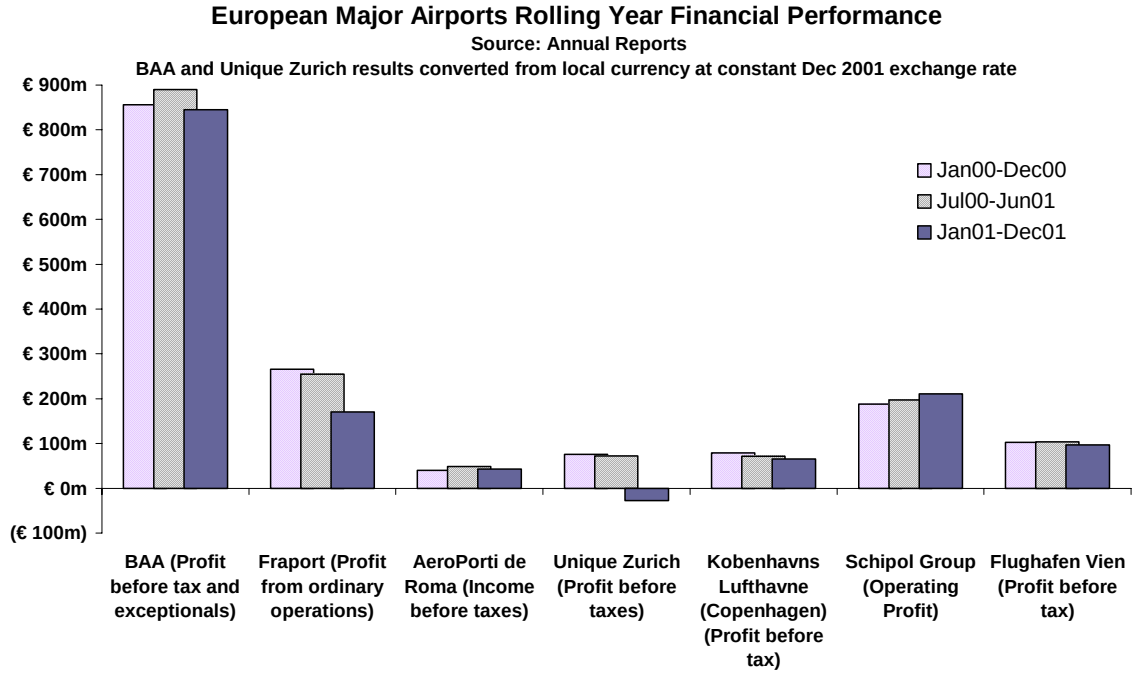


Figure 24

Planned Capital Expenditure

ACI has listed all major investment programmes (>$50m) at Europe's airports, as at end of 2001. The results of their survey are reproduced below.

Airport/Terminal	Planned investment	Opening date/Major projects
Amsterdam-Schiphol	US$ 18.7 billion US$ 1.16 billion	Terminal expansion, 5th runway; new offshore airport after 2025 (project currently on hold); Current terminal & runway projects until 2006
London-Heathrow	US$ 9.2 billion (incl. $5.8 million for T5)	Terminal 5 - first stage not expected to open before 2008; improvements at the other four terminals
Frankfurt	US$ 5.0 billion	CargoCity South expansion, third terminal & fourth runway
Paris (third airport)	US$ 4.0 billion	New airport after 2015 (assuming go ahead)
Paris (CDG + Orly)	US$ 3.0 billion	Terminal & runway work until 2006
Berlin-Schönefeld	US$ 3.2 billion	First-phase expansion into BBI until 2009
Rome-Fiumicino	US$ 2.9 billion	Staged terminal expansion until 2005
Barcelona	US$ 2.7 billion	Third runway, new pax & cargo terminals
Lisbon	US$ 2.4 billion	Completely new airport at Ota not before 2010
Lublin/Poland	US$ 2.3 billion	Completely new airport planned in eastern Poland
Zürich	US$ 1.6 billion	'Project 2000' Fifth Expansion Phase, to open 2003/4
Madrid-Barajas	US$ 1.6 billion	New pax + cargo terminals, new runway
London-Gatwick	US$ 1.4 billion	New midfield terminal and refurbishment of facilities
Copenhagen	US$ 1.2 billion	New pax & cargo terminals, road & rail access
Munich	US$ 1.1 billion	Second terminal until summer 2003
Düsseldorf	US$ 1.1 billion	New terminals, rail station, runway extension
Leipzig/Halle	US$ 1.0 billion	New terminal with rail station, new runway
Vienna	US$ 910 million	New terminal, apron, tower, office park
London-Stansted	US$ 840 million	Improving ground access; third satellite terminal
Manchester	US$ 780 million	2nd runway ($275m) completed, terminal expansion
Stockholm-Arlanda	US$ 720 million	Third runway, capacity increase
Lyon	US$ 700 million	Doubling of capacity
Cologne/Bonn	US$ 610 million	New terminal with rail link & station
Zagreb	US$ 600 million	Master Plan projects
Prague	US$ 585 million	Major terminal expansion, new runway
Funchal/Madeira	US$ 550 million	Runway, apron extension & terminal upgrade
Stuttgart	US$ 550 million	Third terminal; new cargo complex (completed)
Hamburg	US$ 500 million	New terminal & satellites, new apron
Dublin	US$ 500 million	Terminal modernisation (new Pier C, Terminal D)

Figure 25

4.4 Review of wider developments in the European Airport Industry

4.4.1 Consolidation of flag carriers back to hub airports

Post September 11th, most of Europe's flag carriers rationalised their operations. In some cases, there was a small but noticeable movement towards consolidation at the airline's main base.

British Airways increased its proportion of flights from Heathrow, as flights were switched from Gatwick. A similar retrenchment took place with Iberia.

Other leading airlines did not change the distribution of their flights to any degree of significance.

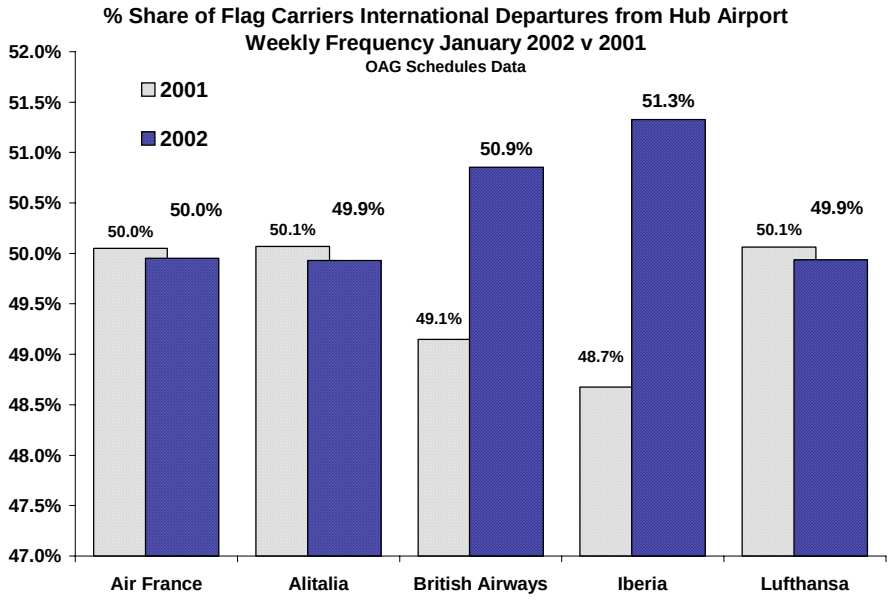


Figure 26

4.4.2 Share performance of European airports post September 11th

Only a few airports are publicly quoted. Schroeder Salomon Smith Barney investigated the share price performance of European airports post September 11th, and compared performance to the share performance of the base airline at the main airport in their portfolio.

Six months after September 11th, BAA and Copenhagen Airports had recovered to just above pre-September 11th levels. Fraport and Vienna Airport were below September 11th share prices but not substantially so.

The two airport groups whose share price suffered major, non-short term damage were Unique Zurich and TBI.

Unique Zurich was badly impacted by the financial collapse of their main customer Swissair. As well as losing anticipated future traffic income, there were also concerns that some of Swissair's incurred landing charges would not be honoured.

TBI's share price was also impacted by the withdrawal of an attempted hostile takeover by the Vinci group. In August 2001, Vinci of France offered a 50% premium on the existing share price as it attempted to win control of TBI. After September 11th, the bid lapsed, causing the share price to fall more than it would have done just from the September 11th impact in isolation.

It is also interesting to note that an airport's share price tended to perform substantially better than their base airline in the six months after September 11th. The exception to this was Fraport who underperformed compared to Lufthansa.

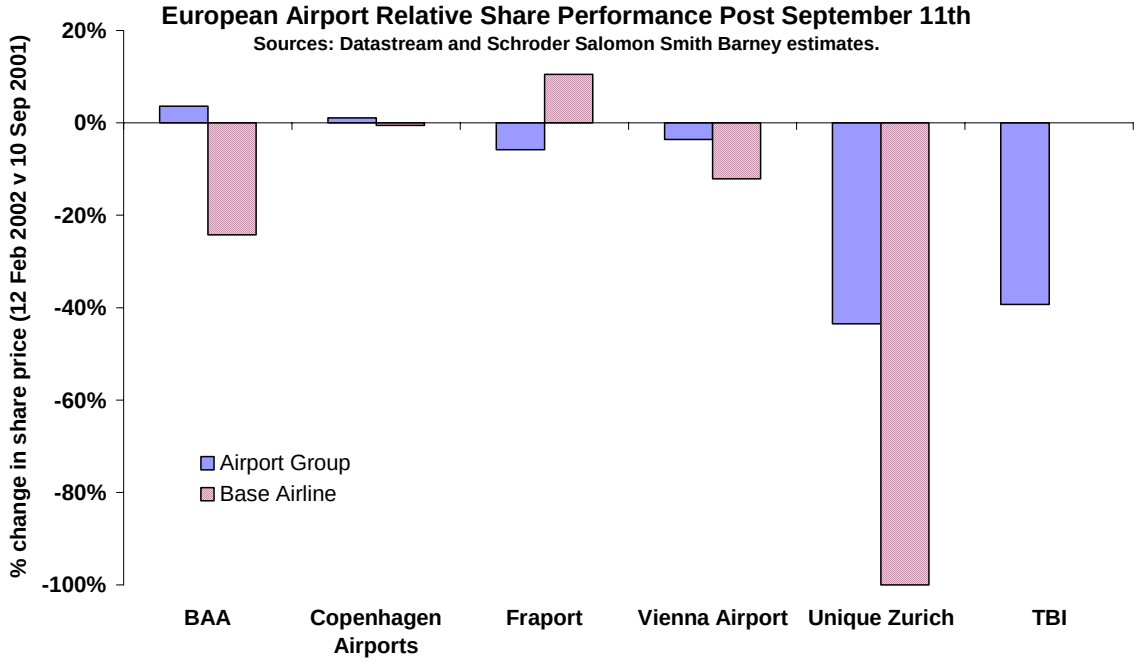


Figure 27

4.5 Key developments at individual EEA airports

Introduction

The following section provides commentary relating to significant events experienced by some of the major European airports and airport groups in 2001.

AENA (Spanish airports including Madrid-Barajas, Barcelona and Palma de Mallorca) [8]

Throughout the year 2001, AENA continued with its 2000-2007 airports and air navigation modernisation plan, valued at € 9bn. During 2001, master plans of all the airports in the Aena network were completed and approved.

The operating revenue rose by 9.3 % during the 2001 financial year (€ 1,581m versus € 1,446m in 2000). This was primarily split between airport services revenue (41.2%), airport commercial revenue (22.2%) and air navigation revenue (35.7%).

Operating results for 2001 rose to € 224.5m, an increase of 9.2%. However, financial results deteriorated to a loss of € 20.3m (compared to a loss of € 6.5m in 2000), as a result of new debt taken to finance investment plans.

Aer Rianta (Irish airports including Dublin) [9]

During 2001, group traffic continued to grow despite the post September 11th slowdown and local impacts of foot and mouth disease.

In 2001, the Commission for Aviation Regulation was established to regulate airport charges and aviation terminal services charges. In August, the Commission issued its Determination in respect of the maximum levels of airport charges that may be levied by Aer Rianta at Dublin, Cork and Shannon airports. Aer Rianta sought a judicial review of the Determination, with the process still ongoing at year end.

Financial highlights for the year are summarised below:

- Total turnover amounted to €438 million, an increase of 3% over 2000.
- Group operating profit before exceptional items, interest and taxation amounted to €67.5 million, down 18.7% on 2000.
- Group profit after tax fell to €11.6 million, down 75% on the previous year (net impact of exceptional items amounting to €19.2 million after tax).

[8] Source: Annual Report
[9] Source: Annual Report

Aeroporti di Roma Group (Rome Fuimicino and Ciampino airports) [10]

Performance in 2001 of the newly formed ADR group (after merger of Leonardo SPA and ADR SPA) is summarised below:

- Passenger numbers decreased by 2.9% on 2000; after rising by 2.9% to September 11th, the number of passengers then fell by 18.7% in the period to the end of the year.
- Aviation revenues stable at € 322m while non aviation revenue rose 8.9% to € 183m.
- Operating costs cut 16%.

The group financial statements stated that "*… public sector investment and initiatives requiring government authorisation stagnated. The absence of a legislative and regulatory framework covering not only investment but also ordinary activities, which takes into account changes in decision making powers resulting from the privatisation of the management company and liberalisation of handling, has been repeatedly brought to the authorities attention by the Company*".

Following liberalisation of ground handling, Alitalia Airport S.p.A. and EAS S.p.A (a subsidiary of Air One) were awarded the two tenders for management of ground handling services at Fuimicino airport. A contract was also drawn up between the parent company and ADR Handling S.p.A.

Aeroports de Paris (ADP) [11]

ADP is responsible for 14 airports in the Paris Basin including the two major international airports – Charles de Gaulle and Orly.

2001 proved to be a difficult year after continual growth and expansion in previous years. Traffic declined significantly due to the aftermath of September 11th, the further development of the French high speed train network and the worsening position of French regional airlines. Overall passengers declined to 71 million (48 million at Charles de Gaulle and 23 million at Orly), a decline of 3.5% on 2000. Whilst Air France attempted to maintain international capacity, domestic traffic fell by 5.7%.

Financially ADP also experienced a tough year. Turnover decreased 2.7% on 2000, while the operating result fell 30% to € 201 million. The result after tax was only € 7 million.

ADP continued with a major investment programme to develop capacity. CDG Terminal T9 development was given the go-ahead, to enlarge capacity from 2.5 to 3.5 million passengers.

The Government announced its decision to build a new international airport in the Grand Bassin Parisien at Chalnes (125 km north of Paris). The new airport was due to be operational by 2015.

Athens Eleftherios Venielos [12]

The new Athens airport opened on March 28 2001, slightly ahead of schedule. Like many new airports, it suffered a chaotic first three days, with a breakdown of the baggage system and problems associated with the new road links.

The airport was constructed by a public-private consortium led by Hochteif AirPort, under a 25 year Build-Own-Operate-Transfer concession. Following the substantial investment, the new airport doubled the landing fees (compared to the old airport).

[10] Source: Annual Report
[11] www.adp.fr - Press release regarding 2001 performance
[12] Source: Airline Business December 2001

BAA (7 UK airports including London Heathrow, Gatwick and Stansted)

In 2001, BAA finally received permission to build Heathrow Terminal 5, after a long running planning inquiry. The first phase is due to be opened in 2008, with completion in 2011. The estimated UK £3.7bn cost of the terminal was part of UK £8.1bn investment programme at London airports published by the company.

During the year, major terminal extensions were completed at both London Stansted and Gatwick airports. Following its strategy of focussing on core airports, BAA exited from direct duty and tax-free retailing activities in the US (at an exceptional cost of UK £190 million).

Brussels International Airport Company (Brussels National Airport)[13]

Brussels National Airport was badly hit by the collapse of Sabena and City Bird in late 2001. In the immediate aftermath of bankruptcy, Brussels traffic was down by 43% in November, although the decline was reduced to 20% by December.

Much of the lost Sabena traffic was replaced by its successor airline and increased services from other European flag carriers. In January 2002, Sabena/DAT operated 30% fewer services than in January 2001. However, other carriers increased services by 18% in total. This included a 63% increase in services by British Airways and a 35% increase by Lufthansa.

Overall, services in January 2002 fell by 8.4% compared to the previous year (traffic down 15%). However, Brussels status as a connecting hub was severely compromised by Sabena and City Bird's collapse.

The airport stated in their annual report that "*the disappearance of these two companies raises a problem with regard to the long-haul services to and from this airport. Moreover, as Sabena provided the bulk of the transfer traffic, we are now more or less witnessing the disappearance of this phenomenon*."

Following Sabena's collapse, Brussels International Airport Company participated to the extent of € 12m in the funding of its successor airline by becoming a shareholder in the holding company "Air Holding". The company stated that "*obviously this is not a strategic participation to be retained in the long term … But, given the void Sabena left, it was imperative to pool the goodwill that existed and join forces so as to ensure the successful "takeoff" of a home carrier, without which an airport is not really viable*."

Environmental initiatives in 2001 included a focus on reducing noise impacts for local residents, such as the inauguration of the 1st phase of a noise barrier and the renovation of the noise monitoring system

Towards the end of the year, BIAC won a tender for the management contract of Ostend airport, contracted out by the Flemish Region.

Financial highlights included:

- 12% increase in turnover for aeronautical activities compared to 2000 - largely explained by the tariff adjustment implemented in April 2001 which is to cover the extra investments made since 1998 for security and baggage sorting as well as for the services BIAC took over from the airlines.
- Commercial revenues increased by 4.6% - largely attributable to the fees paid by the ground handling agents with which new concession agreements were concluded.
- Expenses for "Services and other goods" rose by 19% - largely accounted for by the fact that BIAC now bears € 9.4 million of expenses for several services that used to be paid by the airlines (special assistance, bussing services, technical post of the baggage sorting system, etc) and by the increase with € 7.5 million in "Maintenance and repairs".
- Expenses for active members of staff grew by 15.9% to € 39.8 million, as the company proceeded to increase the number of staff in the closing months of 2000 and early months of 2001.

[13] Source: Airline Business March 2002 and Annual Report

Brussels South Charleroi Airport[14]

In February 2001, Ryanair confirmed it had chosen Charleroi Airport as its first continental European base, with the airport chosen ahead of other airports in Germany, Italy and Sweden.

From the end of April, the airline operated around 120 flights a week from the airport.

Kobenhavns Lufthavne (Copenhagen)[15]

In 2001, total turnover for the company increased by 6.6%. However, little of this increase was derived from traffic related income – traffic was flat during 2001. Concession income declined but there were sizeable increases in revenue from rentals and also sales of other services – where hotel revenue and consultancy revenue outstripped 2000 levels. Finally, profit from interest in associated companies also increased substantially. These associated companies included the equity stake in the UK's Newcastle Airport.

Overall operating profit fell by 7.8% while net profit declined even further – by 22.0%.

Flughafen Wien Group (Vienna)[16]

During 2001, total passenger traffic fell by 0.7% versus the previous year. However, the areas of strategic focus for the airport continued to grow. Transfer traffic overall increased by 12.2%, bringing the transfer share of passengers to 31.9%. The group attributed this growth to its 25 minute connect time ("*the fastest transfer airport in Europe*") and pledged to encourage more growth through the introduction of new transfer tariffs.

In addition, the area of focus, Eastern Europe, also grew, with passenger numbers up 11.3% on 2000. The airport now offers more Eastern European destinations than its competitors.

Turnover fell by 2.2%, with ground handling income most badly impacted (-5.9%). Earnings before interest and tax deteriorated by 8.5%, and the net profits of €66.3m were 93% down on 2000.

The planned investment programme was subsequently reduced. Finally, over the course of the year Flughafen Wien Group's market capitalisation fell by a quarter.

[14] Source: Financial Times Power Search
[15] Source: Annual Report
[16] Source: Annual Report

Fraport AG Frankfurt Airport Services Worldwide (Frankfurt Airport)[17]

2001 was an eventful year for Fraport. After re-branding earlier in the year, an Initial Public Offering of shares took place on June 11. The company's shares were listed on the stock exchange and subsequently included in the German mid-cap index, MDAX from September 24th.

Market capitalisation at time of stock exchange listing was just below €3bn. By September 21st, the market capitalisation had fallen to €1.6bn before recovering to €2.4bn by the year end.

Fraport were involved in a number of other ventures outside of Frankfurt airport:

- Continued alliance with the Schiphol Group under the umbrella of the Pantares joint venture, with the alliance winning a tender (with local partners) for building and operating a cargo logistics centre in Hong Kong.
- Acquisition of aviation security services company ICTS Europe Holdings B.V. during 2001 (final transaction completed 1 Jan 2002).
- The Build-Operate-Transfer project for a new international terminal Manila faced difficulties in 2001, with the company making a write down after profitability forecasts were revised.
- Fraport AG, the U.S. construction firm Bechtel, and the Peruvian construction company Cosapi – operating as Lima Airport Partners – assumed management of Lima Airport in February 2001
- New Athens airport opened in March, with Fraport AG the principal advisor to the operator.

During 2001, Frankfurt Airport suffered a 1.6% decline in passengers. However, total revenues for the group grew by 5.7%. Nevertheless, operating profit declined 36% and profit for the year fell 22%. Big declines in profitability of the aviation segment (-81.6%) and ground handling (-82.5%) were partially offset by an increase in the non aviation segment (+22.5%).

Finland Civil Aviation Authority – Helsinki Vantaa[18]

The Finnish CAA managed to increase turnover during 2001. The €206.8 million figure represented a growth of 5.6% from the previous year. However, profit was 10% lower than in 2000 at €12.2 million. Helsinki Vantaa passenger growth was marginally positive at +0.2%.

The Schengen Agreement, which promotes freedom of travel among 15 European countries, came into force in Scandinavia on 25th March 2001. This resulted in operational changes and construction work at Helsinki's international terminal costing €10 million.

Construction work on Helsinki's third runway was close to completion with the aim of being operational in November 2002.

Manchester Airport PLC (Manchester and East Midlands airports amongst UK portfolio)[19]

UK regional airports East Midlands and Bournemouth were acquired on 28 March 2001. Manchester Airport Group bought the airports from National Express in a UK £241 million (US $350 million) deal.

Due to the change in the make up of the company, year on year comparisons should be treated with caution. However, 2001/02 group turnover increased by 21.4% (influenced by new acquisitions). Operating profits (excluding restructuring costs) also improved, 22.4% up on 2000/01. However, pre tax profits deteriorated severely, falling from UK £36.7m to just UK £2.4m.

[17] Source: Annual Report
[18] CAA Finland Annual Report 2001
[19] Source: Annual Report

Milan Linate Airport[20]

There were two main developments at Linate during 2001.

On October 8, 118 people were killed when a Scandinavian Airlines System jet hit a private aircraft while taking off in fog from Milan's Linate airport. It skidded across the runway and crashed into a hangar, killing all 114 people aboard the two aircraft and four airport workers.

The committee set up by the Italian ministry of transport to investigate the air disaster revealed that the ground radar system had been broken for more than a year, and signalling and signs did not comply with airport regulations.

Shortly after the crash, Linate airport (along with a number of other Italian airports) was downgraded to "category one" by Italian air safety authority Enav. Airports in this category cannot be used if visibility is reduced to less then 550 metres. Before Linate's status was reinstated in early November, widespread operational disruption was experienced as fog forced temporary closures of Linate.

The other significant development was the change in traffic distribution rules, approved by the European Commission at the end of 2000. The compromise put forward by the Italian Government ended a four year dispute between Italian authorities and some of Europe's leading airlines. The dispute arose when airlines were forced to transfer most of their flights from Linate to the redeveloped Malpensa airport. Objections were raised that the forcible transfer broke European law because it discriminated in favour of Italian airlines, especially Alitalia.

The new traffic distribution rules guaranteed a minimum of one daily return service between Linate and every European capital. Airports handling more than 40m passengers in 2000 - London Heathrow, Frankfurt and Paris Charles de Gaulle - would be guaranteed two daily return services.

The switch in services as a result of the original enforced transfer and the relaxing of this in 2001 can be seen in the chart below.

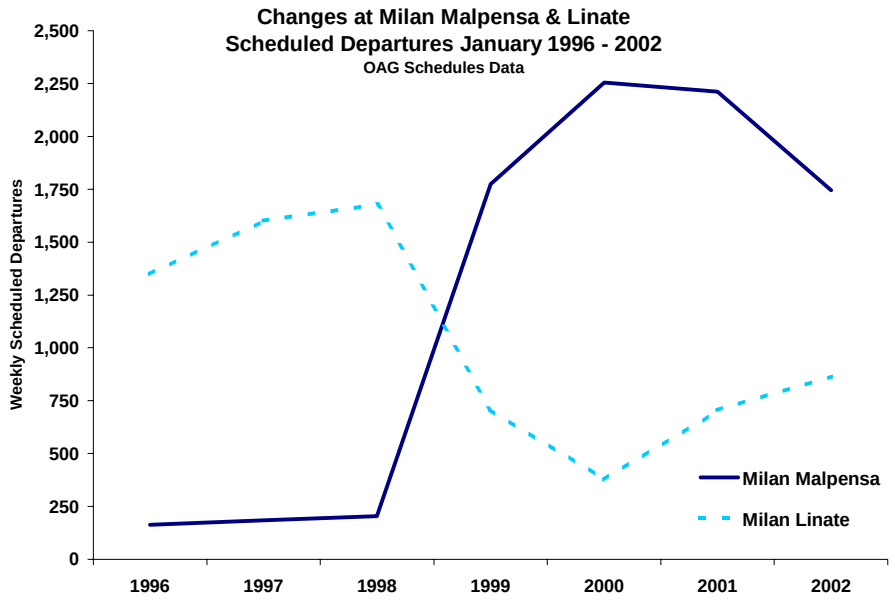


Figure 28

[20] Source: Financial Times Power Search

Milan Malpensa Airport[21]

2001 got off to an inauspicious start for the airport, as it attracted much criticism for its operational performance. An AEA report placed Malpensa in last position for its delay performance.

In May, Alitalia said that the airline was to reduce its presence in Malpensa airport in Milan, reallocating aircraft to other parts of Italy. This announcement was criticised by local business leaders, and subsequently there was some apparent softening of Alitalia's position. However, post September 11th, Alitalia and other airlines made substantial service cut backs at the airport.

Malpensa was also briefly downgraded to category one status following the crash at Linate airport, which led to the airport being closed in fog.

Finally, 2001 was originally pencilled in as the year the airport's holding company, SEA, would make its stock market debut. This was postponed indefinitely in the aftermath of September 11th.

Oslo Lufthavn[22]

Oslo airport's operating result was NOK 499m, 80m less than in 2000. The result after tax was a loss of NOK 116m. Passenger traffic was down 1.9% to 13.7 million passengers. The most significant downturn was on domestic routes due to SAS's acquisition of Braathens, which resulted in a reduction of services.

In 2001 Oslo maintained its position as Europe's most punctual airport.

Operational modifications were completed in time for the commencement of the Schengen Agreement.

Schiphol Group (Amsterdam)[23]

2001 total income for the group increased by 9.1% compared to the previous year. Income grew in all four business areas – Amsterdam airport aeronautical, Amsterdam airport commercial, real estate and alliances / joint ventures.

Operating profit and net profit both improved on the previous year (+12% and +27% respectively).

As well as Amsterdam airport, the group also had interests in a number of other ventures:

- A Memorandum of Understanding was signed in 2001 with the government of Malaysia to take a stake in Malaysia Airports Holding, the company managing all airports in that country, including the new airport in Kuala Lumpur.
- Further cooperation with Fraport in the tender to a logistics centre at Chek Lap Kok Airport, Hong Kong.
- Eindhoven Airport, in which Schiphol Group has a 51% interest, had a difficult year with severe traffic declines.
- Terminal 4 at New York JFK airport was opened (Schipol USA holds an interest). However, following September 11th, income from the terminal was below expectations.

[21] Source: Financial Times Power Search
[22] Oslo Airport Annual Report 2001
[23] Source: Annual Report

Unique Zurich (Zurich Kloten Airport)[24]

In the early part of the year, there was an ongoing discussion between Germany and Switzerland over the issue of flights to and from Zurich flying over Southern Germany. Germany was seeking to agree restrictions which would reduce noise for residents in Southern Germany.

On 23 April, transport ministers of Germany and Switzerland agreed the main contents of a treaty limiting the volume of incoming flights over German airspace. In October, the treaty was signed and Part 1 of the treaty came into effect, mandating aircraft to approach from the east and use runway 28 late at night. Unique Zurich repeatedly expressed its strong objections to this treaty.

In June, Unique replaced the Canton of Zurich as the official operator of Zurich Airport, with a new licence valid for fifty years.

Following September 11th, Zurich airport faced immediate challenges. The airport briefly operated without war and terrorism insurance after cover was withdrawn. Then the collapse of Swissair saw intensified traffic decreases. By January 2002, the airport saw a 19% fall in the number of services compared to January 2001. Swissair/Crossair services had been cut by 25% while other airlines reduced services by 6%.

Furthermore, liquidity problems at Swissair subsidiary companies threatened the operation of the airport. In response, in November the airport took over the baggage handling and de-icing systems formerly operated by Swissport and SR Technics respectively.

The airport decided to go ahead with its partially completed expansion plan. The local canton of Zurich agreed to provide a CHF 100m credit line to acquire former Swissair subsidiaries seen as crucial to the airport's operation.

Finally, the airport was affected by two crashes towards the end of the year. On 24 November, a Crossair Avro RJ 100 crashed during its approach to Zurich Airport and on 21 December a Cessna plane crashed at the airport.

Financially, the airport was affected by reduced traffic, increased security costs and bad debts from Swissair. Turnover increased by 2.9%, the majority of the rise originating from non-aeronautical income. Excluding bad debts and write downs, the result for the year was CHF 44m, compared to CHF 90m in 2000. However, including bad debts and write downs transforms this profit into a CHF 36m loss.

[24] Source: Financial Times Power Search, Airline Business March 2002 and Annual Report

Section 5

The Cargo Sector

Contents

5.1 Overview of the European Sector

5.1.1 Introduction and summary

Air cargo is considered a premium service in the goods transportation marketplace. Items which are transported by air are characterised as having special features, for example being perishable, high value, fragile, or requiring rapid transit over longer distances.

Air cargo is carried either in the lower hold space of passenger aircraft ('bellyhold') or on the main deck of combination ("combi") and freighter aircraft.

