

Impact of Deregulation

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Pre-Deregulation in the US

- Carriers were not able to compete in terms of price
- Service quality and frequency were the main means by which they competed
- Load factors were low and unit costs high as a result
- A study by Jordan (*Airline Regulation in America, 1970*) of inter-state trunk airline fares in 1965 showed that *if there had been no regulation these would have been 32 – 47% lower*

Airline Competition in Major US City Pairs (1970)

Number of competitors*

Number of city-pairs

| | |
|--------------|-----------|
| 1 | 4 |
| 2 | 90 |
| 3 | 38 |
| >3 | 3 |

Source: US Dept of Transportation, "Top City Pairs", 1970
(*at least 10% market share)

US Trunk Airlines Pre-Deregulation (c. 1970)

American

Braniff - *bankrupt in 1981 and ceased operating*

Continental - *bankrupt in 1983, but re-established*

Delta – *bankrupt in 2005, exited Chapter 11 in 2007*

Eastern - *bankrupt in 1989 and ceased operating*

National - *acquired by Pan Am in 1979*

Northeast - *acquired by Delta in 1971*

Northwest - *bankrupt 2005, exited Chapter 11 in 2007*

TWA - *acquired by American in 2001*

United - *bankrupt in 2002, exited Chapter 11 in 2006*

Western - *merged with Delta in 1986*

US Deregulation

- US interstate markets tightly regulated from 1940
- US Domestic Market fully liberalised in 1978
- US international markets tightly regulated since 1945
- Intra-European Market gradually liberalised 1987-1997

Forms of Regulation

| | <i>Domestic US</i> | <i>Intra-Europe</i> |
|---------------------|--------------------|---------------------|
| Fares | ✓ | ✓ |
| Capacity | x | ✓ |
| Market Entry | ✓ | ✓ |

Response to Competition in the US

- **Realigning route networks – linear to *hub and spoke***
- **Interline to Online connections**
- **Franchising of feeder services**
- **Change in methods of distribution**
- **CRS development and exploitation**
- **Frequent flier programs**

Outcome of US Deregulation

- **Lower fares**
- **Increase in market concentration**
- **Poor profitability**
- **Entry of low cost no-frills airlines**
- **Use of Chapter 11 bankruptcy protection**

European Liberalisation

Liberalisation an on-going evolutionary process

Impact of Tight Economic Regulation

Breaking the Mould:

~ **affinity group charters**

~ **inclusive tours**

Changing Market Conditions

Key Differentiating Features

- Europe comprises over 30 autonomous states each with its own language, culture and administrative procedures. (80% of airline trips are international.)
- Around 20% of intra-European demand (RPKs) is carried on non-scheduled (charter) services. (Most of this traffic consists of inclusive tour holidaymakers travelling from Northern Europe to Mediterranean resorts.)
- Hub and Spoke Systems already in existence, but not exploited.
- Flag carriers were nearly all state-owned. (Very few independently owned airlines operated scheduled services.)

European Flag Carriers

| | % State Owned | Airline Equity Holder % |
|-------------------------|----------------------|--------------------------------|
| Aer Lingus | 28 | |
| Air France - KLM | 19 | |
| Alitalia | 50 | AF 2 |
| Austrian | 40 | |
| British Airways | 0 | |
| Finnair | 58 | |
| Iberia | 0 | BA 10 |
| Lufthansa | 0 | |
| Luxair | 23 | LH 13 |
| Olympic | 100 | |
| SAS | 50 | |
| TAP | 100 | |

The European Approach

Stage 1 **Bilateral Harmonisation**

Stage 2 **Bilateral Liberalisation**

Stage 3 **Multilateralism**

Key Underlying Objective:

Achieving a Common European Market

Outcomes of European Liberalisation

- Acquisition of local *potential* competitors
- Acquisition of carriers based in other EU states
- Franchising of feeder airlines
- Outsourcing
- Emergence of low cost “no-frills” carriers (e.g. Ryanair, easyJet, Germanwings, Norwegian)

Impact of Deregulation in the French Domestic Market

Paris (Orly) - Toulouse November 1994

| Depart | Aircraft | Seats |
|---------------|-----------------|--------------|
| 06.50 | A330 | 412 |
| 08.15 | A320 | 172 |
| 09.10 | A330 | 412 |
| 11.30 | A300 | 314 |
| 13.15 | A320 | 172 |
| 14.25 | A330 | 412 |
| 15.30 | A300 | 314 |
| 16.20 | A320 | 172 |
| 17.20 | A330 | 412 |
| 19.15 | A300 | 314 |
| 21.05 | A330 | 412 |
| 21.55 | A320 | 172 |

Paris (Orly) - Toulouse November 1995

| <i>Air Inter</i> | | <i>Air Liberté</i> | | <i>Euralair</i> | | <i>TAT</i> | |
|------------------|-------------|--------------------|-------------|-----------------|-------------|--------------|-------------|
| <i>Dept</i> | <i>A/c</i> | <i>Dept</i> | <i>A/c</i> | <i>Dept</i> | <i>A/c</i> | <i>Dept</i> | <i>A/c</i> |
| <i>06.10</i> | <i>A320</i> | <i>06.05</i> | <i>MD83</i> | <i>07.30</i> | <i>B732</i> | <i>06.05</i> | <i>F100</i> |
| <i>07.05</i> | <i>A330</i> | <i>07.55</i> | <i>A310</i> | <i>09.45</i> | <i>B732</i> | <i>08.30</i> | <i>F100</i> |
| <i>08.15</i> | <i>F100</i> | <i>09.05</i> | <i>A300</i> | <i>17.20</i> | <i>B732</i> | <i>11.15</i> | <i>F100</i> |
| <i>09.05</i> | <i>A321</i> | <i>12.25</i> | <i>A310</i> | <i>20.35</i> | <i>B732</i> | <i>16.10</i> | <i>F100</i> |
| <i>10.40</i> | <i>A320</i> | <i>15.05</i> | <i>MD83</i> | | | <i>18.45</i> | <i>F100</i> |
| <i>12.05</i> | <i>A320</i> | <i>17.00</i> | <i>A310</i> | | | <i>20.00</i> | <i>F100</i> |
| <i>13.25</i> | <i>A321</i> | <i>19.45</i> | <i>A300</i> | | | | |
| <i>15.15</i> | <i>A321</i> | | | | | | |
| <i>17.00</i> | <i>A320</i> | <i>18.15</i> | <i>A300</i> | <i>20.15</i> | <i>A320</i> | | |
| <i>17.50</i> | <i>A320</i> | <i>19.15</i> | <i>A321</i> | <i>21.10</i> | <i>A330</i> | | |

Impact of Competition on Paris (Orly) - Toulouse

| | October 1994 | October 1996 | % change |
|------------------|--------------|--------------|----------|
| Daily Frequency | 13 | 32 | 246 |
| Daily Seats | 3690 | 5326 | 44 |
| Seats per flight | 284 | 166 | - 42 |

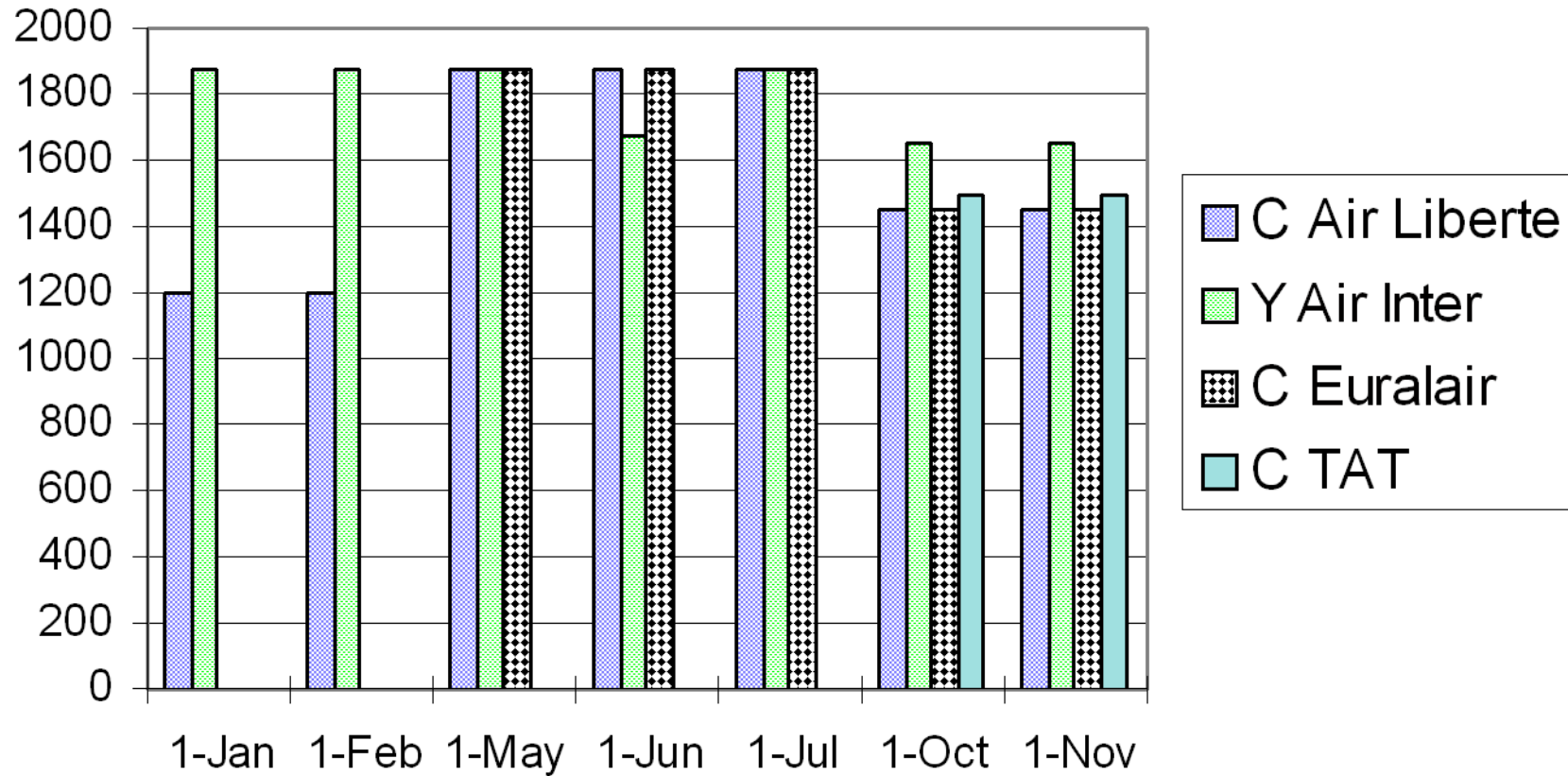
Incumbent response in France to deregulation

- Increase frequency
- Downsize aircraft
- Match new entrant discount fares
- Maintain single class
- Maintain high density seating
- Maintain minimal in-flight service

