

# The Challenge of the Low-cost Airlines

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- How Low cost airlines have changed the EU?
- Maturity in Europe?
- Market Substitution or generation?
  - Are LCCs culpable for increasing aviation's carbon footprint?
- What makes a successful low cost airline?
- LCCs and the long haul market

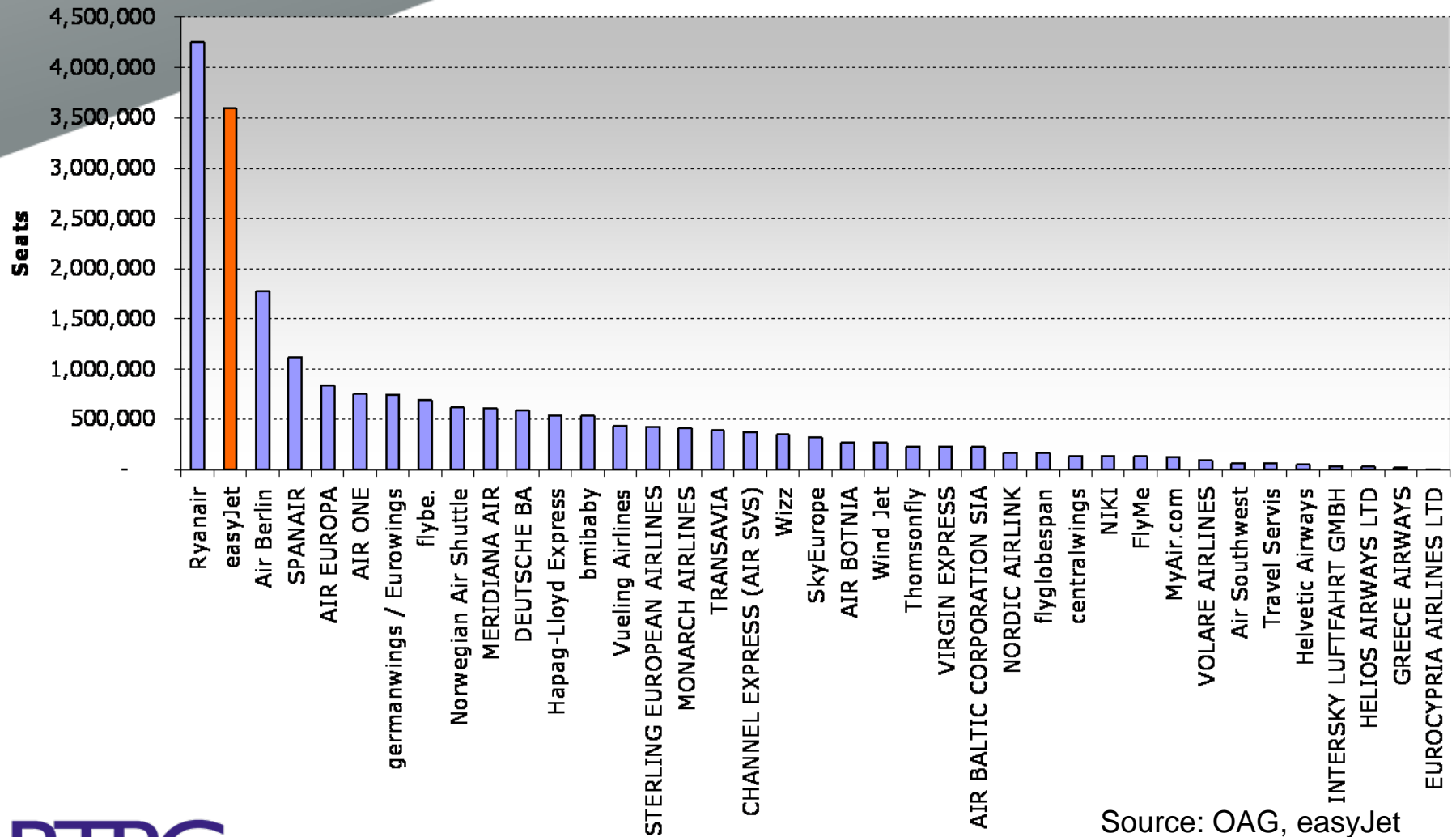
# The low-cost sector in context

- European low-cost carrier seat capacity grew by 21% or 34 million seats in 2006 compared to 2005 (2005 v 2004: +27%)
- The number of intra-European seats offered by conventional airlines dropped 1% compared to 2005
- EU LCCs serve 280 airports
- LCC capacity is concentrated
  - Ryanair, easyJet and Air Berlin accounted for 54% of low-cost capacity within Europe
  - The top 10 LCCs accounted for 77%

Source: Air Transport World online, 7 August 2007

# Ryanair & easyJet dominate

Low fares airlines seats in September '06



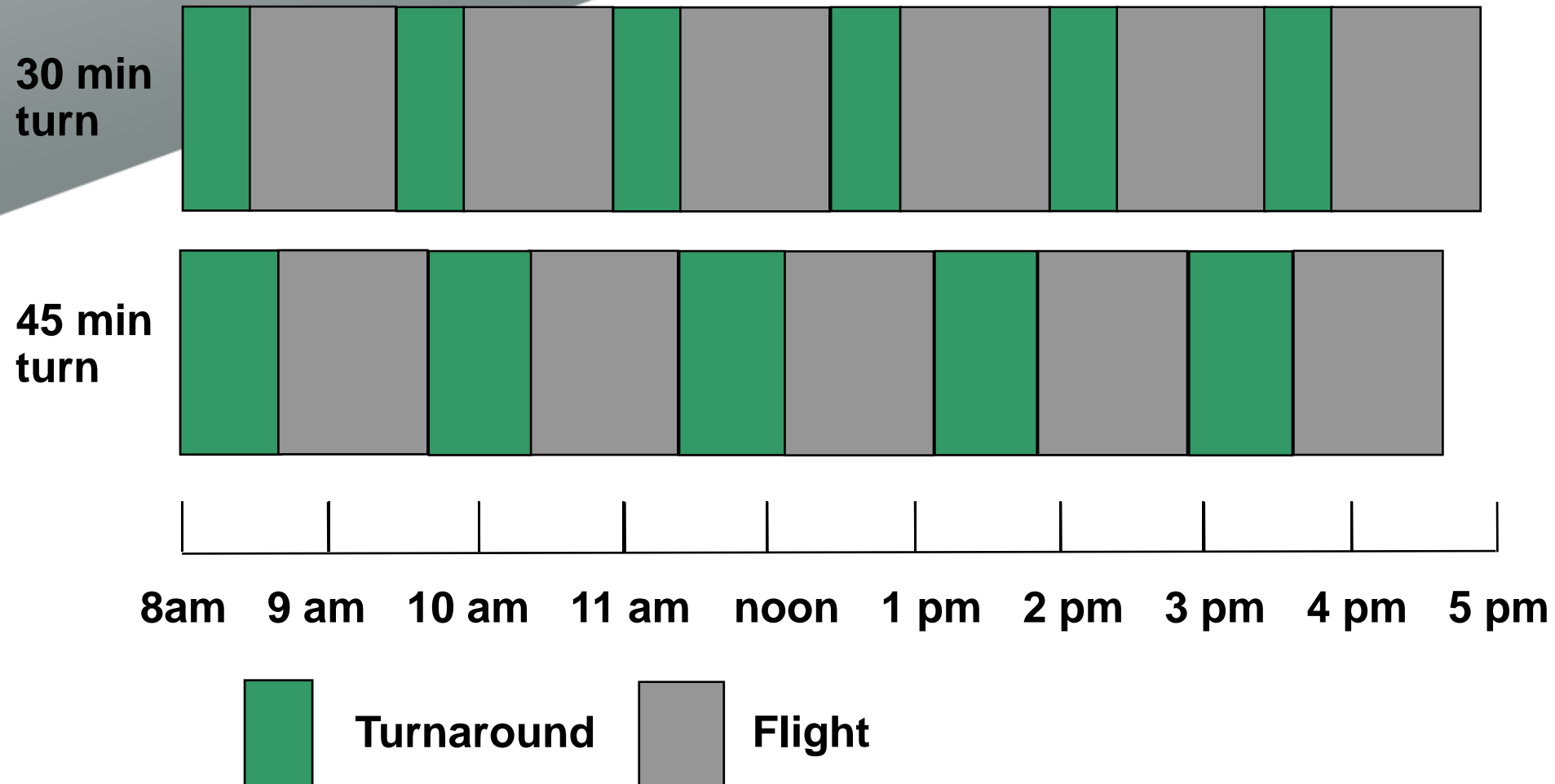
Source: OAG, easyJet

# Low cost airlines in 10 years have

- Changed the way people think of air travel
  - UK residents spend 250% more of personal income on air travel than 10 years before (Shaw and Callum, 2006)
- Changed how airlines construct their business model
  - Removed unnecessary costs
  - Improved utilisation of assets
  - Recognised the potential of the internet for direct distribution
  - Moved customer expectations to accepting charges for non-flight items

- Simple strategy
  - Focus on cost competitive advantage over network carriers
  - Low fares
- Point to point
  - No interlining or connections
- Short haul
  - Higher aircraft utilisation
  - Low comfort acceptable on short sectors
  - Potential for unit cost savings in in-flight product, aircraft utilisation, labour productivity, etc. reduces as sector length increases

# Higher utilisation advantage short haul



# Low cost airline strategy

- Secondary airports
  - Lower airport charges
  - Less congested than principal airports
    - Quicker turnaround
- Simple fleet
  - Commonality: increased crew flexibility & cheaper maintenance
- No free in-flight service
- Direct distribution
- Outsourcing




# Consumers trade schedule & prices

London Stansted to Edinburgh: all flights		
Sat 08 December	Sun 09 December	Mon 10 December
<div><div>○£39.99</div><div>incl. taxes and charges</div><div>dep. 08:45, arr. 10:00</div></div> <div><div>○£39.99</div><div>incl. taxes and charges</div><div>dep. 12:10, arr. 13:25</div></div> <div><div>○£22.99</div><div>incl. taxes and charges</div><div>dep. 16:30, arr. 17:45</div></div>	<div><div>○£22.99</div><div>incl. taxes and charges</div><div>dep. 10:50, arr. 12:05</div></div> <div><div>○£44.99</div><div>incl. taxes and charges</div><div>dep. 14:15, arr. 15:30</div></div> <div><div>○£49.99</div><div>incl. taxes and charges</div><div>dep. 18:40, arr. 19:55</div></div> <div><div>○£44.99</div><div>incl. taxes and charges</div><div>dep. 21:10, arr. 22:25</div></div>	<div><div>○£39.99</div><div>incl. taxes and charges</div><div>dep. 08:05, arr. 09:20</div></div> <div><div>○£22.99</div><div>incl. taxes and charges</div><div>dep. 11:30, arr. 12:45</div></div> <div><div>○£22.99</div><div>incl. taxes and charges</div><div>dep. 16:20, arr. 17:35</div></div> <div><div>○£18.99*</div><div>incl. taxes and charges</div></div> <div><div>This is how your fare is calculated:</div><div><div>easyJet flight:</div><div>Airport operator charges and government taxes:</div></div></div>

Now including Taxes  
and charges

BOOK UNTIL MIDNIGHT THURSDAY!

FLY FOR **10** £/€



ONE WAY, TAXES AND CHARGES INCLUDED

TRAVEL FROM 1st Dec 07 – 12th Mar 08 (Terms and Conditions apply)



# Ryanair's ancillary revenues

- 16% of operating revenues (2007)
- 15% in 2006 (breakdown)
  - Non-flight scheduled revenues including excess baggage, debit and credit card fees, sale of bus and rail tickets, hotels, and travel insurance - 64%
  - Car-rental - 8%
  - In-flight sales - 18%
    - Average in-flight sales per pax - €3.06
  - Internet related e.g. commissions on items sold through website - 10%

## Ancillary revenues

	H1 2007	H1 2006	Change
Ancillary revenue (£m)	77	59	+32%
<b>Per seat</b>	<b>£3.81</b>	<b>£3.23</b>	<b>+18%</b>

### Change per seat

### H1 2007

Card fees	+ 2%
Change / Rescue / Speedy boarding fees	+ 15%
Partner	+ 56%
Excess baggage / Sporting goods	+ 40%
In-flight	- 8%

#### Speedy boarding

**NEW!**

Be among the first to be called to board your flight for just £7.50 per person. Speedy Boarders will be called to board before our other boarding groups, giving you the best choice of seats – provided you're at the gate when we start boarding.

Ancillary revenue per seat in order of revenue contribution



STAR TRIBUNE  
SACK



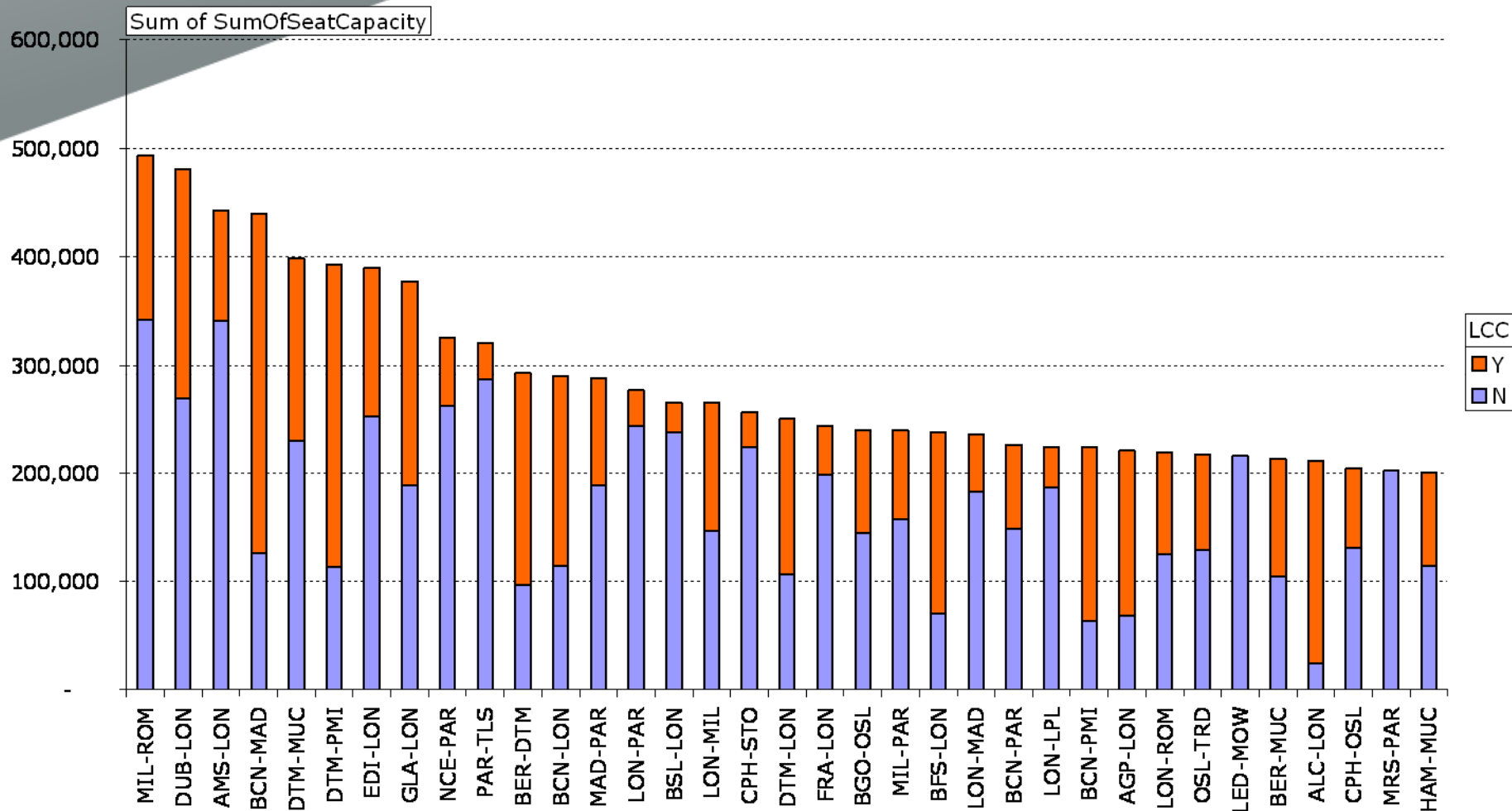
'IT WAS BAD ENOUGH WHEN THEY STARTED CHARGING FOR IN-FLIGHT MEALS...'