Highlights from this section are summarised below:

- Global freight volumes were falling sharply from April 2001. The rate of decline accelerated in the period after September 11th.
- Europe's two main long haul cargo markets contracted in 2001. Tonnage fell to North America (-11%) and to Asia (-3%, compared to +17% growth in 2000).
- The intra-European market also declined in 2001 (9.1% fall in Route Tonne Kilometres). Despite the overall decline in volumes, the "Express" sector posted a small rise in RTKs (+2.2%). This continued their medium term trend of market share gain at the expense of traditional combination carriers or all-cargo airlines.
- All EEA countries saw cargo tonnage at their airports decline with the exception of Luxembourg and Iceland
- DHL launched a new airline at East Midlands Airport in the UK while TNT became the sole European feeder airline for KLM Cargo.
- The main cargo alliances were formalised and named in 2001

5.1.2 Types of player

The sector is divided into essentially three types of player:

- ***Combination carriers*** – airlines which transport both passengers and cargo, usually on the same aircraft (cargo carried in the lower hold space)
- ***All-cargo airlines*** – airlines which only operate dedicated freight aircraft
- ***Integrated carriers*** – companies who provide a door-to-door express delivery service, and will usually operate vans and trucks as well as aircraft fleets

Combination carriers

European combination carriers have different management philosophies regarding their air cargo business. Some regard cargo as a by-product of their passenger operations. They do not consider air cargo as a profit centre and therefore sell into the market on an incremental or marginal cost basis i.e. makes a contribution after costs for extra fuel and handling are taken into account.

Other combination carriers treat their air cargo business as a profit centre and market services that ensure that available space is utilised. These carriers can generate up to 20% of their revenues from air cargo.

Major combination carriers within Europe (e.g. Lufthansa, British Airways and Air France) vary their utilisation of bellyhold, combi main deck space and dedicated freighter aircraft in carrying their freight.

All cargo airlines

European all-cargo airlines (e.g. Cargolux) operate dedicated, freight only aircraft fleets. The capacity of the fleet is marketed in many ways ranging from one-off charters for specific clients (e.g. passenger airlines, manufacturers and freight forwarders) to uplifting a single package.

The key for all-cargo airlines is that their dedicated freighter fleet provides better accommodation for cargo. There are two distinct benefits in using dedicated freighters:

- More efficient utilisation of space is available on the main deck (compared to lower deck)
- Aircraft can fly routes and schedules appropriate for freight demand (as opposed to depending on passenger schedules and destinations).

All-cargo airlines may also offer pick-up and delivery services at either end of a flight and other value adding services.

Integrated carriers

The Integrators or ‘Express’ carriers (e.g. DHL, UPS, TNT and FedEx) have developed since the 1980’s. These companies move goods in a manner that “adds value” to the shipper beyond the basic transportation of goods between two airports.

The integrators therefore package various product offerings that result in a seamless door-to-door, time definite, secure and possibly customised transportation service. “Integrated” has also increasingly come to mean that the companies have their own independent vans, trucks, IT systems, facilities at airports and aircraft fleets. Their customers typically pay a premium for this integrated service over the other airfreight operators.

5.1.3 Main players

European flag carriers are well positioned in the global industry. Lufthansa Cargo (a subsidiary of Lufthansa), Air France, KLM and British Airways are all within the top 10 global carriers by Route Tonne Kilometres. The European integrators are represented by European Air Transport (EAT), which is the Brussels based airline of DHL, and TNT Airways. Both these companies have extensive overnight networks across Europe and in addition use subcontractors on intra-European routes.

However, it should be noted that the chart below understates the size of the businesses of DHL and TNT within Europe. For example, DHL's European based airline EAT carried only a small proportion of DHL's European origin or destination shipments. Most shipments that are destined for a country beyond Europe would be shipped via a service operated by combination carriers. Therefore, much of the throughput of combination carriers is directly attributable to integrators based in Europe.

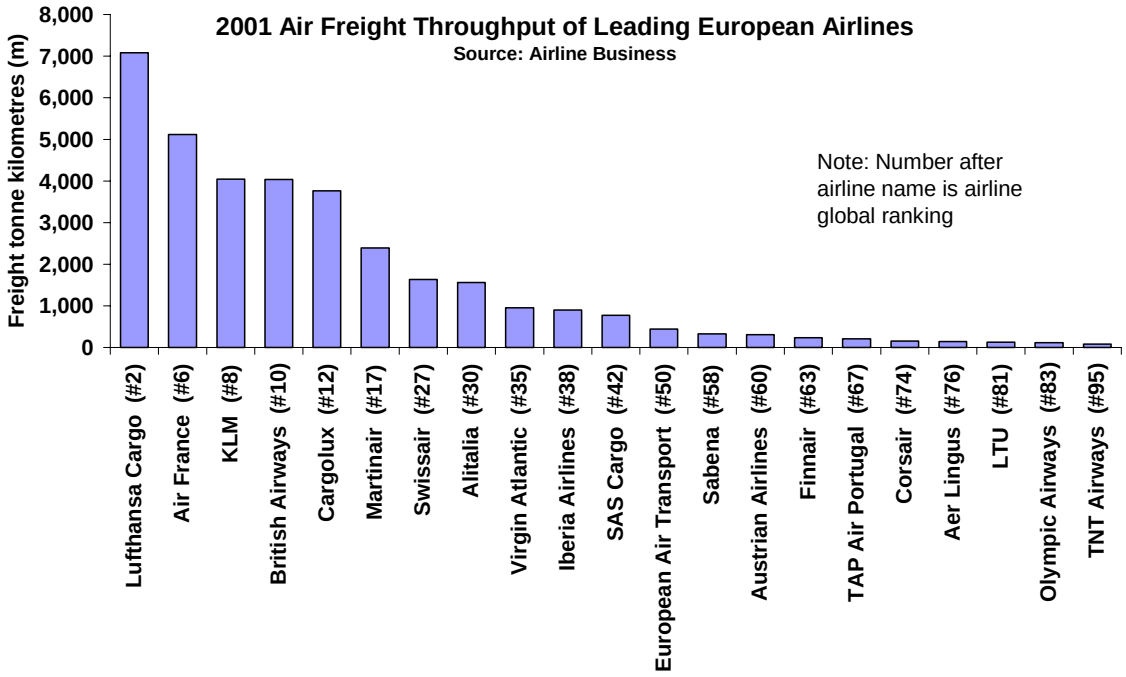


Figure 1

5.1.4 Size of European market

Europe-North America and Europe-Asia are two of the leading global cargo markets, between them accounting for almost 30% of worldwide Route Tonne Kilometres. The market is made up of freight (both scheduled and charter), express, and airmail components.

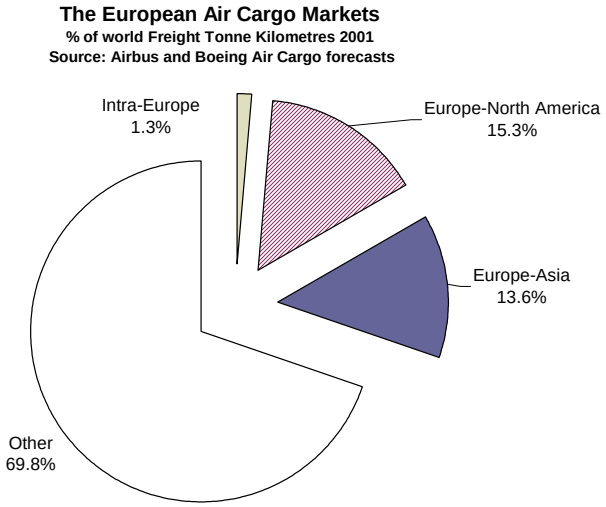


Figure 2

Intra-Europe air cargo market

The intra-Europe air cargo market comprised approximately 4.8% of the world's air cargo traffic in terms of tonnage, but because of its geographically compact nature, only 1.3% in terms of tonne-kilometres. It was therefore not within the top ten international markets.

Air cargo within the European market is characterised by relatively short flight lengths, typically around 1,100 kilometres. Several leading markets are concentrated in the Northern European countries of Germany, the United Kingdom, Belgium, and the Netherlands. Air cargo traffic within Europe also commands high yields, compared to other regional world markets, because much intra-European air cargo traffic is not planned but the result of efforts to recover from unforeseen circumstances, such as inventory disruption.

The freight share of the intra-European aviation market has always been small due to the availability of road and rail alternatives and the type of aircraft utilised on these routes (narrow-body aircraft such as the A319/320 and B737 families which consequently do not have belly-hold capacities for freight). In addition the rapidly expanding low-cost carriers are not currently targeting the air cargo market despite the fact that their belly-hold capacity now represents a growing percentage of the total available in the European market.

Intra-European Traffic Breakdown **(Figure 3)**

% of total RTKs	1998	1999	2000	2001
Passengers	90.6%	91.1%	91.5%	93.1%
Freight	8.3%	7.8%	7.5%	6.0%
Mail	1.1%	1.1%	1.0%	1.0%
Total	**100.0%**	**100.0%**	**100.0%**	**100.0%**

Source: IATA Route Area Statistics Data Collection

Note. IATA does not record all the European express (or integrator) operators, so the intra-European share of freight and mail is probably understated in the table above.

5.1.5 Growth in air cargo market

Economic activity, as measured by world Gross Domestic Product (GDP), remains the primary driver for air cargo industry growth. Air cargo has traditionally expanded at approximately twice the rate of GDP growth in the world economy. This relationship is expected to continue, and expansion at an average annual rate of 5.5%[1] to 6.4%[2] has been forecast for the next two decades.

It is anticipated that the air cargo routes between Europe-Asia and Europe-North America will continue to grow more rapidly than the intra-European market. In particular, the markets to Asia are expected to mirror the move of manufacturing from the West to the East. Changes in manufacturing techniques such as the adoption of 'just-in-time' inventory discipline also support further rapid growth.

Other factors that affect the airborne freight growth rate include available capacity, air cargo yields, relative currency strength, regulations, and national industrial initiatives

Regional markets growth in 2001

The three main European markets all contracted in 2001. As with the passenger business, the North Atlantic market was severely impacted. However, the intra European market was almost as badly affected.

Meanwhile, Europe-Asia volume declined slightly in 2001 following a huge increase in 2000.

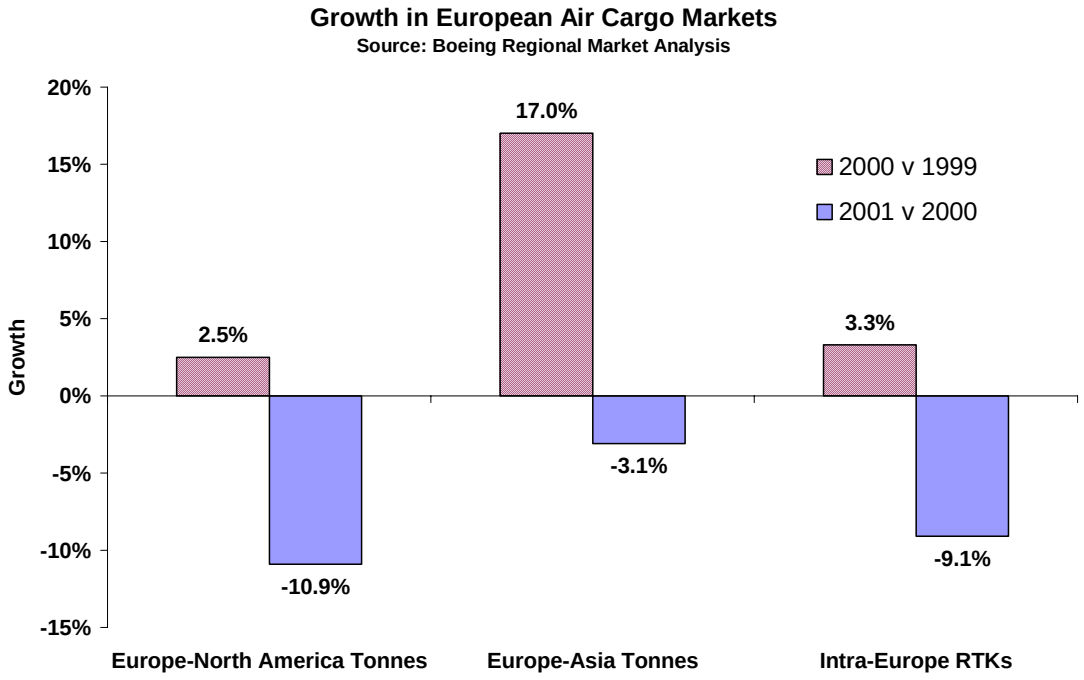


Figure 4

[1] Airbus, Air Cargo Forecast 2001
[2] Boeing, World Air Cargo Forecast 2002 - 2003

Intra-Europe market

While intra-Europe cargo volumes decreased in 2001, the different sectors of the industry produced very different performances. Scheduled freight, carried by combination and all-cargo airlines, fell dramatically (-18.8%). On the other hand, the volume of "express" cargo, carried by integrators, continued to grow – although at a much lower rate than historically.

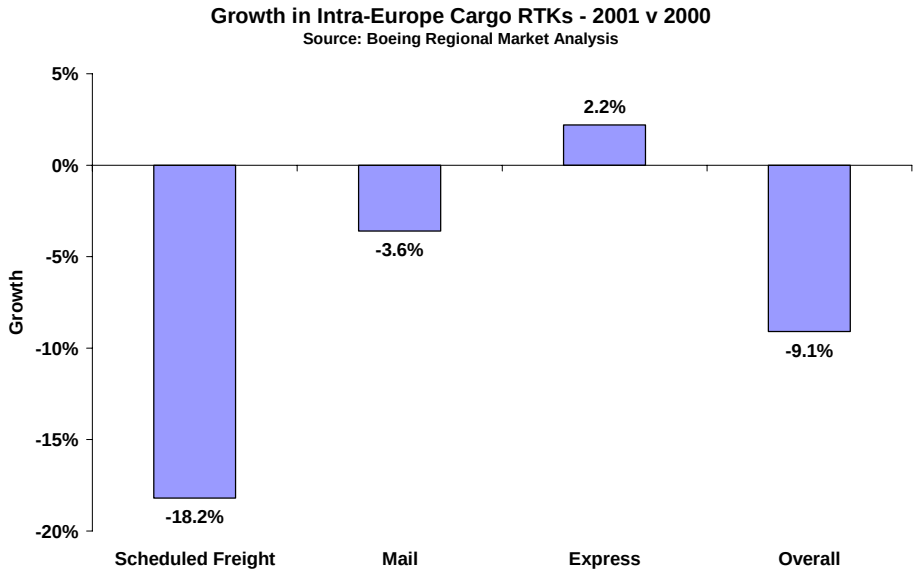
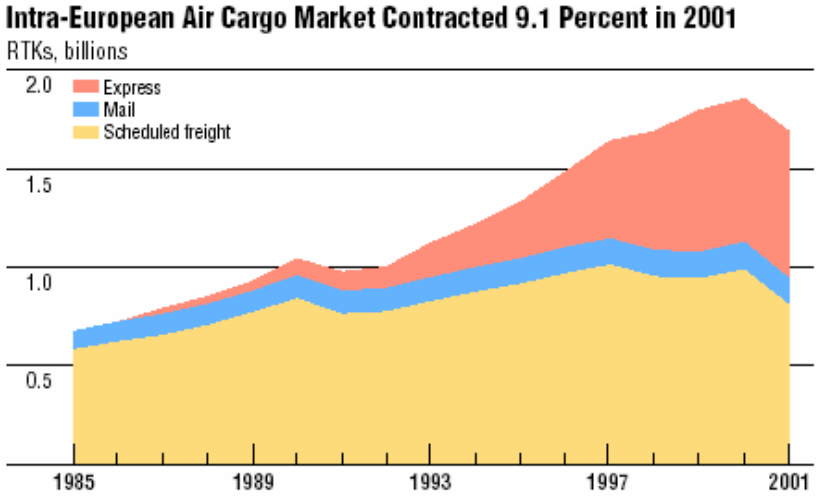


Figure 5

In fact, the volume growth trend between 1989 and 1999 for intra-Europe express cargo was almost 30% per annum. In this time, growth in the other sectors of the intra-Europe market was extremely limited.



Source: Boeing Regional Market Analysis

Figure 6

Intra Europe scheduled freight yields[3]

One of the few positive aspects of 2001 for the "traditional" cargo industry (combination carriers and all-cargo airlines) was an improvement in intra-European cargo yields, reversing recent trends.

Weak demand and competition from integrators had a negative impact on yield for much of the previous decade. However, two main factors led to an improved performance in 2001, where airfreight yields on scheduled carriers actually rose 8.0% in 2001. Firstly, scheduled airfreight capacity began to contract during second half of 2000 as airlines returned dedicated freighters to lessors. Secondly, the application of fuel surcharges also had a positive yield impact.

International growth trends throughout 2001

As with the passenger airline business, the cargo industry was suffering a decline in volumes prior to September 11th before experiencing a far more severe contraction post September 11th. Although there was a slight recovery by the end of the year, December volumes were nevertheless 10% below the previous year.

The downturn in the global economy, the contraction in the technology sector, combined with the events of September 11th resulted in the worst recorded decline in the international air cargo market. IATA figures recorded an overall decline of 7.7% in international scheduled traffic (measured in freight tonne-kilometres).

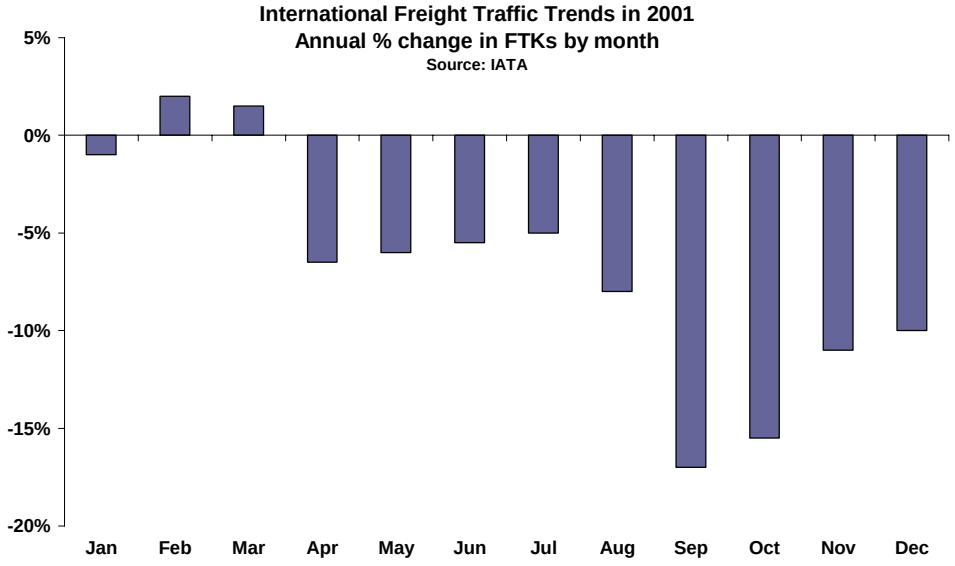


Figure 7

[3] **Source: Boeing Regional Market Analysis**

5.2 European Combination Carriers and All Cargo Airlines

5.2.1 Key developments

Some of the key developments and emerging trends of 2001 are discussed below.

It was notable that even before September 11th, market demand was very weak. A number of operators undertook temporary measures to reduce capacity. These moves intensified post September 11th.

There were a number of other emerging themes:

- Move to replacing old aircraft with new efficient aircraft due to lower operating unit costs.
- Continuing blurring of the boundaries between air cargo operators business model and that of the integrator business model.
- Use of wet-leased capacity as an alternative to investments in owned aircraft.
- Further development of cargo alliances (discussed in later section) led by Lufthansa and Air France.

5.2.2 Traffic and revenues at leading operators

Europe's leading passenger flag carriers also feature strongly in the cargo market. As with the passenger business, Lufthansa and Air France are the two largest airlines in terms of volume.

Unlike the passenger business, Lufthansa Cargo was almost 40% larger than their nearest competitor in 2001.

Leading European Combination & All-Cargo Airlines

Operator	2001 Cargo Traffic (RTKm)	2001 Cargo Revenue (US$m)
Lufthansa Cargo	7,081	2,184
Air France	5,117	1,298
KLM Royal Dutch Airlines	4,042	909
British Airways	4,033	702
Cargolux	3,768	731
Martinair	2,395	349
Swissair	1,636	n/a
Alitalia	1,565	404
Virgin Atlantic Airways	953	n/a
Iberia Airlines	899	223
SAS Cargo	770	261
Austrian Airlines Group	308	102
Finnair	240	104
TAP Air Portugal	208	60

Source: Airline Business

Figure 8

In the cargo business, KLM and British Airways achieved almost identical throughput in 2001. This is different to their standing in the passenger business, where British Airways are significantly larger.

Cargolux is Europe's largest all-cargo airline, and in 2001 was the 5th largest cargo operator. Martinair, who have a relatively small passenger business, were ranked 6th.

The majority of Europe's leading cargo airlines experienced big falls in both traffic and revenue in 2001. Notable exceptions were Iberia and (on revenue) Air France.

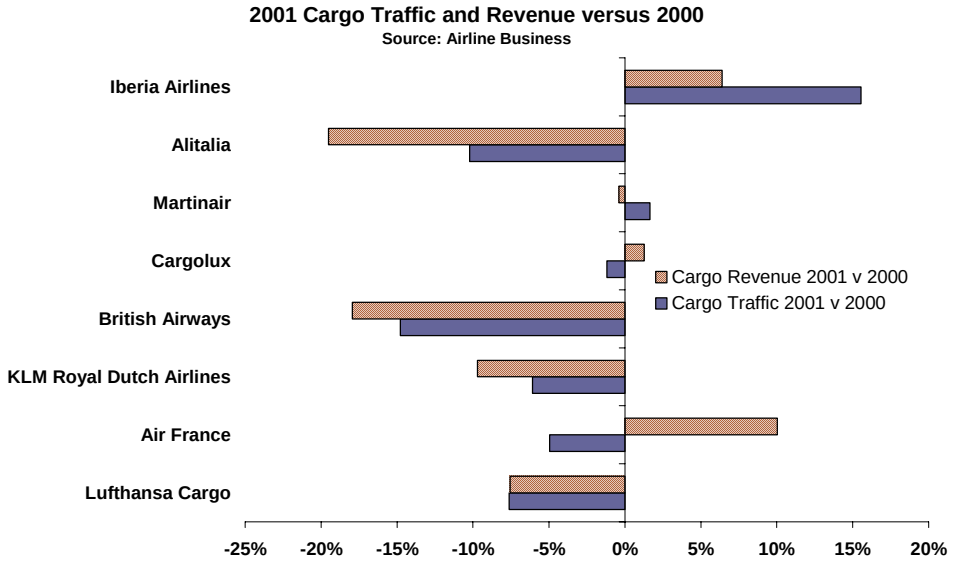


Figure 9

5.3 European Integrators

5.3.1 Key developments

Express cargo has a guaranteed or time-definite service component. Express carriers are usually characterised as "integrated," because, in addition to carrying mostly airport-to-airport, time definite cargo, they also bring together many other services, such as door-to-door pickup and delivery.

Historically, integrators have grown by three times the rate of international air cargo market.

Some of the key developments and trends present in 2001 are summarised below:

- High investment levels in European airport facilities
- High investment levels in European dedicated aircraft to provide dedicated uplift
- New aircraft being introduced to reduce aircraft noise and emissions. The majority of this equipment tends to be Airbus manufactured
- Integration of TNT European network into KLM Cargo's business.

5.3.2 Developments at individual companies[4]

This section summaries developments at European Integrators and also highlights developments relevant to the European market from non European companies.

DHL Worldwide Express

- New UK-based airline was launched in June 2001, run independently from the existing European airline operation at Brussels.
- The new airline is based at East Midlands Airport, following on US $50m investment in a new distribution centre in 2000.
- DHL announced it is to invest US $600m in the new airline, earmarking 23 of the 35 Boeing 757 Special Freighters the company is due to receive by 2004

United Parcel Service (UPS)

- UPS announced they would increase capacity and reduce flight movements in Europe by replacing multiple smaller chartered aircraft with single, larger UPS aircraft
- The additional UPS owned aircraft would increase volume capacity while reducing the total number of aircraft in use and reducing air movement in Cologne at night.
- UPS also announced "significant" investment in the expansion of its operations at the UK's East Midlands Airport
- In January UPS placed a follow-on order for 60 firm and 50 optioned Airbus A300-600F freighters, the biggest value single order Airbus had ever received at a list price of US $6b for the firm component of the order

FedEx

- In February 2001, FedEx became the launch customer for the freighter version of the Airbus A380.

TNT

- In October 2001, TNT Express became the sole European feeder airline for KLM Cargo.
- It replaced the service that KLM Cargo previously operated using a leased freighter
- TNT will operate KLM Cargo flights from its base at Liege, Belgium, operating a truck service linking KLM's hub at Amsterdam airport.

[4] **Source: Air Transport Intelligence**

5.4 Cargo Alliances

5.4.1 Key developments

In 2001, the air cargo alliances were formalised and named. The individual alliance makeup followed along the membership lines that exist within the global passenger airlines.

The cargo alliances have the aim of presenting global capabilities to the marketplace to counteract the global brands and underlying global integrated capabilities of the integrators or express companies. The latter are also deemed to have a range of less price sensitive (and more profitable) services. The alliances therefore have the stated aim of developing services to compete within the integrator marketplace.

In revenue traffic terms for 2001, the cargo alliances are now on the same scale as the two largest integrators, FedEx and UPS. However, there are some differences in the makeup of this traffic.

Cargo alliances are primarily in the business of longer range trans-continental movements of goods while the integrators business is dominated by intra-trading bloc movements e.g. intra-European and intra-USA movements. However, on sheer scale the cargo alliances are a match for the integrators.

Once again, it is worth noting that a substantial proportion of the integrators' business is carried by cargo alliances rather than on their own aircraft. Therefore, although some cargo alliances have overtaken integrators in pure volume terms, this does not tell the whole story. Integrators will "own" the customer interface for much of the cargo being carried by cargo alliances and typically will be able to extract greater value from this type of traffic.

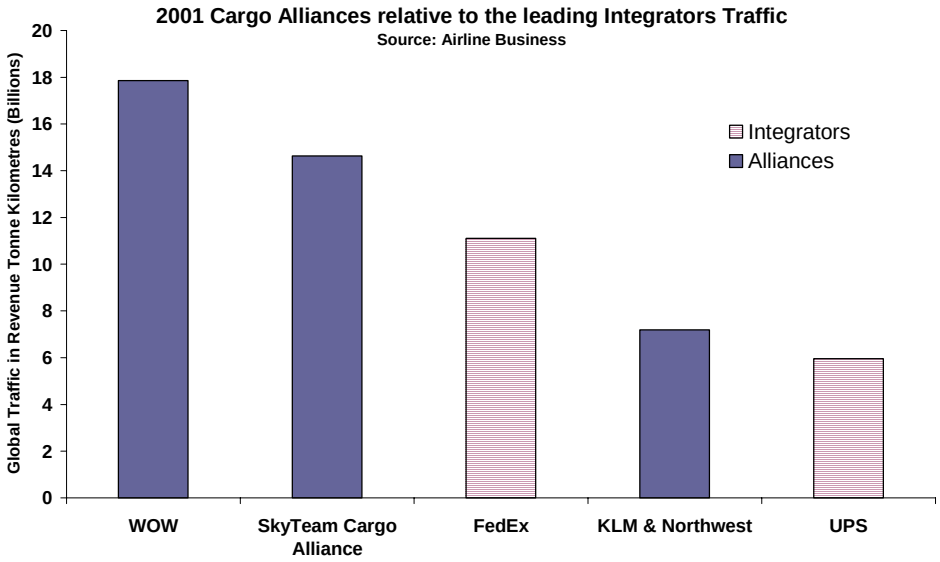


Figure 10

The key points relating to the development of cargo alliances in Europe in 2001 are summarised below:

- Investment in integrating IT systems and harmonising handling processes between alliance members.
- Harmonisation of products and services within the cargo alliances.
- Joint products being marketed across the alliances.
- An emerging trend of cargo alliances possibly being cemented by minority cross-shareholdings being taken by the larger partner in the smaller partner.
- Sales force synergies being sought by SkyTeam Cargo alliance.
- Cargo alliances being named but alliance partners being reluctant to re-brand to the alliance away from individual airline identity.

5.4.2 Key developments at individual alliances[5]

WOW (previously called NewGlobalCargo)

Members are Lufthansa, Singapore Airlines, SAS and Japan Airlines

- WOW's first joint offering, a system wide express product was launched

SkyTeam Cargo

Members are Air France, Alitalia, Delta, Korean and AeroMexico

- US Justice Department approved a plan by Delta Air Lines and Air France to set up a joint venture company to sell and market US export cargo services.
- Alitalia joined SkyTeam Cargo in October

[5] **Source: Air Transport Intelligence**

5.5 Airports

5.5.1 Growth of cargo at European airports

Growth in cargo tonnage at EEA airports has been fairly steady, averaging 4.0% since 1994. However, volume fell sharply in 2001.

Long term average growth from EU Candidate countries was similar to EEA countries, though more erratic from year to year. Volume fell in 1996, 1998 and 2001.

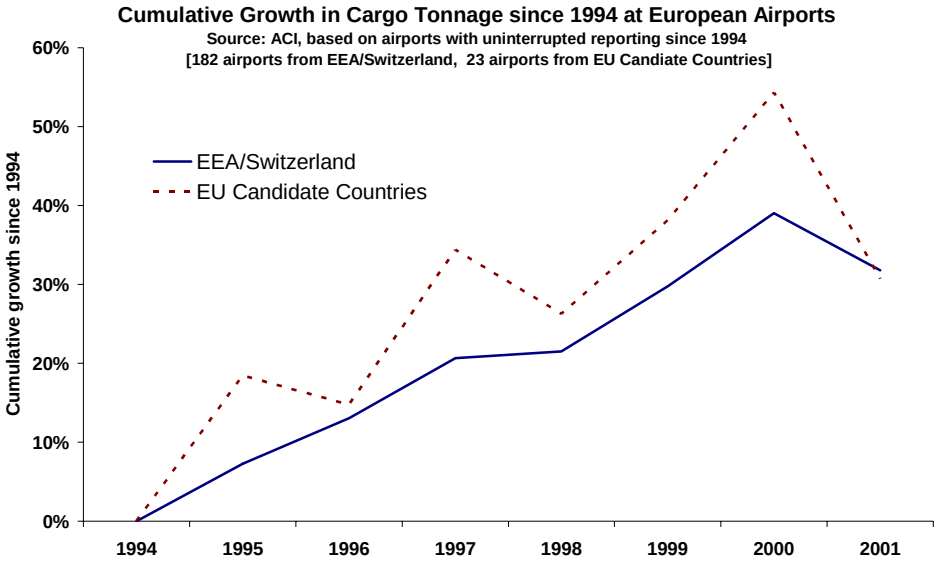


Figure 11

5.5.2 Cargo market in individual countries

Europe's three largest economies are the three biggest cargo markets by some distance. In 2001, German airports achieved the greatest cargo throughput, closely followed by UK and France.