Air Inter Fleet March 1994

| Aircraft type | Number in fleet | Seating capacity |
|----------------------|------------------------|-------------------------|
| Mercure | 8 | 156 |
| Airbus 320 | 35 | 172 |
| Airbus 300 | 19 | 314 |
| Airbus 330 | 3 | 412 |
| <i>On order</i> | | |
| Airbus 319 | 9 | 142 |
| Airbus 321 | 7 | 207 |
| Airbus 330 | 12 | 412 |

PARIS - TOULOUSE 1995 RETURN FARES



Paris (Orly) - Toulouse May 1998

Air France

| Depart | Aircraft |
|--------|----------|
| 06.30 | A320 |
| 07.00 | A320 |
| 07.30 | B733 |
| 08.00 | A319 |
| 08.30 | A319 |
| 09.00 | A319 |
| 09.30 | A320 |
| 10.00 | B733 |
| 11.00 | B733 |
| 11.30 | A319 |
| 12.00 | A319 |

Air Liberté

| Depart | Aircraft |
|-------------------|-------------------|
| 07.10 | MD83 |
| 07.50 | F100 |
| 09.20 | MD83 |
| 11.10 | F100/MD83 |
| 12.10 | F100/MD83 |
| <i>Seats</i> | |
| <i>A320 (172)</i> | <i>F100 (105)</i> |
| <i>A319 (142)</i> | <i>MD83 (159)</i> |
| <i>B733 (141)</i> | |

Paris (Orly) - Toulouse October 2007

- ◆ **Air France – every 30 minutes in peak hours,
hourly at off-peak times**

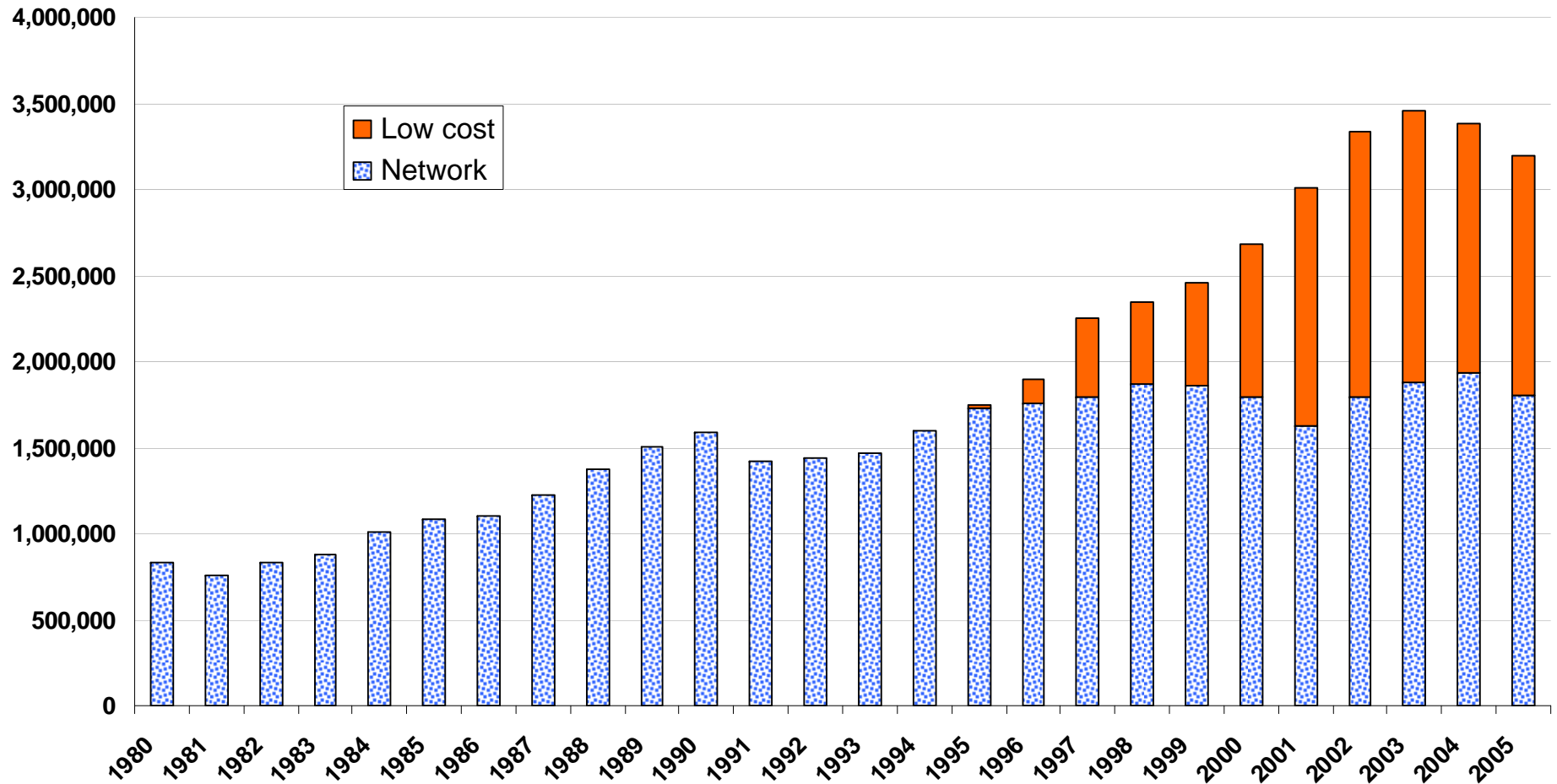
- ◆ **easyJet – 4 daily flights**

UK Domestic Trunk Routes

- ✈ **No-frills carriers have had a major impact on UK domestic air routes, with around 50% of passengers travelling within the UK on such services (up from 37% in February 2003 and 22% in February 2001)**
- ✈ **London – Glasgow is one of the UK’s busiest domestic city pairs, with services provided from four of the capital’s airports**
- ✈ **Of the 3.2 million journeys undertaken in 2005, some 50% were on flights operated by low cost airlines**