# LCCs edges toward maturity

- LCCs accounted for about 30% of all intra-European seat capacity in 2006
- 49% of UK domestic traffic (May 2006)
- At current growth rates, more than half of all European point-to-point passengers will be carried by LCCs by 2011.

# LCCs are present in main EU routes

July, 2007



Source: OAG, easyJet



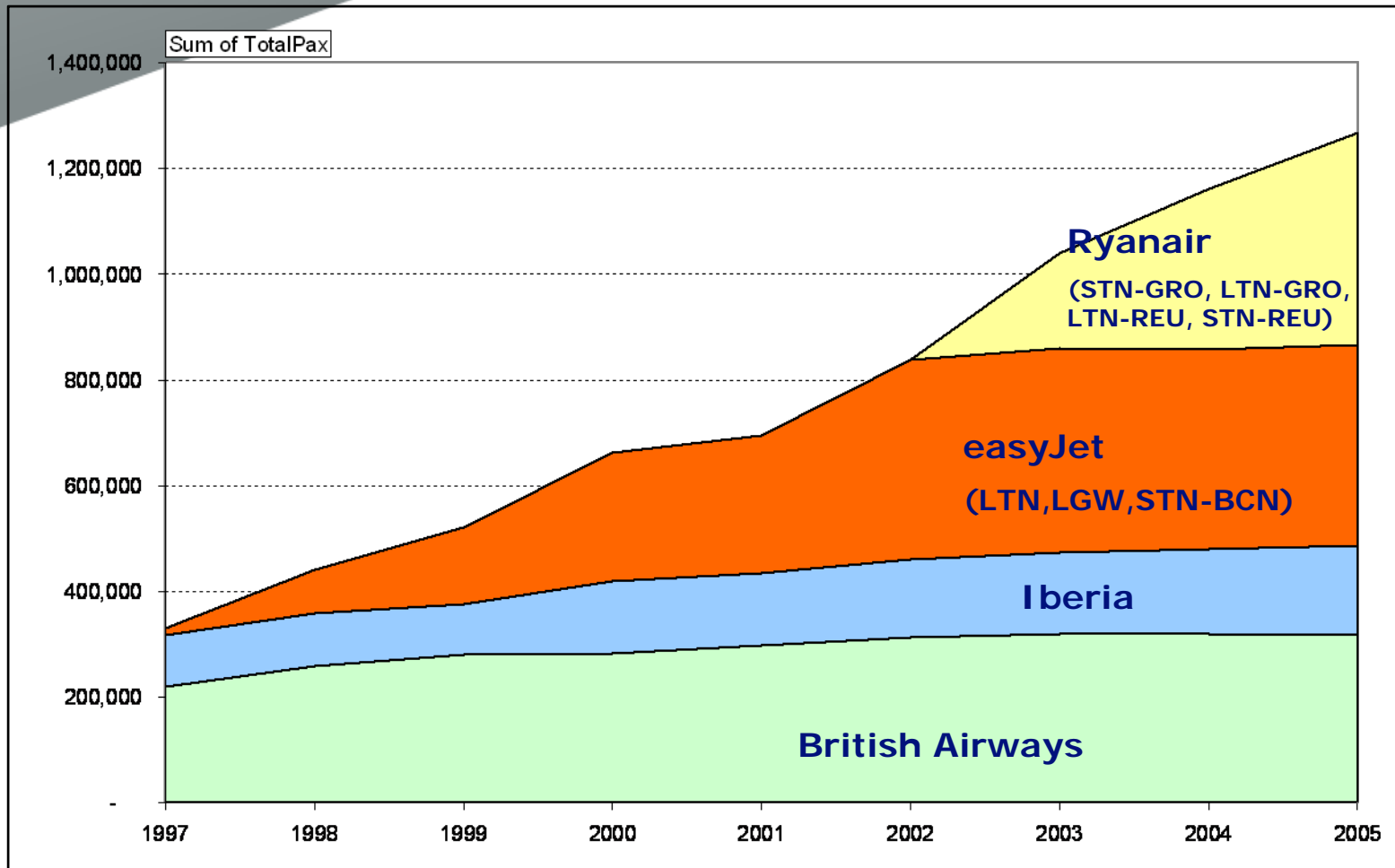
# Market Substitution or Generation?

- 60% of traffic on LCCs are stimulated and 40% switch from other airlines (ELFAA, 2002, HLX, 2004)
- UK CAA's view is that once natural growth is included in estimates, much higher proportion is switching behaviour (CAA, 2006)