Benelux, Denmark and Switzerland had relatively high cargo volumes given the size of the countries. In contrast, cargo volumes from Italy and Spain were relatively low.

Cargo throughput from the EU candidate countries accounted for just 3.7% of the cargo throughput of EU members.

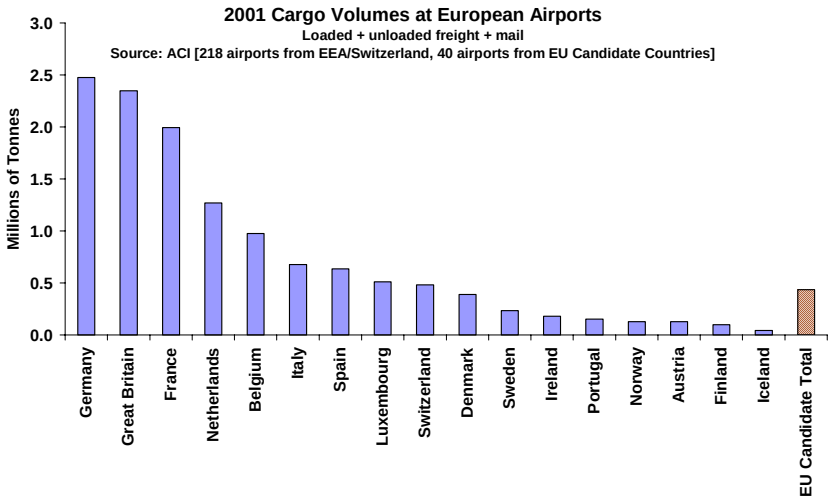
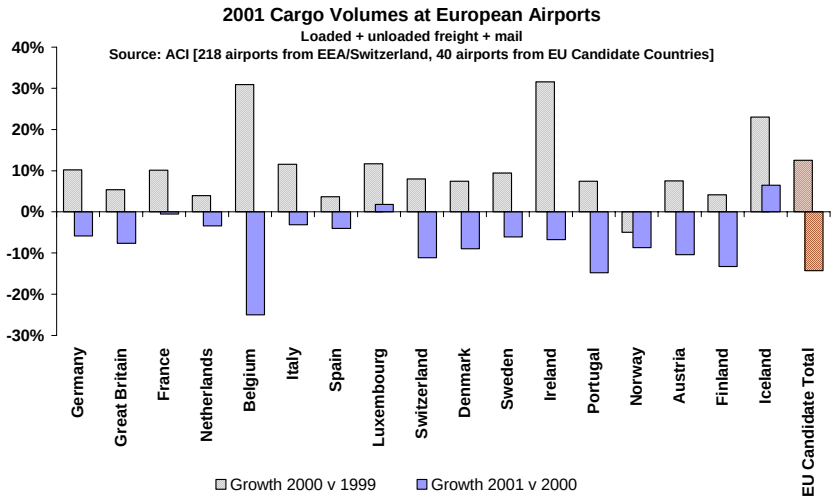


Figure 12

Almost all EEA countries saw significant declines in cargo throughput in 2001. Luxembourg and Iceland were the only exceptions to this trend.



Belgium recorded the biggest percentage decline, almost wiping out the huge growth posted in 2000. The collapse of Sabena following its earlier rapid expansion is the main factor in this pattern.

Flag carrier difficulties also explain the big volume declines in Switzerland and Portugal.

Figure 13

5.5.3 Leading cargo airports

Frankfurt and Paris Charles De Gaulle airports were Europe's biggest in terms of cargo throughput. London Heathrow, the #1 passenger airport in Europe, was a little way behind in third place. Amsterdam airport was #4 in Europe for cargo, only just behind Heathrow, but with twice the cargo throughput of the fifth placed airport, Brussels.

Cologne/Bonn, Luxembourg, Liege and East Midlands airports all appeared in the top 15 airports as measured by cargo tonnage, but not amongst Europe's leading passenger airports. Cologne/Bonn is an important cargo base for Lufthansa Cargo and UPS, likewise Luxembourg for Cargolux. Liege is a new European hub for TNT, while East Midlands is the UK base for both DHL and UPS.

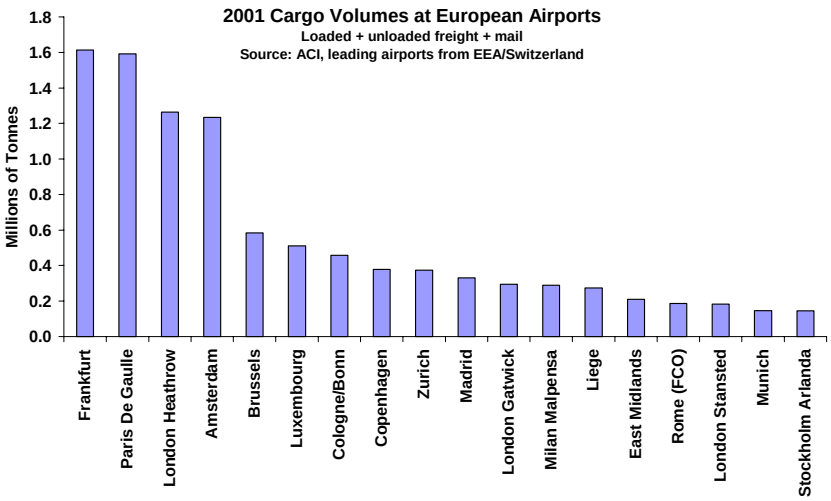


Figure 14

Despite the general cargo downturn, a few of the leading cargo airports managed to achieve positive growth in 2001. It was notable that the airports which grew tended to be ones with a strong cargo flavour, frequented by either all-cargo airlines or integrators. The UK's East Midlands airport grew by 8%, while Luxembourg, Cologne/Bonn and Liege airports all posted volume increases. In the case of East Midlands and Liege, 2000 was marked by massive growth in cargo throughput, dwarfing the increase achieved in 2001.

Airports more reliant on bellyhold cargo transported on passenger aircraft generally performed more poorly.

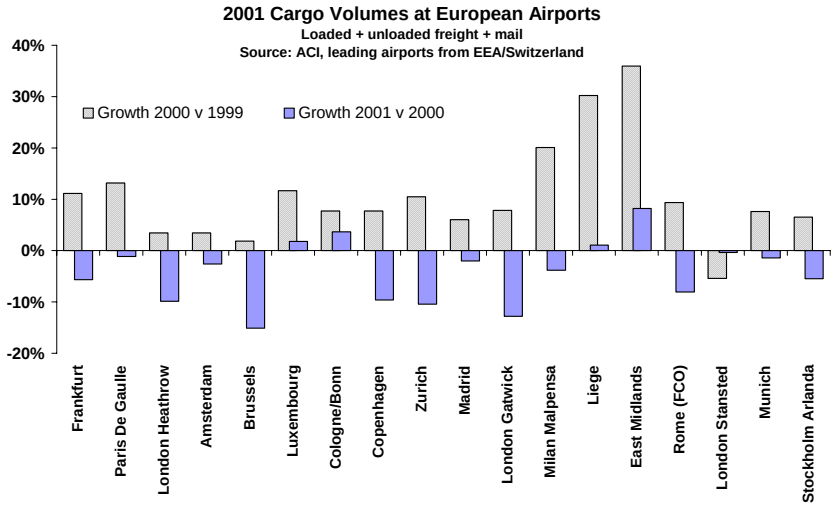


Figure 15

Finally, the airports with a strong cargo bias have been analysed. Of the large and medium sized European airports, Liege has the highest share of cargo throughput (compared to passenger throughput). For every thousand passengers at the airport, 1350 tonnes of cargo is uplifted.

Of the reasonably large European airports, Luxembourg and Cologne/Bonn also have a significant cargo bias.

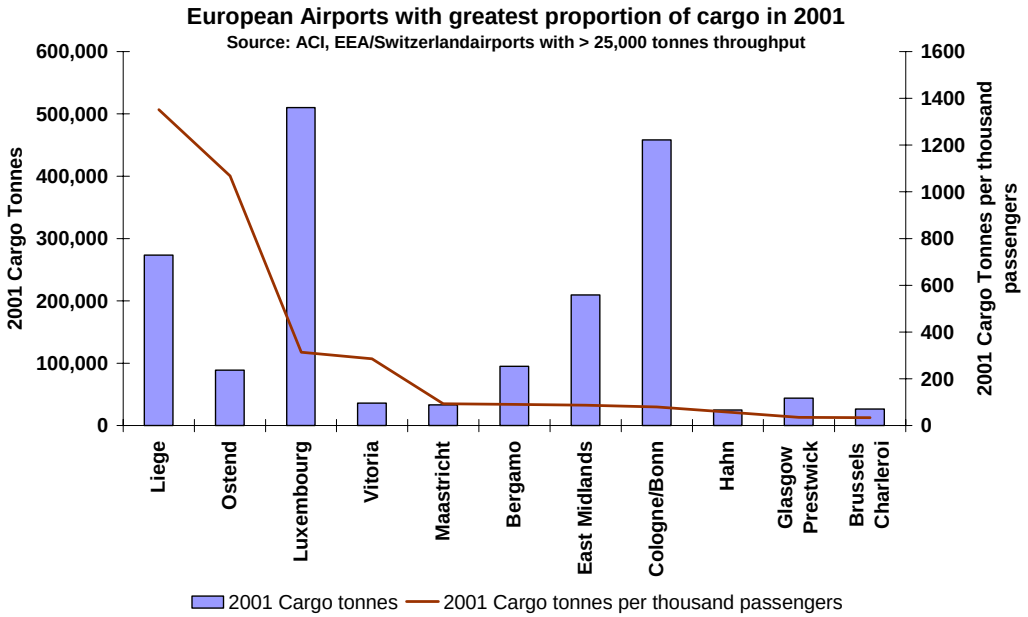


Figure 16

It is also interesting to note that many of the airports with a strong cargo presence are also home to low cost passenger airlines. Benefits such as lack of congestion and low operating costs are equally attractive to both sectors.

5.5.4 Key issues for airports

This section highlights some of the key issues affecting cargo operations at Europe's airports. Although not unique to 2001, these issues were high on the agenda during the year.

Night flights

Integrators operate overnight air networks throughout Europe. There are increasing concerns about the environmental consequences of these overnight networks on communities within range of airports utilised at night by the operators. On the other hand, local communities and local governments are aware of the jobs the industry creates and supports.

Older fleet equipment and noise / fuel efficiency

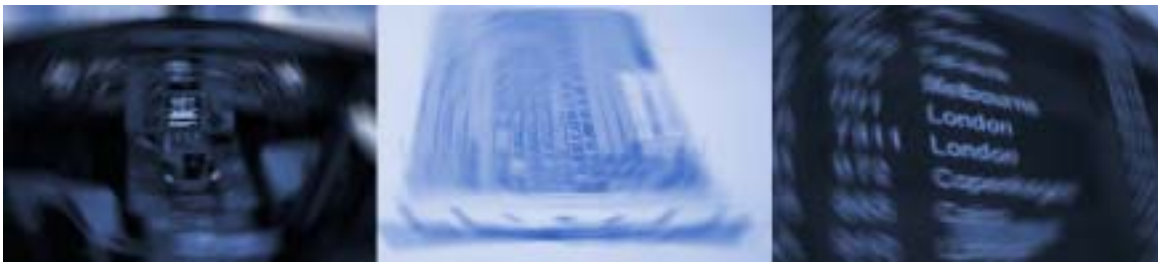
The majority of dedicated freight aircraft are conversions from a passenger configuration after the aircraft has ceased to be an economic or desirable passenger proposition. Due to the relatively low daily utilisation of short range freighters (as little as four hours per day compared to 8-10 hours a day for passenger aircraft) it is a necessity for freighter aircraft to be relatively inexpensive. Unfortunately, older aircraft tend to be Stage 3 or lower and therefore create noise profiles less desirable than modern equipment. Older aircraft also utilise engines that will be less fuel efficient and have a worse emission profile than modern equivalents.

Road access

Freight operators require access to main European trunk routes. Many airports currently being marketed as new hub locations to integrators and combination carriers are not located on trunk road networks. Most air cargo movements involve a large trucked element so proximity of airports to trunk routes is very important.

Section 6

Other Sectors



Contents

6.1 Airframe Manufacturers

6.1.1 Context

The manufacture of commercial aircraft over 100 seats is dominated by Europe's Airbus and USA's Boeing. There are various regional aircraft manufacturers, including, from Europe, BAE Systems, Aerospatiale and Fairchild-Dornier[1].

September 11th had a major impact on all airframe manufacturers. Aircraft valuations plummeted as falling demand led to excess aircraft being taken out of service and put into storage. Clearly, in this environment selling new aircraft was challenging.

Nevertheless, 2001 was a good year for Airbus in their competitive battle with Boeing. The list price value of net orders placed with Airbus in 2001 exceeded Boeing by a considerable margin.

[1] Fairchild-Dornier subsequently went into administration in Summer 2002

6.1.2 Aircraft Orders placed in 2001

Airbus achieved a 61% market share in terms of value of 2001 aircraft orders. While 2001 orders were only US$3.2 billion higher than in 2000, Boeing saw the value of their orders plummet versus the previous year.

Both manufacturers were impacted by cancellations post September 11th. Airbus stated that 90% of the cancellations that incurred were from airlines facing bankruptcy.

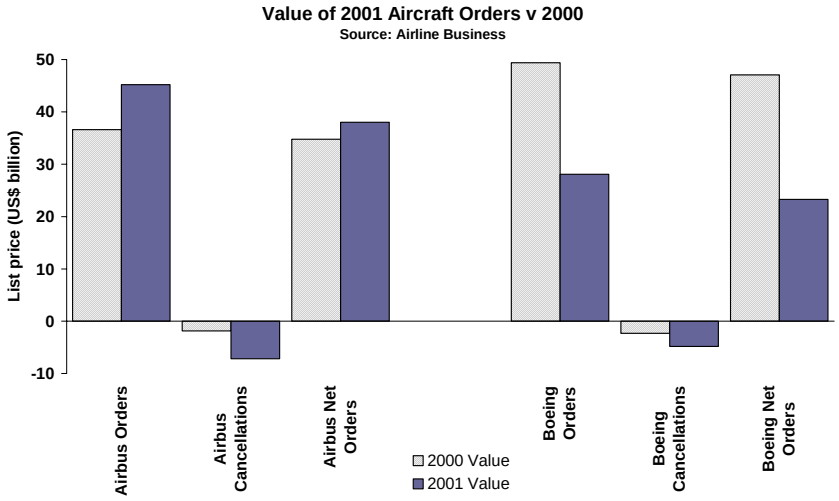


Figure 1

The number of Airbus aircraft ordered in 2001 actually fell. However, Airbus large aircraft sales almost tripled. In particular, after its launch in December 2000, Airbus won almost 100 orders for its Superjumbo, the A380. Meanwhile, orders for the A230 family were a long way below those achieved in 2000.

The Boeing 767 was the only Boeing aircraft that saw increased orders in 2001. There was a sharp fall in orders for the 777 and 737 families of aircraft.

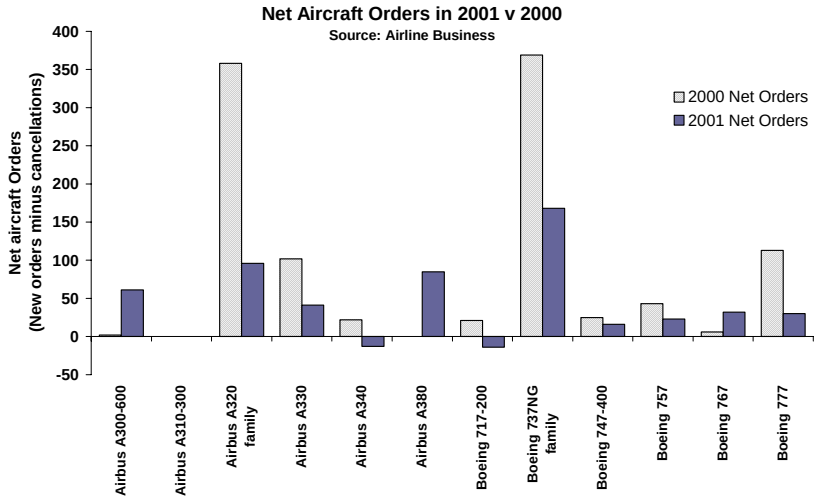


Figure 2

In the regional aircraft sector, regional jet orders fell drastically compared to 2000. Units ordered dropped by over 50%. In particular, 2001 orders of Embraer aircraft fell a long way short of the 2000 level.

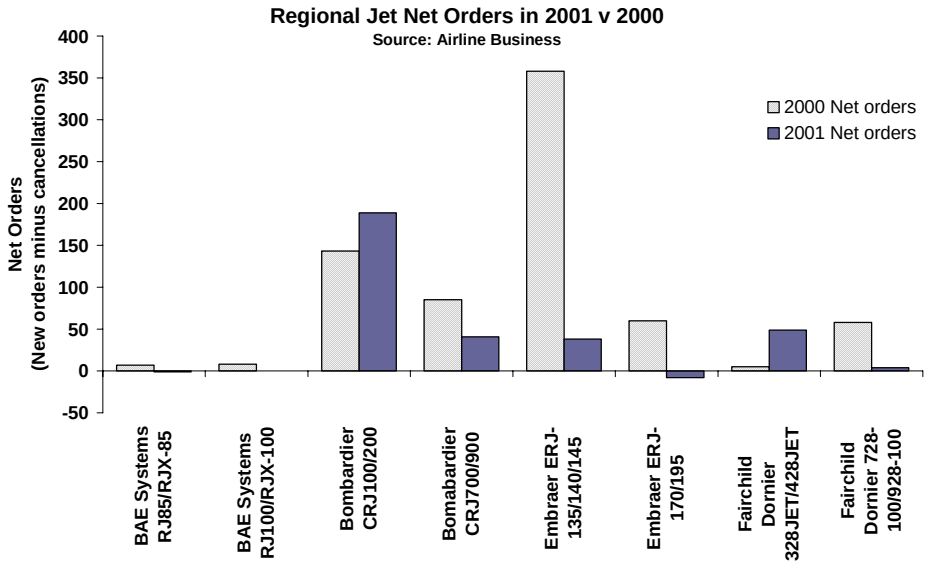


Figure 3

Finally, turboprops orders also saw substantial decline on the year 2000. Units ordered fell by one-third. The Bombardier Dash 8 series in particular saw a major reduction in net orders.

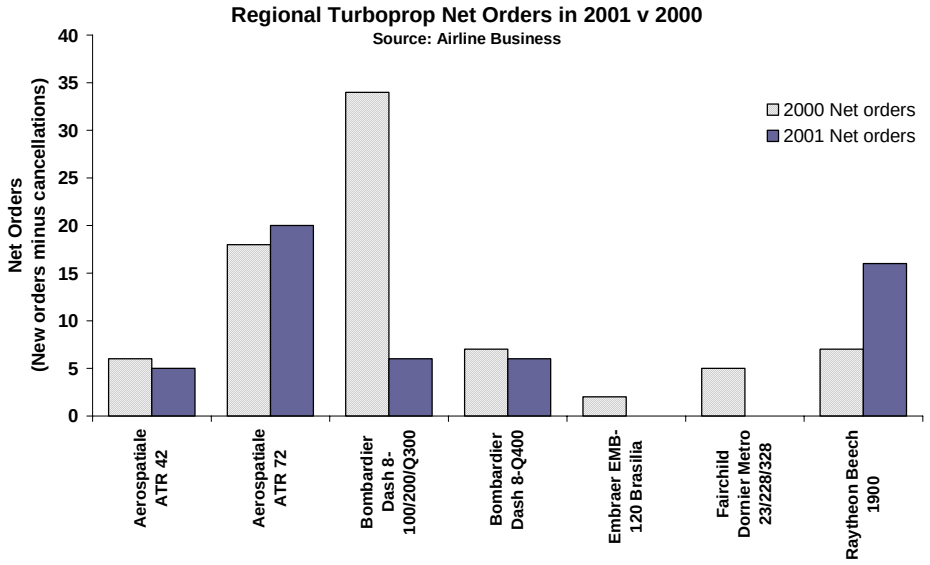


Figure 4

6.1.3 Aircraft Deliveries in 2001

Airbus enjoyed a year of record deliveries but still fell a long way short of the number of units Boeing delivered. Boeing continued to deliver large numbers of 737 series aircraft. For Airbus, the equivalent A320 family dominates.

Boeing was also slightly more successful in the deliveries of larger, long haul range aircraft, where they grew share in 2001.

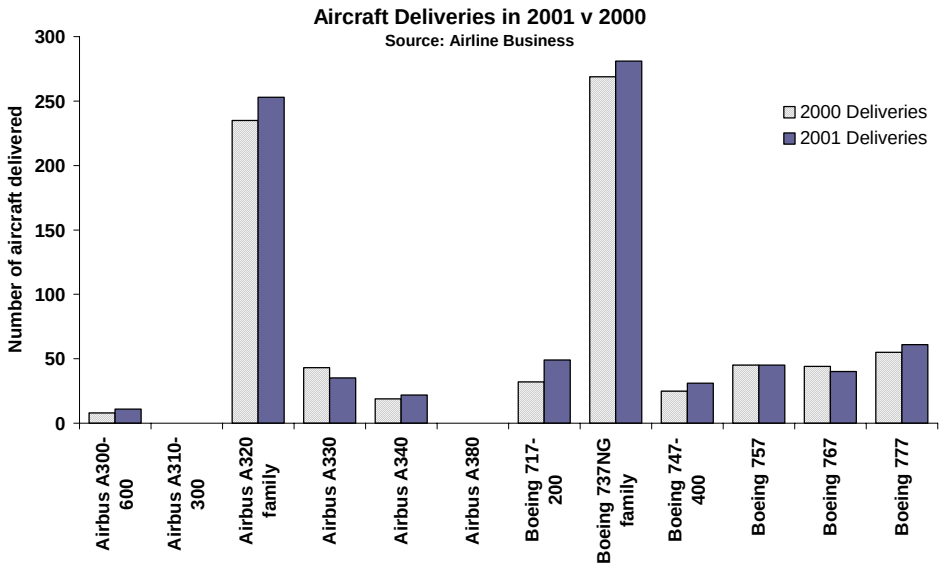


Figure 5

Regional jet deliveries were up 13% in 2001. Bombardier increased their output noticeably, while other manufacturers had a fairly stable delivery programme.

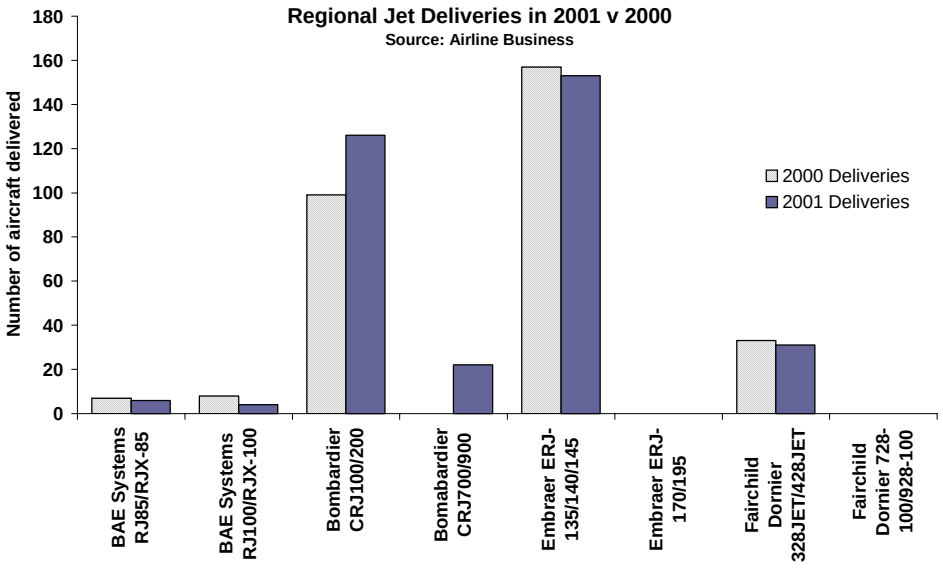


Figure 6

On the regional turboprop side, overall deliveries were down on 2000. Bombardier increased output substantially, while Raytheon saw deliveries fall markedly on 2000.

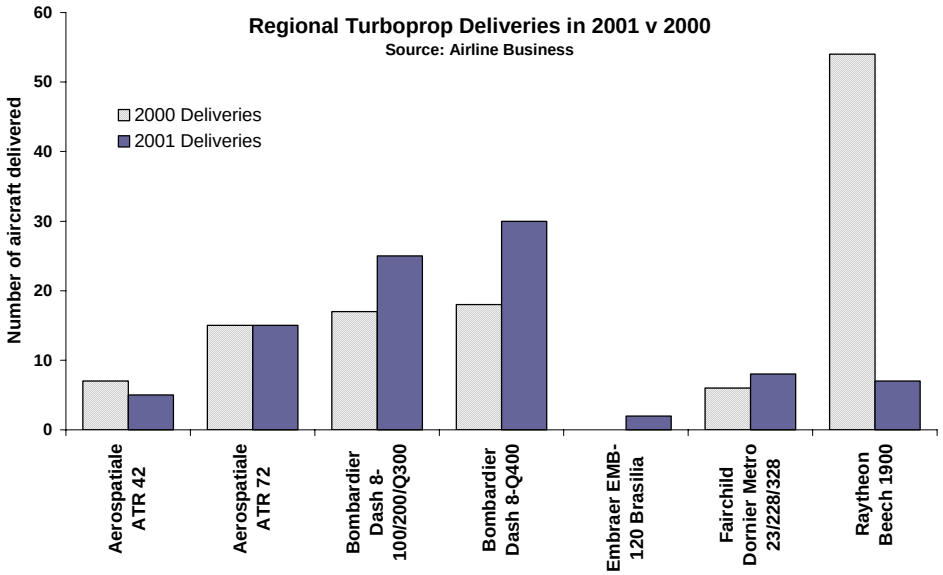


Figure 7

6.1.4 Developments in Aircraft Manufacturing[2]

Airbus

In early 2001, Airbus formally became a single integrated company. The European Aeronautic Defence and Space Company (EADS[3]) and BAE Systems of the UK transferred all of their Airbus-related assets to the newly incorporated company and, in exchange, became shareholders in Airbus with 80 per cent and 20 per cent respectively of the new stock.

In spring 2001, the first Airbus A340-600 was rolled out – Airbus's longest and largest aircraft to date.

After September 11th, Airbus embarked on cost cutting exercises in order to cope with reduced demand. Various cost saving measures were announced, including 1,600 job cuts.

In response to airline financial difficulties, Airbus also announced measures to assist their airline customer base. The company implemented a 6 month price freeze for its catalogue of spare parts, goods and services. Assistance was provided to airlines in certification of aircraft security modifications, while various training courses were offered for free or reduced cost.

Boeing

At the Paris Air Show, Boeing unveiled a detailed model of its proposed "sonic cruiser", which was designed to fly at circa 20% faster than existing sub-sonic aircraft.

Shortly after September 11th, Boeing announced plans to cut the work force by 20%-30% at their commercial airplanes unit. Production was also reduced drastically within days of September 11th.

Other Manufacturers

Other aircraft manufacturers also implemented major cutbacks in the last months of 2001. Bombardier cut 3,800 jobs and suspended the Canadair 415. Embraer had to re-programme aircraft deliveries, and cut 1,800 staff.

Finally, BAe abandoned development of the RJX after a post September 11th review of the group's business.

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[2] Source: Air Transport Intelligence, Spectrum Capital and FT Powersearch

[3] EADS resulted from the merger between Aerospatiale Matra SA of France, Daimler Chrysler Aerospace AG of Germany and Construcciones Aeronauticas SA of Spain

6.2 Air Traffic Service Providers

6.2.1 Context - Current Route Charges System

Airspace controlled by Eurocontrol States is subject to a common route charges system established by a multilateral agreement which came into effect on 8th September 1970. There are currently 31 contracting states to the multilateral agreement and all subscribe to the common system by applying common principles for establishing the cost base for route facility charges and for the calculation of the unit rates.

These common principles include provision for full cost recovery over a three year cycle. The UK is the only country to not apply the cost recovery approach, instead favouring an independent economic regulation based on price capping.

Under the full cost recovery concept, the economic risk lies completely on the side of the airspace users irrespective of whether the imbalance between the revenues and costs is generated by an increase in costs (actual costs higher than forecasts) or by lower traffic (actual traffic lower than forecasts). On the other hand, the Air Navigation Service Providers (ANSP) cannot retain any economic benefit from reducing their costs or attracting more traffic.

At any one time the 31 states will be at different stages of development and investment in terms of operational activity and capital projects. Investment in air traffic services is of a medium to long term nature and cannot be put on hold if future capacity and safety is to be provided. Consequently, the ability of ANSP's to respond, in difficult times, to user demands for cost reduction can be limited.

6.2.2 Review of 2001

The terrorist attack on September 11th 2001 provoked a very significant downturn in air traffic world wide. ANSPs' were impacted upon to varying degrees by the greatly reduced traffic levels. Consequently, ANSPs' revenues fell short of costs for the year 2001.

The 27 states within Eurocontrol showed a very marginal (0.2%) increase on the 2000 actual levels (in terms of service units). Furthermore, 2001 actual levels were 5.7% below anticipated levels on which the unit rate was calculated from.

Given the financial difficulties experienced by airlines, the customers of ANSPs', it is not surprising that there were strong calls for freezing or even reducing charges. Freezing of 2001 unit rates was agreed for the first quarter of 2002 only, before increases were scheduled in order to make up the under recovery of 2001.

6.2.3 Unit Rates

Eurocontrol (CRCO) Document (Flimsy No. 4 / Revised) sets out trends in unit rates over recent years. It can be seen that a gradual rate reduction trend was reversed in 2001, and increases are scheduled for later years.