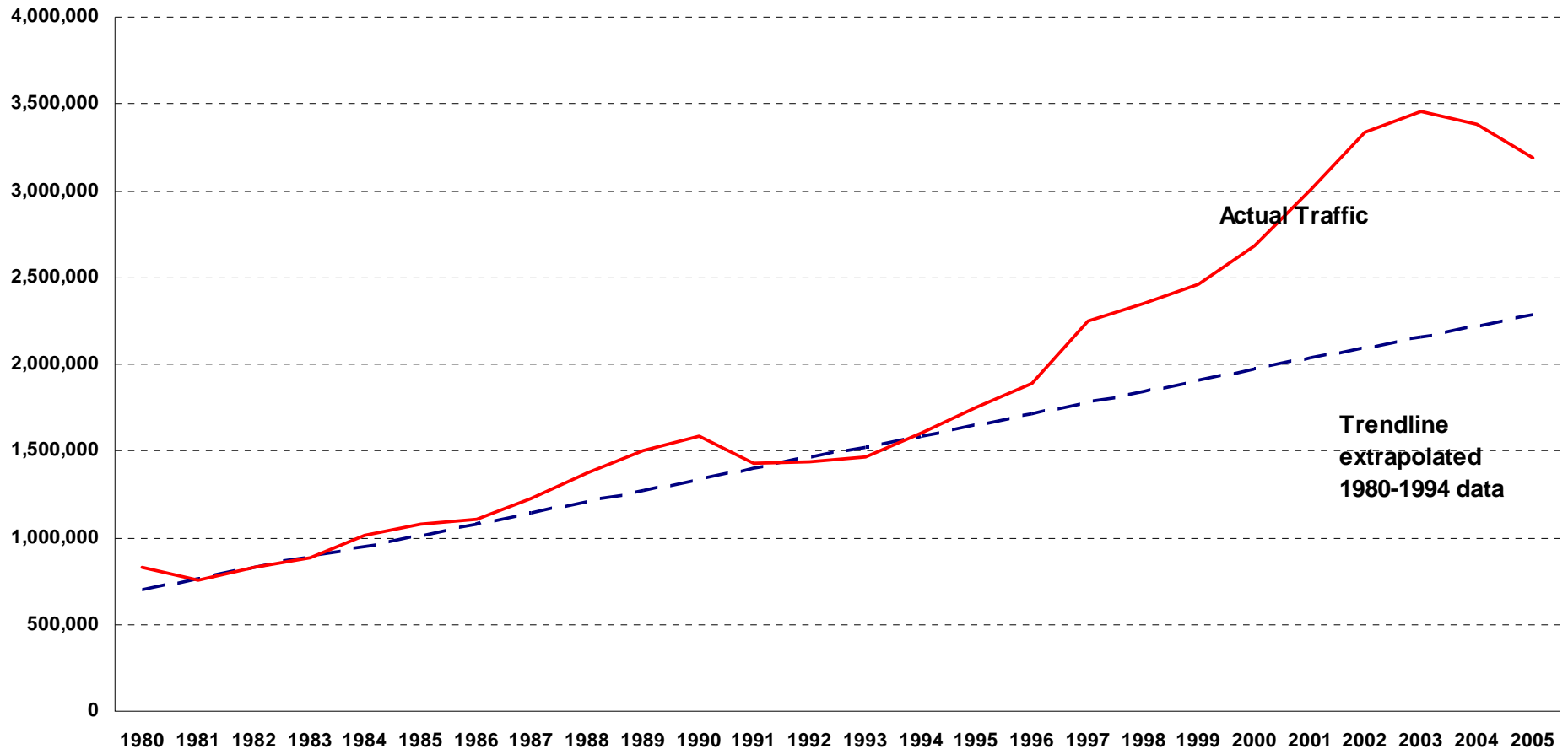
Annual passenger traffic 1980 - 2005

London - Glasgow



Traffic generation on London-Glasgow

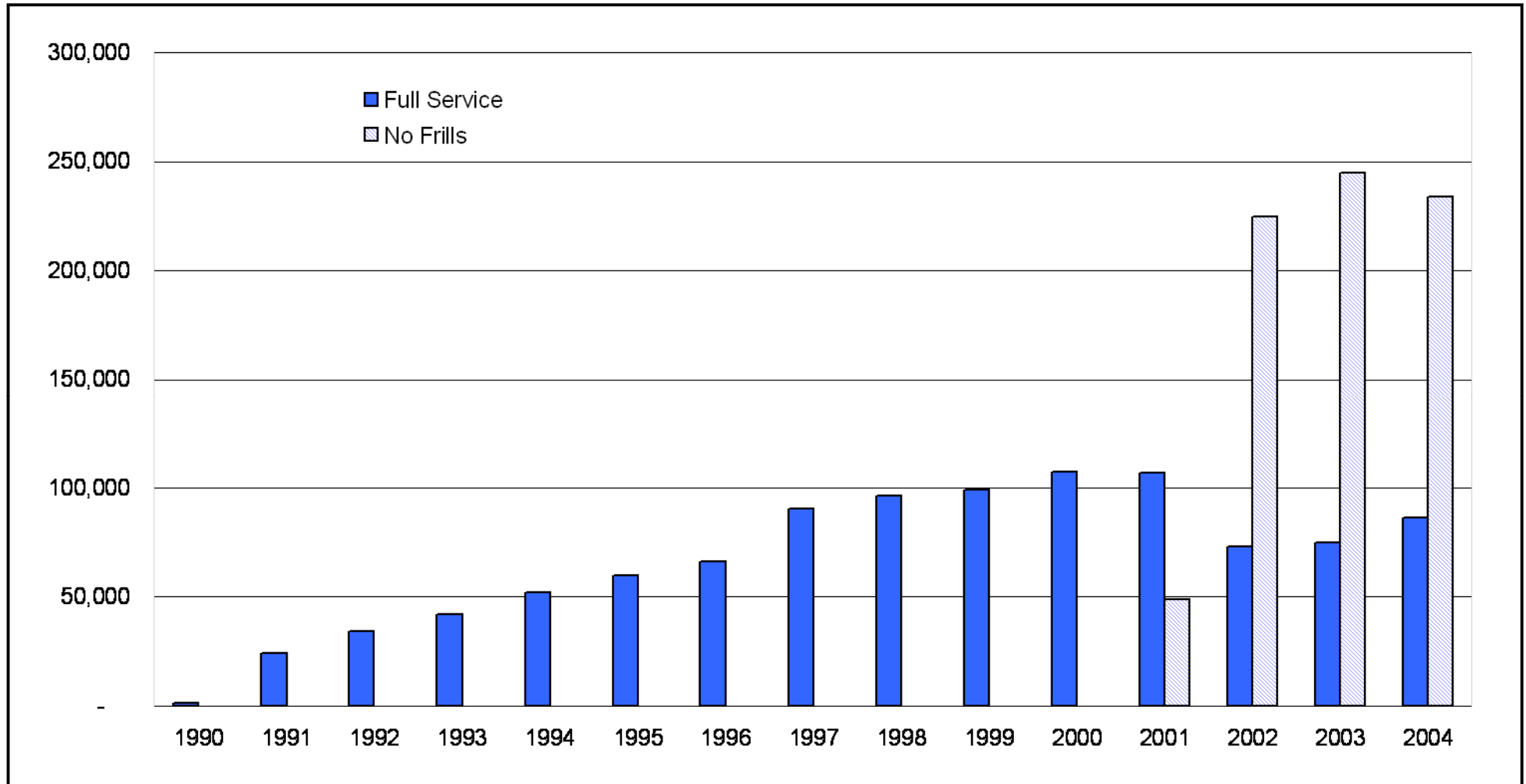
London - Glasgow



No frills traffic at UK Regional Airports

- **Since 1999 UK regional airports have attracted the attentions of low cost operators**
- **Go, for example, began operations between Bristol and Edinburgh in September 2001, producing an even more dramatic increase in traffic volumes than that experienced on London-Glasgow**
- **Passenger journeys nearly trebled from 107,000 in 2000 to 324,000 in 2003 (329,745 in 2005)**

Bristol – Edinburgh traffic 1996-2004



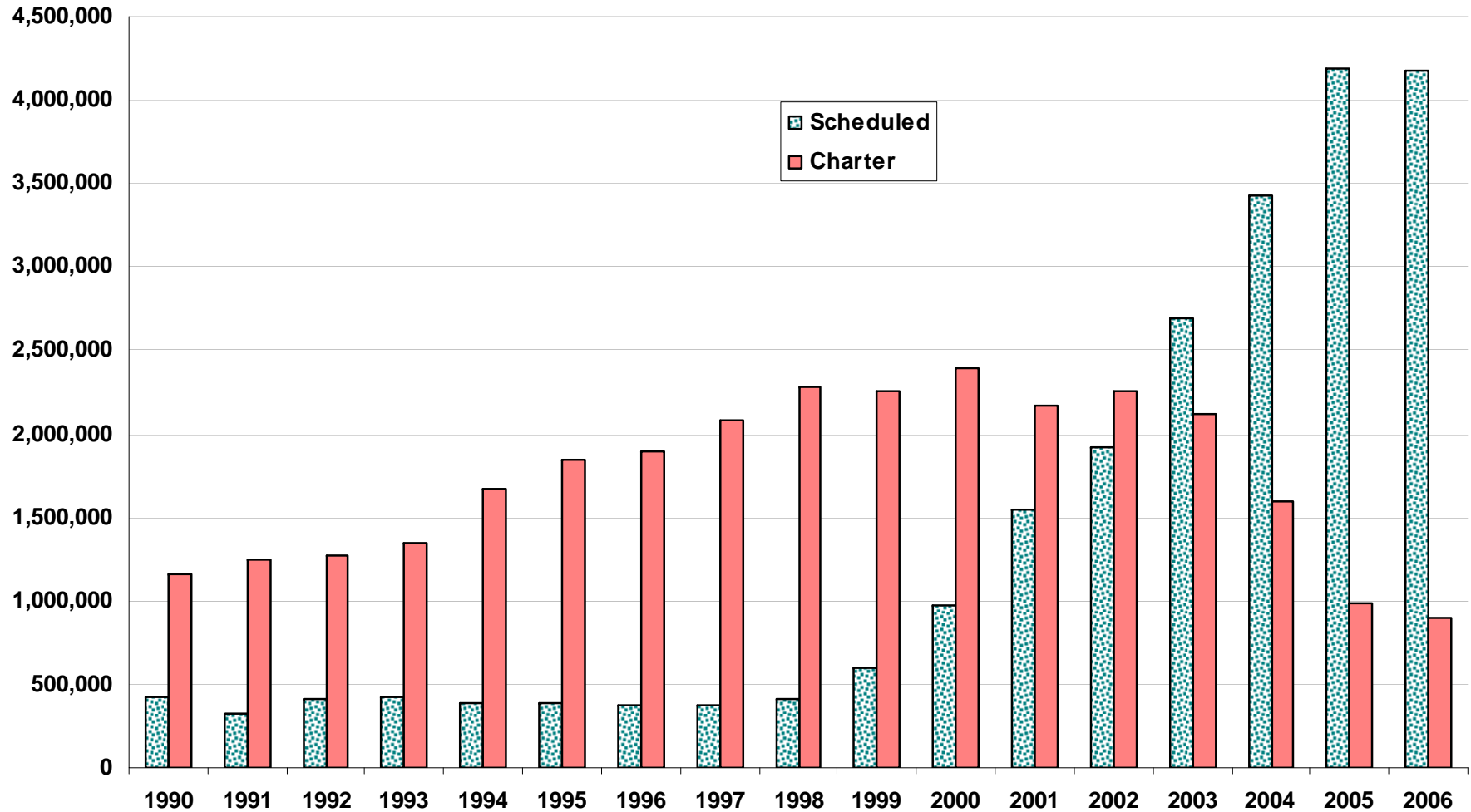
No frills impact on Bristol - Edinburgh

- Go's traffic share during the first quarter of 2003 was a staggering 82%
- Despite this dominant position of the low cost operator (easyJet) with its three daily rotations, BA Citiexpress continued to provide five services each weekday using Embraer 145 regional jets until March 2007
- It is worth noting that the full service provider experienced a drop of 31.5% in its passenger traffic on the route in 2002 compared to the previous year

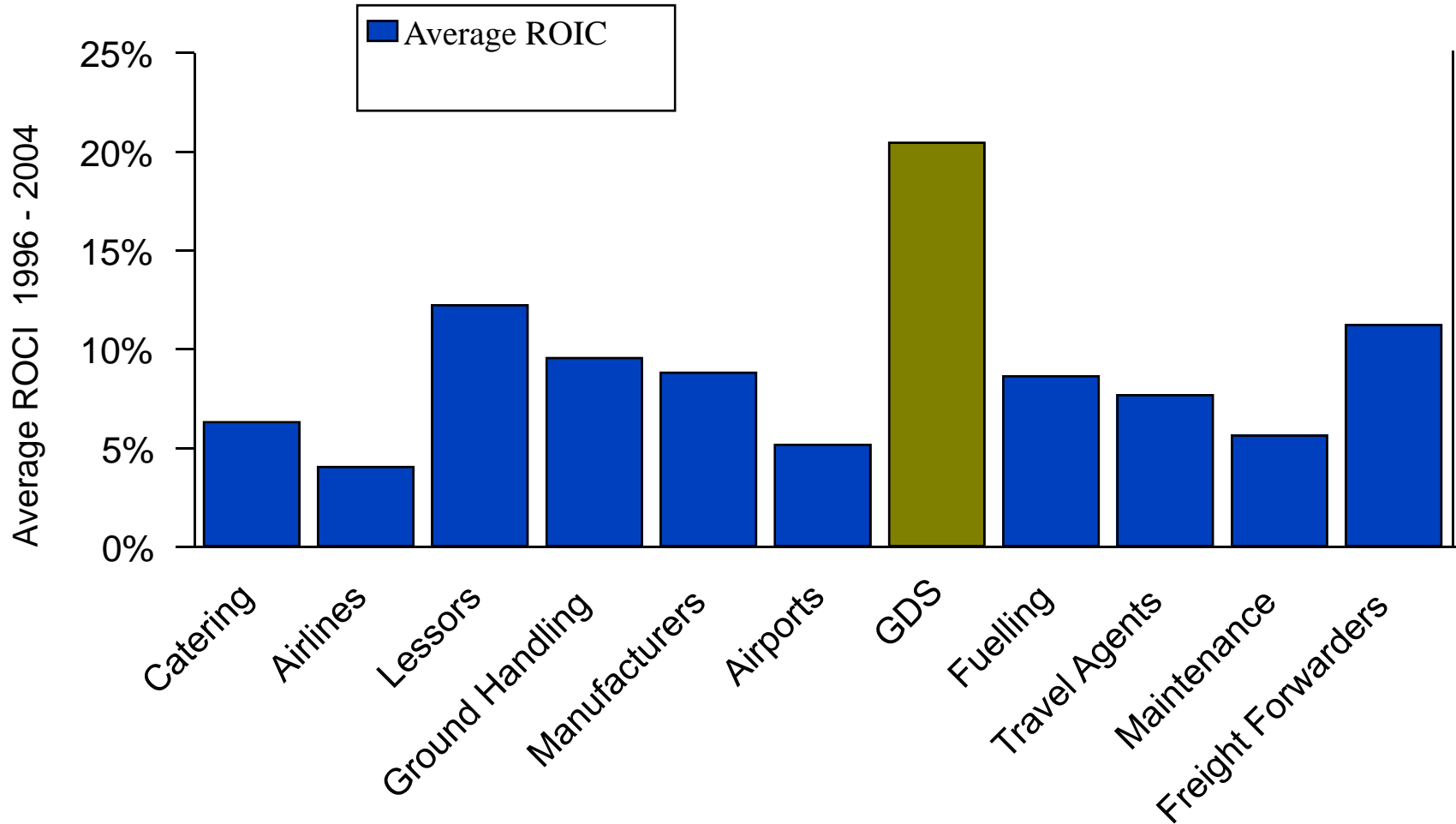
UK Intra-European Scheduled Routes

- **54% of passengers are now travelling between the UK and EEA countries on the services of no-frills carriers**
- **UK – Malaga routes provide a good example of the impact that low cost “no-frills” carriers have had on conventional network airlines and charter companies**

UK – Malaga Passenger Traffic



Industry Performance Comparisons



Source: Value Chain Profitability (June 2006), IATA

Financial Margins by Regions in 2004

| Region | Operating Margin |
|-------------------|------------------|
| EU ¹ | 2.5% |
| US ² | (1.0%) |
| Asia ³ | 6.0% |

1 20 network carriers (1.5%), 3 regional airlines (-4.0%), 4 LCCs (10.8%) and 6 charter airlines (9.6%)

2 Air Transport Association members

3 Association of Asia Pacific Airlines members

Sir Richard Branson is said to have admitted when asked how to become a millionaire:

“Start as a billionaire and buy an airline.”