# Market stimulation:

Mature market

## London to Barcelona – Scheduled Traffic (1997-2005)

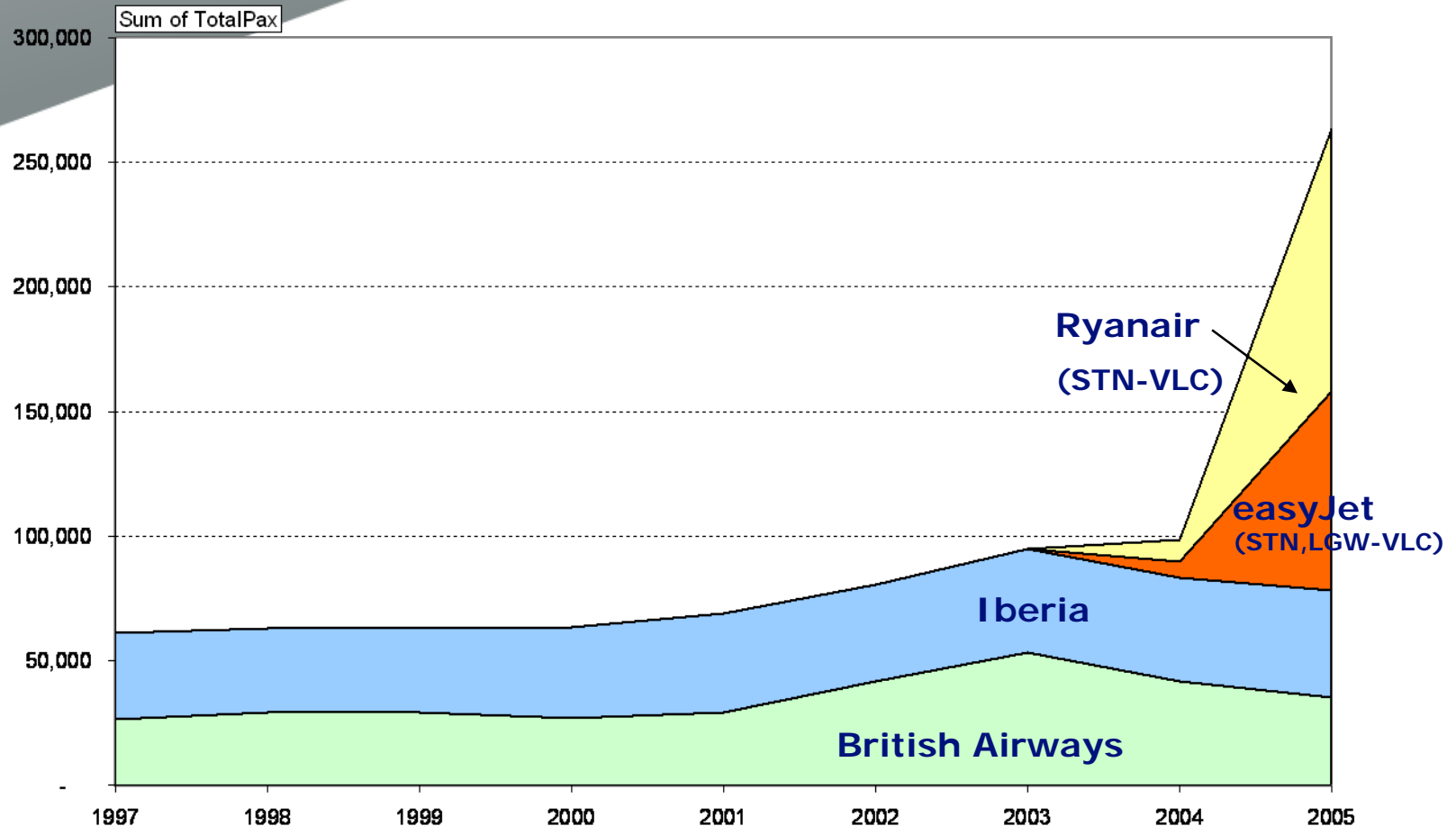


Source: UK CAA

# Market stimulation:

Secondary market

## London to Valencia – Scheduled Traffic (1997-2005)



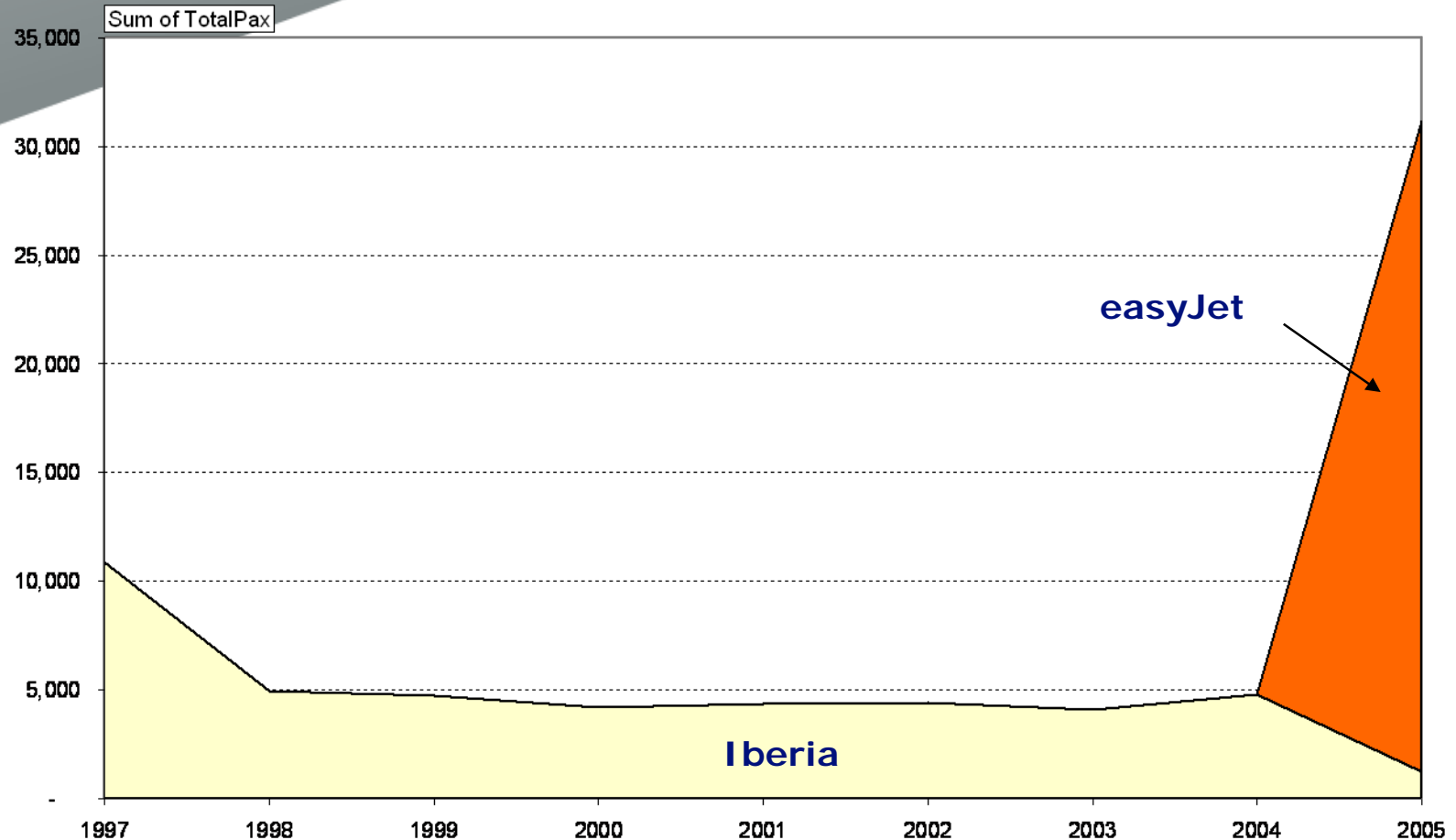
Source: UK CAA

easyJet started STN-VLC on 3 November 2004, LGW-VLC on 1 March 2005

# Market stimulation:

Undeveloped market

## London to Oviedo/Asturias – Scheduled Traffic (1997-2005)



Source: UK CAA

# The LCCs environmental paradox

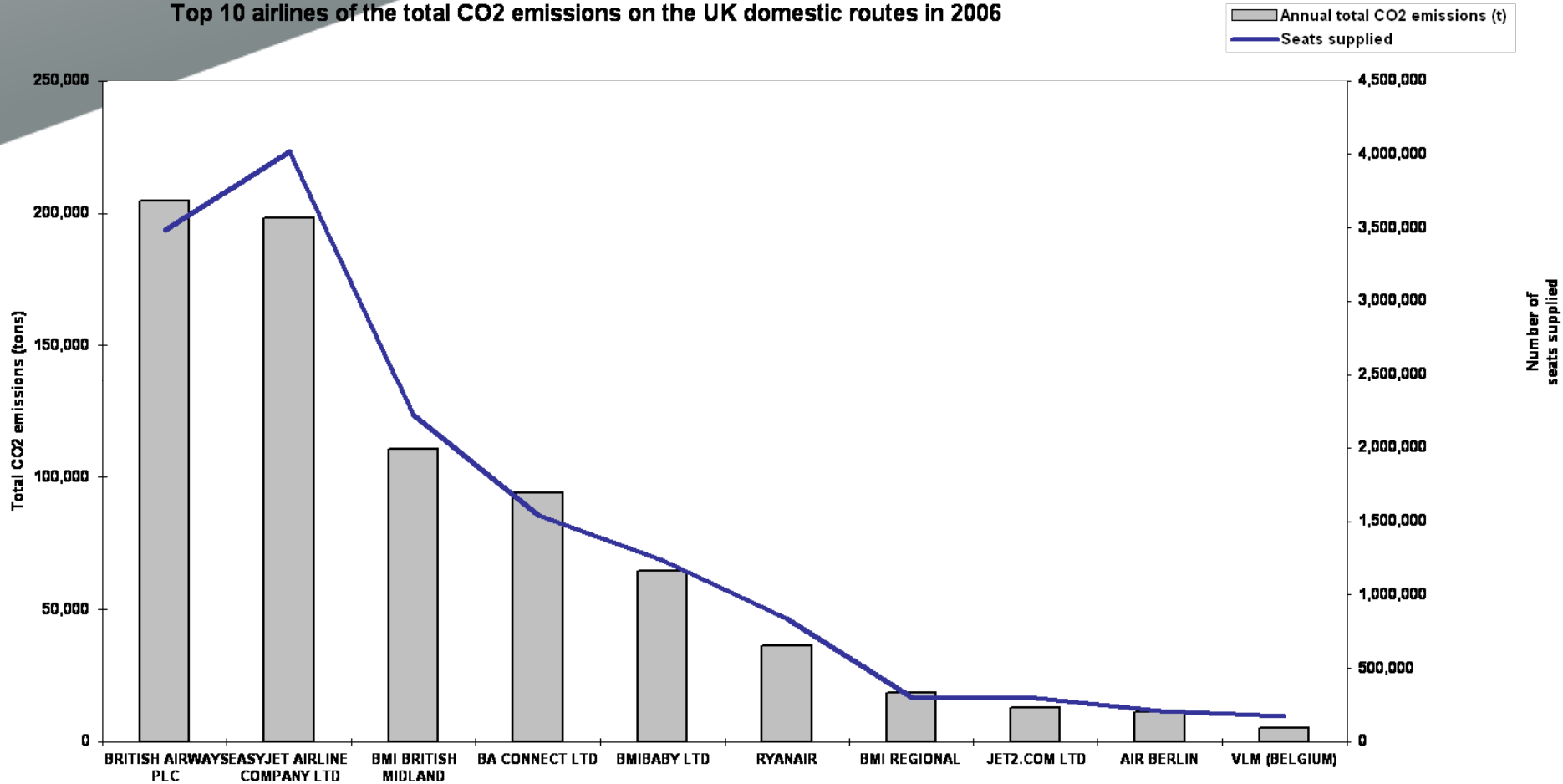
- High density seating on new fuel efficient aircraft give LCCs low seat emissions
- However if the market had not grown, far fewer people would be travelling

# Are LCCs culpable for increasing aviation's carbon footprint?

- If 60% of trips on LCAs are stimulated by low fares, environmental taxes (or cap and trade costs) may make a significant dent in the EU LCA market.
- However recent APD, interest rate rises and fuel cost increases has shown the market to be resilient so far indicating traffic is more likely switching from other carriers
  - Middle-class, second home owning, and multiple holidaying travellers use LCCs means that any environmental tax imposition would have to be very significant

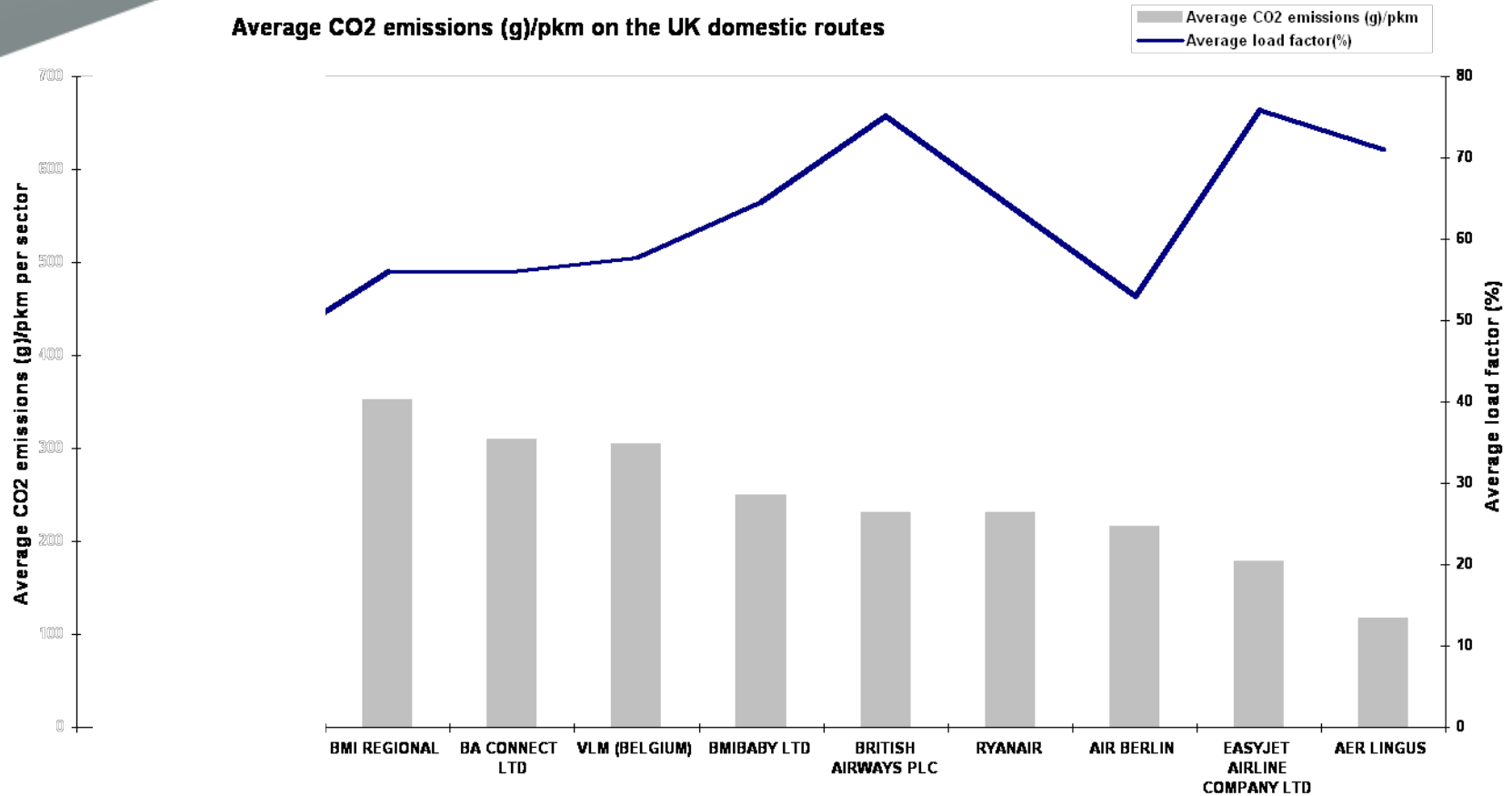
# UK Domestic market

Top 10 airlines of the total CO2 emissions on the UK domestic routes in 2006



# Load Factors important

**Average CO2 emissions (g)/pkm on the UK domestic routes**





# Do all LCCs follow the same model?



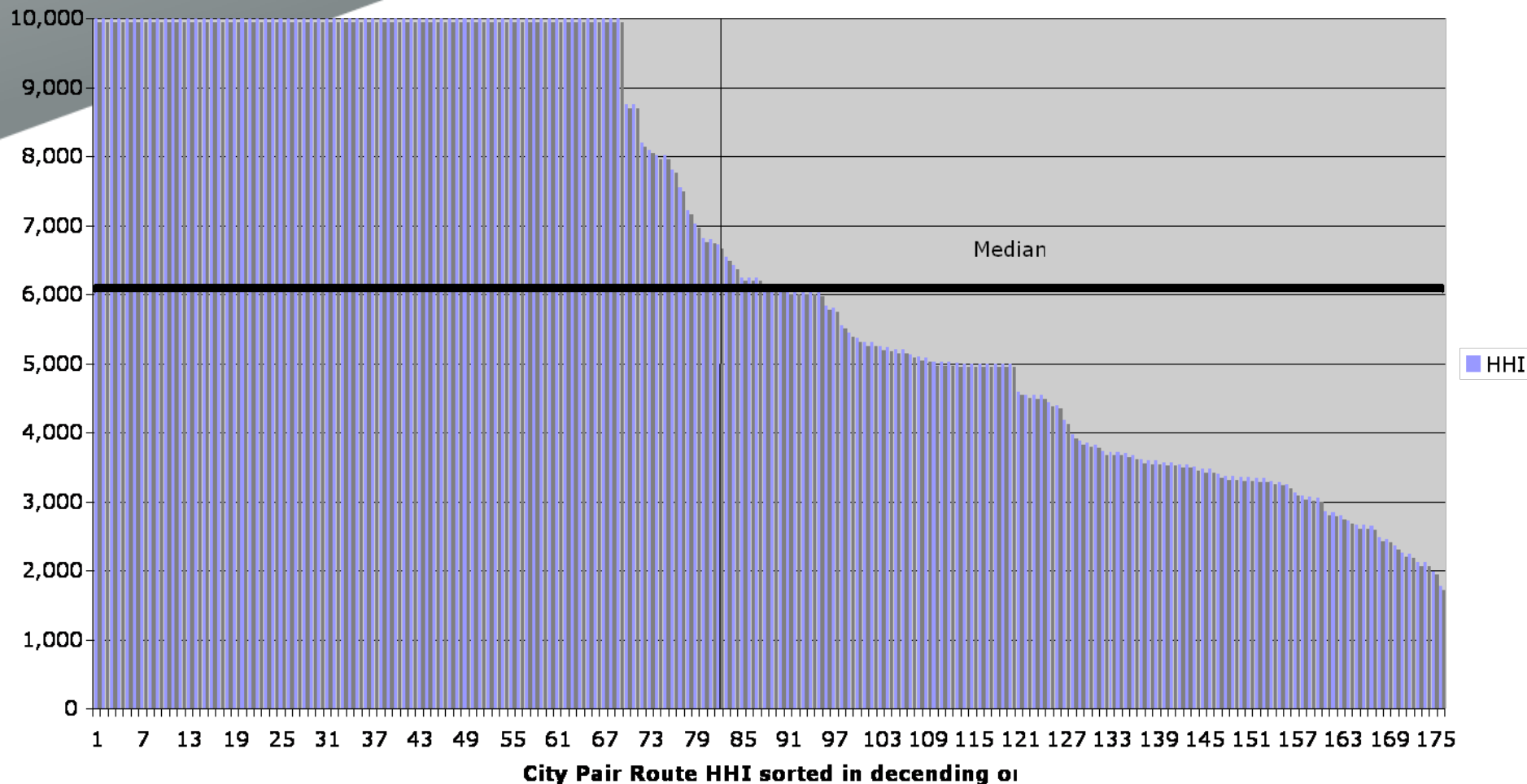
# Network choices

2006	Average airport pax (m)	No of Network airlines at Destination	Flights at primary airports	Average Weekly Freq	Capacity share on seats	Average no of competitors	Average City size served
EasyJet	5.25	4.63	35.8%	27.1	64%	2.31	677,522
Ryanair	2.64	1.60	26.5%	18.4	81%	1.67	451,020
SkyEurope	4.27	4.96	41.5%	8.2	79%	1.66	438,881
Norwegian	4.69	5.47	42.2%	16.4	71%	1.77	307,038
FlyBe	1.94	2.13	33.5%	19.4	85%	1.38	192,007
Air Berlin	7.13	7.26	56.9%	8.5	64%	2.14	665,902

- Ryanair and FlyBe
  - Smaller cities
  - Use of small airports
  - Double daily
  - Avoid network carrier competition
- Network avoiders
- easyJet and Air Berlin
  - Larger cities
  - Use of primary airports
  - 4 x daily (U2)
  - Compete with network carriers
- Network supplanters

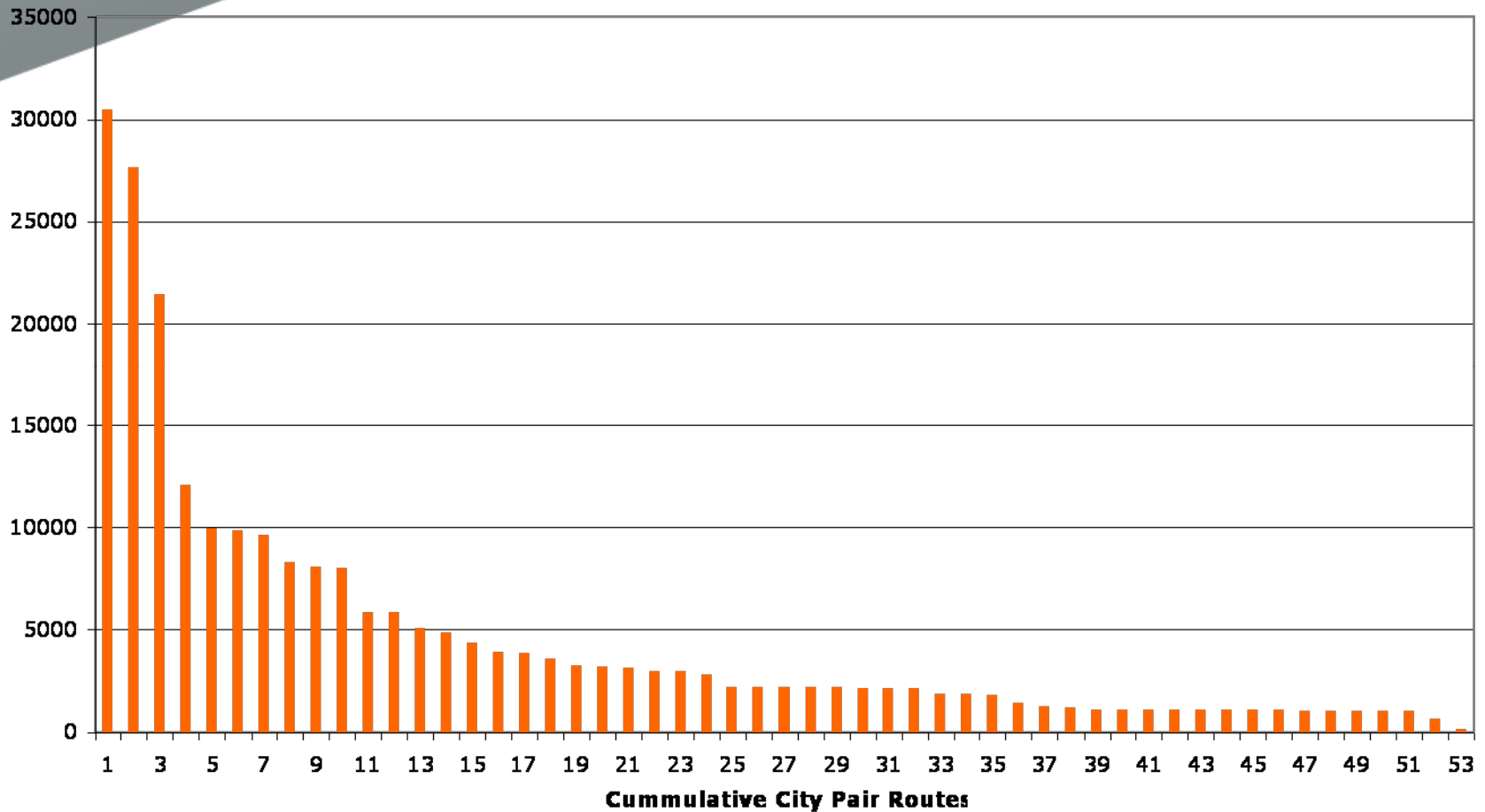
# EasyJet City-Pair HHIs

HHI by City Pairs (Summer 2006)