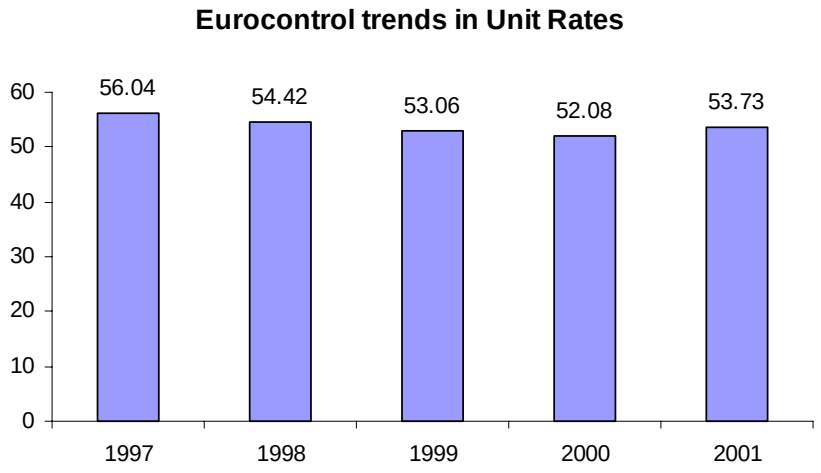


Figure 8

6.2.4 Legislative Developments in 2001

With a view to increasing the capacity of European airspace and reducing the level of delays, the European Commission in October 2001 put forward a legislative package on air traffic management. It consists of four draft regulations:

- a framework Regulation (COM(2001) 123) aimed at creating a single European sky and setting out its objectives and operating principles
- within the communication from the Commission to the Council and the European Parliament (COM(2001) 564) three draft regulations concerning, respectively:
    - the provision of air navigation services
    - the organisation and use of airspace
    - the interoperability of systems and equipment.

The draft regulations require the Commission to prepare and adopt new regulatory provisions for all aspects of civil aviation with the assistance of a Single Sky Committee. The Committee, made up of civil and military representatives of member states, will work in co-operation with Eurocontrol, which will be mandated to develop the technical aspects of regulatory proposals.

The legislative package also provides for the introduction of a harmonised system of certification of ANS providers by national supervisory authorities; the liberalisation of the provision of ancillary services including CNS and AIS; and new rules on charges, which may offer an incentive to providers to achieve the policy objectives set.

The European upper airspace, above flight level 285 (including the airspace of EU states, Switzerland and Norway) will be re-designated as a single flight information region, in which air traffic control services will be subject to the same rules and airspace categories will be harmonised. Co-ordination between civilian and military authorities is to be enhanced in order to achieve more flexible use of airspace. The airspace will be reconfigured into optimum control areas, not constrained by national boundaries ("functional airspace blocks").

States will retain the responsibility for designating the providers of air navigation services in their territory, and will for this purpose recognise the certification given by the supervisory authorities of other states. In trans-national "functional airspace blocks" the States involved will jointly agree on the designation of ANS providers.

6.2.5 Other developments

RVSM programme [Reduced Vertical Separation Minima]

In July 2001, the Provisional Council of Eurocontrol confirmed the decision to implement the Reduced Vertical Separation Minima programme from 24 January 2002.

The minimum vertical separation for aircraft between 29,000 ft and 41,000 ft was reduced from 2,000 ft to 1,000 – the standard separation previously in use in the lower airspace. This change provided an additional six flight levels and increases the capacity of the upper airspace by 20%.

More aircraft would therefore be able to operate at their preferred flight levels and routes, reducing delays and fuel consumption. Safety would also be enhanced by reducing the number of aircraft sharing a given flight level.

CEATS [Central European Air Traffic Services]

During 2001, Bosnia and Herzegovina acceded to the CEATS agreement. The agreement was originally made in 1997 between Eurocontrol and the other seven participating states[4] under which the states agreed to co-operate in the provision of air traffic services in their airspace, and requested Eurocontrol to provide and operate en route air traffic facilities and services

The CEATS Strategy, Planning and Development Unit, located in Prague, has been in operation since November 1999. In June 2001, the CEATS Research, Development and Simulation Centre was opened in Budapest. It is intended to validate the envisaged operational concept for the future CEATS Upper Airspace Centre and improvements to air traffic services in the CEATS region.

The CEATS project, together with the long-standing four-states agreement on the provision of services from Maastricht for the upper airspace of Belgium, the Netherlands, Luxembourg and North Germany, are seen as the first examples of cross-border “functional airspace blocks” to be implemented in Europe for achieving the Single European Sky initiated by the European Commission.

Developments at individual service providers: UK NATS

Since the early 1990s there has been a trend to increasing the autonomy of air navigation services providers, and the great majority of European ANSPs are now corporatised entities, generally 100% state owned.

The trend towards increasing the autonomy of ANSPs was taken further in the UK in 2001, when, in accordance with the Transport Act 2000, the Government entered into a public-private partnership, in the terms of which it relinquished its controlling shareholding in UK NATS. The company is now 51% privately-owned (46% by the Airline Group, made up of seven UK airlines, and 5% by UK NATS employees). The Government retains a 49% share including a “golden share”.

The company is subject to economic regulation by the Civil Aviation Authority, which sets a cap on its charges, and imposes penalties for flight delays caused by the company.

By the end of the year, details of financial difficulties started to emerge. Unlike other ANSPs operating on a cost recovery principle, the severe aviation downturn had an immediate impact on the finances of the company.

[4] Austria, Croatia, the Czech Republic, Hungary, Italy, the Slovak Republic and Slovenia. In the case of Italy, the agreement covers the north-eastern portion of Italian airspace.

6.3 Ground Handling & Catering

6.3.1 Context

Background

The European ground handling market has been subject to wide-ranging changes in recent years, primarily driven by the European Commission's desire to see increased competition, particularly at airports where handling rights were exclusively held by either the national airline or the airport company.

In the 1990s, airlines across Europe claimed that the lack of competition in ground handling was leading to high prices and poor service standards. At many airports, the provision of ground handling activities would normally fall within one of the following cases:

- *National carrier monopoly*: national airline was sole provider of handling services for all airports within their country (e.g. Greece and Portugal);
- *Airport monopoly***:** airport company was sole provider of handling services at a given airport (e.g. Frankfurt and Vienna); or
- *Airline and airport duopoly***:** only the national airline and airport company would be authorised to provide handling activities at a specific airport (e.g. Air France and Aeroports de Paris at Charles de Gaulle and Orly airports in Paris).

Liberalisation of handling activities

The Council Directive 96/67/EC issued on 15 October 1996 made provisions for a gradual liberalisation of handling activities across the EU airports. Its main milestones can be summarised as follow:

Date	Milestone	Airports affected	Activities affected
1st January 1998	Freedom to self-handle landside	All airports	
	Freedom to self-handle air-side	Over 1m passengers or 25,000 tonnes of freight p.a.	Restrictions may apply to following activities: • Baggage handling • Ramp handling • Fuel and oil • Freight and mail However, no fewer than two handlers for any activity.
1st January 1999	Freedom to third-party handling: landside and airside	All airports over 3m passenger or 75,000 tonnes of freight	Restrictions may apply to following activities but no fewer than two providers for: • Baggage handling • Ramp handling • Fuel and oil • Freight and mail
1st January 2001	Freedom of third party handling: airside	All airports over 2m passenger or 50,000 tonnes of freight	No fewer than two providers for: • Baggage handling • Ramp handling • Fuel and oil • Freight and mail At least one provider must be 'independent'[5]

Several exemptions were granted, primarily for airports within Germany (i.e. Berlin-Tegel, Cologne/Bonn, Düsseldorf, Frankfurt, Hamburg, Stuttgart). Nonetheless, these were temporary exemptions and all airports need to comply fully with Directive's requirement by end of 2001.

As a result of the Handling Directive, airports gradually started granting self-handling rights to other airlines besides the national flag carrier and tendering third-party ground handling licenses.

[5] Independent is defined as any handling that is not owned or controlled by the airport company or any airline that holds a traffic share above 25%.

Emergence of Global Players

The liberalisation of ground handling at a large number of airports provided opportunities for emerging global ground handlers that would build up a network of stations (airports) across Europe. This also led to changes of purchasing power for airlines moving from the traditional negotiation on a station basis to larger contracts that would comprise a group of airports. Two different types of global players started emerging:

- The so called *independent handlers* which had no ties to either airline or airports (e.g. Servisair, initially a UK listed company and Aviapartner, a handling company controlled by a group of Belgium investors); and

- *Handling subsidiaries of large European airlines* such as Lufthansa's GlobeGround and SAirGroup's Swissport.

These global groups were increasingly competing against each other in order to successfully expand their network base (additional airports) as well as their customer base (airlines). There is evidence of significant handling price cuts, particularly at previously monopoly supplied airports.

6.3.2 Overview of developments in 2001

Like much of the rest of the aviation industry, ground handling companies underwent a challenging year.

Airline customers had a renewed push on costs in all areas of their business and ground handling companies were not exempt. This involved driving hard bargains for ground handling contracts. There was also an emerging trend for full service airlines to take cost out of their products and, for example, reduce or abolish “frills” such as in-flight meals.

Reduced passenger throughput also led directly to smaller revenues as many contracts contain a sizeable throughput related component.

European ground handling companies with interests in the USA were badly hit by the even more severe downturn experienced there.

Finally, 2001 also saw a continuation of the trend towards consolidation in the ground handling sector.

6.3.3 General ground handling sector

Swissport

Swissport endured a turbulent year as its parent group Swissair struggled to survive.

Prior to its financial collapse, Swissair announced plans to sell its ground handling division to Candover partners, a private equity group. This was in order to raise cash to reduce the crippling parent company debt.

However, the subsequent financial collapse of the group engulfed Swissport. At one stage, Swissport faced a cash crisis as emergency government loans for Swissair were earmarked for the airline operation only.

Finally, a sale to Candover was completed for CHF 580m (~US$350m).

Aviance

In January, Go-Ahead bought Midland Airport Services from BMI British Midland for US$ 105m. This was followed up by a subsequent re-branding of the merged entity to “Aviance”. The company was aligned with a number of other European ground handlers under the same branding.

There was industrial action at Dublin airport as staff went on strike against the plans to transfer the company ownership.

Post September 11th, Aviance axed 700 jobs, in particular at London Gatwick.

Menzies Aviation Group

Menzies started the year 2001 working on the integration of the recently acquired Ogden Ground Services. The acquisition more than doubled the turnover of Menzies Aviation Group.

Financial results were disappointing as the group struggled to cope with the integration and suffered from challenging trading conditions post September 11th.

6.3.4 Catering

GateGourmet and LSG Sky Chefs account for over 60% of the world in-flight catering market.

Developments at LSG SkyChefs

In June 2001, Lufthansa's in-flight catering division, LSG Lufthansa Service Holdings, completed their acquisition of the remaining 47% of Texas-based Onex Food Services. This purchase, for the parent of Sky Chefs, was completed after clearance was given by the European Commission.

The European Commission ruled that there was "sufficient" competition in the in-flight catering market place.

The purchase price for the remaining stake was US$ 850m, bringing Lufthansa 100% ownership.

LSG and Onex Corporation had operated the joint airline brand LSG Sky Chefs since 1993, when LSG took a minority stake of around 25% in Onex Food Services. The stake was subsequently increased to 48% before Lufthansa announced that it would exercise its right to buy the remaining stock.

Shortly after the acquisition was completed, a US-based holding company, LSG Sky Chefs International, was established. However, plans to float the company were postponed after September 11th.

Prior to completion of the acquisition, Lufthansa abandoned plans to take over SSC Sky Shop Catering, the airline catering subsidiary of Aero Lloyd. The German competition regulator ruled that the merger plans would diminish competition at Frankfurt and Munich.

For the nine months to 30 September, LSG SkyChefs recorded an operating loss of €9 million. Much of this loss was attributed to Sky Chefs' takeover expenses and integration costs.

Developments at Gate Gourmet

GateGourmet, historically one of the more successful divisions of Swissair, was caught up in the financial collapse of their parent. 7% of revenues were derived from Swissair's airline division, so the ceasing of operations and partial transfer of flights to Crossair clearly had a negative effect on GateGourmet.

GateGourmet were ultimately sold by the Swissair administrator to Texas Pacific for US$686m.

September 11th impact

September 11th hit the in-flight catering industry hard. Research carried out by the University of Surrey's specialist catering centre revealed that there was a 25% downturn in the global production of airline meals following September 11th.

The American part of both LSG SkyChefs and GateGourmet were badly impacted, with circa 30% of workers laid off. New security requirements also significantly increased costs in the USA.

Section 7

Consumer and Competition Issues

7.1 Overview

7.1.1 Introduction and summary

This section of the report investigates cross sector consumer and competition issues. The section has four broad themes, tracking developments in the following areas:

- The prices that passengers were paying for flights – analysis of fares and yields.
- The level of airline and airline alliance competition – on routes, on country flows and at key airports.
- Regulation, especially with regards to competition rulings and consumer protection.
- Service quality – punctuality and safety issues.

Highlights from this section are summarised below:

- Average published fare levels continued to rise steadily throughout the year, despite the aviation downturn.
- In 2001 there was a decline in the proportion of passengers booked into premium cabins. In most regions, there was also some evidence of down trading within economy as passengers switched from full economy to discounted economy tickets.
- The worsening passenger mix resulted in yields falling in 2001 for most route types. However, compared to long term historical rates of yield decline, the decreases in 2001 were not out of the ordinary. There was no particular pattern to yield movement within a class of service.
- A notable exception to the trend in most regions was that intra - Western European traffic saw the proportion of full economy tickets grow at the expense of discounted economy.
- There was a slight decrease in the level of airline competition[1] on routes in 2001.
- The Skyteam alliance added Alitalia and CSA Czech Airlines as members in 2001, growing their share of EEA/Switzerland capacity to 16% by the end of the year.
- The European Commission insisted on a common approach from member states to the economic and security challenges facing the industry post September 11th.
- Flight punctuality improved slightly in 2001, mainly attributable to a decrease in the number of flights in the last quarter of the year.

[1] As measured by the number of scheduled airlines competing on a route

7.1.2 Introduction to fare and yield data sources

An analysis of trends in fare levels within European aviation needs to draw upon a number of data sources. In isolation, each data source can provide partial insights into industry developments. However, by utilising a number of different analyses in parallel, a more complete picture can emerge.

For this study, we have used five main sources of information. While the sources of information are not directly comparable, at an aggregated level some key trends can be identified.

Information is provided on fare levels, fare or cabin mix and yields.

An analysis of fare levels reflects the movement in price for a very specific product – a seat in a specific cabin on a specific airline for a specific route, with very specific conditions attached to it. Two passengers sitting next to each other on the same flight can have paid very different prices for the ticket depending on when the ticket was bought, where it was bought (both country and distributor) and the flexibility to change an itinerary after the ticket was bought.

Yields reflect the average ticket income per passenger that airlines receive. Changes in yield will be impacted by changes in fare levels. However, the biggest driver of yield movement is usually changes in the mix of different ticket types sold.

It is quite possible, indeed fairly common, for fare levels across the board to rise while at the same time yields decline. Down trading between cabins or greater availability of lower fare types can contribute to a fall in yields.

It is therefore important to consider all three metrics – fares, mix and yield - when analysing fare levels.

Each information source is described in more detail later in this section, while a brief summary of each source is provided below.

- Long term yield trends for a basket of full service airlines are provided by AEA on a route area basis.
- IATA Airline Economic Results and Prospects detail short term yield trends for a basket of major full services airlines. Yields are broken down by route area and class of service but do also include some non-European carriers in the sample.
- An analysis of annual reports is used to provide high level yield trends for low cost carriers.
- Information on fare type mix is derived from IATA Billing & Settlement Plan (BSP) data, for travel agent sales from a selection of major European countries to major destination areas.
- Trends in average fare levels, broken down by country of sale and different fare types, are examined by the American Express Quarterly Travel Index.

7.2 Airline Yield Analysis

7.2.1 Long term context

Yields in the global airline industry have been steadily declining over the last three decades. This trend continued in the 1990s. During the decade, European full service airline yields (in real[2] terms) fell by circa 30% for most route areas.

There was some evidence that the rate of yield decline slowed in the second half of the 1990s, especially in the more mature markets. For example, yields on North Atlantic fell by an average of 4.3% per annum in the period 1991-1995; from 1995-2000, the rate of decline was just 0.9% per annum.

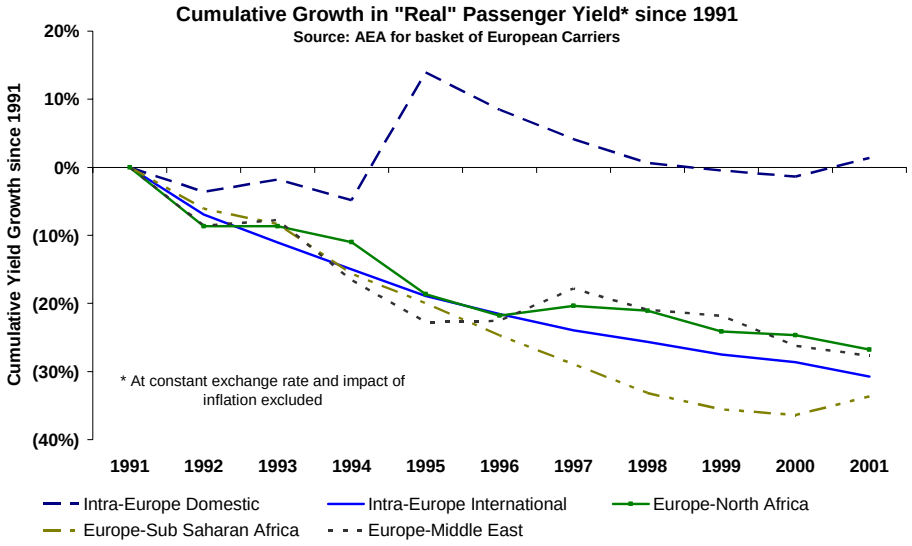
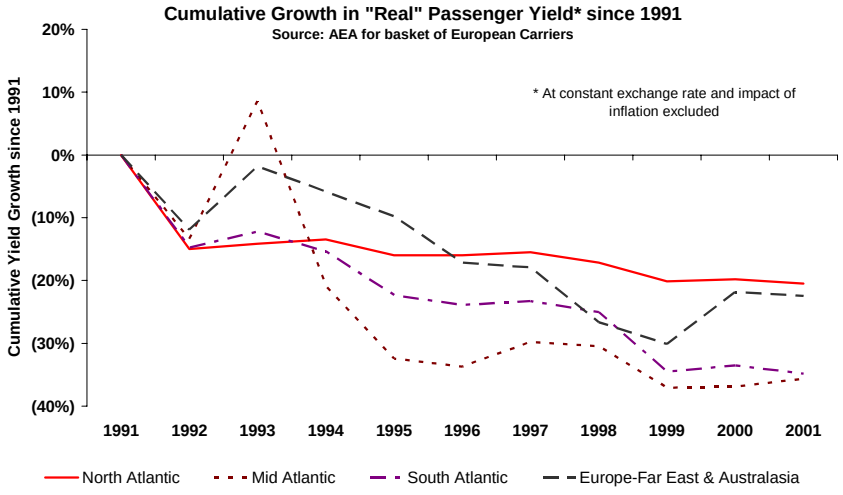


Figure 1

Domestic European flying was notable for the maintenance of fairly steady yields. In contrast, international intra-Europe yields consistently declined. This can perhaps be at least partially attributed to the level of competition on key routes, from both traditional full service players and the emerging low cost sector.



Long haul European yields experienced similar levels of decline, though with some signs of improvement at the start of the new decade. In fact, all long haul route areas saw yield improvements in 2000, especially Far East / Australasia where yields were improved by 12%.

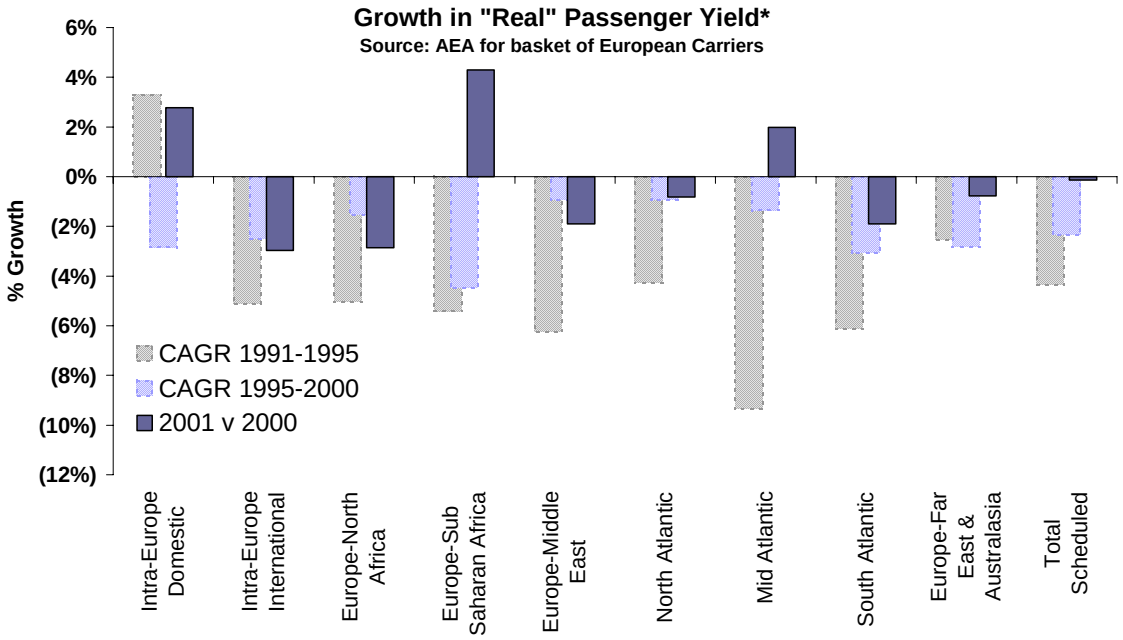
Figure 2

[2] AEA remove impact of exchange rate fluctuations and general price inflation

7.2.2 Overall yields 2001 v 2000

There was a slight decline in overall European scheduled passenger yields in 2001. Domestic, Europe-Middle East and Mid Atlantic yields all posted an improvement; while in no route area did declines exceed 3%.

In fact, compared to historical rates, 2001 saw yields hold up fairly well for the European full service sector. Possible factors may include the impact of capacity reductions, the surcharges applied to ticket prices later in the year, and the elimination of the worst performing routes as cut-backs were made post September 11th.



*** AEA remove impact of exchange rate fluctuations and general price inflation**

Figure 3

Meanwhile, there were no clear trends in the low cost sector. Ryanair's average yield fell by 7% in 2001. In their annual report, this was celebrated rather than being seen as an area of concern, which would be a more typical response in much of the airline industry. Ryanair's low fares are their key differentiator, and a further lowering was seen by the airline as strengthening their competitive advantage.

Virgin Express, in contrast, saw average yield rise by 9%. 2001 saw many changes in the Virgin Express business, with their route structure being substantially altered. Therefore, it is likely there were a number of impacts contributing to this fairly large increase. It should be noted also that Virgin Express yield is calculated on flown passengers, meaning that the actual average fare will be slightly lower than shown (taking into account passenger "no-shows")

Finally, easyJet's yield increased by 3.0% in euros, or 3.7% in original denomination of UK pounds. It should also be noted that no adjustments for general price inflation were made for any of the three airlines i.e. the increase in real terms would be slightly lower (or where yield decreased, the decrease in yield terms would be greater).

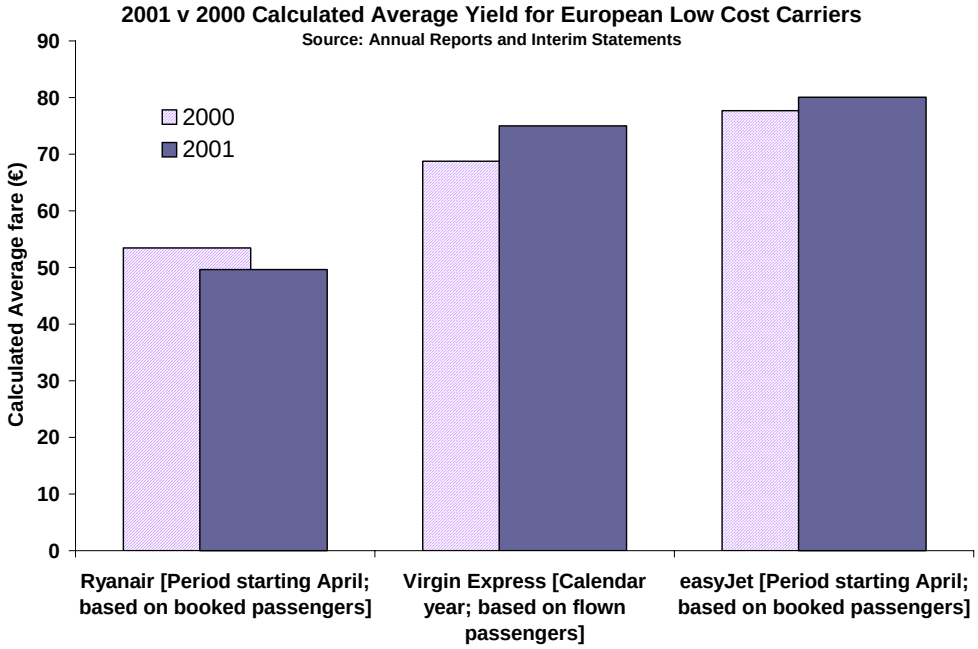


Figure 4

7.2.3 Yields by class of service

Introduction

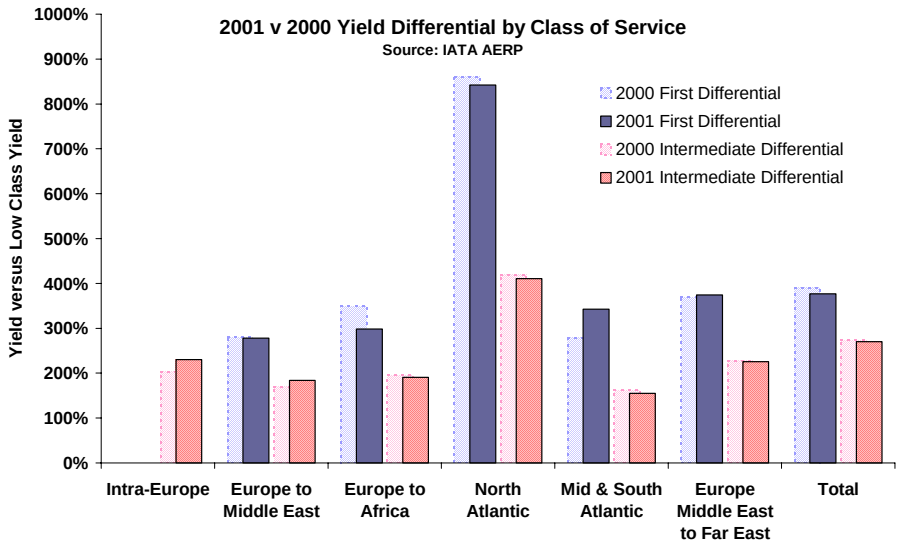
Yield information in this section is derived from IATA Airline Economic Results and Prospects. It should be noted that while the sample of airlines and routes presented below will primarily consist of routes touching Europe and airlines based in Europe, it does also include some non-European routes and airlines.[3]

IATA do not break yield down by class on individual routes where there are fewer than three carriers operating. Therefore, in some cases the overall yield for a route area is not quite the weighted average of the yields of the three classes of service.

Finally, no adjustments for inflation or exchange rates are made.

Yield differentials between cabins

An important driver of profitability for traditional full service airlines is the proportion of their traffic booked into premium cabins (i.e. first or business class). This is because passengers in premium cabins usually pay much higher fares than economy passengers; while costs for premium cabin passengers are also somewhat higher, the yield differential is usually much greater than the cost differential.



For most route areas, the average yield for passengers booked into first class is circa 3 to 4 times greater than the average economy class yield. Meanwhile, intermediate class (i.e. business class) yields are around twice those of economy class.

Figure 5

The one route area where yield differentials are much greater is the North Atlantic. On this route area, first class yields are over 8 times greater than economy class, while business class yields are more than 4 times greater. This phenomenon is perhaps related to the very high level of business class demand on the North Atlantic, resulting in airlines being able to command higher fares for limited business class space.

From 2000 to 2001, there was some small erosion of the yield differentials on most route areas.

[3] AERP reporting carriers are United Parcel, American Airlines, Air France, Air India, Alaska Airlines, Royal Air Maroc, Finnair, Alitalia, British Airways, bmi British Midland, BWIA, Continental, Cargolux, Cyprus Airways, Delta Airlines, Federal Express, America West Airlines, Iberia, Indian Airlines, Iran Air, Japan Airlines, Adria Airways, JAT, Kuwait Airways, All Nippon Cargo, Lufthansa, El Al, Malev, Malaysia Airline System, Egyptair, Northwest Airlines, Olympic Airways, CSA, Austrian Airlines, Croatia Airlines, Philippine Airlines, QANTAS, Varig, Royal Jordanian, South African Airways, SAS, Singapore Airlines, Thai Airways, Turkish Airlines+, TAP-Air Portugal, Trans World, United Airlines, US Air, Virgin Atlantic

North Atlantic = any flight between North America or Central America or South America and Northern Europe or Southern Europe or Middle East or Eastern Africa or Western Africa or Southern Africa via a gateway (commercial traffic stop) in North America. *Mid / South Atlantic* – as for North Atlantic except via a gateway in Central or South America

Share of Premium Class of Service

In 2001, Premium Class RPKs accounted for between 12% and 15% of all RPKs across all route areas. Intra Europe flights had the highest proportion of premium class passengers.

However, in all route areas, there was a noticeable decline in premium share compared to 2000. Intra Europe suffered the biggest drop, at around 3 percentage points of share, while most other areas lost around 1 percentage point of share.