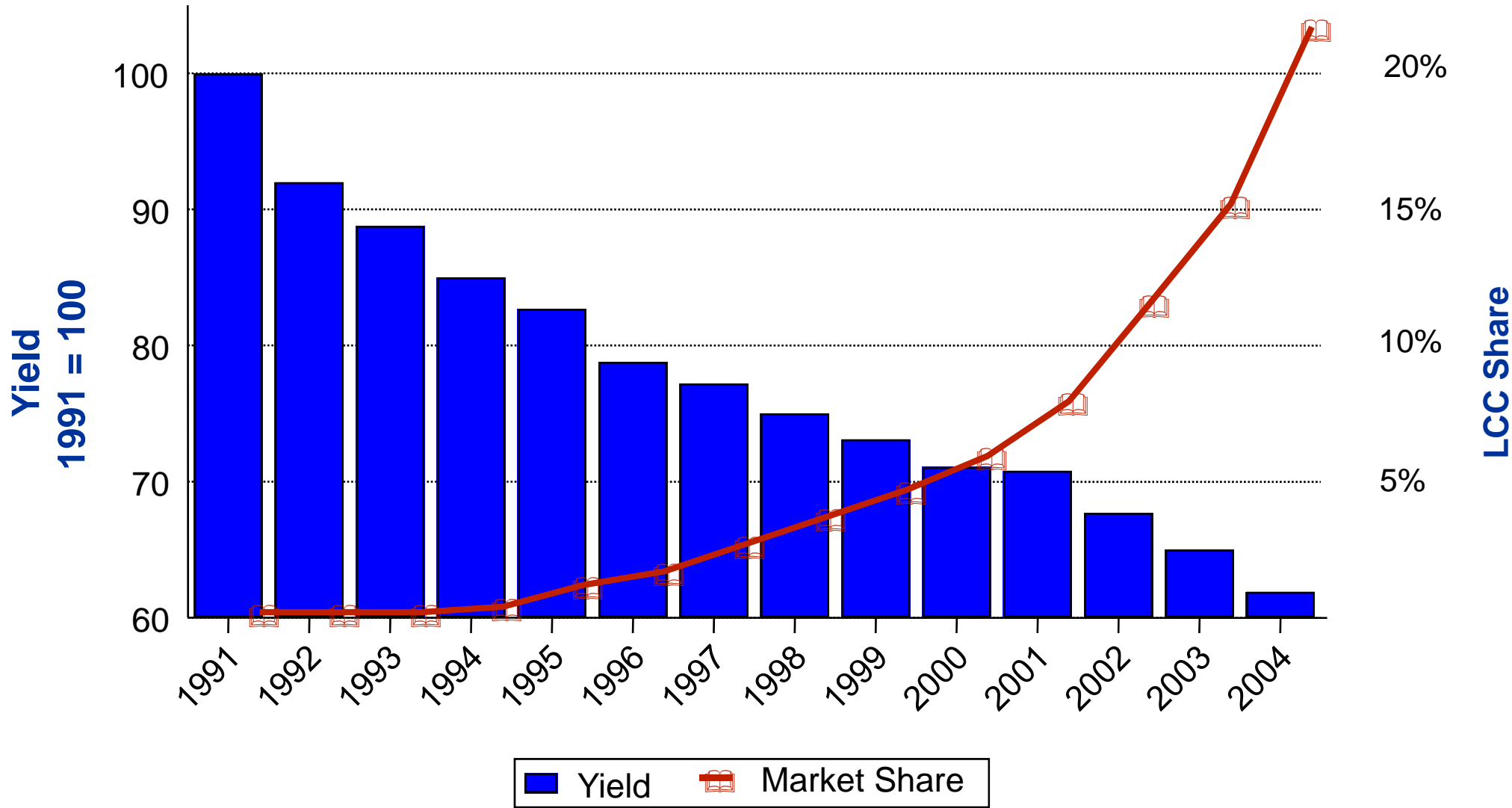
Poor Financial Performance partly due to external factors

- Economic downturn
- Sept 11th 2001 terrorist attacks
- Iraq war
- SARS
- Increasing oil prices

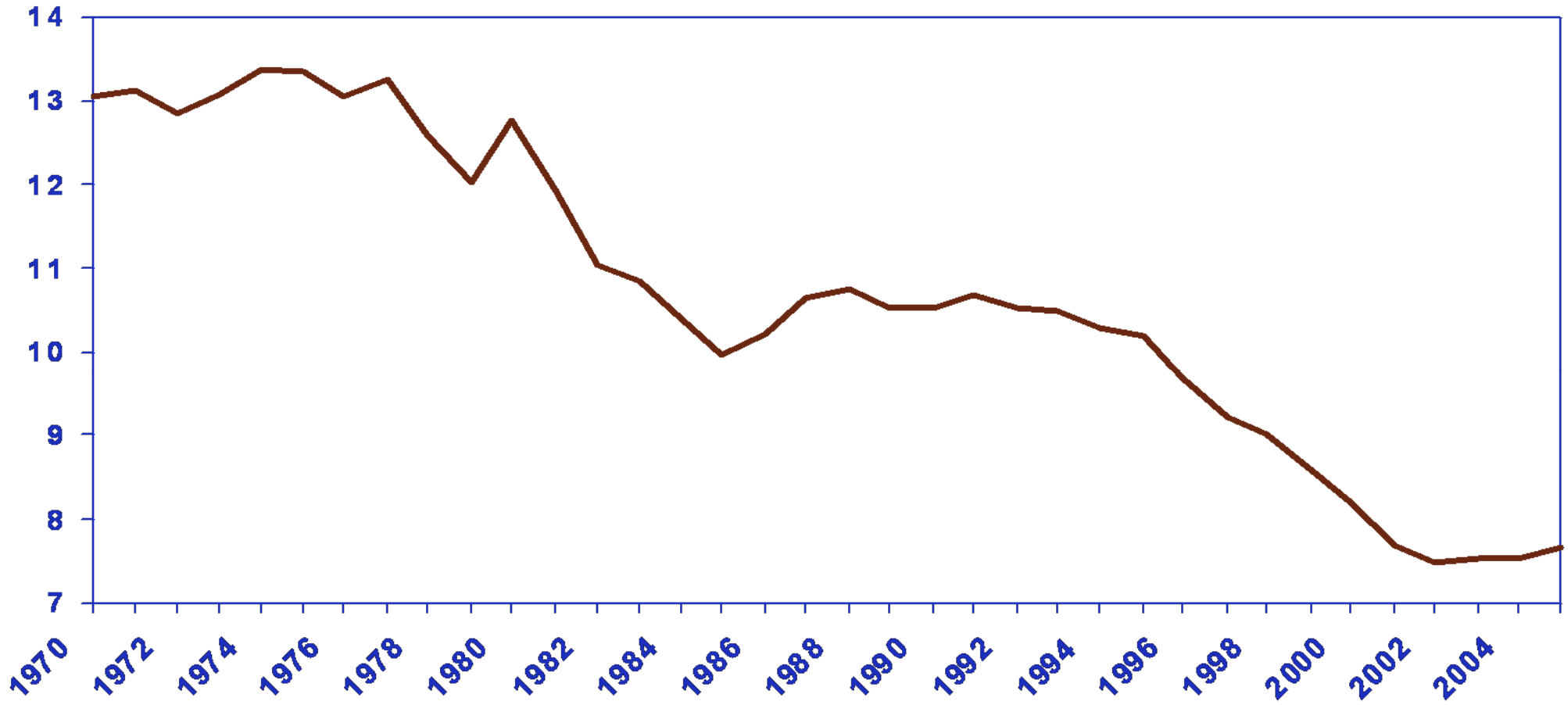
Poor Financial Performance partly due to internal factors

- **Overly complex operations**
- **Inability to modify business model quickly**
- **Obsession with market share and load factor at the expense of profit**
- **Excess capacity**
- **Hub inefficiency and congestion**
- **Ignoring low cost carriers as viable competitors**
- **Ignoring the changes in customers' purchasing behaviour**