# EasyJet's Long Tail ex-London

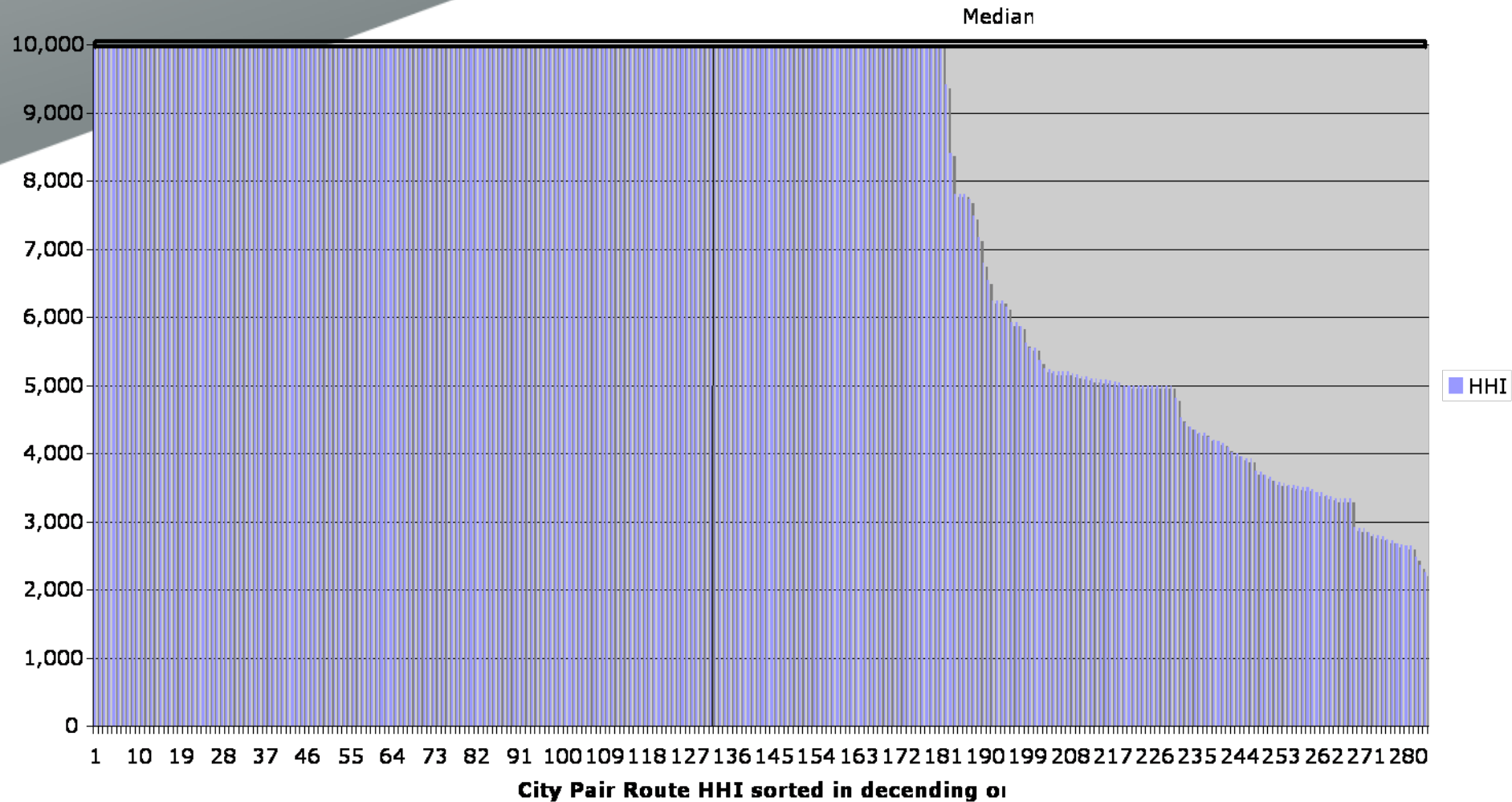
EasyJet's Long Tail





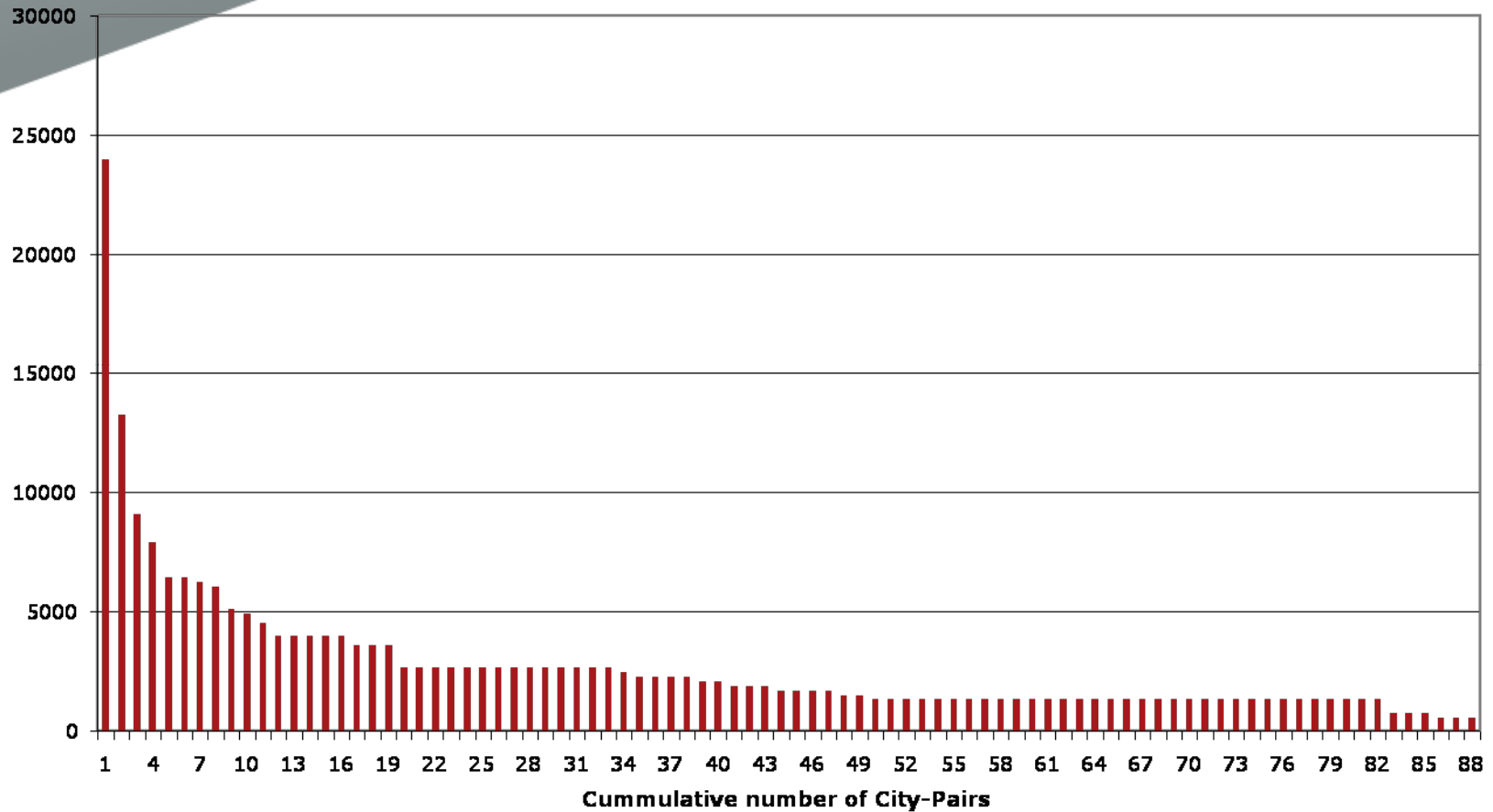
# Ryanair's City-Pair HHIs

HHI by City Pairs (Summer 2006)



# Ryanair's Longer Tail

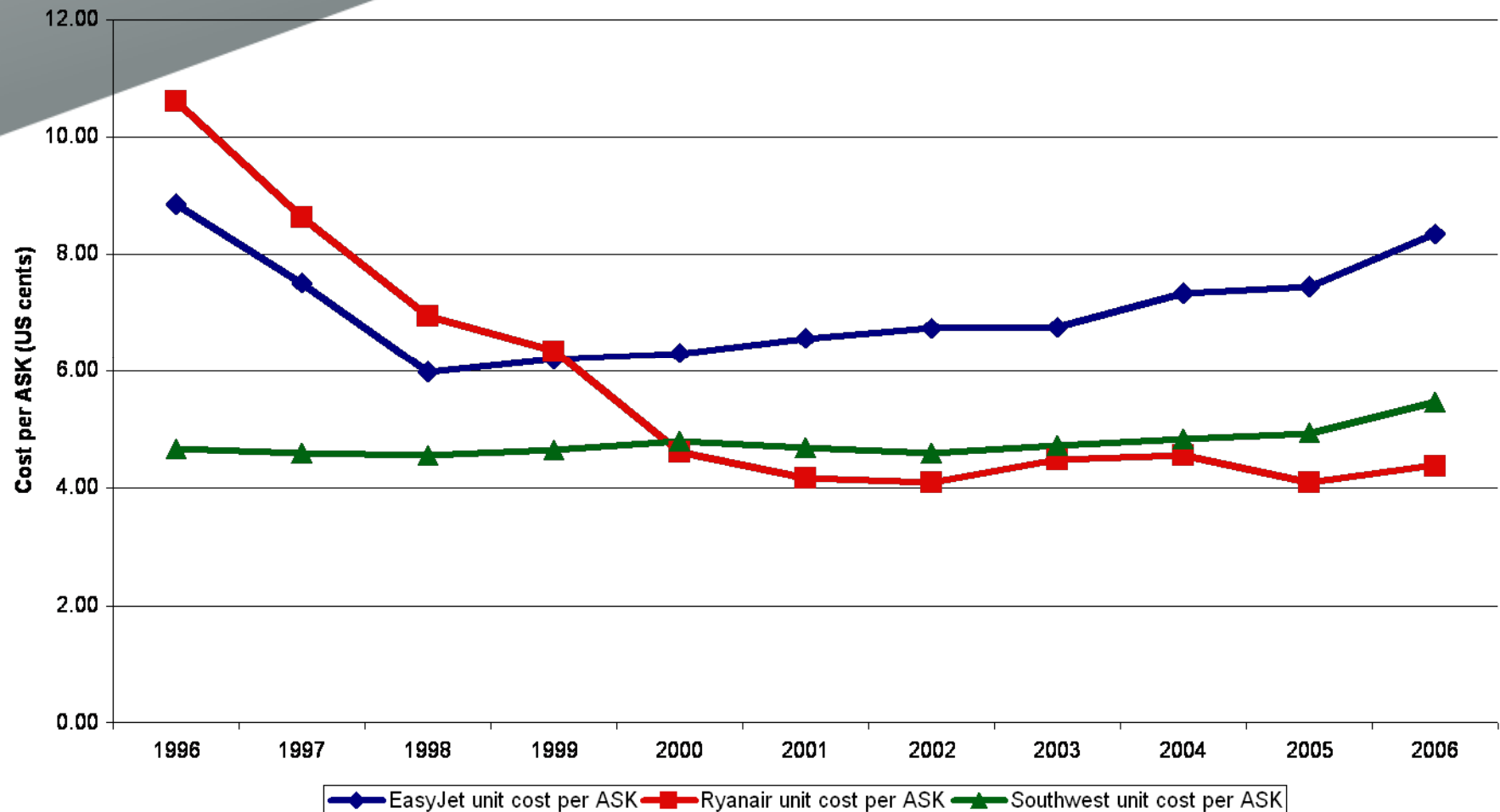
**Ryanair's ex-London Long Tail**



# Which model is best?

# Unit cost trends

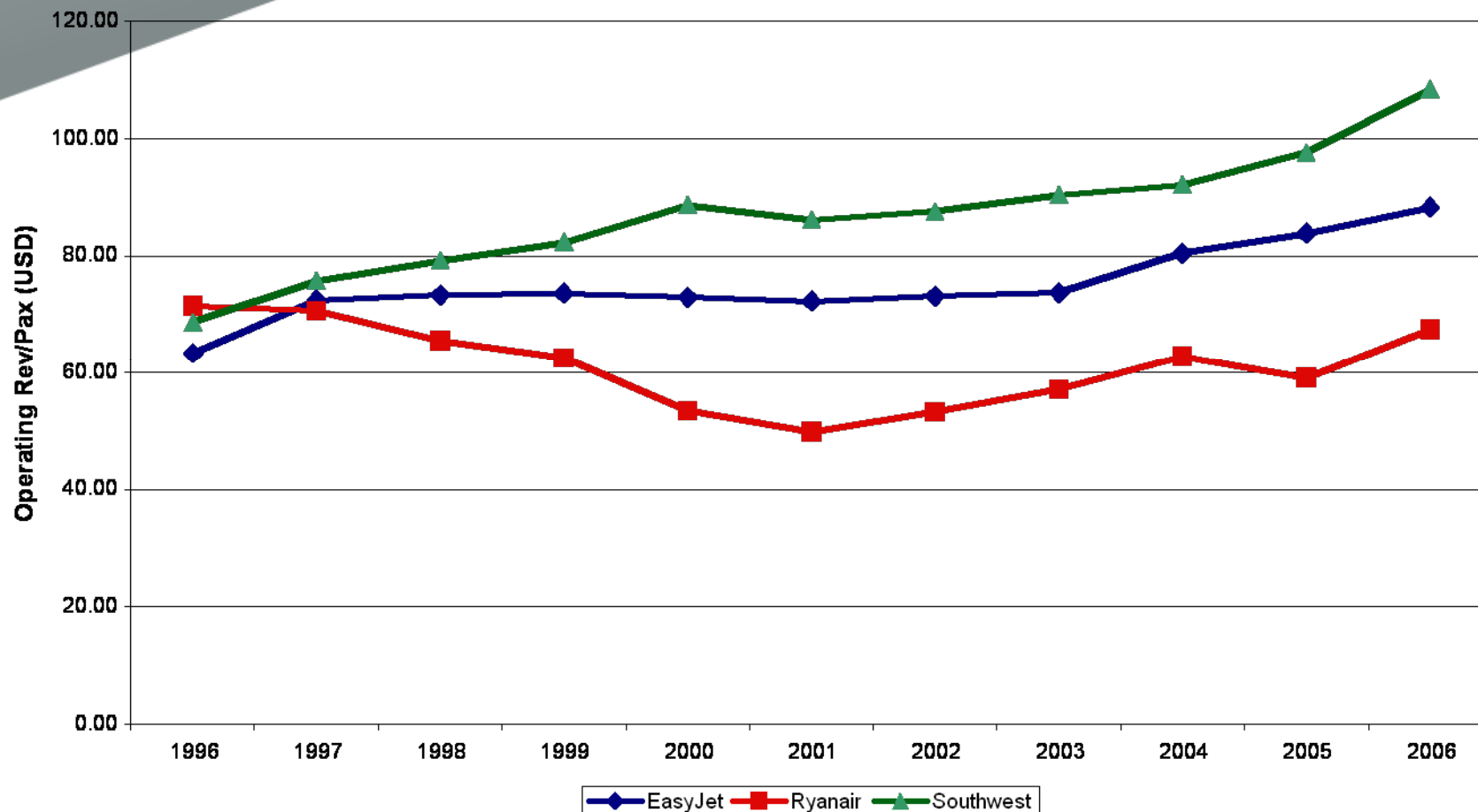
Unit cost (per ASK): Southwest, easyJet and Ryanair