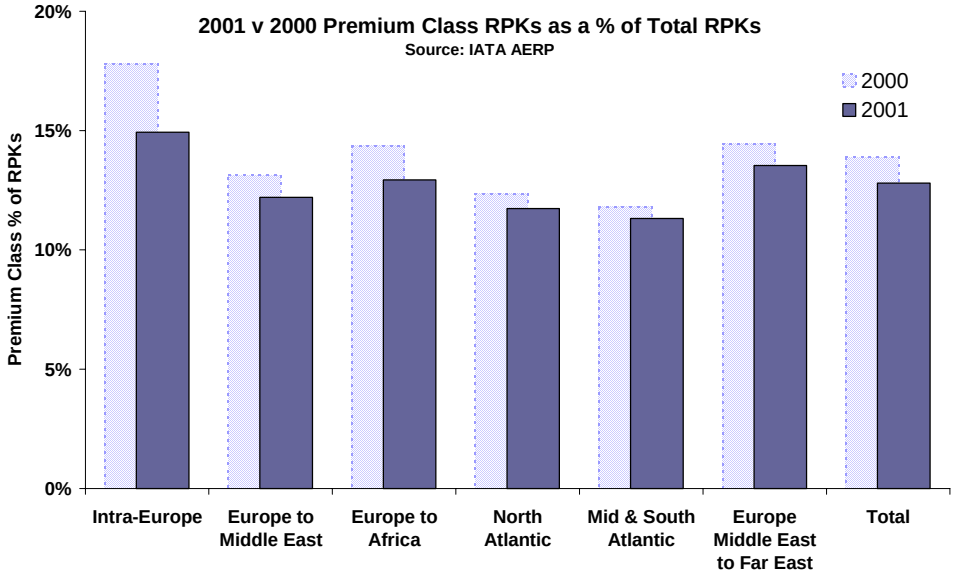


Figure 6

Intra Europe performance

Overall passenger yields on intra-European flights fell by 4.9% compared to the previous year[4]. Intermediate (business) class yield actually posted a small rise.

However, the business class RPKs fell by circa 15% compared to a 4% rise in low (economy) class passengers RPKs. Therefore, the passenger mix in 2001 was weighted more towards economy class. Furthermore, yields in economy class also declined.

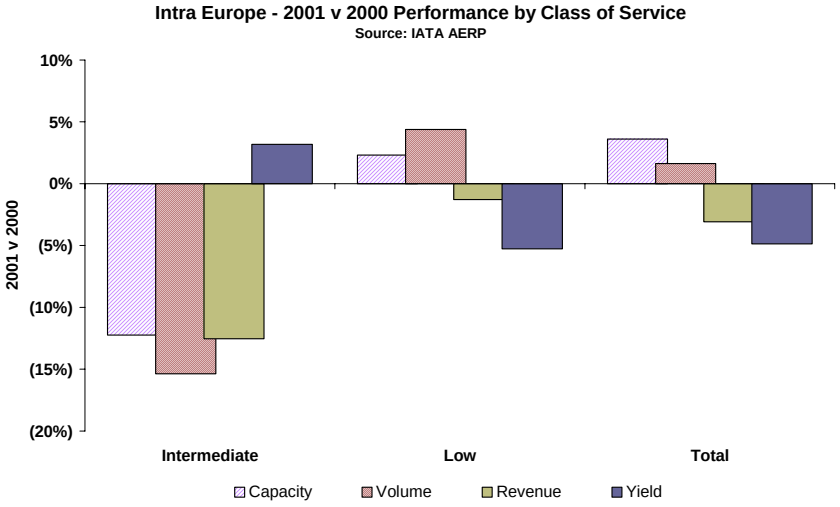
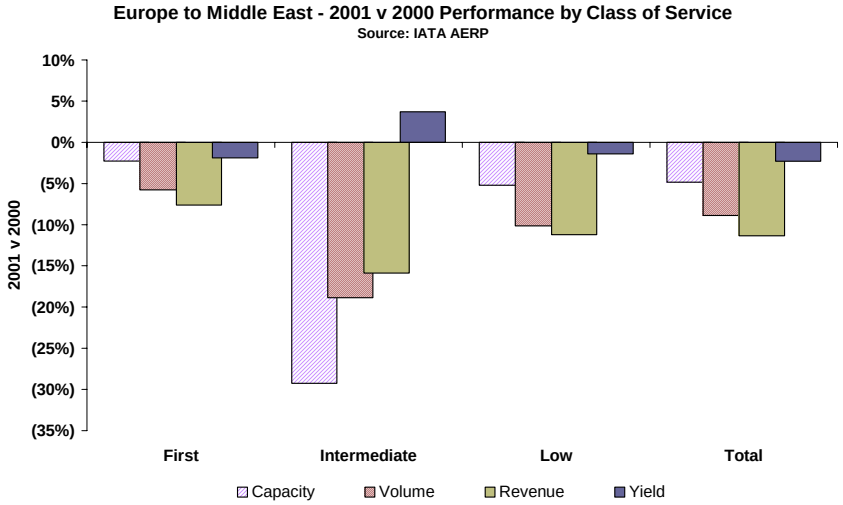


Figure 7

Note that many European carriers make use of flexible cabins (with converter seats) on short haul routes. Therefore, analysis of short haul capacity changes by class of service is not particularly meaningful.

Europe-Middle East

The Europe-Middle East route areas experienced significant falls in passenger traffic in all classes of service, ranging from a 6% drop in first class to a 19% drop in business class.



Yields in all classes except business class also declined, leading to substantially reduced revenue. Overall revenue on the route area fell by 11.4%, primarily driven by a reduction in passenger volume (-8.9%) but also impacted by a fall in yields (-2.3%).

Figure 8

[4] Impact of general price inflation has NOT been excluded

Europe-Africa

The relatively small route area of Europe-Africa did not follow the same pattern as many of the other route areas. Overall passenger volume was up slightly in 2001 (+0.6% RPKs), accompanied by a 3.5% rise in overall yields. This resulted in an overall revenue increase of 4.0%.

Analysing performance by class of service highlights some interesting developments. First class RPKs actually grew by 7.3% (on the back of expansion of first class capacity of 14.0%). However, this rapid growth was accompanied by a fall in first class yields of 8.5%, resulting in a revenue decline of 1.8%.

In contrast, business class saw a substantial capacity cut (-8.2%). Business class RPKs fell at a much slower rate (-3.2%), and with yields improving by 1.5%, business class revenue was down by only 1.7%.

Finally, economy class performance was strong. Volume grew in excess of capacity (10.3% volume v 5.9% capacity) and yields also improved by 3.2%. This resulted in a revenue increase of 13.8%.

North Atlantic

Of all European route areas in 2001, the North Atlantic was most badly impacted by the aviation downturn. Passenger volumes were substantially down in all classes of service, especially the premium cabins. Furthermore, a small yield decline in first and business class resulted in a much worse revenue performance than in 2001 (overall revenue down by 13%).

Note that the North Atlantic route area may include some routes not touching Europe, although it is envisaged European routes will dominate.

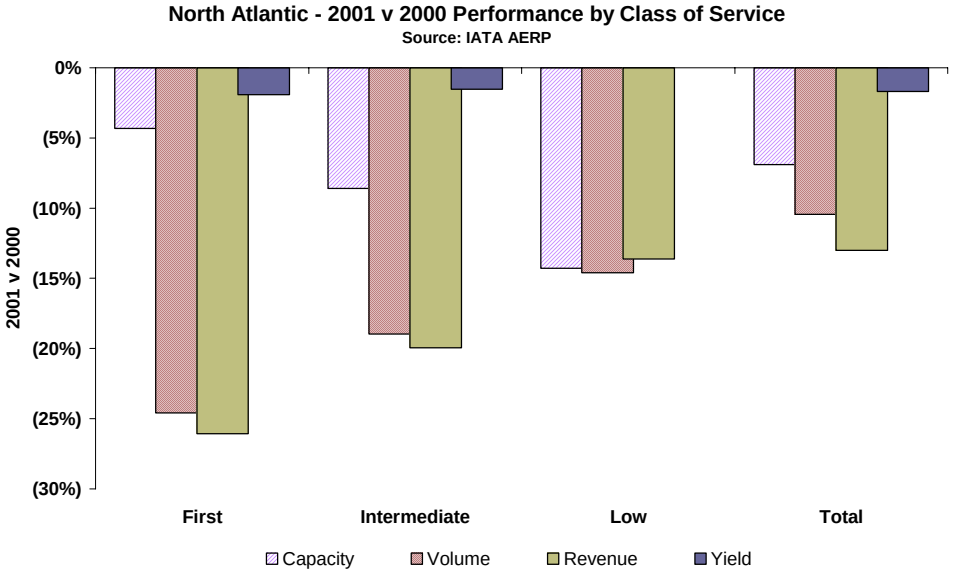


Figure 9

Mid and South Atlantic

In contrast to the North Atlantic, passenger volumes and yield performance on the Mid and South Atlantic route area was positive. Overall RPKs improved by 3.3% (though at less than half the rate of capacity growth) and yields increased by 0.6%, resulting in a revenue uplift of 3.9%.

First class revenues were flat. However, this hid a large decrease in passenger volumes (-15.7%) but was cancelled out by a large yield increase (+18.7%).

Yields and volumes in business and economy class were fairly stable.

Europe Middle East – Far East

Volumes and yields were substantially down on the previous year for this route area (which includes some routes not touching Europe). All classes of services experienced declines, especially premium classes where RPKs fell 20.3% in first class and 14.3% in business class.

Overall passenger volumes were 2.8% down. Yields fell by 6.5%, mainly as a result of traffic mix being more heavily weighted towards economy in 2001.

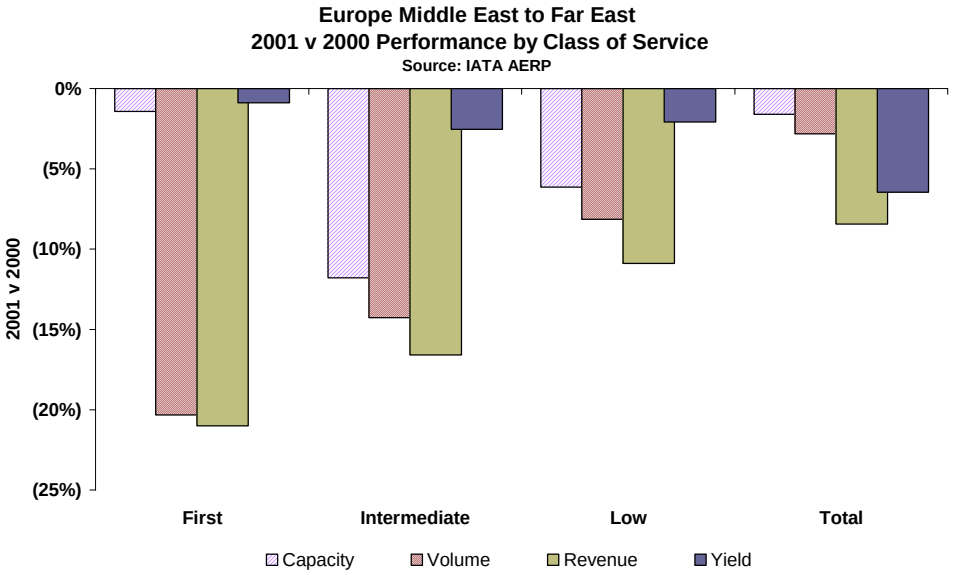


Figure 10

7.3 Analysis of Mix of Fare Types

7.3.1 Introduction

An analysis of developments in mix of different fare types has been undertaken using IATA BSP data. Reproduced below is a summary of IATA's description of the data.

The data is taken from the Billing and Settlement Plan (BSP) offices local to the country and processed centrally by a data processing company on behalf of IATA Air Transport Consultancy Services. The BSPs act as clearing houses for all the tickets issued by IATA travel agents.

The fields retained from the ticket coupon are:

- Airport of origin
- Connecting airport(s)
- Final destination airport
- Date of ticket issuance
- Agency location
- Date of travel
- Fare category (aggregated into five different categories – First, Business, Full Economy, Discounted Economy and Other). "Other" includes shuttle services as well as tickets whose fare category could not be identified.

As the data is based on actual ticketed travel, the problem of phantom and strategic booking by agents is eliminated. Tickets issued manually by some travel agents and thus not going through a CRS[5] network are also included in the data as well as internet bookings handled by IATA Travel Agents. Coverage is estimated at around 85% of all tickets sold in a particular country – though this will vary from country to country.

As low cost carriers do not sell many tickets (if at all) through travel agents, they are not significantly represented in the data.

Currently, data is limited to BSP offices from selected major European countries. The countries included in our analysis are Belgium / Luxembourg, France, Germany, Netherlands, Switzerland and the UK. For this study, ticket sales in these countries to final destinations in Europe, North America or Asia are examined. The tickets sold in a country will be predominantly for itineraries starting in that country.

[5] Computer Reservation System

7.3.2 Fare mix by destination region

Overview

Different destination regions, not surprisingly, have different fare mix profiles. In all regions, first class tickets made up only a very small proportion of all tickets sold. Business class share ranged from 12% on routes to North America up to 26% for routes to Western Europe.

In 2001, discounted economy tickets represented just under half of all tickets sold, though for North American routes this share was much higher at 72%.

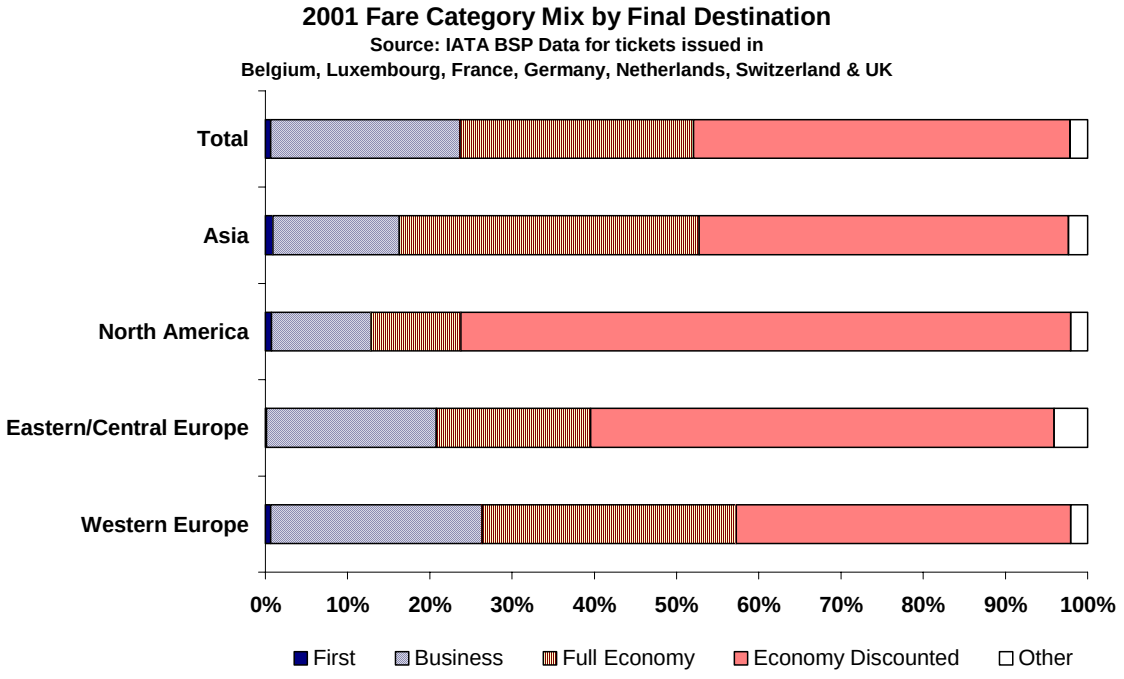


Figure 11

There are some differences in fare mix depending on the country of sale. These can largely be explained by differences in route mix.

2001 v 2000

Fare mix changed markedly from 2000 to 2001. In all regions, the share of business class tickets fell, though only marginally in the case of North America. Although business class tickets only dropped small percentage points of share, this is quite significant given the relatively low proportion of business class tickets. For example, the 2 percentage points dropped on Asia reduced the overall share of business class tickets from 18% to 16%.

In most destination regions, there was also a shift from full economy tickets to discounted economy tickets, in addition to down trading from business class.

The notable exception to this trend was intra-European traffic. Here there was a noticeable shift in the opposite direction. It is not clear why full economy ticket share increased at the expense of discounted economy. Potential reasons include a loss of leisure traffic to low cost carriers and a reduction of capacity leading to airlines being more successful in using revenue management techniques to improve mix.

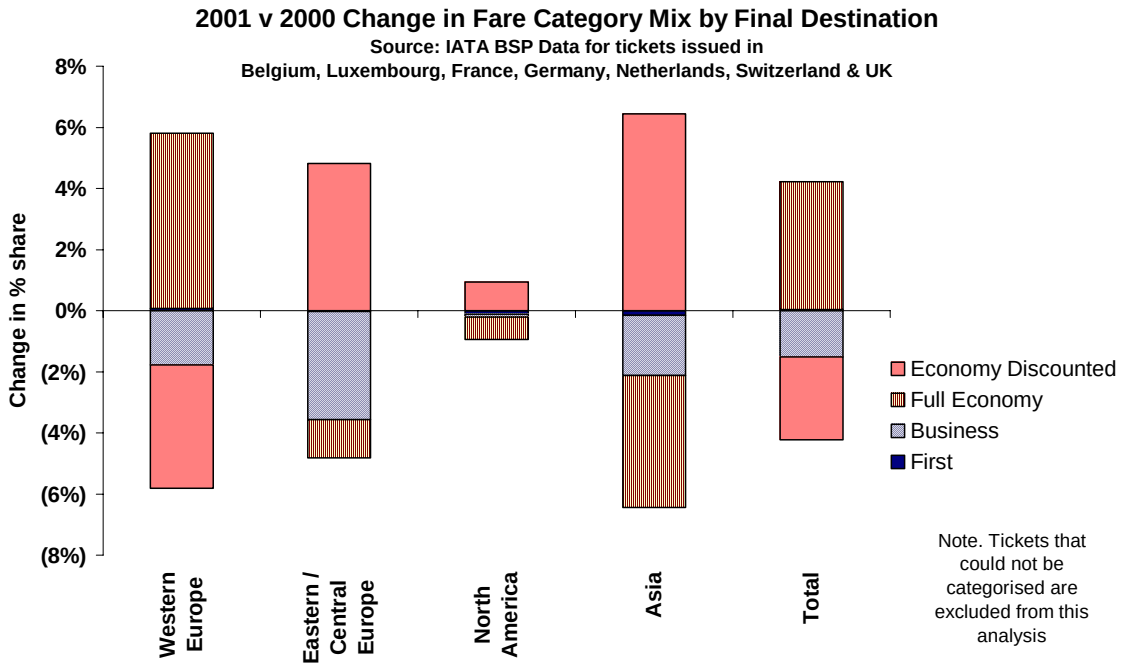


Figure 12

It is also worth noting that trends detailed above could be slightly distorted by tickets not successfully categorised - especially if the proportion of uncategorised tickets is not spread in proportion across the different fare types.

7.3.3 Fare mix by country of issue

First and business class

As demonstrated in the previous sub section, the share of tickets sold in first and business class varies significantly by destination region. There are also some (usually smaller) variances by country of sale.

On short haul routes, UK and Germany had the highest proportion of tickets sold in premium classes. This perhaps reflects the strength of the economies of these two countries. The Netherlands had the lowest proportion.

In contrast, premium class share is highest in Switzerland on long haul routes. Meanwhile, the UK and the Netherlands had the lowest shares.

2001 % of Tickets in First or Business Class

Country of Issue	Destination Region			
	Western Europe	Eastern / Central Europe	North America	Asia
Belgium / Luxembourg	17%	19%	16%	19%
France	22%	20%	14%	16%
Germany	31%	26%	14%	17%
Netherlands	11%	16%	13%	14%
Switzerland	21%	16%	21%	22%
UK	33%	21%	12%	16%

Source: IATA BSP Data

Figure 13

In nearly all cases, the share of premium class tickets was reduced in 2001. The only notable exception was tickets to North America issued in Germany, which saw a gain of 1 percentage point.

2001 v 2000: Change in share of tickets in First or Business Class

Country of Issue	Destination Region			
	Western Europe	Eastern / Central Europe	North America	Asia
Belgium / Luxembourg	0%	-2%	0%	-2%
France	0%	-2%	-1%	-3%
Germany	-4%	-4%	1%	-2%
Netherlands	-3%	-2%	0%	-1%
Switzerland	0%	-1%	-1%	-3%
UK	-1%	-6%	-1%	-2%

Source: IATA BSP Data

Figure 14

Note that in the tables above, uncategorised tickets have been excluded from the analysis. The trends detailed above could be slightly distorted if the proportion of uncategorised tickets is not spread in proportion across the different fare types.

First, business and full economy class

A similar analysis was carried out investigating the share of tickets issued that were not discounted i.e. excluding discounted economy tickets.

France had the highest proportion of undiscounted tickets on short haul routes (by a considerable margin). Belgium, Netherlands and Switzerland had the lowest proportions.

On long haul, Germany had the highest share of undiscounted tickets to North America, while France had the lowest. All but one country showed a similar share of undiscounted tickets to Asia. The exception was Germany, which had a much lower proportion of undiscounted tickets than other countries.

2001 % of Tickets in First, Business Class or Full Economy

	Destination Region			
Country of Issue	Western Europe	Eastern / Central Europe	North America	Asia
Belgium / Luxembourg	34%	38%	22%	59%
France	73%	52%	19%	55%
Germany	60%	41%	27%	46%
Netherlands	36%	30%	22%	61%
Switzerland	40%	36%	24%	62%
UK	55%	40%	25%	57%

Source: IATA BSP Data

Figure 15

Once again, share of undiscounted tickets fell in most cases from 2000 to 2001, reflecting the difficult financial environment. However, Germany markedly increased the proportion of undiscounted tickets sold to Western European destinations - from 48% to 60%.

2001 v 2000: Change in share of tickets in First, Business Class or Full Economy

	Destination Region			
Country of Issue	Western Europe	Eastern / Central Europe	North America	Asia
Belgium / Luxembourg	0%	-2%	-2%	-4%
France	3%	-4%	-3%	-6%
Germany	12%	-4%	1%	-5%
Netherlands	-3%	-2%	1%	-4%
Switzerland	-1%	-7%	-2%	-12%
UK	0%	-8%	-2%	-8%

Source: IATA BSP Data

Figure 16

Note that in the tables above, uncategorised tickets have been excluded from the analysis. The trends detailed above could be slightly distorted if the proportion of uncategorised tickets is not spread in proportion across the different fare types.

7.3.4 Direct v indirect

The proportion of tickets sold for direct v indirect itineraries was also examined.

Indirect itineraries accounted for 22% of all tickets in the sample. Tickets sold to North America and Asia had a much higher proportion of indirect itineraries at 50%. This is not surprising as “hub and spoke” operations are much more of a factor on long haul journeys, where relatively few city pairs are linked directly,

There is no material change in the proportion of indirect tickets from 2000 to 2001.

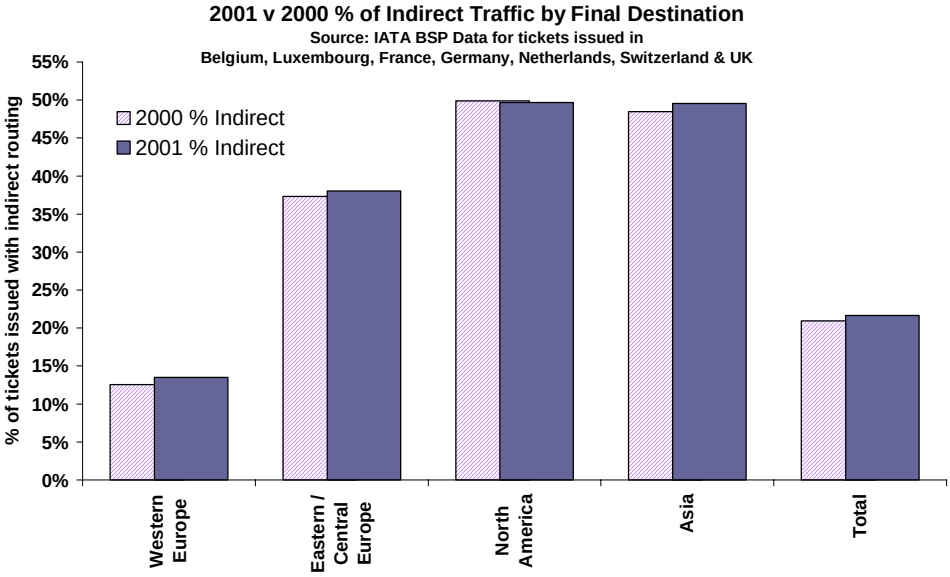


Figure 17

Indirect ticket sales can be broadly broken down into two types:

- Passengers who must connect i.e. their destination point is not served direct from their origin point
- Passengers who choose to connect i.e. direct services do exist.

Passengers who connect when a direct service exists choose to do so for a variety of reasons including timings of flights, airline preferences etc. However, in many cases (probably most cases), price is the main driver.

Airlines often sell excess capacity very cheaply into the connecting market. In this way, the airline is not diluting the price in their home market, which would be the risk if they heavily discounted on direct itineraries. However, as a connecting ticket is generally less attractive, prices would usually need to be much lower than the equivalent direct ticket.

For example, a French airline with excess seats on Paris-New York could fill these by discounting Frankfurt-Paris-New York itineraries. It would need to be priced at a point substantially below the level of a direct Frankfurt-New York service. However, any downward pressure on fares as a result of heavy discounting would be felt on the Frankfurt-New York route, not the French airline's core market of Paris-New York.

The chart below illustrates the price sensitive nature of some indirect journey. The share of connecting itineraries in discounted economy was greater than the share found in higher classes.

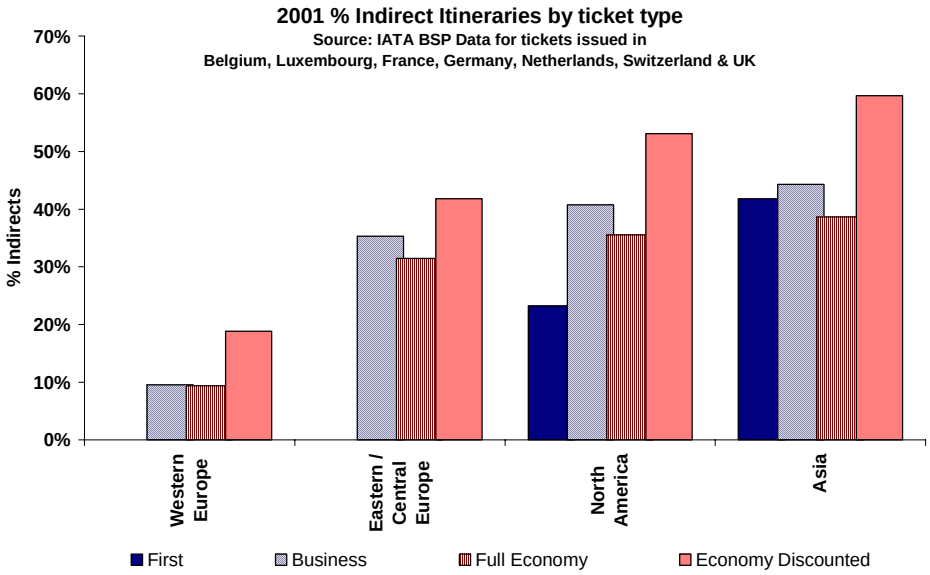


Figure 18

7.4 Analysis of Trends in Published Fares

7.4.1 Introduction

This section provides an analysis of recent European fare trends and developments. A global overview is followed by a perspective on key regional and country markets of interest.

7.4.2 Limitations of analysis

It is important to stress that fare trends are not equivalent to yield trends. Analysis of fare trends does not provide information on fare mix i.e. the percentage of passengers buying tickets at each fare level.

This is an important consideration. As there are numerous fares filed on each route, the average yield obtained by airlines is usually more sensitive to changes in the proportion of passengers buying higher priced tickets versus lower priced tickets.

Airlines typically respond to increases or decreases in demand by increasing or decreasing the availability of cheaper tickets rather than making major changes to headline fare levels for each fare type.

A further point to note is that it is only possible to analyse published fares i.e. those fares filed with Global Distribution Systems available to the general public. There are many more private fares that are provided to restricted customer groups e.g. through “bucket shops”, specialist “student outlets”, as part of holiday packages etc. Furthermore, direct bookings via airline websites etc. often bypass Global Distribution Systems.

7.4.3 Approach

Analysis of fares has become more difficult as airlines file a greater variety of complex fares in an attempt to market their product more competitively. With the advent of low cost airlines and internet booking, airlines are moving to different methods of fare filing, based on step pricing principles.

American Express has provided analyses of historic fares data for a number of years as part of their European Corporate Travel Index. This well-established report monitors published fares and benchmarks percentage change over time.

The Airfare Index monitors changes from 59 Western European cities to 10 geographical regions worldwide, incorporating 126 (full service) carriers[6]. This data represents 1,704 city pairs.

The American Express data has been used to analyse European wide trends and individual countrywide trends.

Six fare types have been defined:

Economy Class is the average of any published Economy Class fare suitable for business travel; compiled from published Economy Class fares with a short minimum stay (three days or shorter for short haul travel and five days or shorter for long haul travel) and no weekend stay requirement.

Economy Leisure Class is the average of any published Economy Class fare. These fares are more suitable for leisure travel and contain longer maximum stay and other restrictions.

Business Class is the average of any unrestricted, published Business Class fare, irrespective of aircraft configuration.

Restricted Business Class is the average of any restricted, published Business Class fare, irrespective of aircraft configuration.

First Class is the average of any unrestricted, published First Class fare.

Restricted First Class is the average of any restricted, published First Class fare.

[6] No significant representation from low cost sector

7.4.4 Overall European Situation

At the beginning of 2001, the travel industry was concerned about the impacts that uncertain economic growth would have on their business. The economic slowdown led many multi-national companies to issue profit warnings and cut back on travel expenditure. This directly hurt the profitability of the major airlines, which rely heavily on their high yield business travellers.

American Express noted that over the course of the year, a reduction in demand for business travel led to some price increases on price inelastic routes. Also as capacity was cut, passenger choice was reduced.

By the last quarter, fare increases varied considerably depending on the class of travel flown. Competition on short haul flights and low fares from the low cost airlines kept leisure fares in check at a 3.2% year-over-year increase.

However, premium business and first class fares increased by well over twice this percentage - and in some cases by over four times. Although business travel volumes were hit by both the threat of terrorism and economic difficulties, passengers flying for business purposes were thought less likely to be impacted by increases in fares.

There is anecdotal evidence of down trading, as business travellers opted for economy or less restricted business class tickets. In response to the downturn, some airlines loosened some of their restrictions on ticket types, effectively opening up previous leisure fares to business travellers.

Reduction in capacity meant that passengers had less choice enabling the airlines to limit reductions in fares.

Prior to September 11th, average fares across all fare types had increased slightly:

- Economy leisure had increased by 12.5% to €0.18 per kilometre.
- Economy increased by 6.7%.
- Restricted business increased by 8.8%.
- Business increased by 5.7%.