Decline in European Short-Haul Yields verses LCC Share

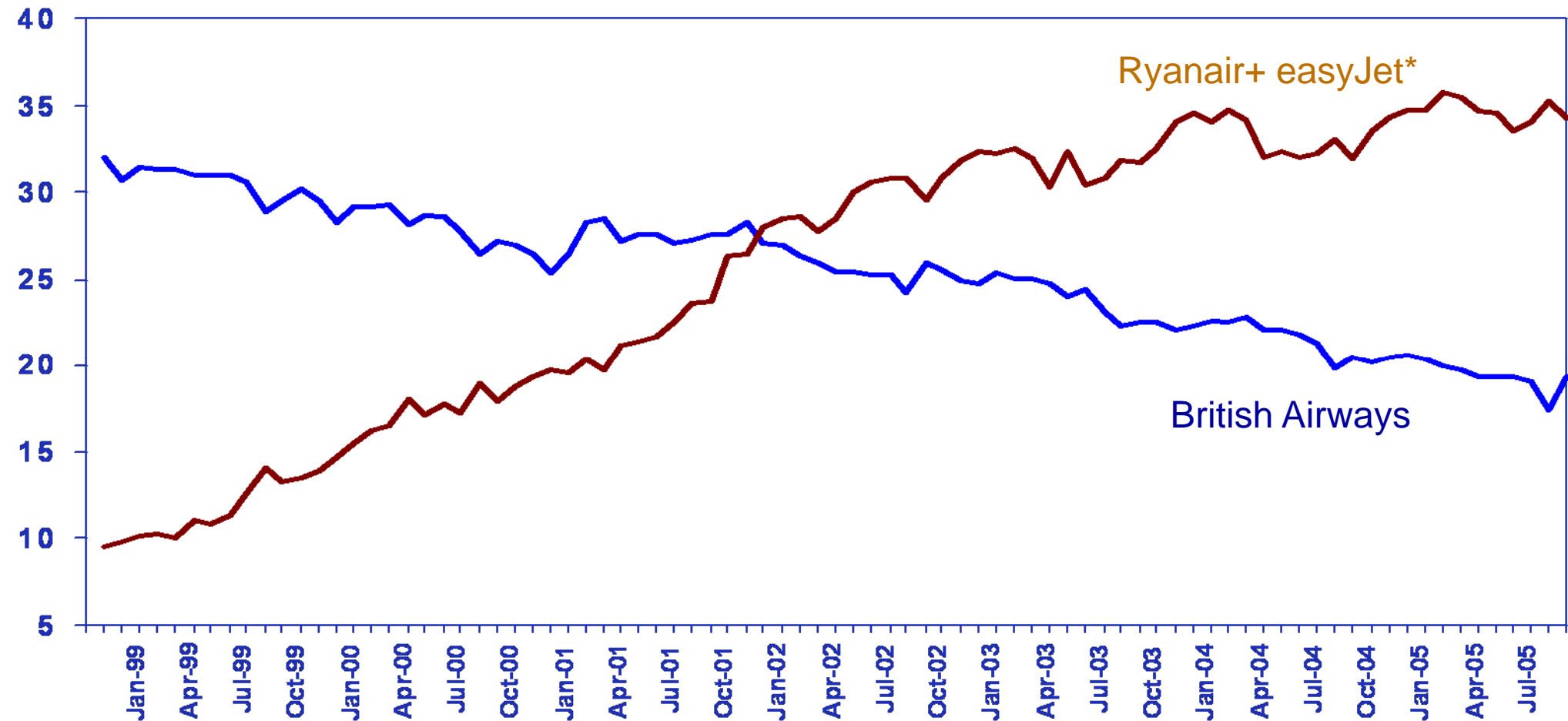


Average Real Yield Falling



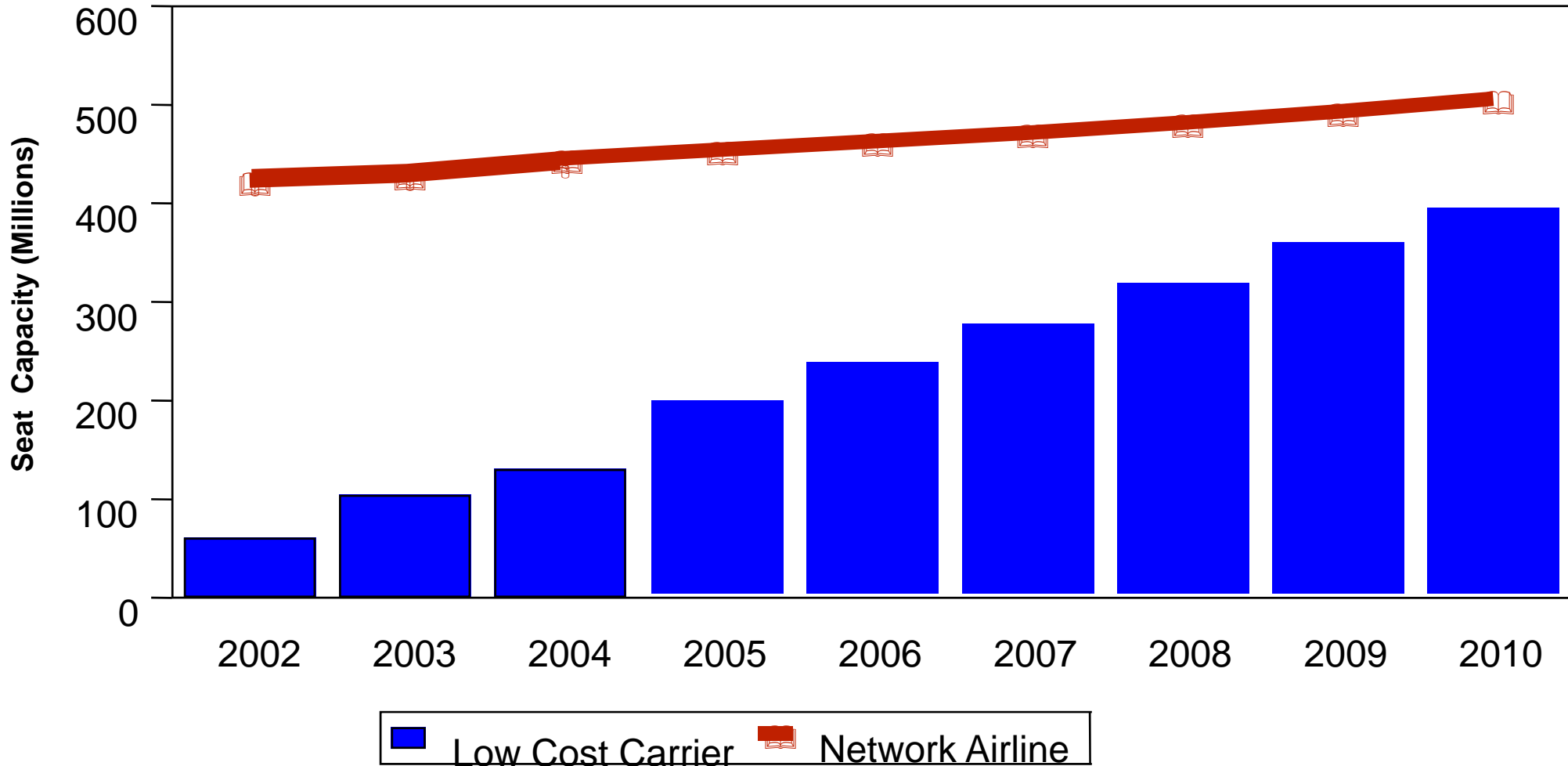
US cents per RPK, world scheduled airlines, deflated by US CPI, 1990=100 Sources: ICAO, IATA

% of passengers - UK short haul scheduled flights



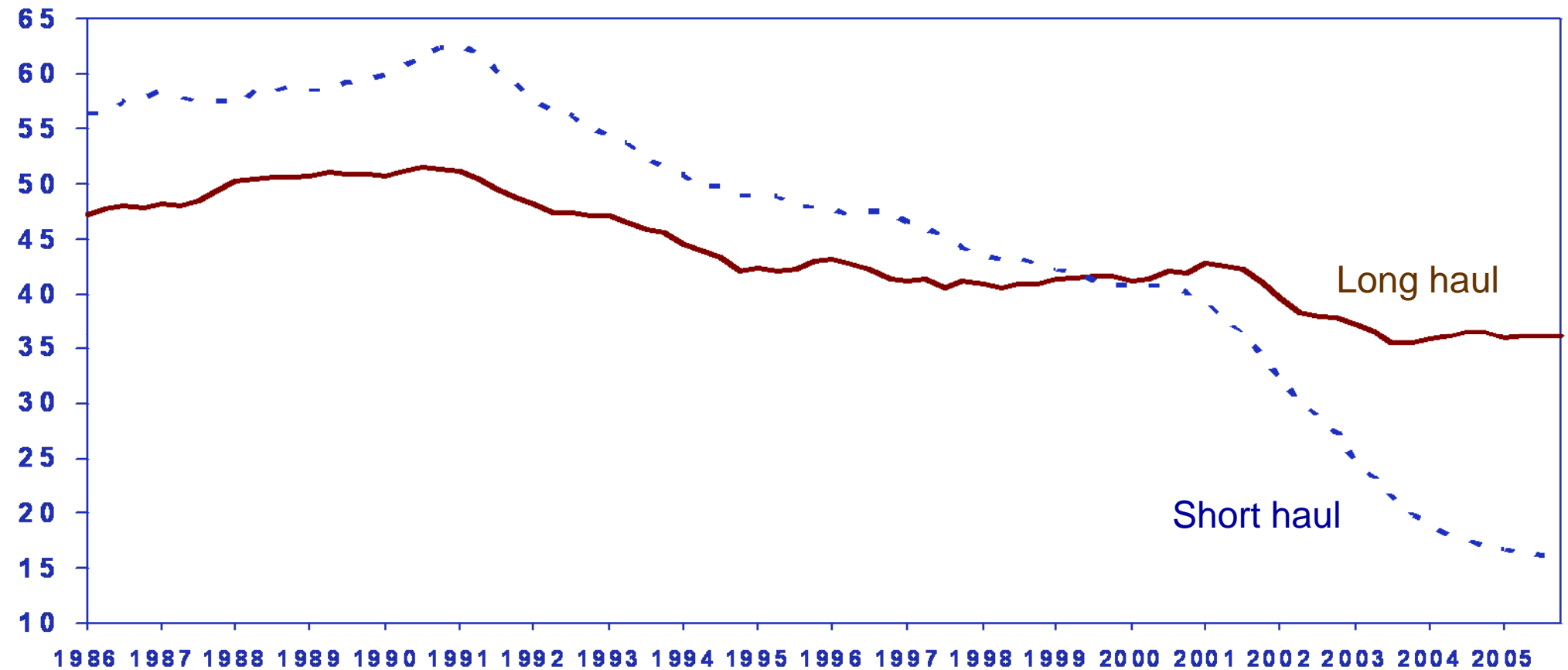
* Ryanair, Buzz, easyJet, go Source: British Airways, 01.11.2005

Time series forecast, low cost carrier verses network airline European Seat Capacity 2002-2010



Shifting Pattern of Business Travel

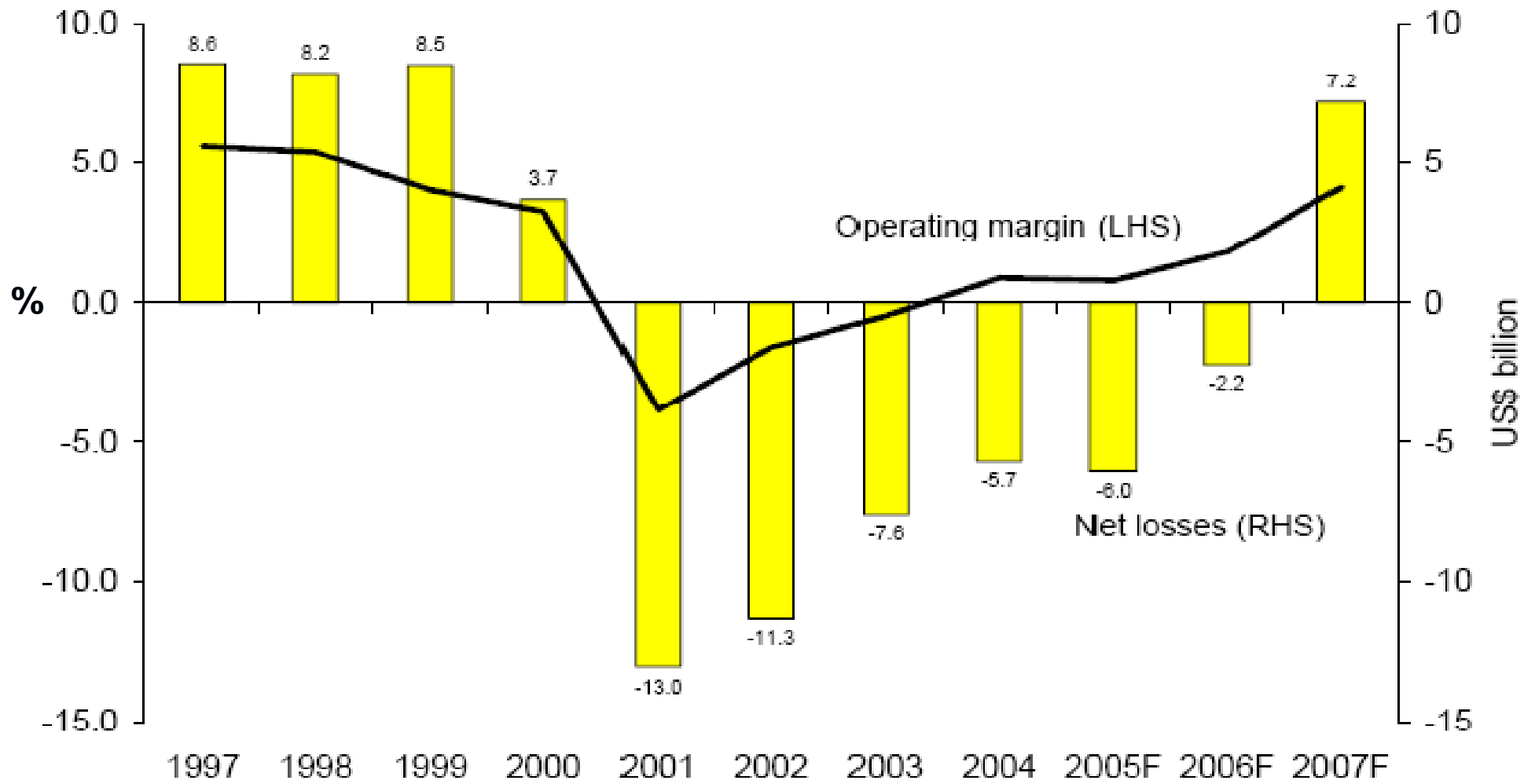
% of business travellers in premium cabins, 4 quarter average