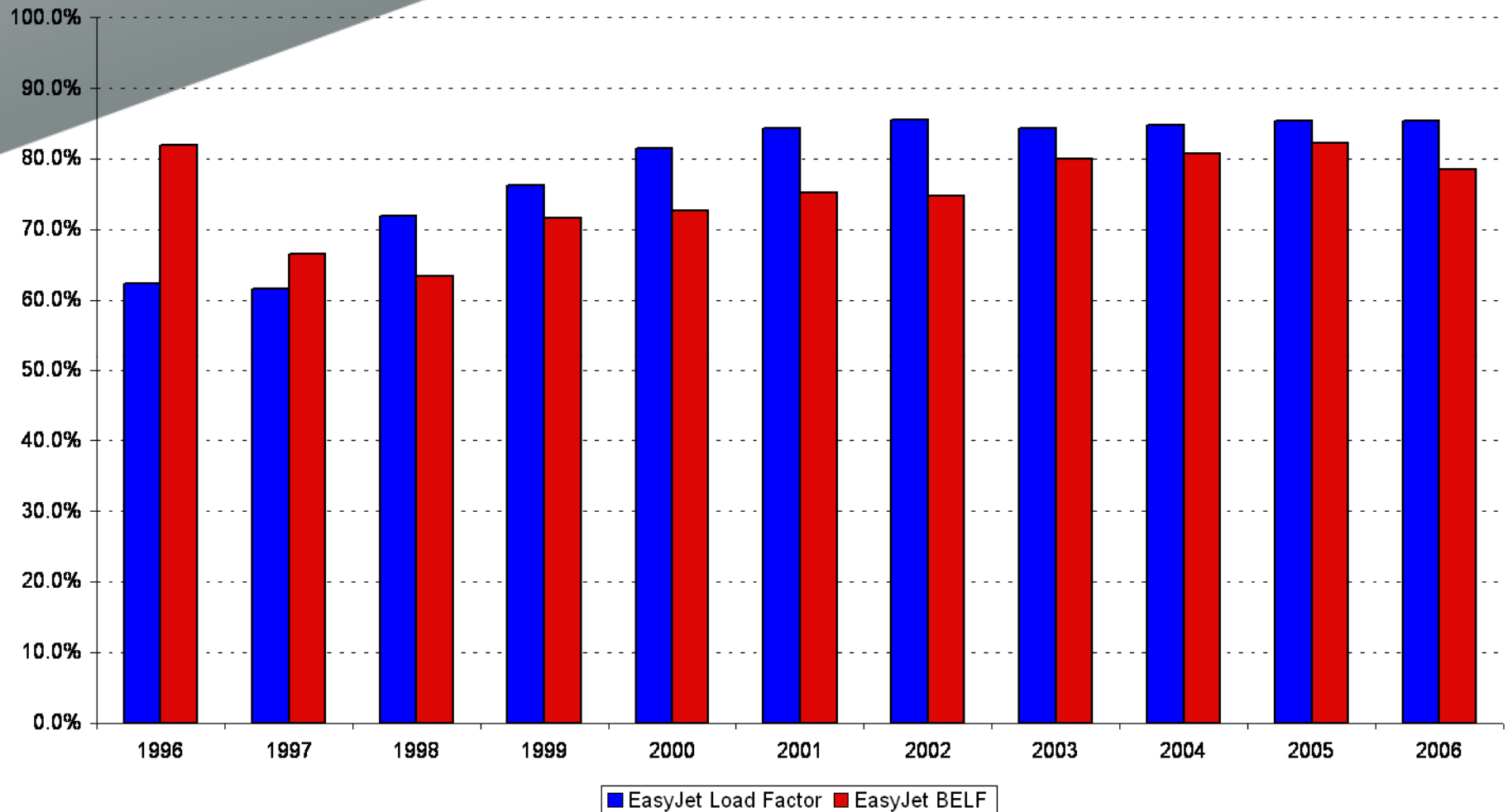
# Average Fare Trends

**Average Fares Trends: Southwest, easyJet, Ryanair**



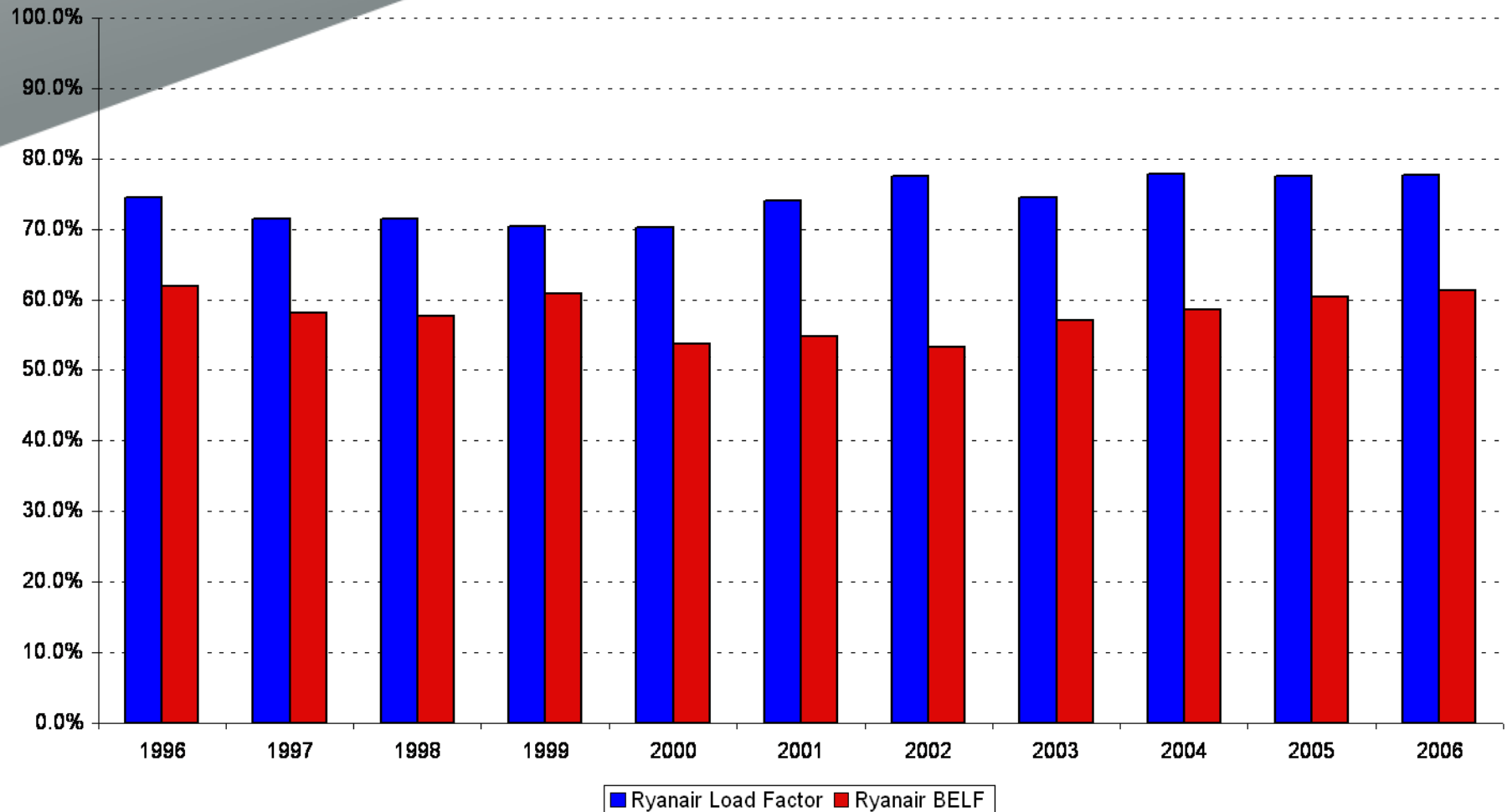
# EasyJet BELF and LF Trends

## EasyJet break even and load factor trends



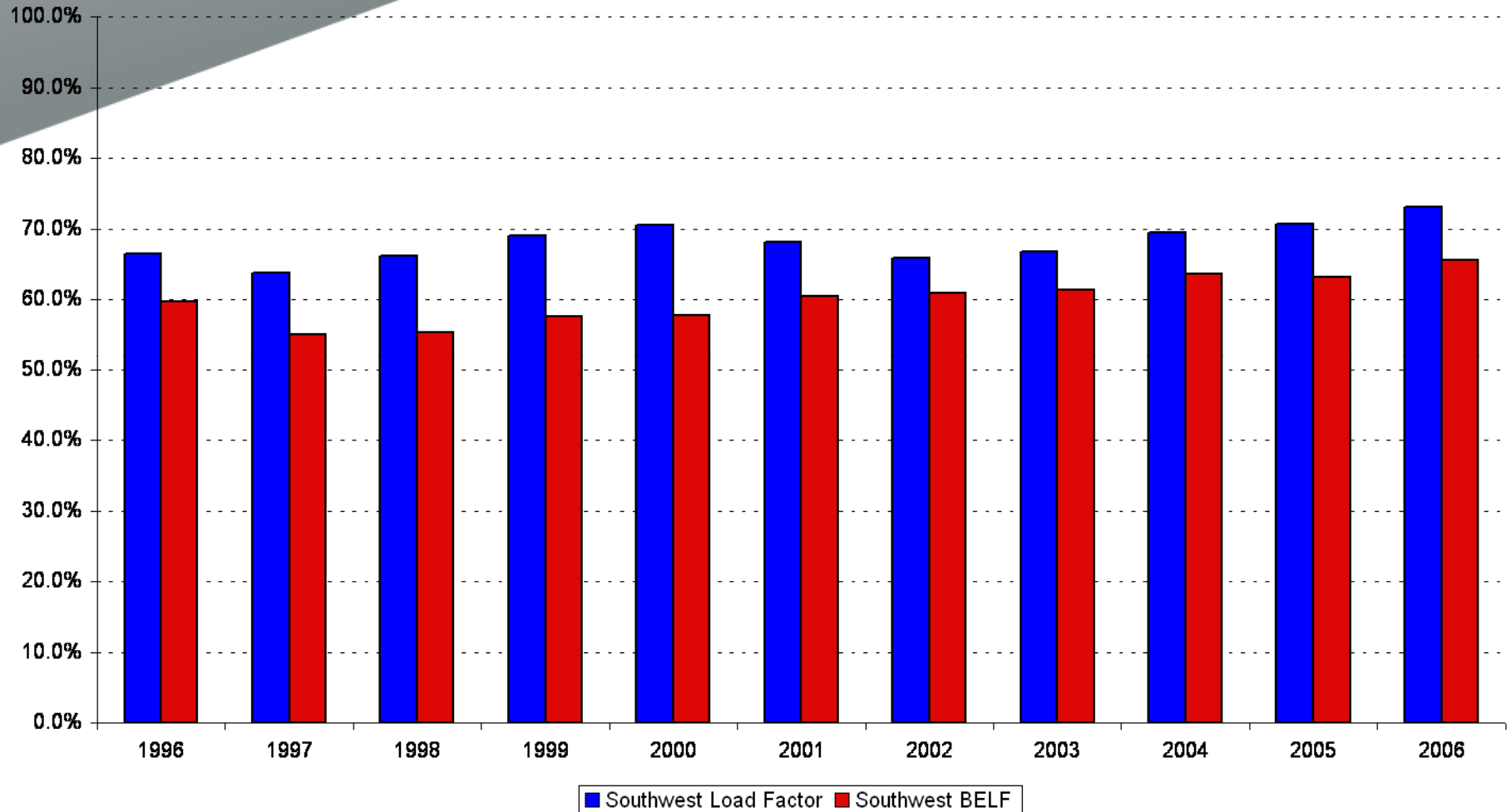
# Ryanair BELF and LF Trends

## Ryanair break even and load factor trends



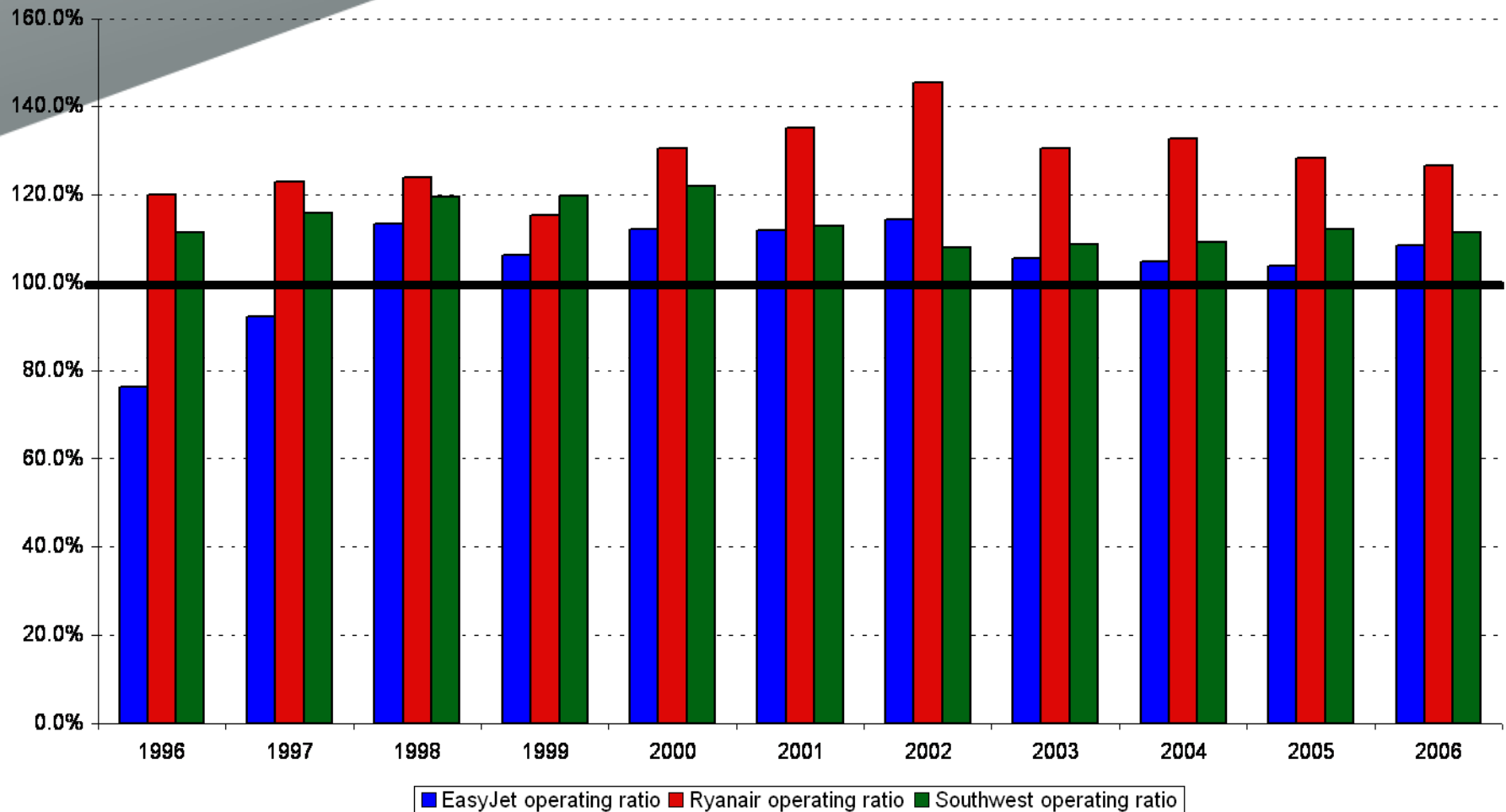
# Southwest BELF and LF Trends

## Southwest break even and load factor trends



# Operating Ratios trends

## Operating ratios for EasyJet, Ryanair & Southwest



# Benchmarking analysis

- Work in progress with colleague Prof Bill Morrison at Wilfred Laurier University, Ontario.
- Dataset of benchmark data based on annual reports, and Reed publications
  - Not all items available for all airlines so analysis limited to:
    - ☐ EasyJet – 2003, 2004, 2005, 2006
    - ☐ Ryanair – 2003, 2004, 2005, 2006
    - ☐ Norwegian – 2003, 2004
    - ☐ Flybe – 2003, 2004
    - ☐ Air Berlin – 2004, 2005
    - ☐ SkyEurope – 2005, 2006

# Indices developed

Based on “Best in class” performance, indices developed for the following:

- **Cost drivers**
  - E.g. Unit Cost (per ASK)
- **Revenue achievement**
  - E.g. Yield, Average fare
- **Distribution**
  - E.g. TSP per pax, % tickets sold online
- **Aircraft productivity**
  - E.g. Utilisation, sectors per day
- **Labour productivity**
  - E.g. ASK and Pax per employee, Personnel cost per ASK,
- **Airport attractiveness**
  - E.g. Airport charges, number of passengers, no of network competitors

# Correlations between indexes

Correlation Matrix	Operating Ratio	Cost driver Index	Revenue Index	Connectivity Index	Convenience Index	Comfort Index