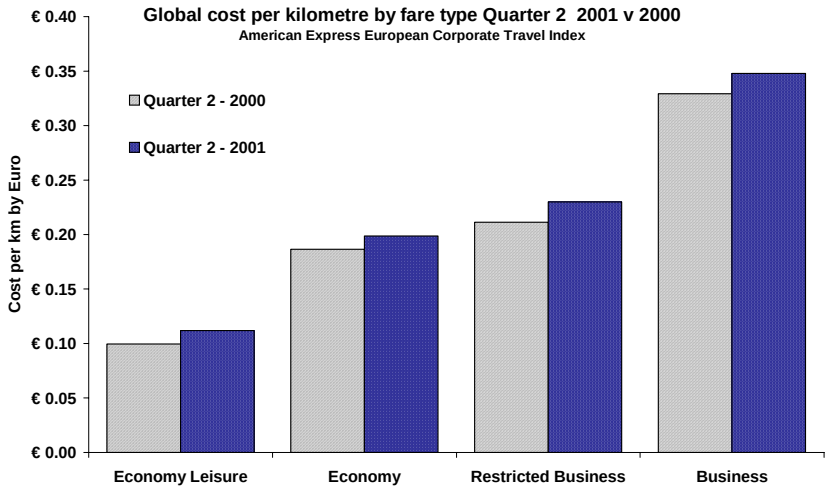


Figure 19

Even post September 11th, quarter 4 had increases of 2.4%[7] in business class despite business travel volumes suffering. Economy fares reduced by 0.1% and leisure fares by 2.5% as airlines sought to fill seats and stimulate the market.

Airlines had to pay for increased insurance premiums and security measures. These additional costs were passed on as surcharges on the ticket price, inevitably increasing fares.

[7] American Express European Corporate Travel Index Q4 2001

7.4.5 Intra Western Europe

Fares for short haul routes in Europe continued to rise, with average unrestricted economy fares increasing by 9.6% to €0.50 per km and business fares increasing by 6.3% to €0.84 per km. Leisure fares showed normal decreases in fare levels in the low season as well as more promotional and discounted fares becoming available after September 11th.

In the second quarter of 2001, British Airways adjusted its fares to reflect a change in the travel agents commission scheme[8]. Lufthansa followed British Airways' lead by the third quarter. Some of the low cost airlines withdrew from supplying their fares to the Global Distribution Systems including Ryanair. Business and economy fares continued to rise.

In the first 9 months of 2001, unrestricted economy and business class fares within Western Europe increased by 6.7% and 2.3 % respectively. This was despite cost cutting measures being made by the airlines and travel industry.

The following fare increases since Q4 2000 were posted:

- Average leisure economy fare – up by 4.7% to €0.28 per km.
- Average economy fare – up by 9.6% to €0.50 per km.
- Average restricted business - up by 9.1% to €0.60 per km.
- Average full business – up by 6.3% to €0.84 per km.

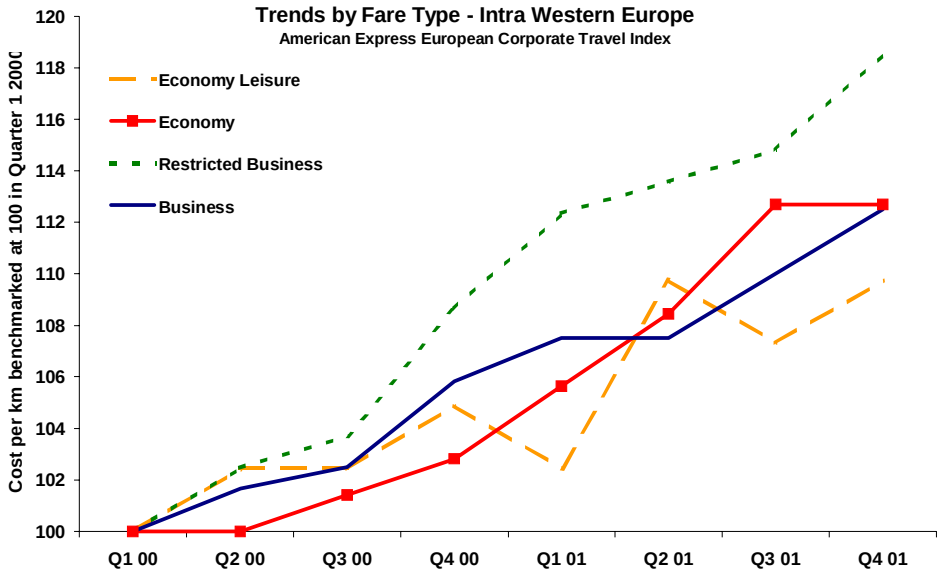


Figure 20

[8] American Express European Corporate Travel Index 2001 Q2

7.4.6 Intercontinental

All fares (with the exception of unrestricted economy fares to North America) continued to rise steadily over the year at around 6.4% to 8.4%. The average unrestricted economy fares increased to €0.31 per km and business fares increased to €0.71. As capacity was cut after September 11th it was not necessary to reduce unrestricted fares.

Leisure fares on transatlantic routes are typically more competitive during the low season of quarter 1 and quarter 4.

Therefore, the variation in economy leisure fares can be attributed to seasonality although there is evidence of very attractive promotional fares in the market place after September 11th as airlines fought to keep load factors up.

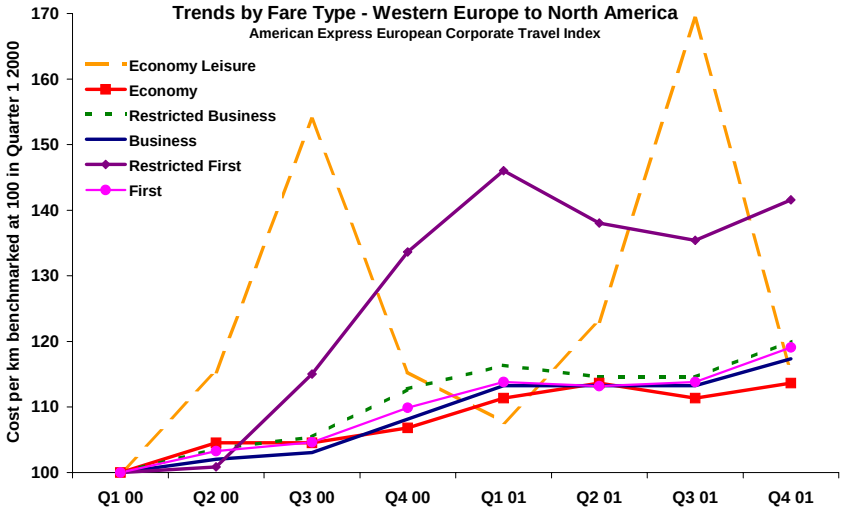


Figure 21

Fare trends in the Western Europe to Far East and Australasia market were similar to the North Atlantic market. Average fares increased by between 4.5% and 6.5%. Full economy fares increased to €0.29 per km and business increased to €0.50 per km. Unlike the North Atlantic market, average leisure economy fares remained stable at €0.11 per km.

First Class fares grew 3% to 4.4%.

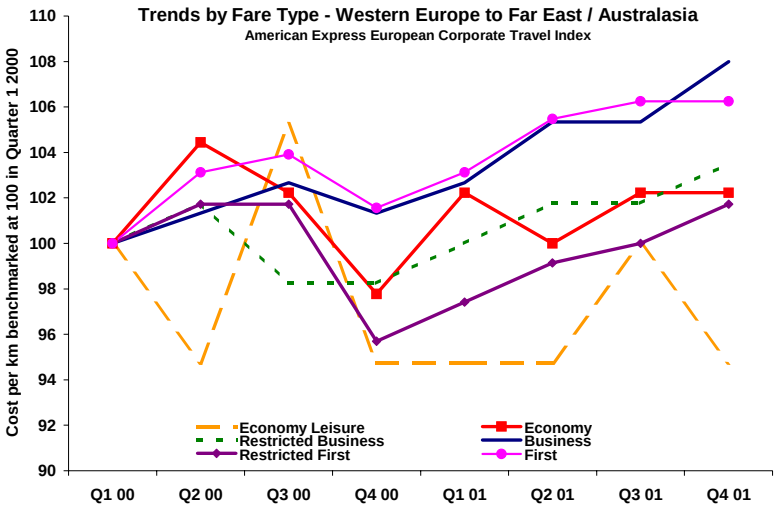


Figure 22

7.4.7 Analysis of different fare types

Economy Leisure

Economy leisure fares have a tendency to show more seasonal variation than other fares.

The chart to the right shows the dramatic seasonal movement on the Western Europe to North American market. The average fare of €0.09 per km in the first quarter rose to €0.14 per km in the third quarter before dropping back down to €0.09.

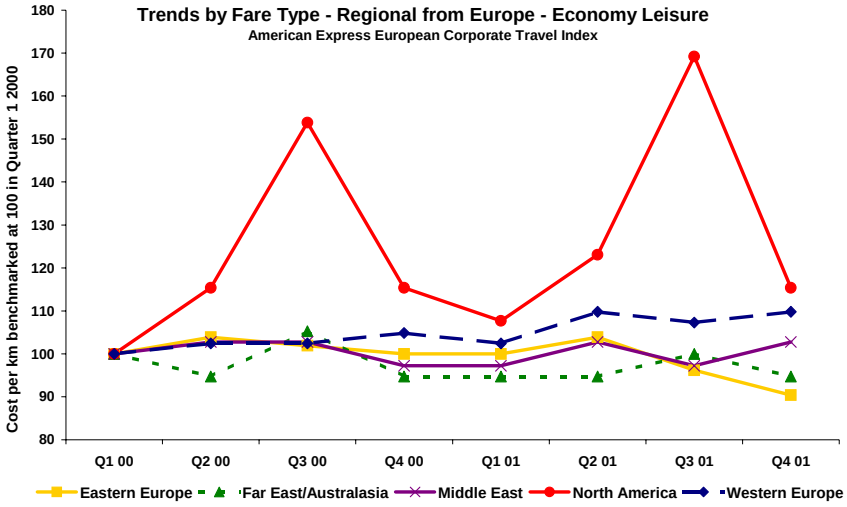


Figure 23

Other regions experienced less movement, with slight annual decreases experienced to the CIS and Eastern Europe. In fact, Eastern Europe showed the most significant year on year decrease of 9.6%. This also reflects the high decreases in passenger traffic experienced towards the end of 2001.

Economy Unrestricted

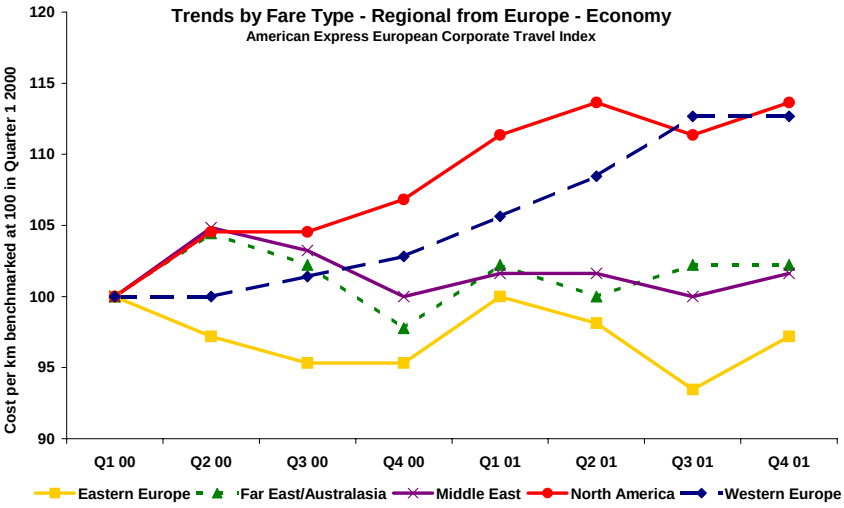


Figure 24

Economy fares to all regions showed some increase over the year. Intra Western European routes saw average fares increase by 9.6%year on year to €0.50 per km.

North Atlantic fares increased by 6.4% to €0.31per km.

As with restricted economy fares, there were decreases to the CIS of 14.9%

Business Unrestricted and Restricted

In general, both business and restricted business average fares increased over the year. Restricted business increased between 0 % and 11.1%. The most substantial increases were to the Southern Asian Subcontinent (11.1%) and within Western Europe (9.1%).

Unrestricted business fares increased across all regions and these rises were higher than those experienced by restricted business fares particularly in the major markets from Europe. Fare rises ranged between 4% (Middle East) to 8.5% (North Atlantic).

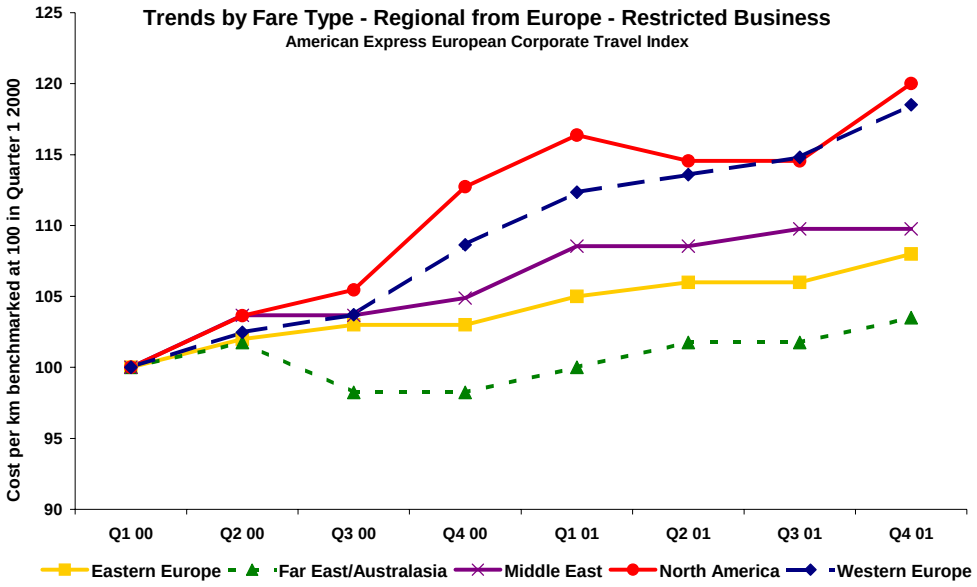


Figure 25

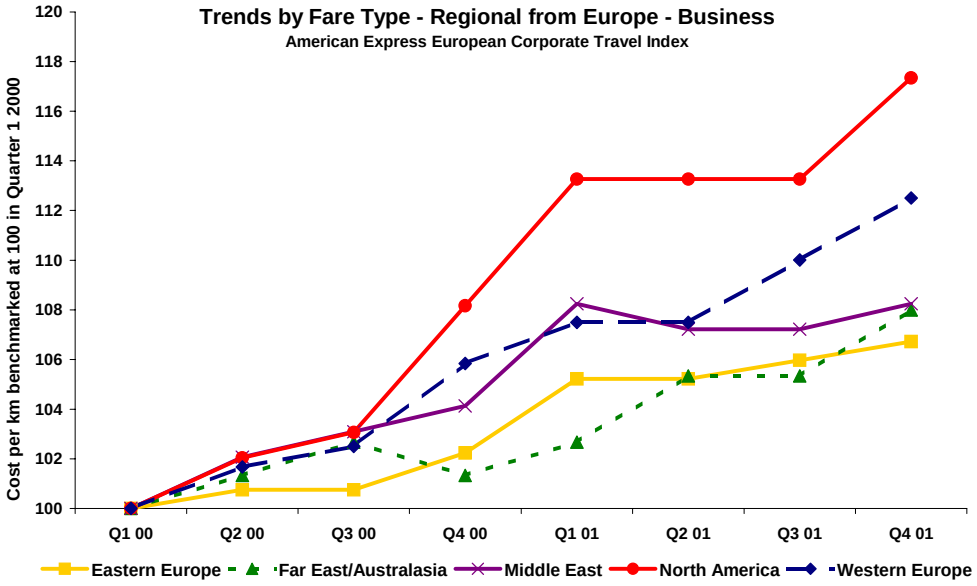


Figure 26

7.4.8 Country Trends

A year on year analysis of fares on a country basis gives some insight into variations in fare levels.

The average rise in economy leisure fares from quarter 2 in 2000 to quarter 2 in 2001 was approximately 7.5%. Ireland, Italy, Norway and Portugal all posted above average fare growth.

Quarter 4 fare increases (versus Q4 2000) were often more modest, though fares from Finland, France, Luxembourg, Spain and the UK rose faster than in Q2. In contrast, a year on year fare decline was recorded in Austria, Germany, Netherlands and Sweden.

In particular, average leisure fares from Germany to Eastern Europe fell by 20.9%.

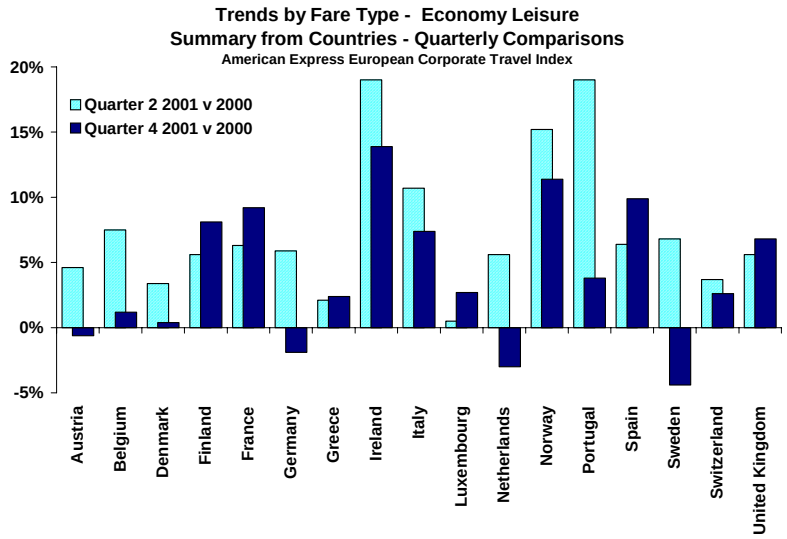
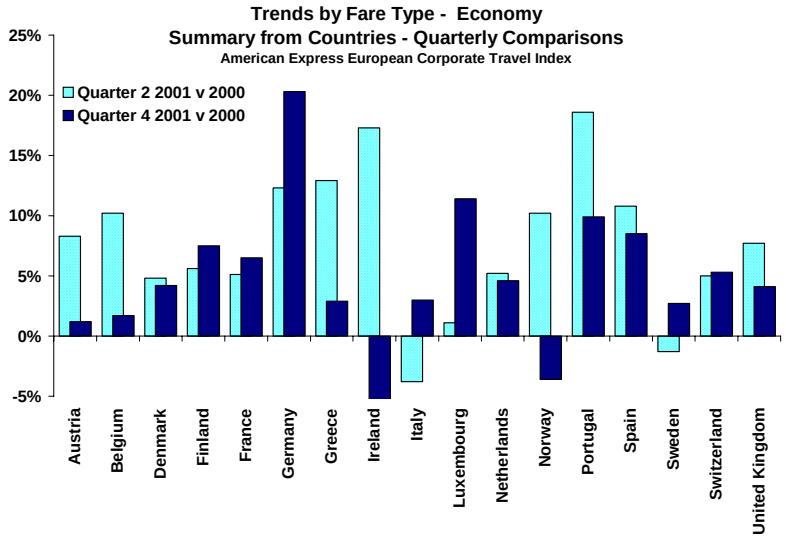


Figure 27

In contrast to economy leisure fares, Germany saw large increases in unrestricted economy fares of 12.3% in quarter 2 and 20.3% in quarter 4 (versus the previous year). In particular, a 25.2% increase on fares to Western Europe was recorded.



Increases in the other countries were typically between 4% and 10%. A large increase in economy fares from Ireland in Q2 was followed by a small reduction in Q4. A similar, but less extreme shift occurred in Norway.

For North America specifically, economy fares from individual EU countries showed extreme variations including increases of 26% from France, 33% from Belgium and a decrease of 29% from Spain.

Figure 28

Restricted business fares differentiated more at a country level. Spain showed significant year on year rises of 12.3% for quarter 2 and 13.9% for quarter 4. Intra Western European destinations were responsible for the highest rises.

Portugal posted a big increase in fares in Q2, particularly a 28.4% increase in fares to North America followed by a small decline in Q4 fares.

France, Germany and the United Kingdom all saw growth in fares slow in quarter 4, with year on year increases of around 3% to 4.5%.

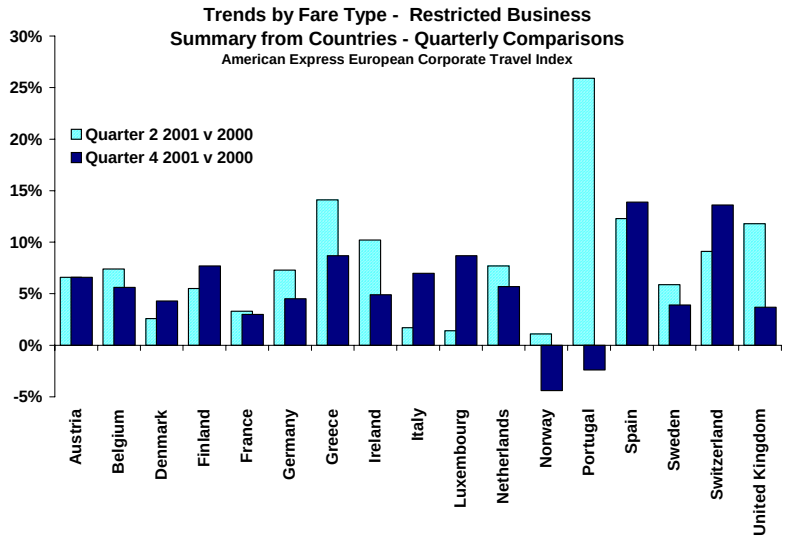


Figure 29

In general, unrestricted business fares continued to increase year on year. It is believed that decreases in capacity, frequency and routes resulted in less choice for customers and therefore less price competition, leading to high business fares.

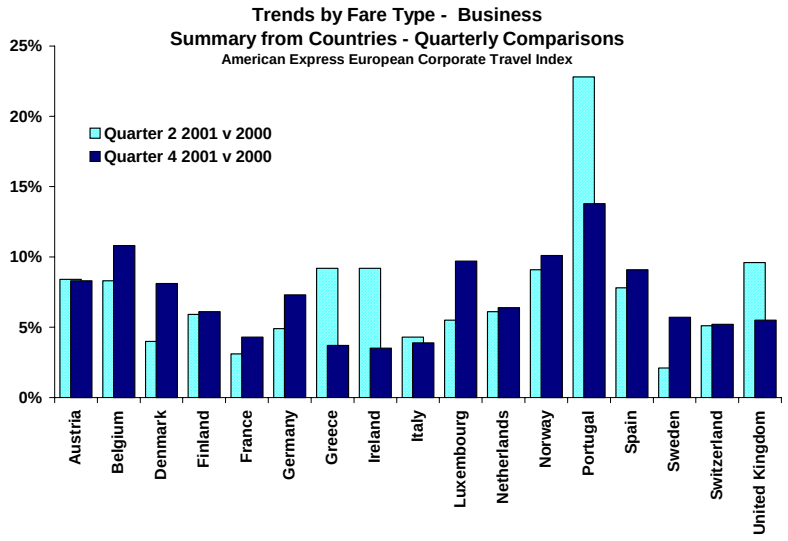


Figure 30

7.5 Competition on Routes

7.5.1 Overview

An examination of the number of airlines operating scheduled services on a city pair can provide an indication of competition. In this section, the change in the competitive situation of various city pairs is analysed.

In July 2001 there were a total of 4,418 city pairs operated to, from and within the EEA, Switzerland and EU candidate countries. A clear majority of these routes were operated by just one carrier (a monopoly). However, the proportion of seats on these monopoly routes was much lower at 29.8%. This is because, typically, "thick" routes are attractive enough to sustain more than one carrier. In contrast, it may not be economic for more than one carrier to operate a "thin" route.

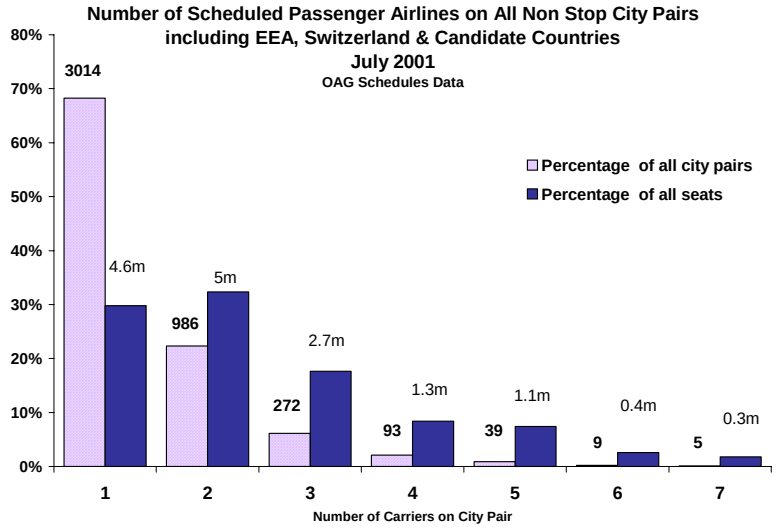
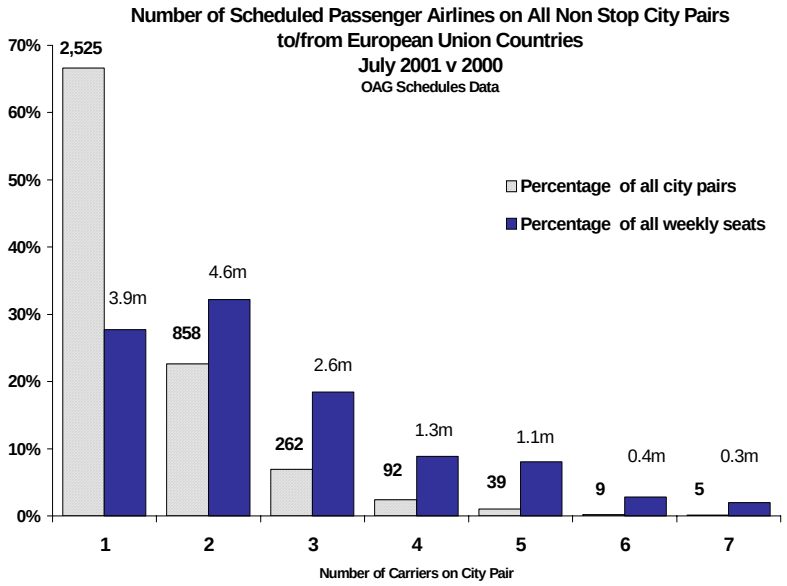


Figure 31

There were 146 city pairs operated by four or more airlines. 145 of these were from European Union countries illustrating that the largest and most competitive multiple carrier routes were in the EU. Although only around 3% of the total number of city pairs, these markets with a high degree of competition accounted for circa 20% of all seats.



The same analysis was conducted for the 15 EU countries only. Of the 3,790 city pairs, 66% were monopoly routes with 27.7% of available seats (compared to 29.8% for EEA, Switzerland and candidate countries).

Small increases in routes with multiple carriers indicate the there was more route competition within the EU 15 countries than in the rest of Europe. Noticeably there was a decrease in monopoly routes in the European Union compared to an increase in the rest of the EEA, Switzerland and Candidate countries.

Domestic routes tended to have the lowest amount of multi-airline competition. However, this did vary by type of route. Many of the biggest domestic routes sustained a high level of airline competition while "thin" domestic routes were typically served by just one carrier.

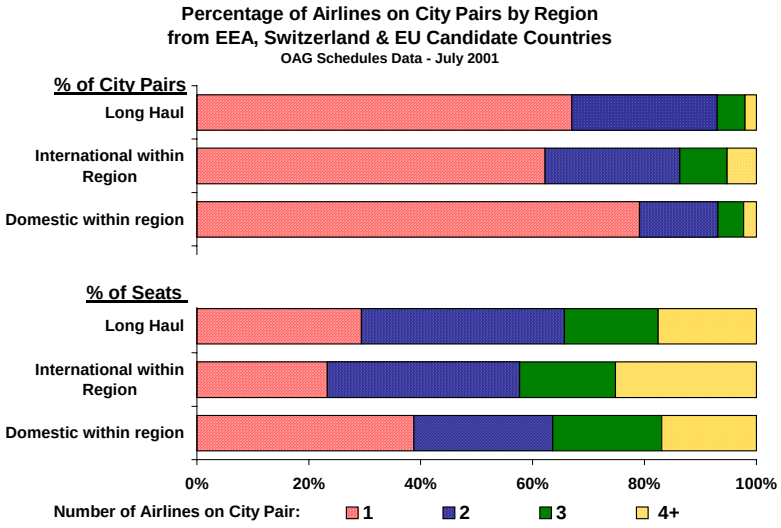


Figure 32

7.5.2 2001 v 2000

The degree of airline competition on city pairs changed from July 2000 to July 2001. Some city pairs saw the number of airlines serving them reduced, others received new entrants. In addition, 561 city pairs served in July 2000 were no longer served the following year; 443 new city pairs were inaugurated in July 2001.

There were 3,975 city pairs that were operated in both July 2000 and July 2001. The competitive situation changed at 640 of these city pairs (16%). Of these 640 city pairs, 283 had increased airline competition in July 2001; 357 had less. In other words, there was slight fall in the level of airline competition on city pairs.

	Airlines serving city pair at July 2000				
Airlines serving city pair at July 2001	Not served in 2000	1 airline	2 airlines	3 airlines	4+ airlines
Not served	-	550	11	0	0
1 airline	425	2351	226	10	2
2 airlines	18	164	724	76	4
3 airlines	0	10	63	160	39
4+ airlines	0	3	3	40	100

Figure 33

7.5.3 Monopoly Routes

In July 2001 3,014 city pairs (68.2% of EEA, Switzerland & EU candidate countries total) were served non-stop by just one scheduled airline. This included 2,525 city pairs from the European Union, representing 66.6% of European Union routes.

Of those monopoly routes:

- 2,351 were monopolies in July 2000.
- 443 were new city pairs that were not served in July 2000.
- 226 were duopolies in July 2000.
- 12 were served by 3 or 4 airlines in the previous year including Paris to Marseilles, Bordeaux and Brussels.

The 10 largest city pairs with one operator on the route were all domestic routes (France (5), Germany (2), Turkey (2) and Switzerland (1)). Half of these routes were operated by two or more carriers in July 2000.

Over the last 10 years, Paris–Marseille had always been served by 3 or 4 airlines. In July 2001, Air France was the sole operator with 25 daily services. A major factor in this change was the greater competition from rail after the opening of a high speed line.