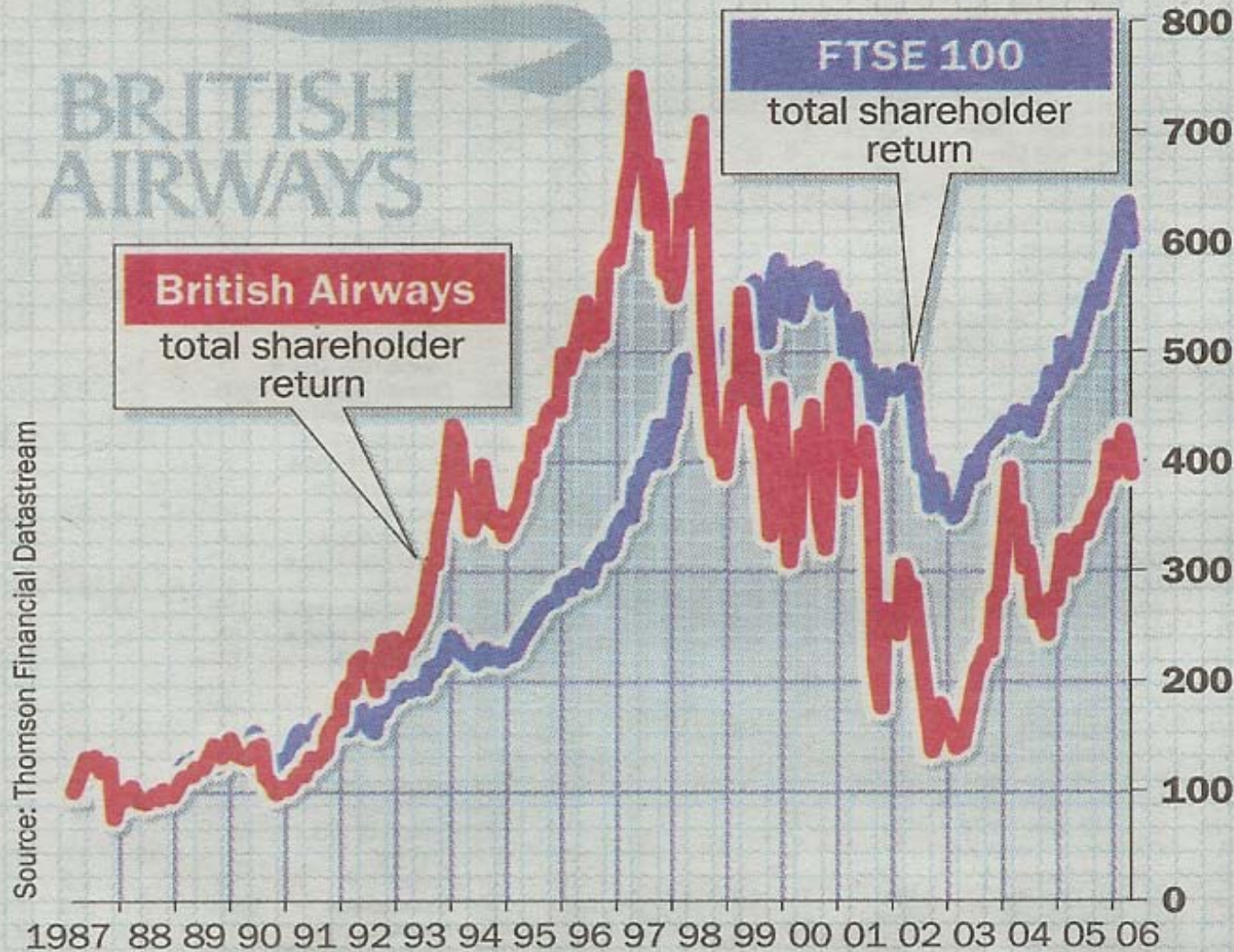
Source: British Airways, January 2006

The results of Airline Deregulation so far

- Poor financial returns
- Falling yields
- Rapid growth of Low Cost Carriers
- Increased consumer awareness
- Development of Survival strategies
- Formation of global alliances
- *Emergence of new international hubs*
- *Innovation – new products*



ENGINE FAILURE



BA FY 2004/5

Operating margin 8.3%

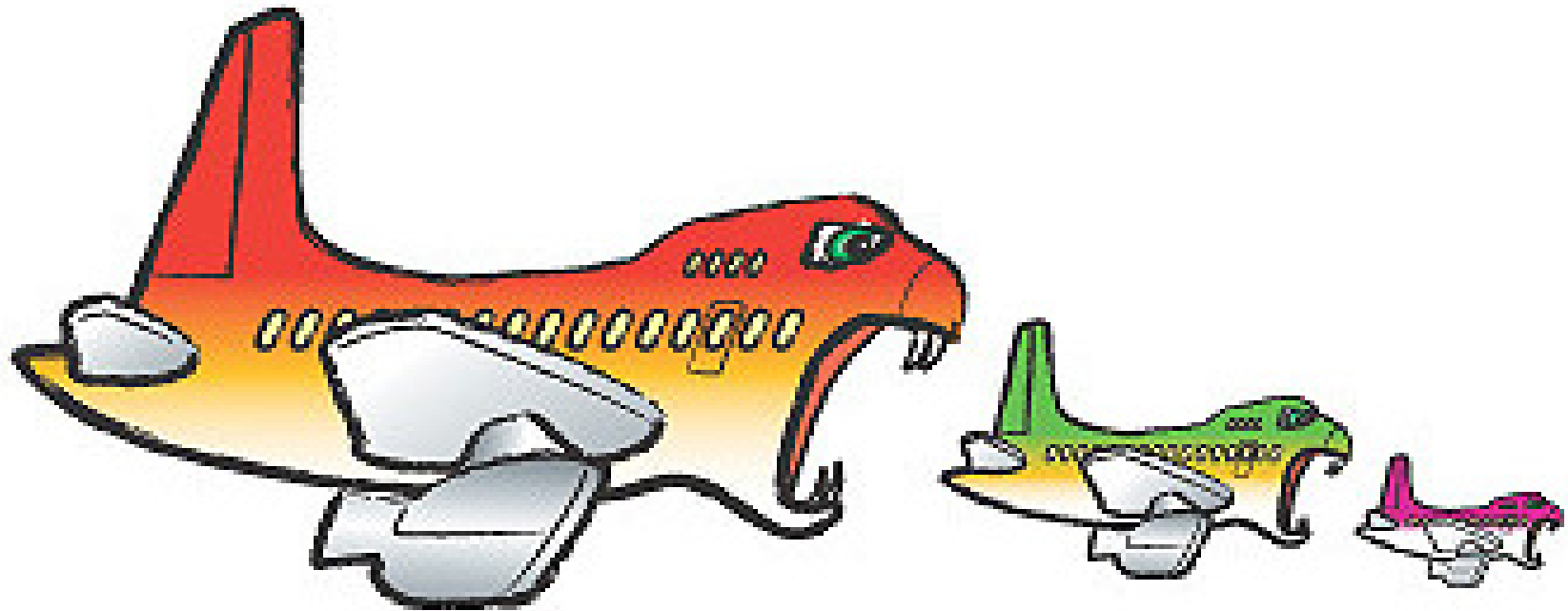
Source:

The Times 20/5/06

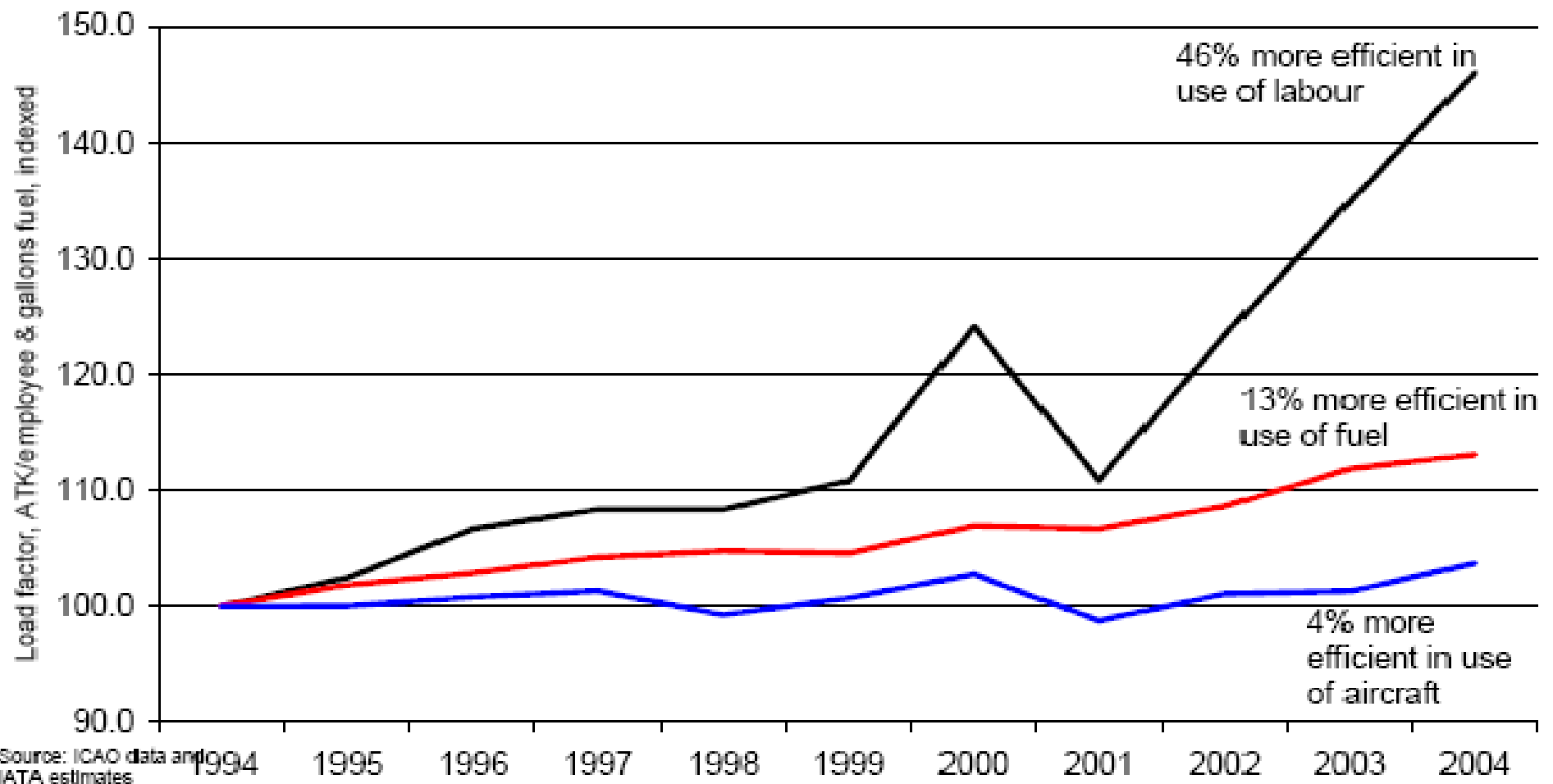
| Industry net profits, US\$ billion | 2004 | 2005 | 2006 | 2007 |
|------------------------------------|-------------|-----------|-------------|------------|
| Global | -5.7 | -6 | -2.2 | 7.2 |
| Regions | | | | |
| North America | -10 | -10.8 | -5.4 | 1.1 |
| Europe | 1.1 | 1.8 | 1.4 | 2.1 |
| Asia-Pacific | 3.4 | 2.9 | 2 | 3.1 |
| Middle East | 0.2 | 0.3 | 0.2 | 0.5 |
| Latin America | 0.1 | 0.2 | 0.2 | 0.4 |
| Africa | -0.4 | -0.4 | -0.6 | 0.0 |
| Markets | | | | |
| Domestic (US only) | -9.4 | -10 | -5.5 | 0.9 |
| International (IATA members only) | 2.9 | 2.7 | 2.1 | 5.1 |
| Other | 0.8 | 1.3 | 1.2 | 1.2 |

Source: ICAO data to 2004. IATA forecasts 2005-2007.

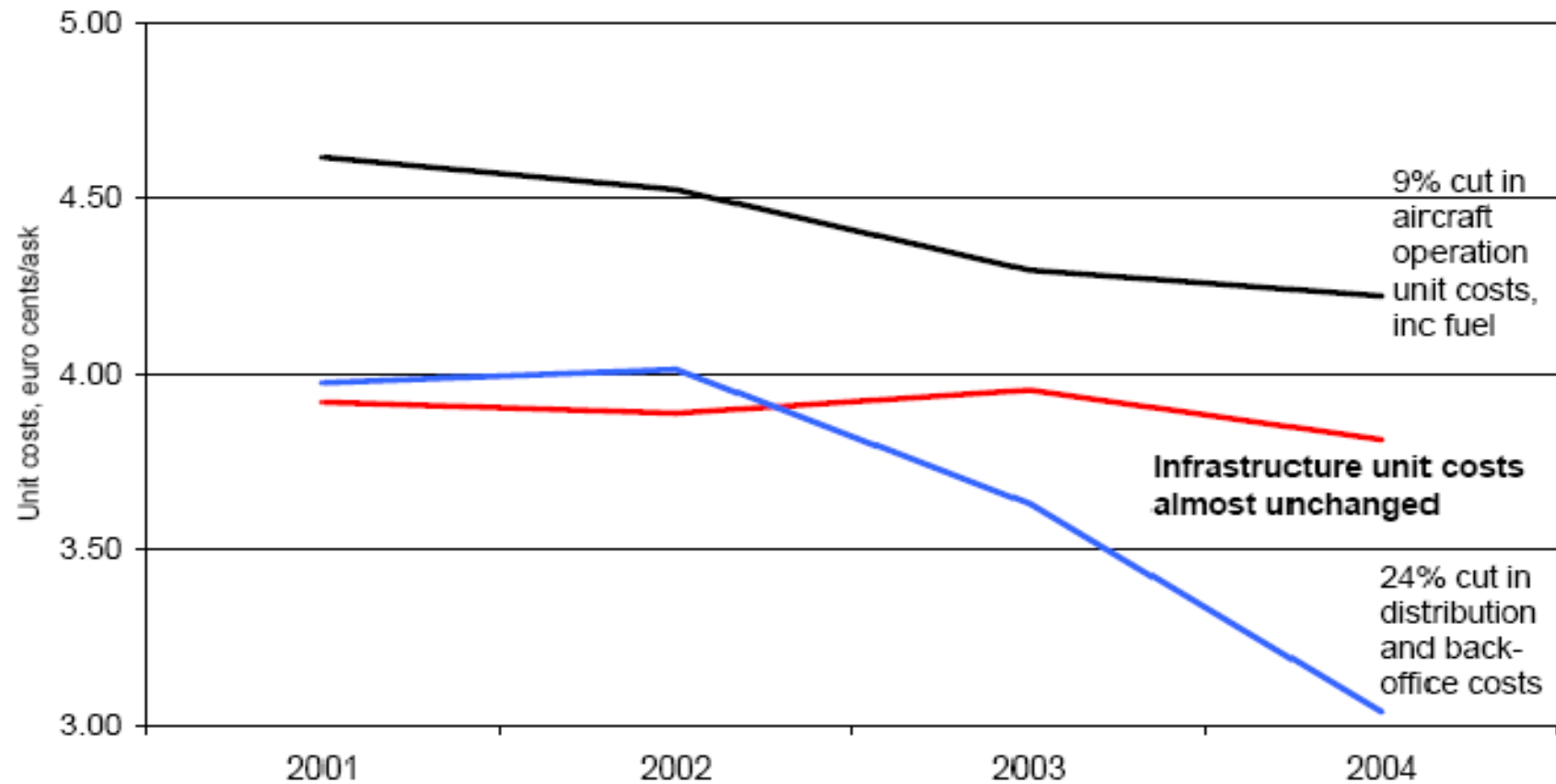
Survival Strategies



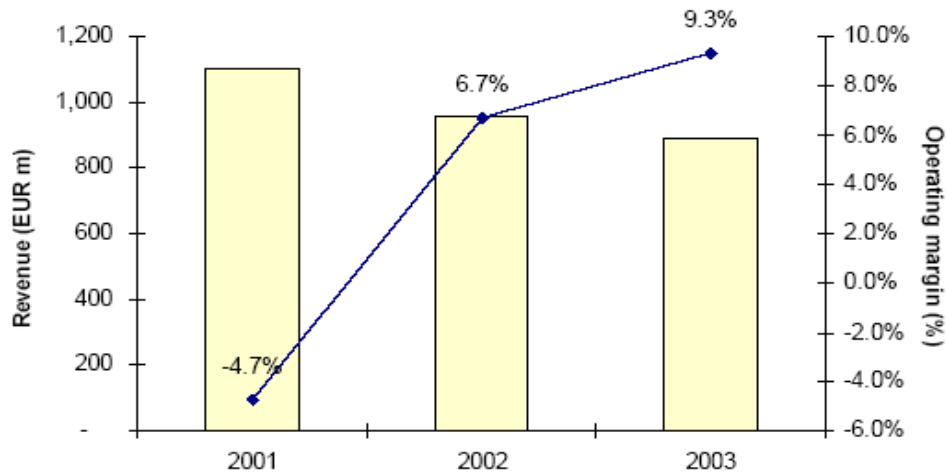
Productivity for global commercial airlines



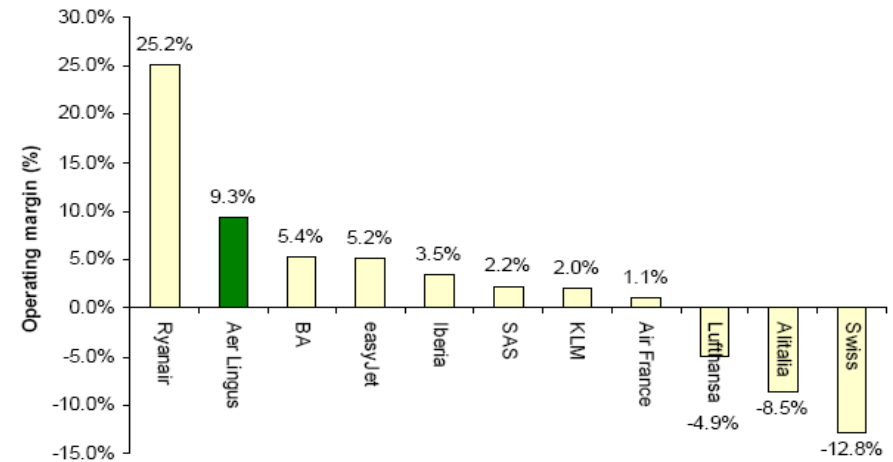
Unit cost performance for European network majors, short-haul



Aer Lingus - revenue and operating margin (FY2001-03)