Operating Ratio	1.00	0.27	-0.25	0.47	-0.60	-0.75
Cost driver Index score	0.27	1.00	-0.71	0.53	-0.44	-0.76
Revenue Index	-0.25	-0.71	1.00	-0.02	0.74	0.48
Connectivity Index	0.47	0.53	-0.02	1.00	0.03	-0.58
Convenience Index	-0.60	-0.44	0.74	0.03	1.00	0.62
Comfort Index	-0.75	-0.76	0.48	-0.58	0.62	1.00
Distribution/Sales index	0.70	0.36	-0.61	0.14	-0.93	-0.63
Aircraft Index	0.51	0.27	-0.74	-0.03	-0.79	-0.44
Labour Index	0.86	0.66	-0.49	0.59	-0.73	-0.94
Airports Index	0.59	0.23	-0.72	-0.20	-0.88	-0.40
Market Structure Index	-0.01	-0.03	-0.49	-0.31	-0.11	0.16

- Low costs is not the only story
  - Although it is a pre-requisite in this sector
- Chasing revenues counterproductive for low costs
- Convenience and comfort do not deliver profits in this sector
- Network coverage is also important



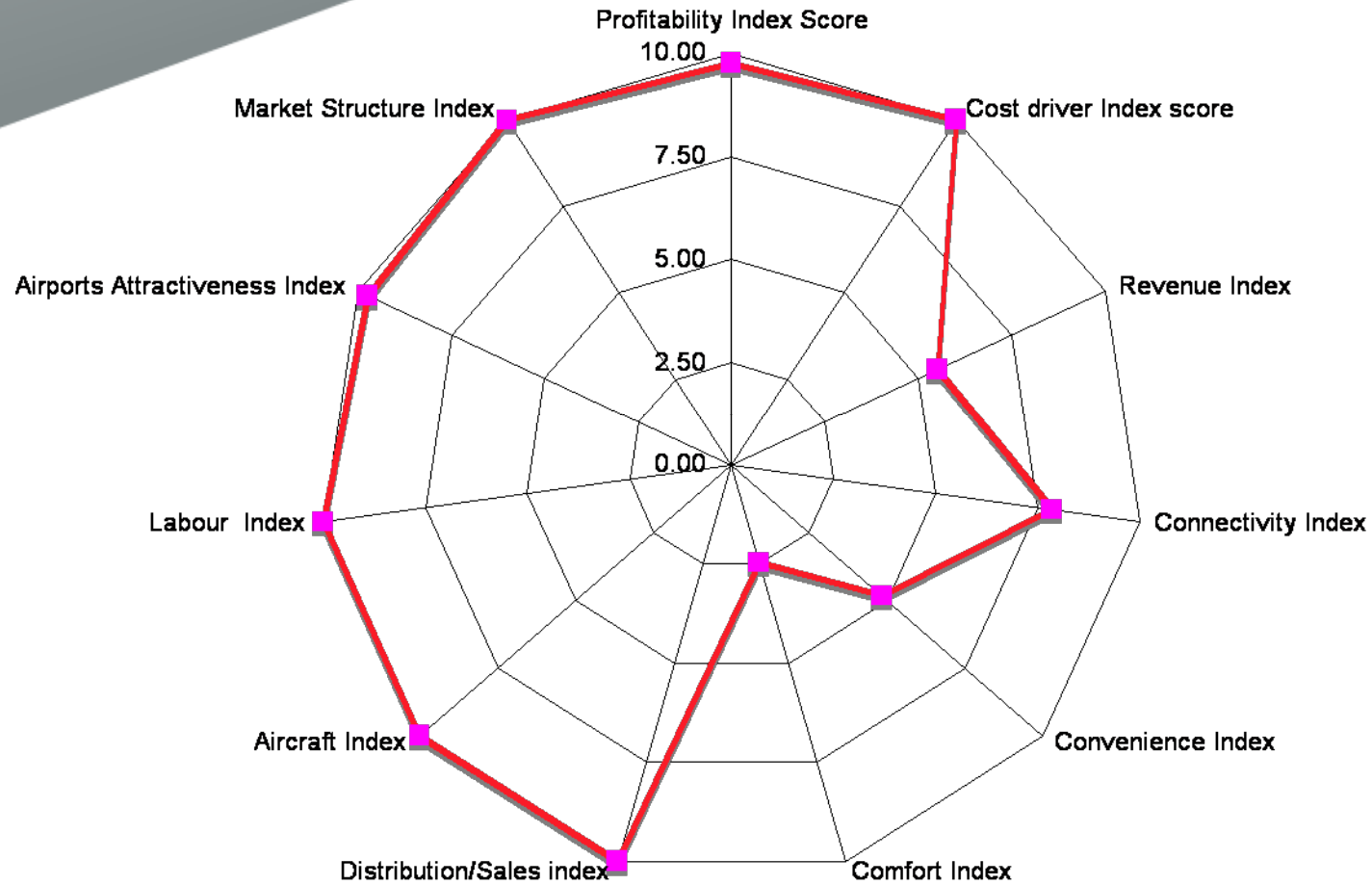
# Correlations between indexes

Correlation Matrix	Distribution/ Sales index	Aircraft Index	Labour Index	Airports Index	Market Structure Index
Operating Ratio	0.70	0.51	0.86	0.59	-0.01
Cost driver Index score	0.38	0.27	0.66	0.23	-0.03
Revenue Index	-0.61	-0.74	-0.49	-0.72	-0.49
Connectivity Index	0.14	-0.03	0.59	-0.20	-0.31
Convenience Index	-0.93	-0.79	-0.73	-0.88	-0.11
Comfort Index	-0.63	-0.44	-0.94	-0.40	0.16
Distribution/Sales index	1.00	0.80	0.78	0.79	0.08
Aircraft Index	0.80	1.00	0.52	0.79	0.47
Labour Index	0.78	0.52	1.00	0.54	-0.16
Airports Index	0.79	0.79	0.54	1.00	0.49
Market Structure Index	0.08	0.47	-0.16	0.49	1.00

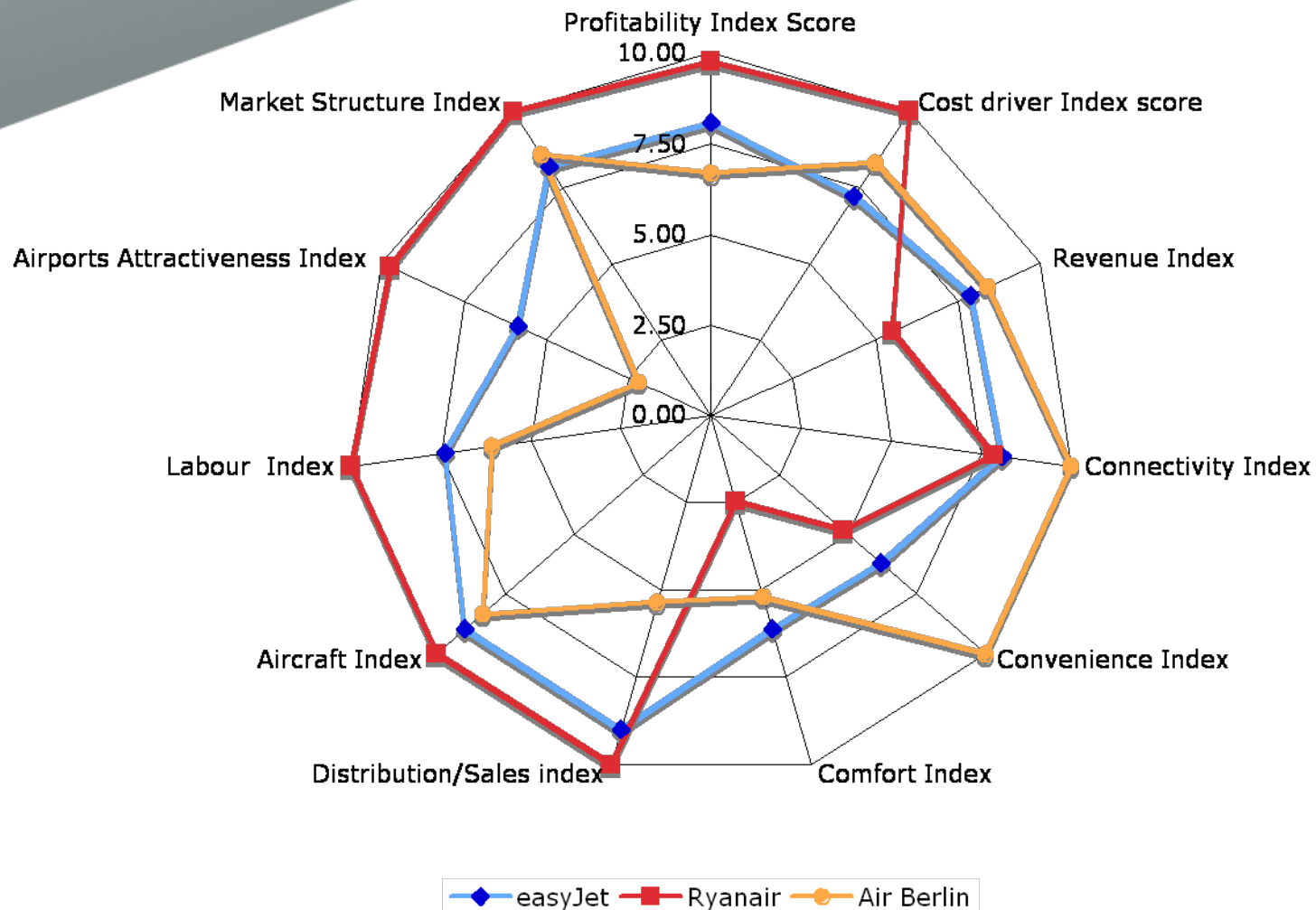
- Effective low cost distribution important
- Working aircraft and labour assets hard is imperative
- Using secondary under-utilised airports is good for costs not pax