The largest international flight (in terms of available capacity) was the Amsterdam–Detroit flight, with 5 return flights per day on Northwest. This service had been previously operated by alliance partners KLM and Northwest since 1996.

Within the European Union, the most significant monopoly routes were:

- Amsterdam–Dublin - operated by just Aer Lingus for the past 10 years.
- Copenhagen–Gothenburg - a SAS monopoly for almost all the last decade.

7.5.4 Duopoly Routes

In July 2001, 986 city pairs (22.3% of EEA, Switzerland & EU candidate countries total) were served non-stop by two scheduled airlines. This included 858 city pairs from the European Union, representing 22.6% of European Union routes.

Of those duopoly routes:

- 724 were duopolies in July 2000
- 18 were new city pairs that were not served in July 2000
- 164 were monopolies in July 2000
- 80 were served by 3 or 4 airlines in the previous year including Nice-Paris, Copenhagen-Oslo, Amsterdam-Paris and Paris-Zurich.

70% of the largest duopoly city pairs[9] were domestic routes. Often these would involve closely matched frequencies for the flag carrier and a short haul airline e.g. British Airways and bmi British Midland or Air France and Air Liberte.

Paris featured in five of the top 10 duopoly markets, all served by Air France.

Top Intra EEA, Switzerland and EU Candidate Country
Duopoly City Pair Routes by Available Capacity
OAG Schedules Data - July 2001

City Pair	Airlines on Route 2000	Airlines on Route 2001	Available Capacity	Difference
Nice - Paris	3	Air France, Air Liberte	76,002	-12.1%
Paris - Toulouse	2	Air France, Air Liberte	62,971	-1.8%
London-Manchester	2	British Airways, British Midland	43,434	-8.1%
Frankfurt-Paris	2	Air France, Lufthansa	40,668	18.6%
Copenhagen - Oslo	3	SAS, Wideroe	38,859	19.9%
Barcelona-Paris	2	Air France, Iberia	28,880	-1.6%
Amsterdam-Paris	3	Air France, KLM	28,608	0.7%
Cagliari - Rome	2	Alitalia, Volare	26,082	-15.6%
Funchal-Lisbon	1	TAP, Air Luxor	25,756	37.5%
Rome-Turin	2	Alitalia, Air One	24,898	-0.6%

Figure 34

27.5% of all duopoly markets were intercontinental. Many of the larger routes were transatlantic and usually involved airlines who had flown on the route for many years. However, some of the duopoly routes were operated by airlines that were in the same global alliance, so in practice the level of competition may have been limited. Examples were Star Alliance carriers United and Lufthansa on the Frankfurt–Washington route and Skyteam partners Delta and Air France on the Atlanta-Paris route.

Denver–Frankfurt was a new duopoly route that commenced in 2001, served by Star Alliance partners Lufthansa and United.

Other significant non-stop duopoly markets included Paris to Tunis and Casablanca, Bombay–London, Beijing–Frankfurt and Frankfurt–Hong Kong,

[9] Weekly seats in July > 20,000

7.5.5 Three Carrier routes

In July 2001, 272 city pairs (6.2% of EEA, Switzerland & EU candidate countries total) were served non-stop by three scheduled airlines. This included 262 city pairs from the European Union, representing 6.9% of European Union routes.

Of those routes served by three airlines:

- 160 were served by three airlines in July 2000.
- 63 were duopolies in July 2000 including London–Munich, Madrid–Valencia, Copenhagen–Stockholm and Munich-Paris.
- 10 were monopolies in July 2000, including Frankfurt-Munich and Frankfurt-Cologne
- 39 were served by 4 or more airlines in the previous year including Rome-Palermo, Paris-Pointe a Pitre, London-Johannesburg, Geneva–Paris, Hamburg–London and Munich–Vienna.

Over 15% of these routes had a capacity of greater than 20,000 seats per week. Within this group was the busiest market in Europe, Madrid–Barcelona. Although there were three airlines on the route, Iberia held 70% of the frequency and capacity share. Spanair had competed on the route since 1993 and had 23% share. Air Europa joined the route in 1994 with Spanair, and in 2001 had 7% of the route.

The second largest route, Madrid–Palma, was also operated by the same three airlines with respective capacity shares of 44%, 32%, 24%.

London-Munich

One of the largest city pairs operated by three airlines was the London – Munich route. Over the years a number of new entrants had entered the route to challenge flag carriers Lufthansa and British Airways. However, after serving the route for a short period of time, most new entrants subsequently withdrew.

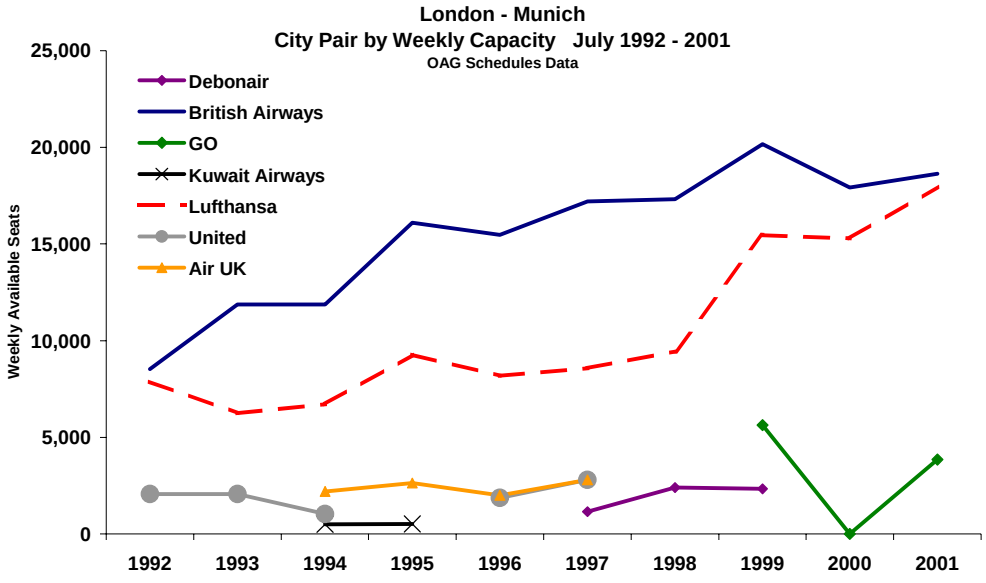


Figure 35

Some of the world's major long haul routes were operated by three airlines. In many cases, two of the three carriers were from the same alliance.

Top Intercontinental Citypairs served by 3 Airlines
From EEA, Switzerland and EU Candidate Countries
OAG Schedules Data - July 2001

City Pair	Airlines on Route 2000	Airlines on Route 2001	Available Capacity	Difference
London - Singapore	3	British Airways, Singapore Airlines, Qantas	36,326	4.1%
London - SanFrancisco	3	British Airways, Virgin, United	32,712	11.3%
London - Washington	3	British Airways, Virgin, United	30,820	3.0%
Hong Kong - London	3	British Airways, Virgin, Cathay Pacific	25,634	0.0%
Johannesburg - London	4	British Airways, Virgin, South African	24,600	2.1%
Paris - Pointe a Pitre	5	Air France, Air Liberte, Corsair	24,552	-8.7%
Paris - Fort de France	4	Air France, Air Liberte, Corsair	24,352	-4.4%
Paris - Tokyo	3	Air France, JAL, All Nippon	21,760	1.8%
Chicago - Frankfurt	3	American, Lufthans, United	21,588	2.1%
London - Miami	3	British Airways, Virgin, American	20,188	10.4%

Figure 36

Of the three airline routes to the EU candidate countries, only London to Prague, Istanbul, Larnaca and Malta had a weekly capacity greater than 10,000 seats.

7.5.6 Routes with four or more airlines

In July 2001, 146 city pairs (3% of EEA, Switzerland & EU candidate countries total) were served non-stop by four or more scheduled airlines of which 145 were from the European Union.

Of those routes served by four or more airlines:

- 100 were served by four or more airlines in July 2000.
- 40 were served by three airlines in July 2000
- 6 were served by one or two airlines in July 2000

Not surprisingly, this category of route contained many of the major European trunk routes, for both long haul and short haul. The major routes, such as London-New York, had up to 7 airline competitors. In many cases, though, the leading carriers on a route had a disproportionate share of capacity.

Top Intercontinental Citypairs over 30,000 weekly seats
served by 4 or more Airlines
From EEA, Switzerland and EU Candidate Countries
OAG Schedules Data - July 2001

City Pair	Airlines on Route 2000	Airlines on Route 2001	Available Capacity	Difference
London - New York	7	American, British Airways, Continental, United, Virgin Atlantic, Kuwait Airways, Air India	124,978	2.0%
Chicago - London	5	American, Air France, Continental, Delta, TWA	48,796	10.7%
New York - Paris	5	American, British Airways, United, Virgin Atlantic, Air India	44,240	3.2%
Los Angeles - London	5	American, British Airways, Air New Zealand,	39,018	-9.4%
London - Toronto	6 to 5	Air Canada, British Airway, Virgin, Air Transat, Canada 3000	35,712	6.3%
Dubai - London	7	British Airways, Emirates, Air Lanka, Pakistan International, Air Seychelles, Biman Bangledesh, Royal Bruneii	33,650	10.3%
Frankfurt - New York	6 to 4	Lufthansa, Delta, Continental, Singapore	32,354	-8.6%
Boston - London	4 to 5	American, British Airways, Delta, United, Virgin Atlantic	31,818	14.5%

Figure 37

Top City pairs over 50,000 weekly seats
served by 4 or more Airlines
Intra EEA, Switzerland and EU Candidate Countries
OAG Schedules Data - July 2001

City Pair	Airlines on Route 2000	Airlines on Route 2001	Available Capacity	Difference
Dublin - London	5 to 4	Aer Lingus, Ryanair, British Midland, British Airways	117,937	1.9%
Milan - Rome	7	Alitalia, Air One, British Airways, Gandalf, Air Europe, Azzurra, Air Lauda	104,067	14.6%
Amsterdam - London	6	British Airways, KLM, KLM UK, British Midland, easyJet	91,106	2.8%
Glasgow - London	6	British Airways, British Midland, Ryanair, Go, easyJet, Scotairways	88,587	18.7%
Edinburgh - London	6	British Airways, British Midland, Go, easyJet, Scotairways, Jersey European	85,455	13.3%
London - Paris	6	Air France, British Airways, British Midland, Buzz, Sudan Airways	79,941	-7.1%
Frankfurt - London	6	British Airways, Lufthansa, Buzz, Ryanair, Air Namibia, Royal Nepal	69,044	0.7%
Madrid - Paris	4	Air France, Iberia, Spanair, Air Europa	57,720	17.3%
Belfast - London	4 to 5	British Airways, British Midland, Go, easyJet, Jersey European	57,122	22.7%
London - Milan	6 to 5	Alitalia, British Airways, British Midland, Buzz, Go	52,280	-7.9%

Figure 38

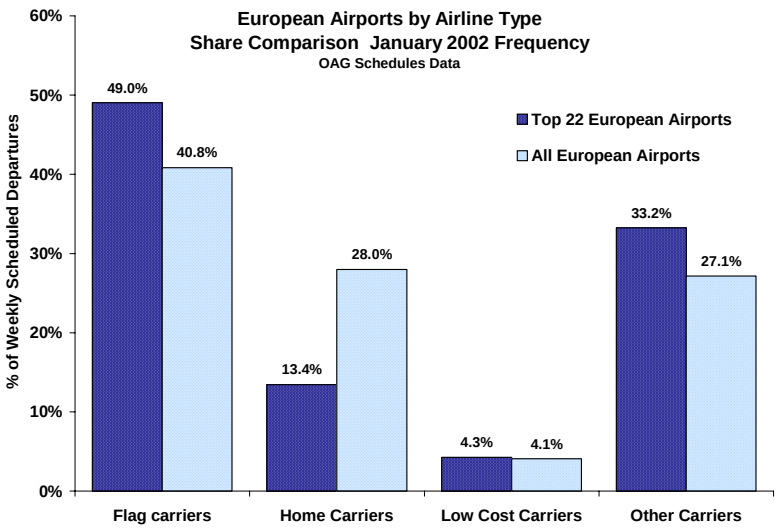
7.6 Airline competition at airports

7.6.1 Differences in Type of Airline Customer Base

Europe's airports have very different customer bases, which change over time. In this section, the airline makeup at Europe's different airports is examined.

Despite liberalisation of the European aviation market, airport schedules were still heavily slanted towards carriers of the airport nationality. For leading airports, there nearly twice as many departures by "flag carriers" and "other home" carriers than by foreign carriers.

For all European airports, the trend was even more marked, with 2.5 times more departures from airlines of the same nationality as the airport.



There are a number of reasons for this. Firstly, the lack of large scale cross-border mergers or aggressive organic expansion from full service airlines has meant there are no genuine pan-European airlines.

In other words, very few airlines operate flights which do not touch their home country. For example, Lufthansa, Europe's largest airline, almost exclusively fly either within Germany or to/from Germany. They do not operate flights from France to Italy (say).

Figure 39

Ironically, this is starting to happen in the low cost sector, as Irish and UK based airlines establish bases in mainland Europe. However, for purely intra-European airlines, the issues associated with traffic rights are simpler than, for example, those for an Irish airline wanting to fly to the USA from Germany.

Secondly, the larger flag carriers can often make marginal routes to their main hub economic as they feed traffic onto outbound connecting flights. Therefore, they often do not face opposition from the national carrier at the other end of the route, who lack such hub efficiencies.

Finally, domestic flying, especially on smaller routes, tends to be undertaken by smaller airlines based in the local area, with strong local market knowledge. This also increases the "home share" of traffic.

There are a number of other points of interest. Flag carriers, not surprisingly, had a much larger share of departures at Europe's major airports than for Europe's airports as a whole. Airports outside the top 22 had a much more regional flavour to their schedule, often lacking flag carriers completely.

Secondly, low cost carriers were equally well represented in Europe's major airports as they were for Europe's airports as a whole. However, this figure was heavily influenced by the extremely high share that low cost carriers held at London Stansted, now a leading European airport.

7.6.2 Airline share of major European airports

For Europe's leading airports, there was a significant variation in the makeup of airlines. In July 2001, London Heathrow's flag carrier (British Airways) held only circa 40% of slots, and faced significant competition from other home carriers Virgin Atlantic and BMI British Midland.

In contrast, at Frankfurt, Lufthansa held circa 60% of slots with little competition from other German carriers. Air France held circa 60% of both Paris airports, but faced competition from other French carriers at Orly. Meanwhile, Amsterdam was notable as the European airport with the greatest presence of non-national airlines, at just over 50% of departures.

At secondary airports, there was less of a tendency for one airline to enjoy such a large share of departures, although this varied from airport to airport.

By July 2001, low cost carriers had gained a foothold in many of Europe's leading airports. However, only at Dublin and London Stansted did low cost carriers enjoy a share greater than 5%. Stansted in particular became an airport where low cost carriers dominate, holding around 75% of slots.

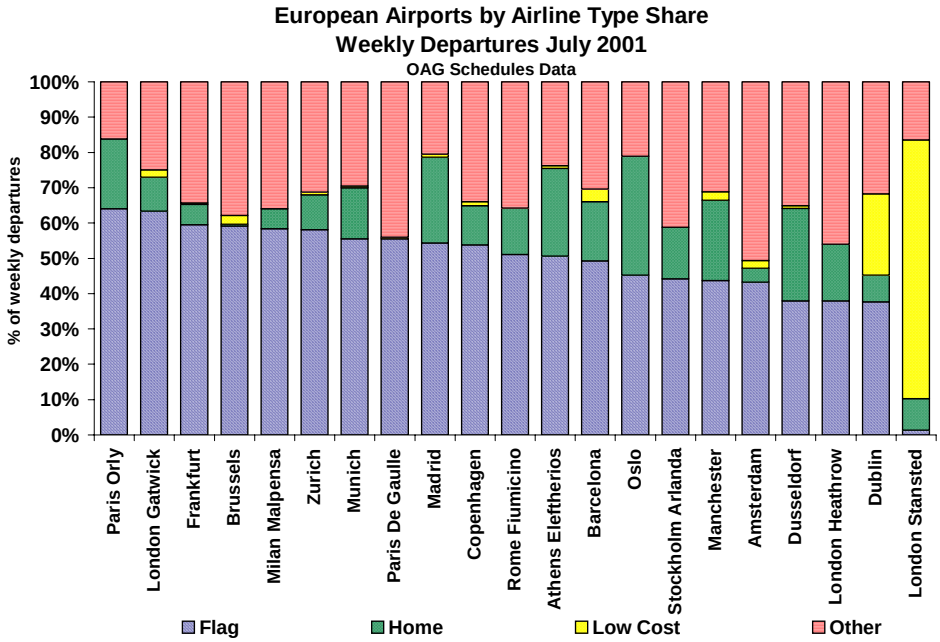


Figure 40

Between July 2001 and the end of the year, there was a dramatic change in airline customer base at a couple of airports. Both Zurich and Brussels saw their flag carrier presence shrink due to well documented airline financial difficulties.

At Brussels, Virgin Express and foreign carriers expanded their share noticeably as Sabena exited the market.

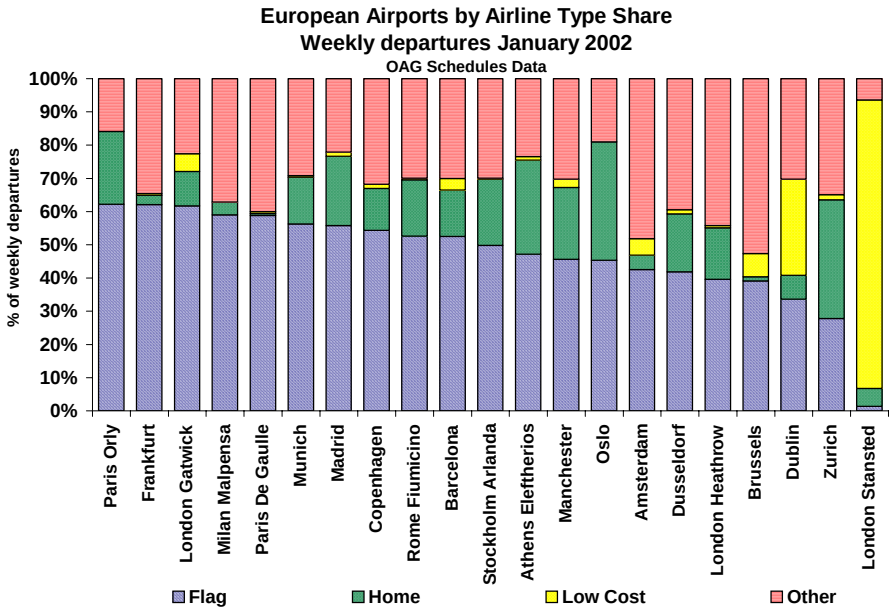


Figure 41

7.7 Competition through alliances

7.7.1 Overview

2001 was a relatively quiet year for the global Alliances. Only Skyteam made significant additions to their alliance family, with CSA Czech Airlines and Alitalia becoming new core members.

The Qualiflyer Alliance was struggling at the end of 2001 after the financial collapse of both Sabena and Swissair.

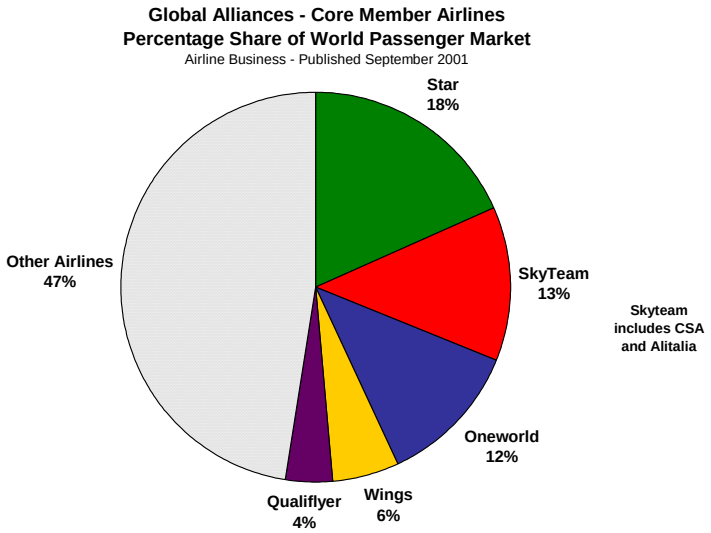


Figure 42

By January 2002 the major alliances had a 69.3% share of EEA available departure seats.

All alliances experienced an annual decrease in seats with the exception of Skyteam, which reached 16.5% of market share. Market shares remained similar apart from Qualiflyer, which saw a decrease of 1.5% and would soon disappear.

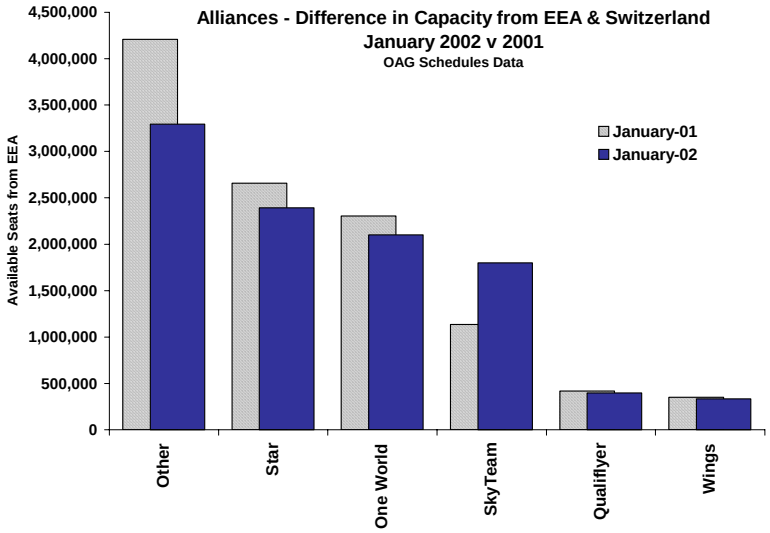


Figure 43

7.7.2 Star Alliance

The Star Alliance was founded in May 1997 by Lufthansa, United Airlines, SAS, Thai Airways and Air Canada. In 2001 the Star Alliance's 12 member airlines had a greater global reach than any of the rival alliances. By January 2002, the Star Alliance accounted for 21.9% of all EEA and Switzerland departure seats and 15.4% of frequencies.

During the year, the European Commission announced it would grant Lufthansa and Austrian a 6 year exemption from EU competition rules after the two airlines resolved concerns about reduced competition. A similar exemption was given to a joint venture agreement between Lufthansa, SAS and bmi British Midland. As part of the two exemptions, Lufthansa and Austrian agreed to make slots available on Germany-Austria routes while bmi withdrew from the London Heathrow-Frankfurt route.

Star Alliance - from EEA & Switzerland
Frequency & Capacity January 2002
OAG Schedules Data

CARRIER	Frequency	% Frequency	Capacity	% Capacity
Lufthansa	9,990	48.4%	1,091,556	45.6%
SAS	6,000	29.1%	751,419	31.4%
Bmi British Midland	1,820	8.8%	199,714	8.3%
Austrian Airline Group	2,312	11.2%	186,436	7.8%
United Airlines	175	0.8%	52,948	2.2%
Singapore Airlines	82	0.4%	30,966	1.3%
Air Canada	111	0.5%	27,192	1.1%
Thai Airways	66	0.3%	25,775	1.1%
Varig	57	0.3%	15,277	0.6%
ANA	22	0.1%	8,536	0.4%
Air New Zealand	7	0.0%	2,744	0.1%
Grand Total	20,642	100.0%	2,392,563	100.0%

Figure 44

7.7.3 Oneworld Alliance

Oneworld was founded in September 1998 by British Airways, American Airlines, Qantas and Cathay Pacific. The development of the alliance has been hampered by British Airways' and American Airlines' inability to gain anti-trust immunity on transatlantic routes.

British Airways and American Airlines reapplied for US anti-trust immunity in August 2001.However, the airlines eventually withdrew their application after it became clear that the regulatory cost (in terms of slots to be relinquished) would be too high.

In June, British Airways and Iberia notified the European Commisision of their plans to co-operate more closely by expanding code sharing agreements on South Atlantic routes

The Oneworld Alliance made up 19.2% of all EEA and Switzerland departure seats and 17.1% of frequencies in January 2002.

One World Alliance - from EEA & Switzerland
Frequency & Capacity January 2002
OAG Schedules Data

CARRIER	Frequency	% Frequency	Capacity	% Capacity
British Airways	8,389	48.1%	913,579	43.5%
Iberia	5,870	33.7%	739,925	35.2%
Finnair	1,843	10.6%	222,449	10.6%
Aer Lingus	1,057	6.1%	156,527	7.4%
American Airlines	193	1.1%	42,231	2.0%
Cathay Pacific	37	0.2%	13,077	0.6%
Qantas	28	0.2%	10,458	0.5%
Lan Chile	15	0.1%	4,035	0.2%
Grand Total	17,432	100.0%	2,102,281	100.0%

Figure 45

7.7.4 Skyteam

Skyteam is the newest alliance and was founded by Air France, Delta Air Lines and Aeromexico in June 1999. In 2001 the Skyteam alliance gained momentum, with CSA Czech Airlines joining in March 2001 and Alitalia joining in July 2001.

Skyteam Alliance - from EEA & Switzerland
Frequency & Capacity January 2002
OAG Schedules Data

CARRIER	Frequency	% Frequency	Capacity	% Capacity
Air France	10,331	65.9%	1,091,546	60.7%
Alitalia	4,881	31.1%	627,316	34.9%
Delta Air Lines	205	1.3%	45,848	2.6%
CSA Czech Airlines	235	1.5%	24,372	1.4%
Korean Air	16	0.1%	6,144	0.3%
Aeromexico	13	0.1%	2,327	0.1%
Grand Total	15,681	100.0%	1,797,553	100.0%

Figure 46

In July, Alitalia signed two memoranda of understanding agreeing to develop code sharing arrangements, link frequent flyer programmes, co-operate in cargo and passenger handling services and seek synergies in information technology. Alitalia expected to gain €100 million additional profits by 2004. Under the agreement, Air France would operate 60% of code-share flights between France and Italy and beyond.

CSA's membership of Skyteam started to have a significant impact on CSA through network co-ordination and cost savings. Prague was able to benefit by developing as a hub for Central Europe.

Air France, Alitalia and CSA filed for US anti trust immunity with Delta in Summer 2001.

By January 2002, the Skyteam alliance accounted for 16.5% of all EEA and Switzerland departure seats.

7.7.5 Wings

KLM and Northwest are long standing alliance partners, and remained the core airlines in the loosely called Wings Alliance, which also included Malaysian Airlines, Kenya Airways and Martinair. By January 2002, the Wings alliance had a 3.1% share of weekly departure seats from EEA and Switzerland, the smallest share of the five main alliances.

At the start of 2001, the alliance was virtually back to just the two core airlines. It terminated its alliance agreement with Alitalia in 2000, and more recently failed to implement an alliance with Continental after objections from the US government.

In July, Malaysian Airlines decided to join Wings instead of Oneworld following re-nationalisation and four years of financial losses. This move allowed the airline to concentrate on services within the Asia-Pacific region whilst code-sharing with KLM and Northwest.

7.7.6 Qualiflyer

Qualiflyer was launched by Swissair in March 1998 and was made up of primarily of second-tier European airlines. However, as Swissair and Sabena faced financial collapse in the final months of 2001, the alliance started to unravel.

Qualiflyer Alliance - from EEA & Switzerland
Frequency & Capacity January 2001
OAG Schedules Data

CARRIER	Frequency	% Frequency	Capacity	% Capacity
Swissair	2,793	23.6%	339,706	28.1%
Sabena	3,017	25.5%	337,020	27.8%
TAP Air Portugal	912	7.7%	124,412	10.3%
Crossair	2,041	17.3%	119,891	9.9%
AOM / Air Littoral	542	4.6%	79,693	6.6%
Air Littoral	1,032	8.7%	53,726	4.4%
THY Turkish Airlines	241	2.0%	39,203	3.2%
Air Europe	312	2.6%	38,820	3.2%
LOT	381	3.2%	34,178	2.8%
Portugalia	478	4.0%	28,782	2.4%
Volare	82	0.7%	14,760	1.2%
Grand Total	11,831	100.0%	1,210,191	100.0%

Figure 47

At the beginning of 2001, Qualiflyer made up 10.1% of all EEA and Switzerland weekly departure seats and 10.8% of frequencies. In January 2001 Qualiflyer Alliance members held 64.1% of departure seats at Zurich. At Brussels, the Qualiflyer alliance accounted for 42.3% of departure seats.

7.7.7 Alliance competition at major airports

One alliance tended to have a clear lead (in terms of capacity) at each of the major European airports. Heathrow was probably the major hub where the 2nd placed alliance was best placed, although Star still remained short of Oneworld's capacity share.

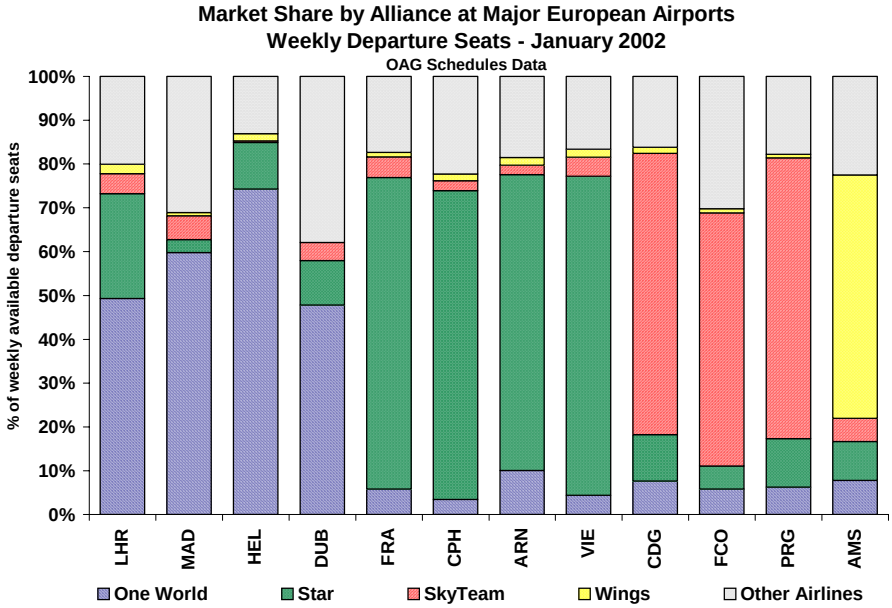


Figure 48

7.7.8 Alliance competition in major markets

From a competitive viewpoint, it is interesting to analyse the airline alliance shares in specific country to country markets.