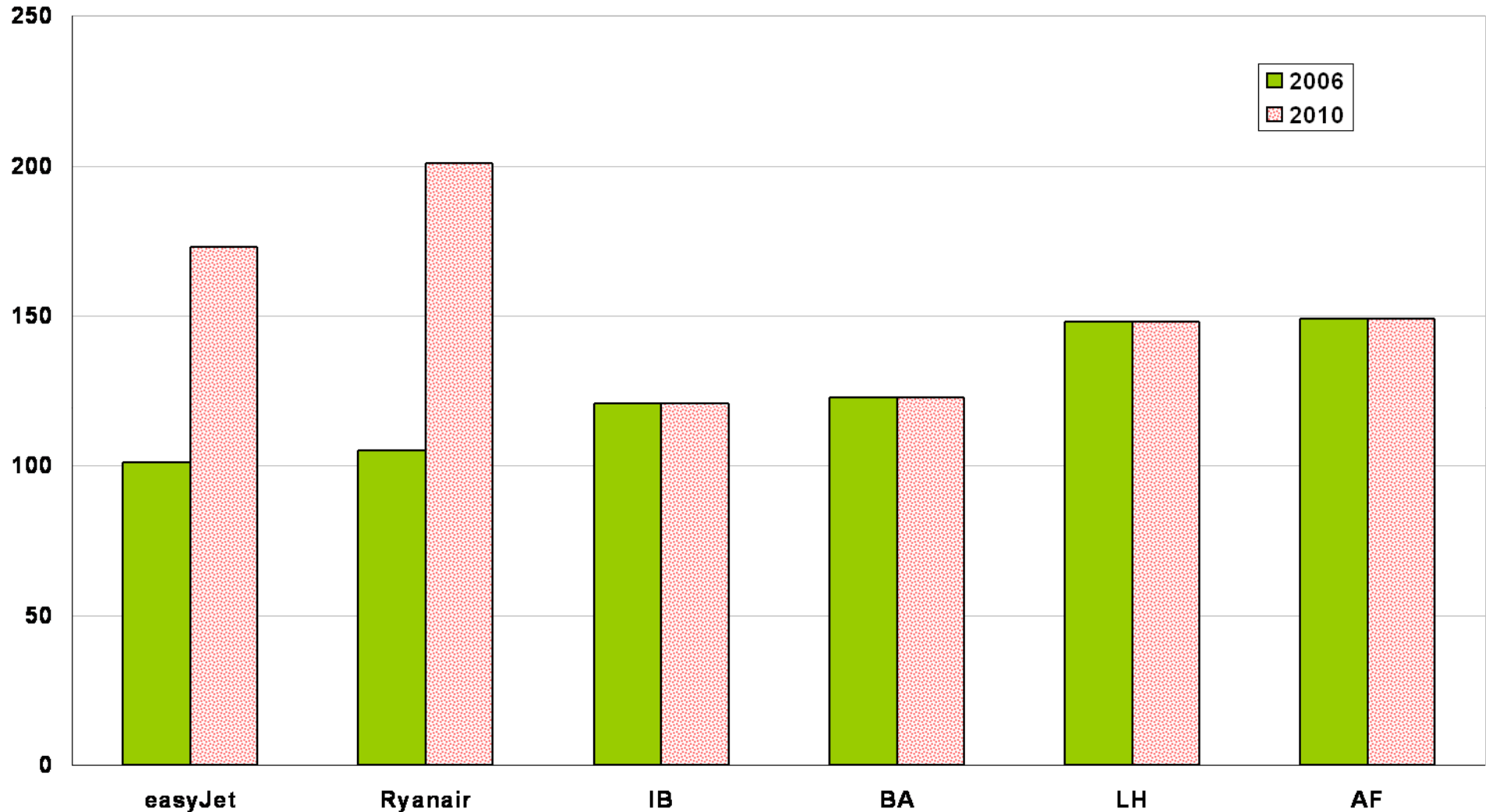


Operating margin financial year 2003-04

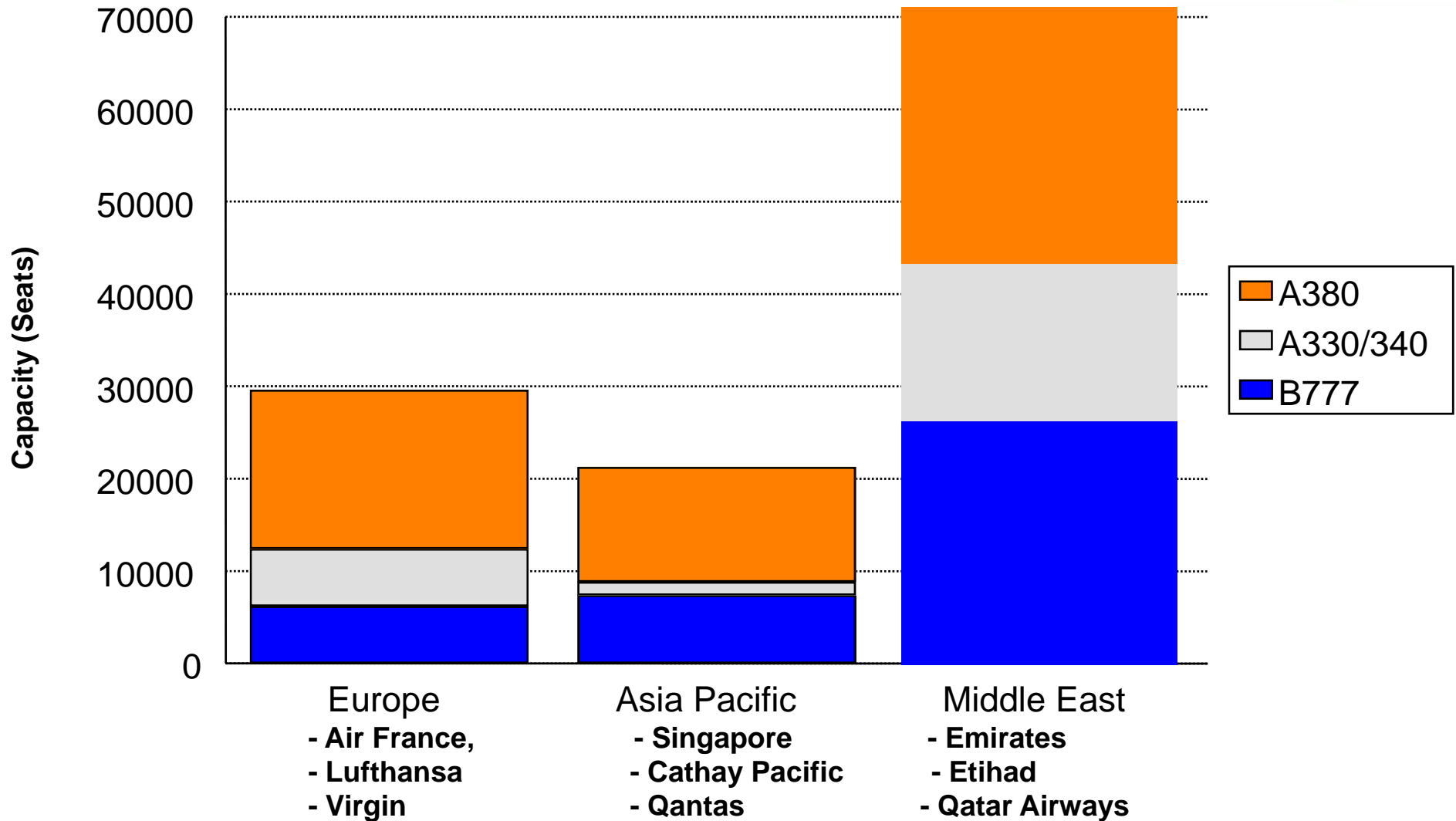


| | Ryanair | Aer Lingus | Ratio Ryanair/Aer Lingus |
|----------------------------|---------|------------|--------------------------|
| Passengers (m) | 23.13 | 6.60 | 3.5 |
| Scheduled revenues (EUR m) | 925 | 730 | 1.3 |
| Ancillary/Other (EUR m) | 150 | 158 | 0.9 |
| Total Revenues (EUR m) | 1,074 | 888 | 1.2 |
| Operating costs (EUR m) | 803 | 805 | 1.0 |
| Operating profit (EUR m) | 271 | 83 | 3.3 |
| Operating margin | 25.2% | 9.3% | 2.7 |
| Average fare (EUR) | 39.97 | 110.69 | 0.4 |

Short haul fleet growth in Europe *Cranfield* UNIVERSITY



Long-Haul Capacity on Order

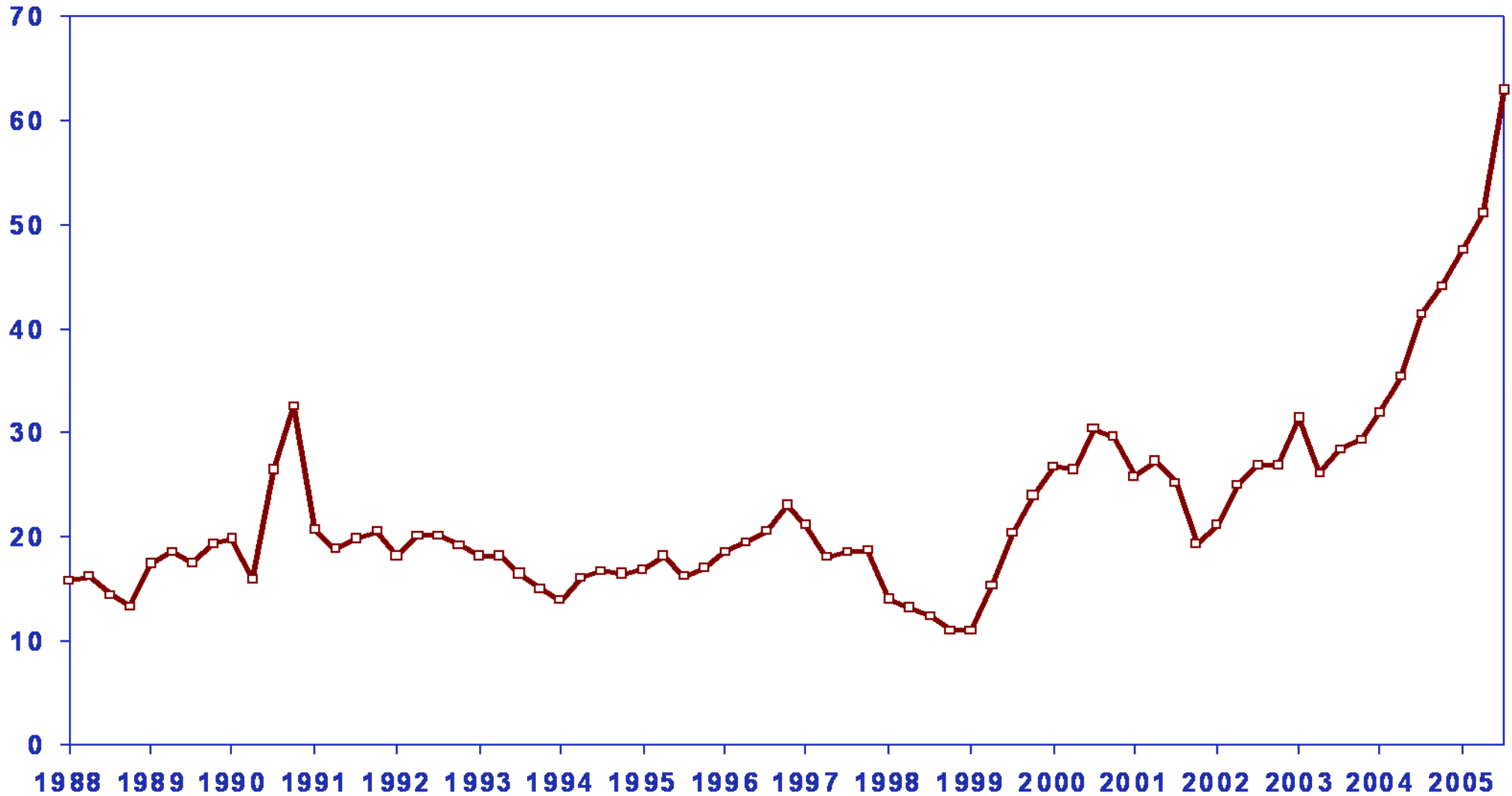


Sources: ACAS, Aviation Strategy

Note: Firm order also including those via lessors

Oil Prices Rising Sharply

Brent crude spot, \$ per barrel



Continuing Evolution

More differentiation:

- Lower cost business class only airlines
- Greater emphasis on customers' convenience
- Low cost with frills
- Longer haul low cost services