# Ryanair's business model

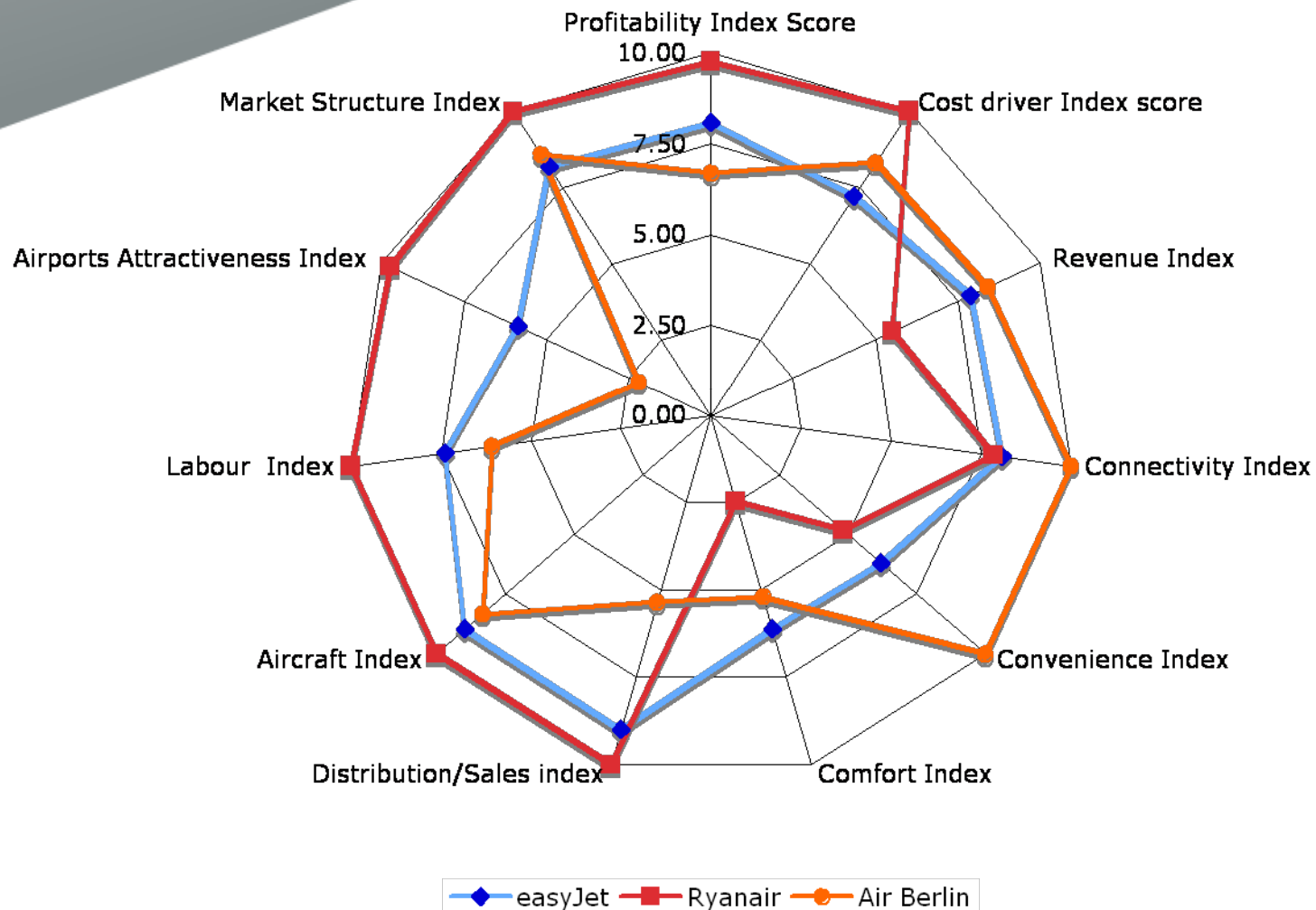
Ryanair 2006



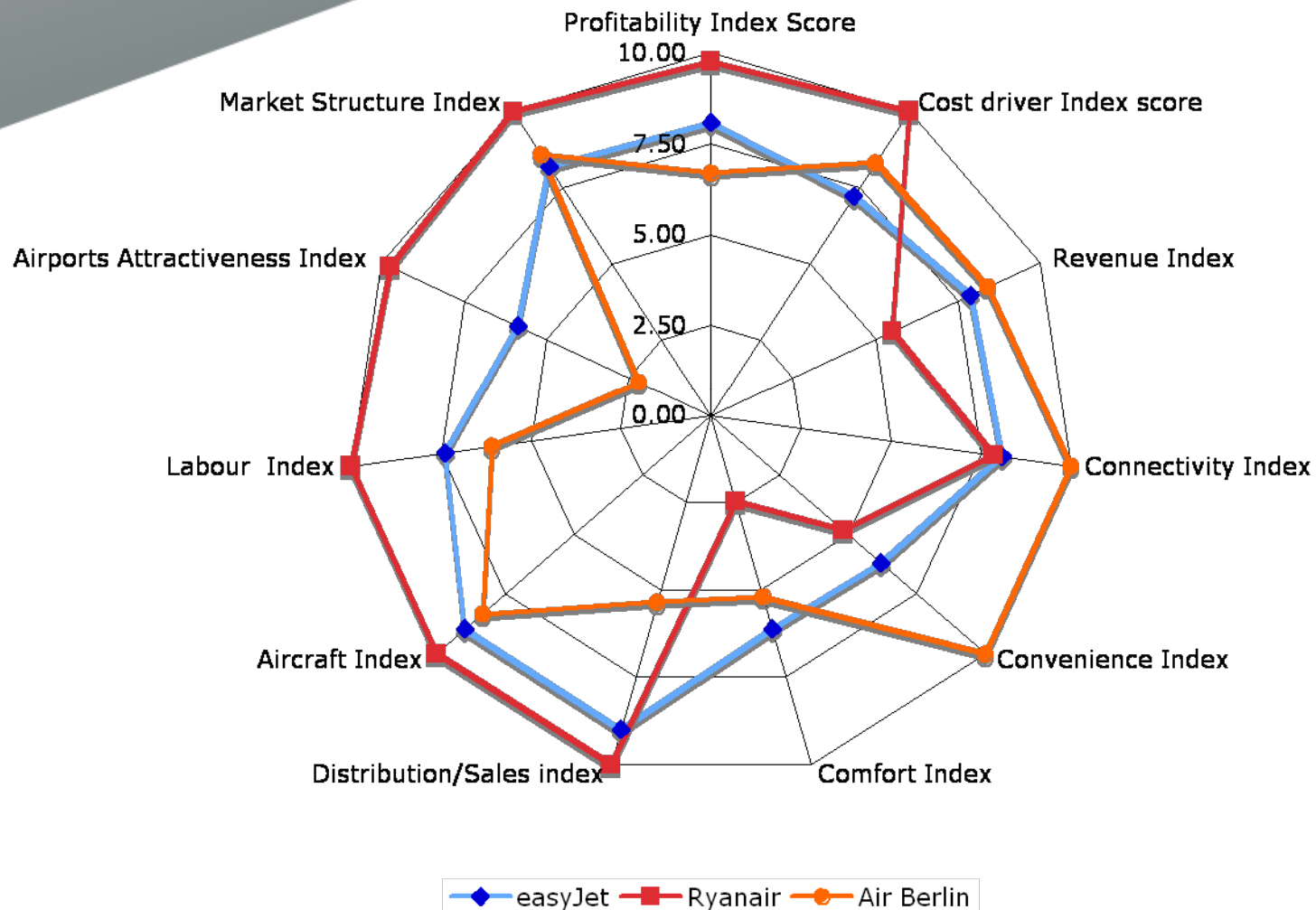
## LCC Profile, 2006



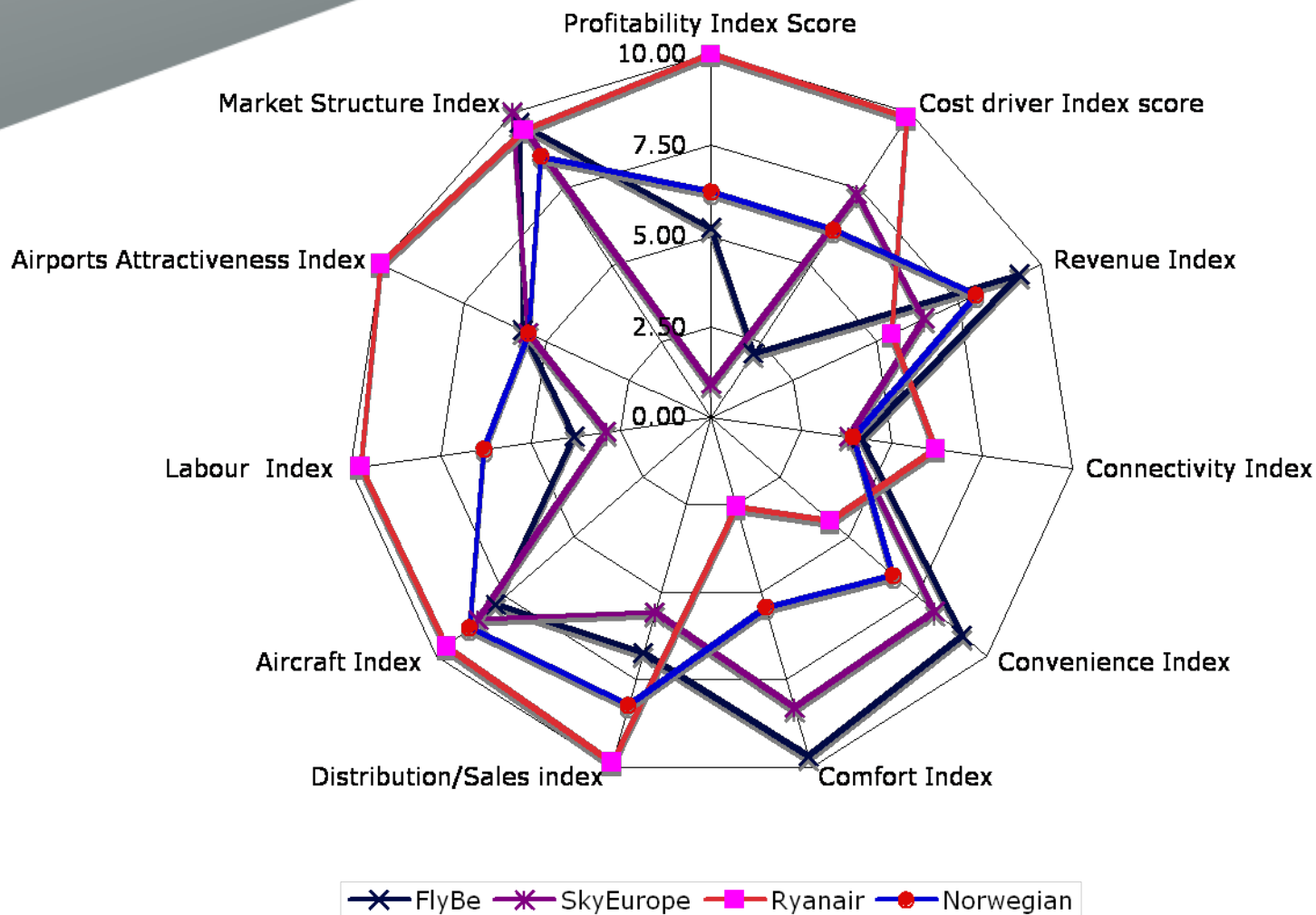
## LCC Profile, 2006



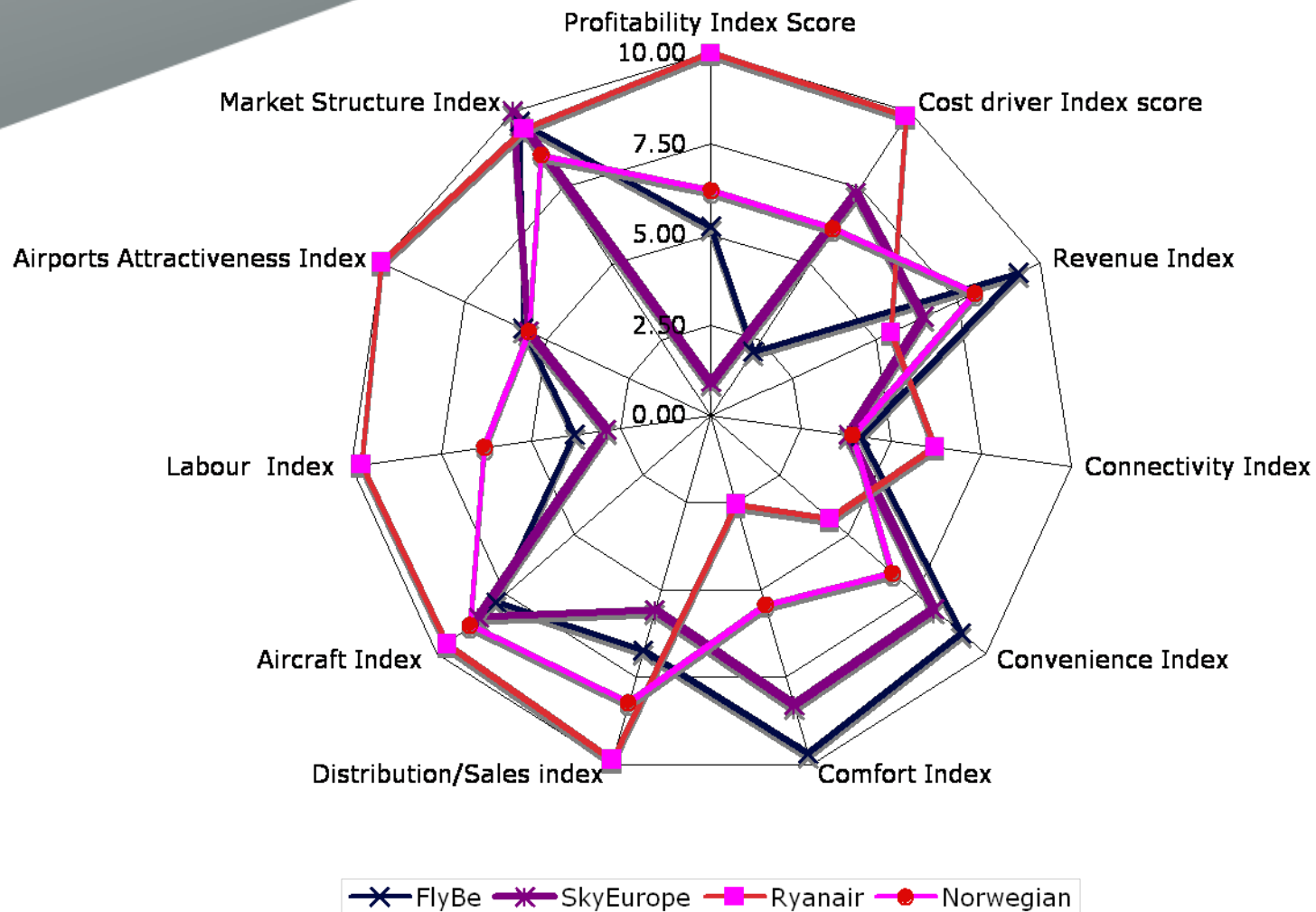
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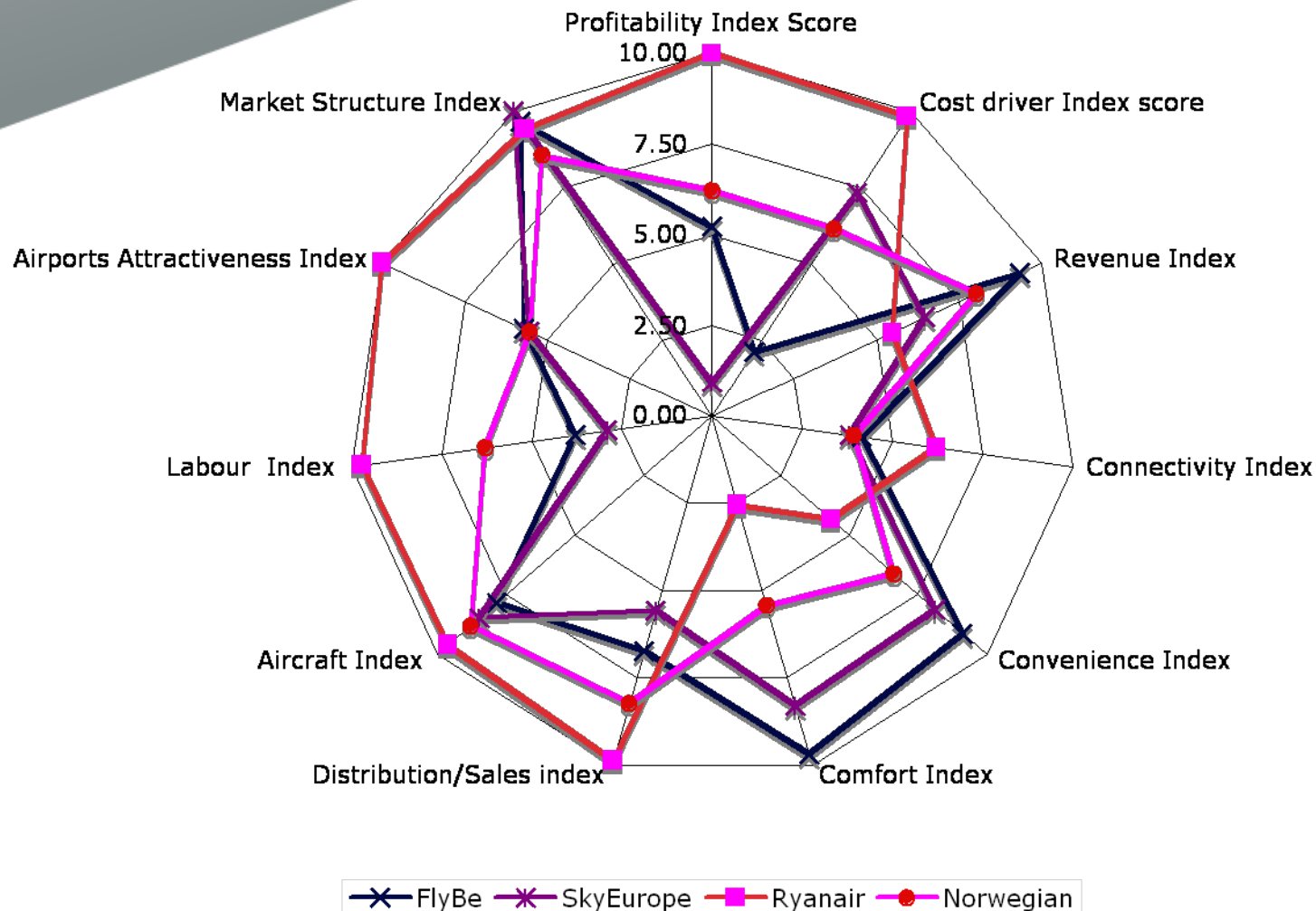
## LCC Profile, 2006