The figure below illustrates that the Star Alliance had achieved a substantial share in most of the top markets from Germany. This is particularly the case to Austria, Scandinavia and the USA where flag carriers from these countries were members of the alliance. The Star share in all these markets was in excess of 60% and, in the case of Austria and Sweden, over 90%.

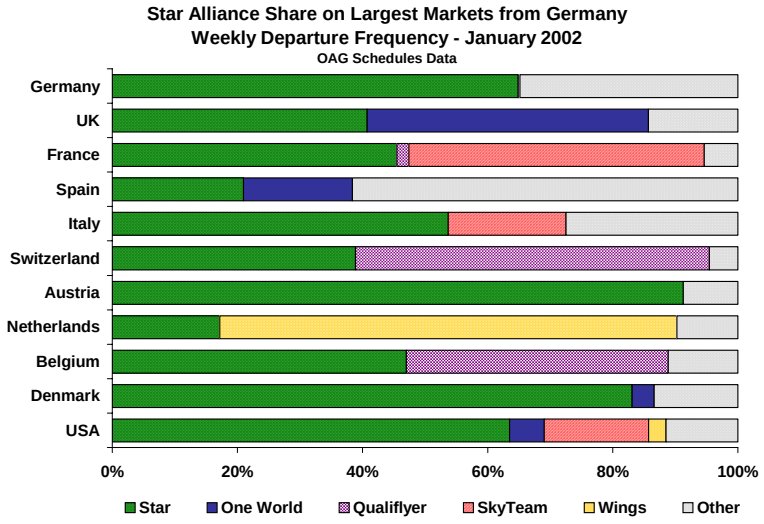


Figure 49

The Oneworld share of top markets from the United Kingdom was less pronounced than the Star alliance out of Germany. However, Oneworld had a big share of the lucrative and bilateral restricted UK-USA market.

Oneworld's relatively low share of UK-Spain capacity (considering both flag carriers are in the alliance) is explained by the presence of substantial low cost competition on these routes.

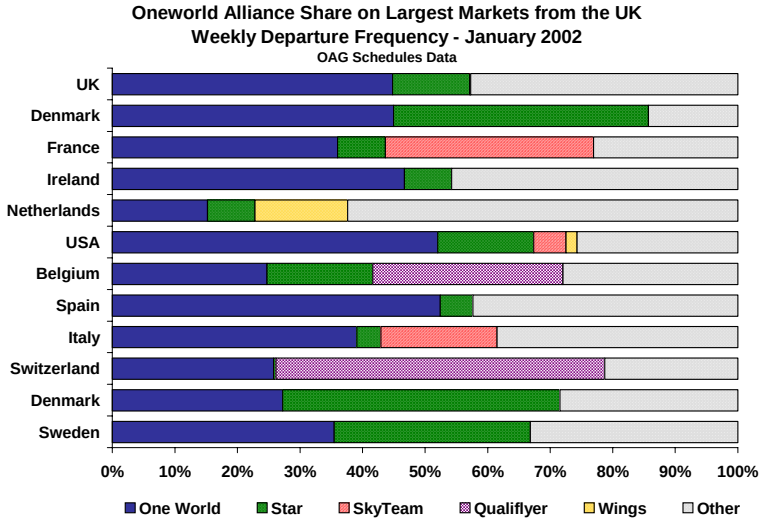


Figure 50

The Wings alliance possessed significant market share to a number of country markets from the Netherlands including Germany and the USA. KLM UK flights made up the majority of the Wings Alliance services to the UK.

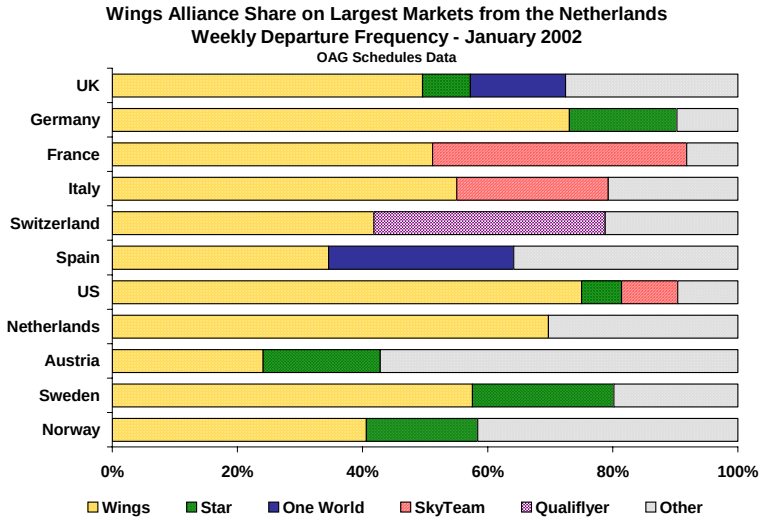


Figure 51

The Skyteam alliance, although relatively new in comparison with the other global alliances, had made considerable market share gains from France. As may be expected, capacity share between France, Italy and the USA was high.

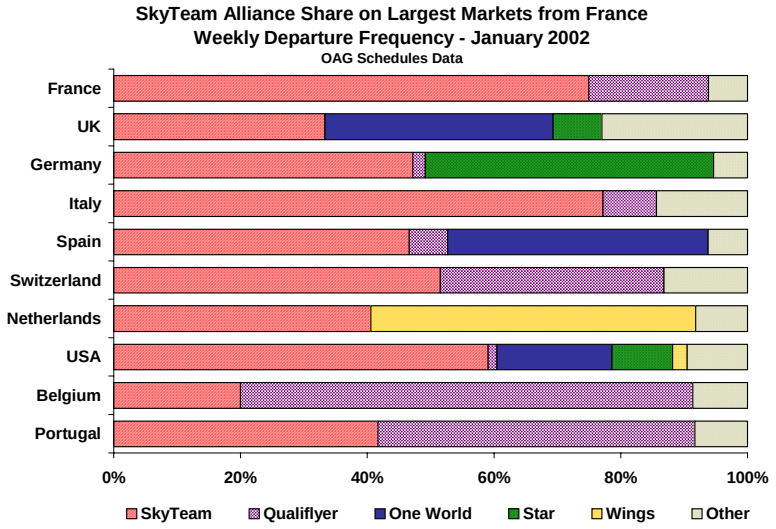


Figure 52

7.8 Regulatory Matters[10]

7.8.1 Post September 11

Economic aspects

The European Commission[11] put forward emergency measures for European air transport following the terrorist attacks of September 11th. The measures allowed for aid to compensate direct losses and changes to the application of Community competition law to take into account the exceptional circumstances.

The framework unveiled on 10 October covered the following components:

- Legislation on airport slots (temporary relaxation of rules requiring unused slots to be redistributed).
- State aid schemes.
- Insurance problems.
- Assumption of the additional costs of security.
- Compensation for the direct losses suffered in the days following the attacks.
- Agreements between airlines - Case by case examination of whether the conditions for an exemption under Article 81(3)(1) of the Treaty are met.

Loyola de Palacio, Vice-President responsible for transport and energy said "*The European Commission is aware of the serious problems facing European airlines and intends to take all appropriate measures. But it must be in a common framework. The range of options presented today will permit a concerted response by all European states, precluding any discrimination between airlines*".

Member states were subsequently authorised to provide emergency aid to airlines left without adequate insurance against the risks of terrorism and acts of war. Approval was given to member state applications on a case by case basis providing the following conditions were met:

- It must address only the withdrawal of terrorist-related risk policies by the commercial insurance market.
- It must be limited to 30 days (any extension must be notified and authorised once more).
- It must re-establish insurance cover at levels similar to those contracted by airlines before the attacks in the United States.
- It must not put beneficiary companies in a better position than they were before the attacks and must apply without discrimination to all airlines within the member state.

A ceiling of 4/365ths of an airline's annual turnover was set for compensation for direct losses incurred due to the 4 day closure of US airspace. The Commission resisted pressure to extend permissible aid beyond the limited criteria in the framework.

Loyola de Palacio commented "*The need for restructuring the sector came before September 11. We must overcome thinking about national flag carriers. We must think about European carriers. Having 14 national flag carriers is not sustainable*."

In other developments, the European Commission made various rulings on the attempts to rescue the national carriers of Belgium[12] and Switzerland. In particular, the Commission expressed concern at the aid

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[10] Source for this section is the European Commission Website and various press reports. The articles can be found at http://europa.eu.int/rapid/start/cgi/guesten.ksh by using the given reference (IP/xx/xxx).

[11] IP/01/1399 Brussels, 10 October 2001: Terrorist attacks: emergency measures for air transport

[12] IP/01/1432 , Brussels, 17 October 2001 Green light to the bridging loan for SABENA in the context of pre-bankruptcy proceedings

granted to Swissair and Crossair, and requested that, in order to avoid distortion of competition, Switzerland brought forward application of the bilateral agreement between the European Community and Switzerland.

Further detail of developments involving Sabena and Swissair is provided in Section 3.6

Security aspects

The European Commission also responded to the security issues highlighted by the September 11th attacks.

The Commission[13] stated that a collective response based on common preventative measures was required, using the EU's existing powers. On October 10, it proposed adoption and enforcement of common EU security rules for civil aviation. It intended to ensure that these rules would be effectively and uniformly implemented throughout the European Union by incorporating into Community law a number of measures which were previously no more than cooperation arrangements.

The common rules proposed were based on rules set out in Document 30 of the European Civil Aviation Conference (ECAC) and were chiefly concerned with:

- Control of access to sensitive areas of airports and aircraft.
- Control of passengers and their hand luggage.
- Control and monitoring of hold luggage.
- Control of cargo and mail.
- Training of ground staff.
- Definition of specifications for the equipment for the above controls.
- Classification of weapons and others items which it is prohibited to bring on to aircraft or into the sensitive areas of airports.

[13] IP/01/1397 Brussels, 10 October 2001 Towards new EU rules on aviation security following the attacks

7.8.2 Modification of rules on airport slot allocation

In June 2001, the European Commission[14] proposed modifications to the rules on airport slot allocation. The proposals were to modernise the existing allocation system for landing and take-off slots at EU airports with a view to enhance its efficiency.

The Commission also announced a fundamental review of the slot allocation system, with an in-depth study to be launched in the coming months, followed by a broad consultation with member states and the aviation industry.

The overall objective of the changes proposed was to ensure, prior to the completion of the fundamental review, that scarce capacity at Europe's congested airports was managed and used efficiently. In particular, no radical change was put forward (at this stage) on the system of slot allocation built around "grandfather" or "historical" slots.

The measures were designed to:

- Clarify the legal nature of slots: there was no clear guideline as to the legal nature of slots. The Commission proposed that slots should be considered as entitlements to use the airport infrastructure for the purpose of landing and take-off at specific times of the day during a scheduling season. These entitlements have to be used by airlines according to specific rules otherwise they return to the pool for reallocation, the "use-it-or-lose-it" principle.
- Efficient slot allocation through the introduction of rules and procedures. The Commission proposed clear rules on methods and procedures to better define airport capacity and provide for transparent, neutral procedures of consultation and mediation with airport users, air traffic controllers and airports.
- Encourage the efficient use of slots. The proposal further strengthened the Commission's efforts to reduce congestion at European airports through tight monitoring, sanctions against abusive practices and incentives for airlines to use their slot portfolios efficiently through slot exchanges and re-timing possibilities of slots as well as through better access to routes serving intra-Community routes and specifically the regions.
- Enhance competition between incumbent carriers and new entrants: clear allocation criteria to ensure that there was balance between incumbents and new entrants, providing that unused slots return to the pool where new entrants get first choice while at the same time confirming the world-wide practice of grandfather rights.
- Provide for a stable environment for hub and spoke networks while promoting services to the regions as well as a stronger link to inter-modal transport.
- Take account of the development of airline alliances.

In a next phase, the Commission intended to conduct an in-depth analysis of all possible options. The review would enable it to propose further measures to introduce a market mechanism for the allocation of slots, allowing for more flexibility and mobility in the use and further enhance market entry possibilities for air carriers.

[14] IP/01/876, Brussels, 20 June 2001: Commission proposes modification of rules on airport slot allocation

7.8.3 Other areas of regulation

Transatlantic Aviation Treaties and Alliance Approvals

During 2001, hearings took place before the European Court of Justice on the legal cases brought by the Commission against seven countries that had concluded bilateral "Open Skies" agreements with the United States in the field of air transport (Austria, Belgium, Denmark, Finland, Germany, Luxembourg, and Sweden). The United Kingdom was also included on the basis of their bilateral Bermuda II arrangement.

The European Commission's position was that the member states of the EU should not enter into a bilateral agreement with countries from outside the EU on an individual basis since such agreements:

- Allow foreign air carriers to enter the internal European market without having to meet the strict criteria required for gaining status as European carriers. For example, there are no guarantees that external carriers do not operate in a protected environment at home, potentially distorting competition.
- Give airlines from one member state unfair competitive advantages over airlines from other member states, in particular, by allocating air traffic rights to foreign destinations on the basis of nationality, which negates the very essence of the internal market. The nationality rules hamper competition between European airlines by limiting each airline to its national market only and prevent the European industry from consolidating into more economic international businesses.
- Given that there is a single European domestic market and that all European airlines should have equal rights to fly passengers and cargo, the Commission considers that negotiations with foreign countries cannot be negotiated by every member state and that the resulting agreements should provide all European airlines with equal rights and benefits.

The Commission acknowledged the general liberalisation objective of the bilateral agreements. However, it was concerned that by negotiating separately, the EU member states in question had given US airlines considerable access to the domestic European market without gaining rights of equivalent value for European airlines in the United States.

For example, while US carriers could fly freely from any point in the US to almost any point in the EU under this patchwork of agreements, European airlines could only fly to US destinations from their home country. Moreover, while US airlines could use their "fifth freedom" rights to fly between two member states of the EU, European airlines could not fly between different destinations within the US.

The Commission also announced its intention to broaden their action to include member states who had concluded open skies agreements with the USA since the court action was started.

In related developments, France entered into an open skies agreement with the USA. At the same time the US Department of Transport granted initial approval for anti-trust immunity to alliance partners Air France and Delta, with the exception of Atlanta-Paris and Cincinnati-Paris due to the alliance’s dominant position in these markets.

Poland and the USA also signed an open skies agreement in the middle of the year (to be implemented by 2004). Discussions continued on the long running negotiations for a US-UK open skies accord, with bmi British Midland and United Airlines submitting an anti-trust immunity application.

Single European Sky

On 10 October 2001, the European Commission[15] adopted a package of measures on air traffic management with a view to implementing the Single European Sky by the end of 2004. This will end the fragmentation of European Union airspace and therefore improve safety and the overall organisation of air traffic control.

More detail is provided in Section 6.2

Aircraft Noise

In November, the European Commission proposed new legislation to fight aircraft noise. As part of the directive, new operating restrictions on noisy aircraft, including banning them altogether, could be introduced at the worst affected airports, taking into account international rules. The directive also repealed the so-called "hushkits" Regulation, resolving a number of long standing disputes with the United States.

Commenting on the new directive, Loyola de Palacio, Vice-President in charge of Transports and Energy, said: "*This is an important piece of legislation: it is a new and forward looking approach to the control of aircraft noise in the EU. It provides long term certainty for all users of airports and for those living around them*." She explained that "*the new legislation targets action on those airports which have real problems, taking into account the concerns of people living in the neighbourhood. Above all, this measure sets clear objectives and provides a transparent process for member states to follow in achieving those objectives*."

The directive had been proposed to bring an EU wide approach to the control of aircraft noise at and around airports. The objective was to ensure that there is no overall increase, and to pave the way for a reduction in aircraft noise, after the completion of the phase out of so-called "Chapter 2(1)" noise certificated aircraft in April 2002. Where necessary, airports could require marginally compliant aircraft (i.e. those that meet the "Chapter 3" noise certification standard by a margin of 5dB (decibels) or less) to be withdrawn from service to that airport over a period of not less than 5 years.

[15] IP/01/1398,Brussels, 10 October 2001 : A single European sky in 2004: towards a more efficient and safer airspace

7.8.4 Competition rulings on individual companies

- *Lufthansa & Austrian Airlines* - In May Lufthansa and Austrian were reprimanded by the EC for their dominant position on flights between Austria and Germany. In December, the Commission announced it would grant them a 6 year exemption from EU competition rules after the two airlines resolved concerns about reduced competition. The two airlines agreed to make available up to 40% of their slots on any city pair to a new entrant unable to obtain slots through the normal channels.
- *Lufthansa / SAS / bmi British Midland* - In June, the European Commission granted a 6 year exemption to the joint venture agreement between the three carriers. As part of the deal, bmi withdrew from the London Heathrow-Frankfurt route to allay competition concerns.
- *SAS & Maersk Air* - In July, both companies were fined for implementing a secret "non-compete" clause covering a number of routes. The Competition Commissioner commented that it was a "*clear case of two airlines sharing markets illegally to the detriment of passengers*". SAS were fined €39m while Maersk received a €13m fine.
- *British Airways & KLM* – Post September 11th, the Commission cleared the way for British Airways and KLM to discuss joint scheduling of flights.
- *United Airlines & US Airways* - The EC authorised the acquisition of US Airways by United Airlines. United had pledged to make slots available in Frankfurt and Munich for competing airlines.
- *TUI / Preussag* - In August, the EC sanctioned the acquisition of tourism group TUI Belgium by Preussag Group.
- *Brussels Charleroi Airport* - The European Commission started investigations into the deal Ryanair concluded with the Walloon regional government for its operations at the airport. There was a concern that the deal could constitute hidden public subsidy.
- *Amsterdam Schiphol Airport* - The Commission ruled that the exemption from Dutch corporation tax that had been granted to the Schiphol Group should be classed as state aid and that the aid should therefore be discontinued by 1 January 2002.
- *Opodo* - In November, the EC approved the creation of Opodo, an internet travel agency set up by nine European flag carriers.
- *UK Air Traffic Control (National Air Traffic Services)* - In May, the EC authorised the public-private partnership between the Airline Group (a group of seven UK airlines) and the United Kingdom government. The Commission concluded that the airline participation would not have significant competition implications.
- *Rolls Royce* - The Commission approved a government loan of £250 million to Rolls Royce to help develop new engines.

7.9 Flight Punctuality

7.9.1 Overall 2001 Performance

The Association of European Airlines (AEA) report on departure delays amongst their members at 28 European airports. The AEA reported that in 2001 there was a slight reduction in the % of departures delayed by more than 15 minutes on intra-European services. 24.2% of all intra-European departures suffered a delay of greater than 15 minutes, compared to 25.5% in 2000.

Eurocontrol calculate similar punctuality figures. In 2001, the average departure delay was 39 minutes, with an average arrival delay of 40 minutes.

The long term delay trend was rising. 1999 saw the worst delay performance in recent years after aircraft flight paths were impacted by the Kosovo conflict.

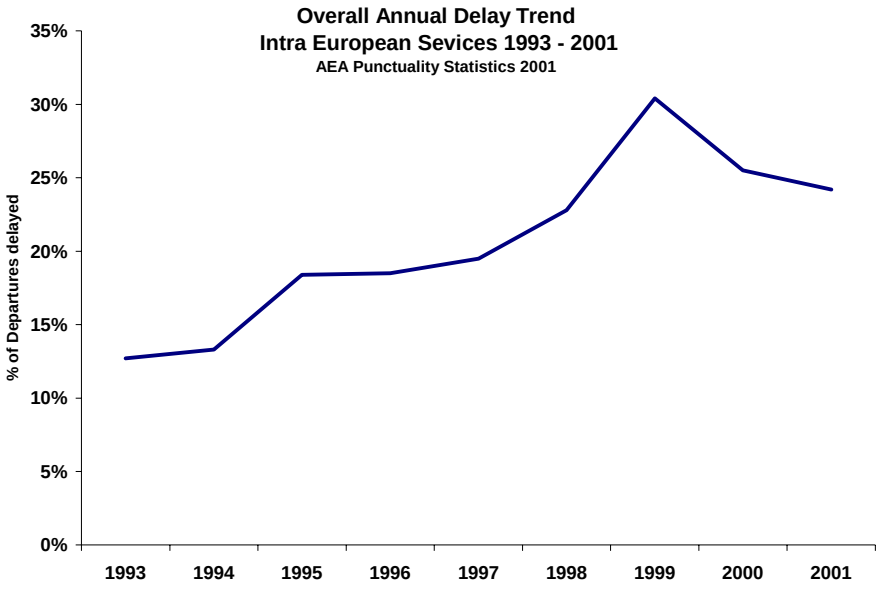

Figure 53

A key underlying reason behind the slight punctuality improvement appears to be the reduction in flights after September 11th. Until the last three months of the year, delay performance was similar to 2000. However, delays reduced markedly in the final quarter, coinciding with an 8% reduction in the number of departures.

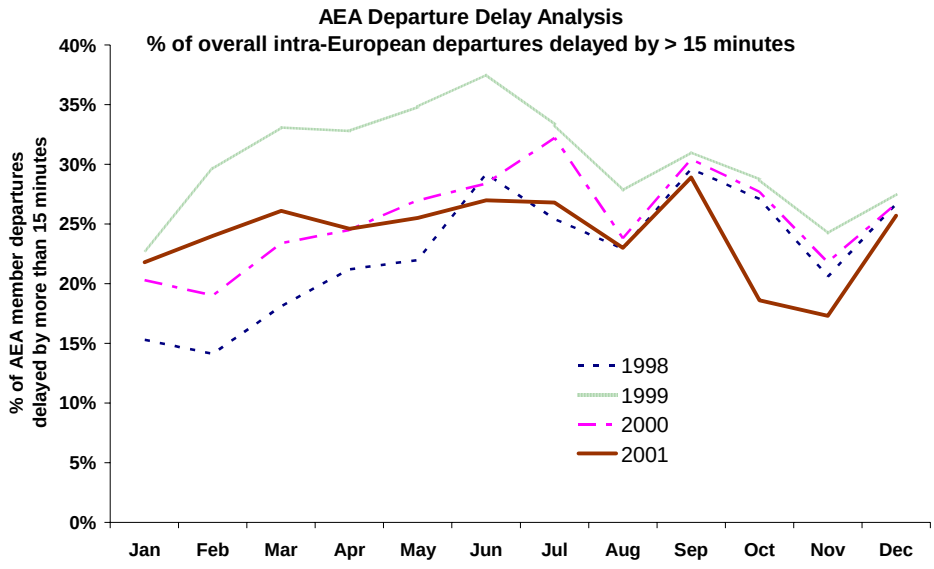

Figure 54

AEA Secretary-General Karl-Heinz Neumeister commented "*Any improvement, no matter how small, is to be welcomed, but we must remember that these figures, which remain unacceptably high by any standards, are an indicator of a problem which still needs to be addressed. Most of our delays are infrastructure-related, and in particular can be traced to Air Traffic Control. The relative improvement in October/November, with many fewer flights, merely confirms what we all know, that Europe's fragmented airspace is unable to cope satisfactorily with normal levels of traffic.*"

In contrast, delays due to security increased post September 11th, as more time was spent on screening both passengers and their baggage.

Effect of September 11th
Reasons for Delays
Eurocontrol PRR 5 & CODA

	January to August 2001	September to December 2001	Difference
Airport	15%	16%	1%
Security	4%	11%	7%
Airline	41%	42%	1%
Weather	8%	11%	3%
En-Route	32%	20%	-12%

Figure 55

7.9.2 Airport performance

AEA monitor delays experienced by their member airlines at 27 European airports.

In 2001, Oslo recorded the best punctuality statistics of the airports in the sample. In fact, the top four airports were all in Scandinavia. Frankfurt posted the best punctuality results of the major European hubs.

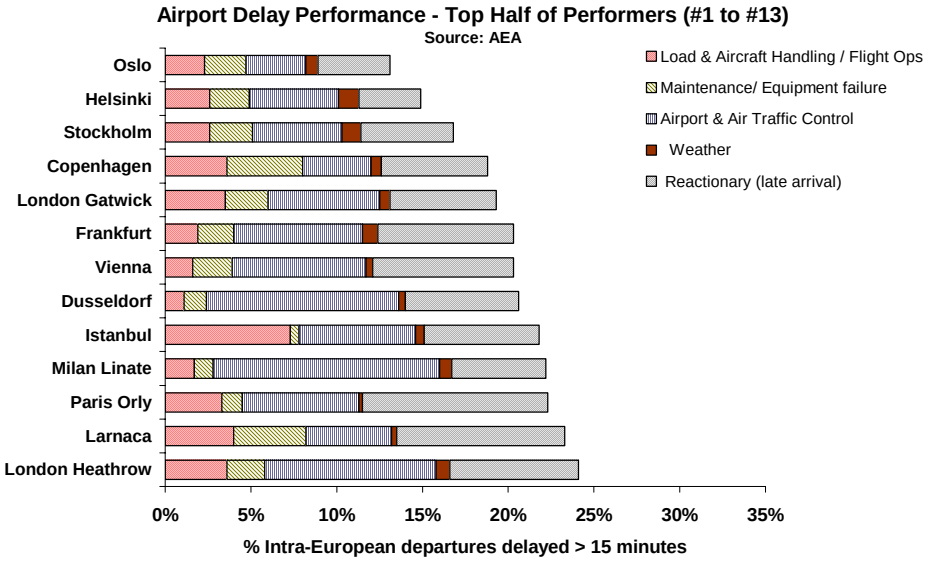

Figure 56

The worst punctuality statistics in the sample were posted by Milan Malpensa, where one-third of intra-European departures were delayed by more than 15 minutes. The average delay was 44.3 minutes on departure and 39.5 minutes on arrival. The majority of airlines experienced at least 30% delays to their flights. The airport also had the worst punctuality record in 2000.

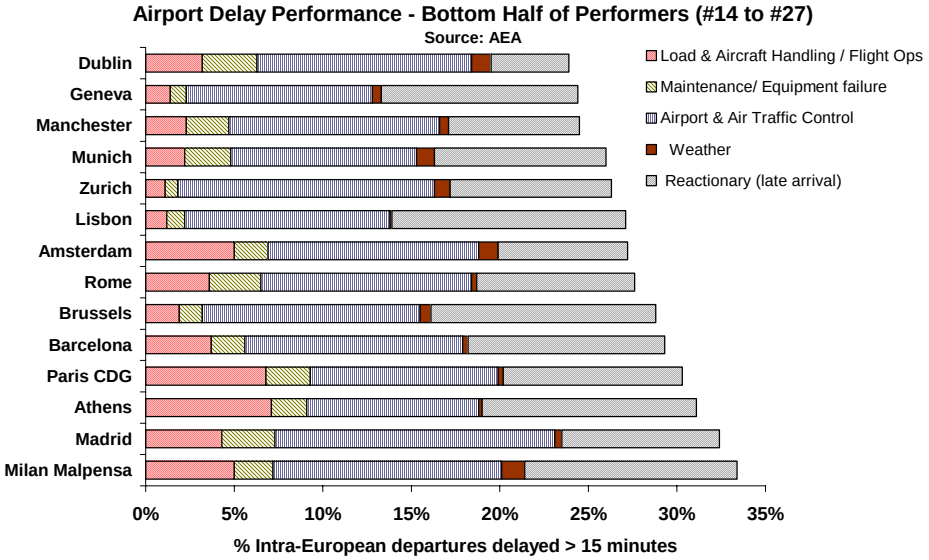

Figure 57

The highest average delays were experienced at Larnaca with 86 minutes for arrivals and 59 minutes for departures. Athens fared little better with average arrival delays of 77 minutes and departure delays of 46 minutes. All the other major airports recorded average delays between 30 and 40 minutes.

The highest proportion of delays caused by airport and air traffic control was at Zurich where 14.5% of departures were delayed (over half of all delays). This is almost certainly related to the airspace issues involving approaches over Germany.

7.9.3 Airline performance

From the AEA figures, it is difficult to accurately calculate overall punctuality performance for airlines. In any case, an airline's punctuality performance will vary depending on the level of congestion at the main airports they serve.

However, the punctuality performance of European majors has been compared at leading European airports. The table below benchmarks each major airline's punctuality against the average punctuality performance – at each leading airport.

SAS were the only airline to out perform the average at each of the leading airports analysed. At Amsterdam and Paris, SAS intra-European flights were delayed only on 17% and 20% of occasions respectively. This compared to the airport's average % of departures delays of 27% (AMS) and 30% (CDG).

Lufthansa and British Airways both out performed their peers at 5 of the 7 airports analysed (Amsterdam and Stockholm were the exceptions for Lufthansa, Frankfurt and Rome for BA).

At the other end of the scale, Air France and Iberia produced above average punctuality performance at only 2 airports. These two airlines were also the only ones to under perform at their main base.

Delay Performance of European Majors (compared to AEA average) at Leading European Airports
Airline % departures delayed minus % AEA average departures delayed

	Amsterdam	Frankfurt	London Heathrow	Madrid	Paris CDG	Rome	Stockholm
KLM	-2.7%	0.5%	0.0%	5.3%	-10.6%	0.9%	-1.7%
Lufthansa	9.3%	-0.3%	-0.3%	-5.1%	-9.7%	-2.2%	2.1%
British Airways	-1.8%	3.1%	-2.8%	-6.8%	-8.0%	5.6%	-2.5%
Iberia	19.8%	14.5%	-0.5%	2.2%	3.8%	-0.3%	12.4%
Air France	8.7%	-9.3%	14.8%	-1.0%	3.5%	3.6%	11.8%
Alitalia	10.3%	-2.7%	11.2%	-7.5%	-8.1%	-1.6%	12.6%
SAS	-10.0%	-1.7%	-5.9%	-4.2%	-10.7%	-1.1%	-1.4%

Source: AEA, for intra-European flights. Delay is defined as departure delay more than 15 minutes

Figure 58

7.10 Safety issues

Crashes

In 2001, the two most common type of accidents reported worldwide resulted from CFIT (Controlled Flight Into Terrain) and Runway Incursions.

The two most prominent 2001 examples in Europe were the SAS flight SK 686 at Milan Linate and the Crossair – RJ100 near Zurich. As a result, proposals were tabled to increase the safety equipment on the aircraft - principally TAWS (Terrain Awareness Warning System).

Also, in July 2001 a joint runway safety initiative was launched by GASR, JAA, ICAO and Eurocontrol to investigate specific runway safety issues and to identify preventative actions.

Wiring Problems on IFE systems

It emerged in 2001 that the Swiss flight 111 crash in 1999 was associated with a problem with the wiring of the in-flight entertainment system. This had particular implications for inspections and overall maintenance procedures.