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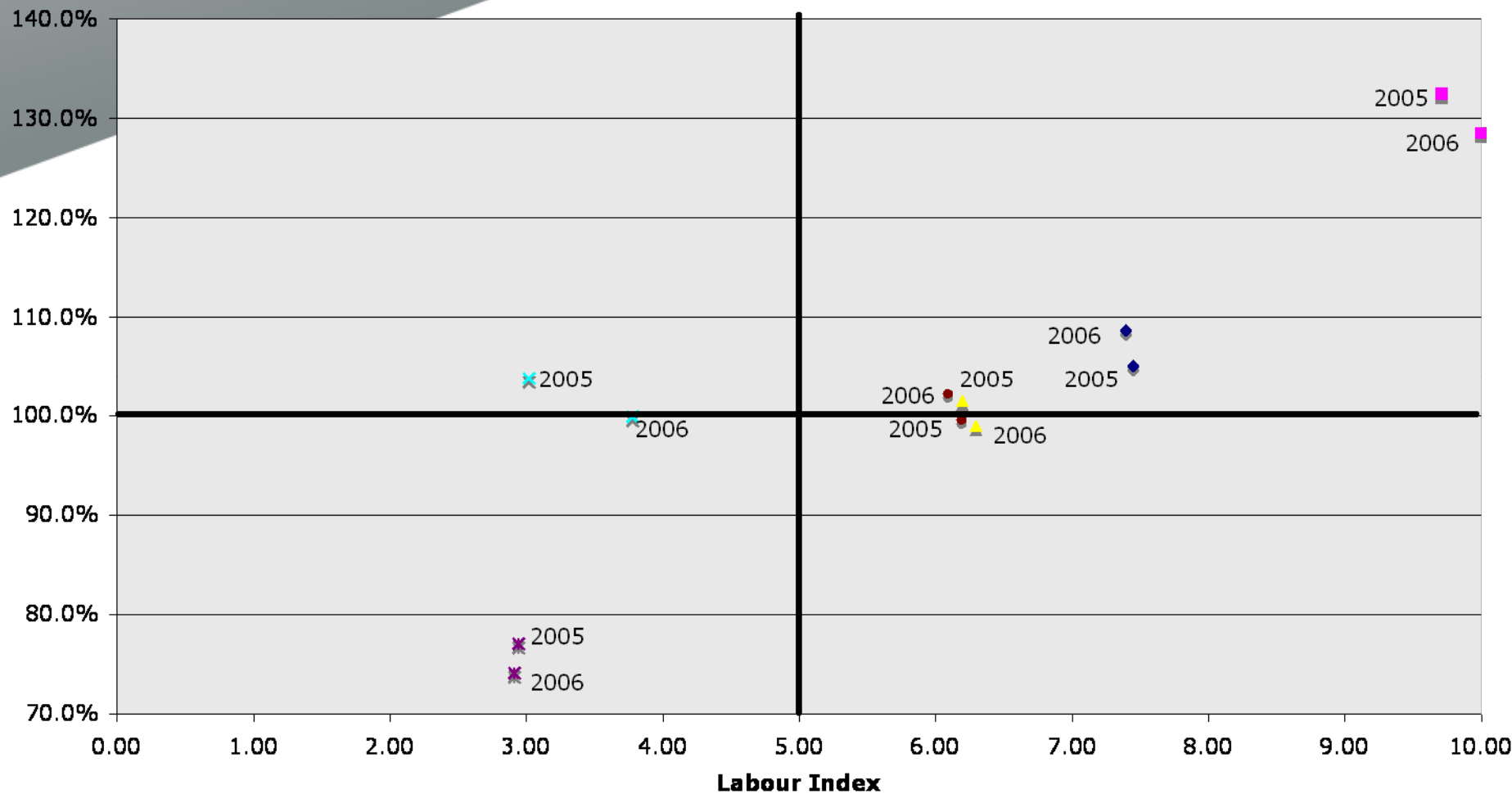


## LCC Profile, 2006



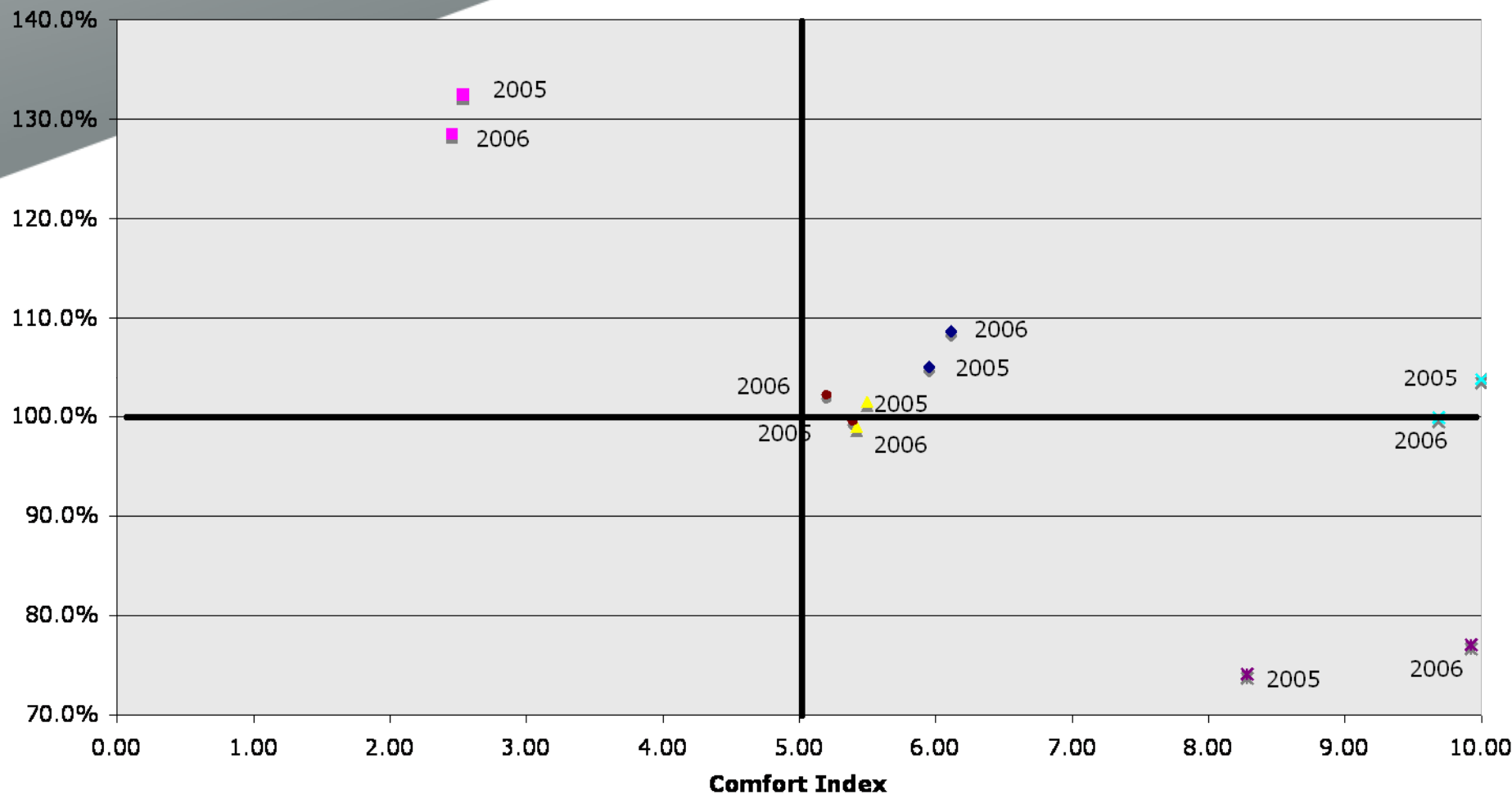


## Operating Ratio and Labour Index

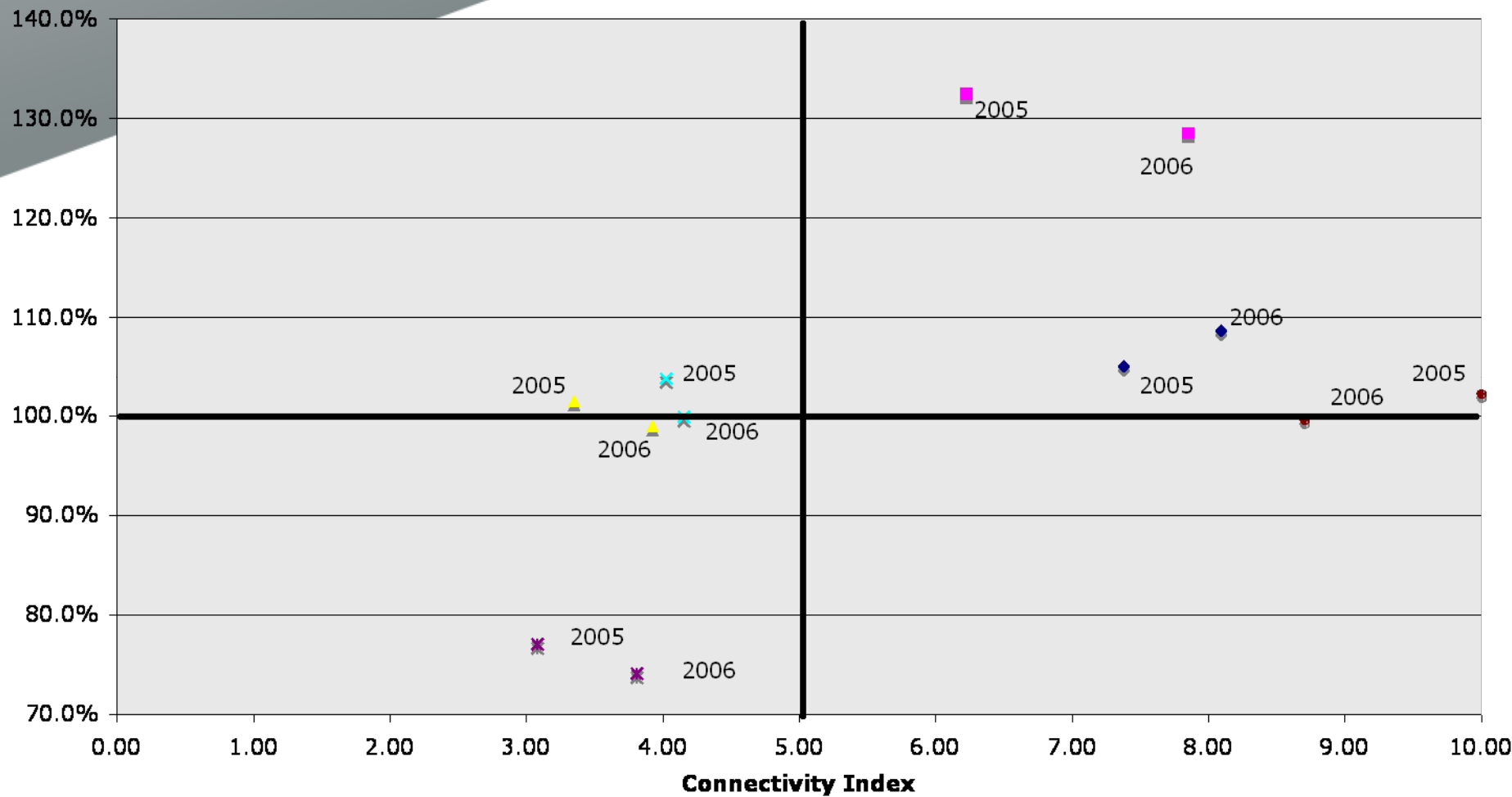


◆ easyJet ■ Ryanair ▲ Norwegian ✕ FlyBe ✕ SkyEurope ● Air Berlin

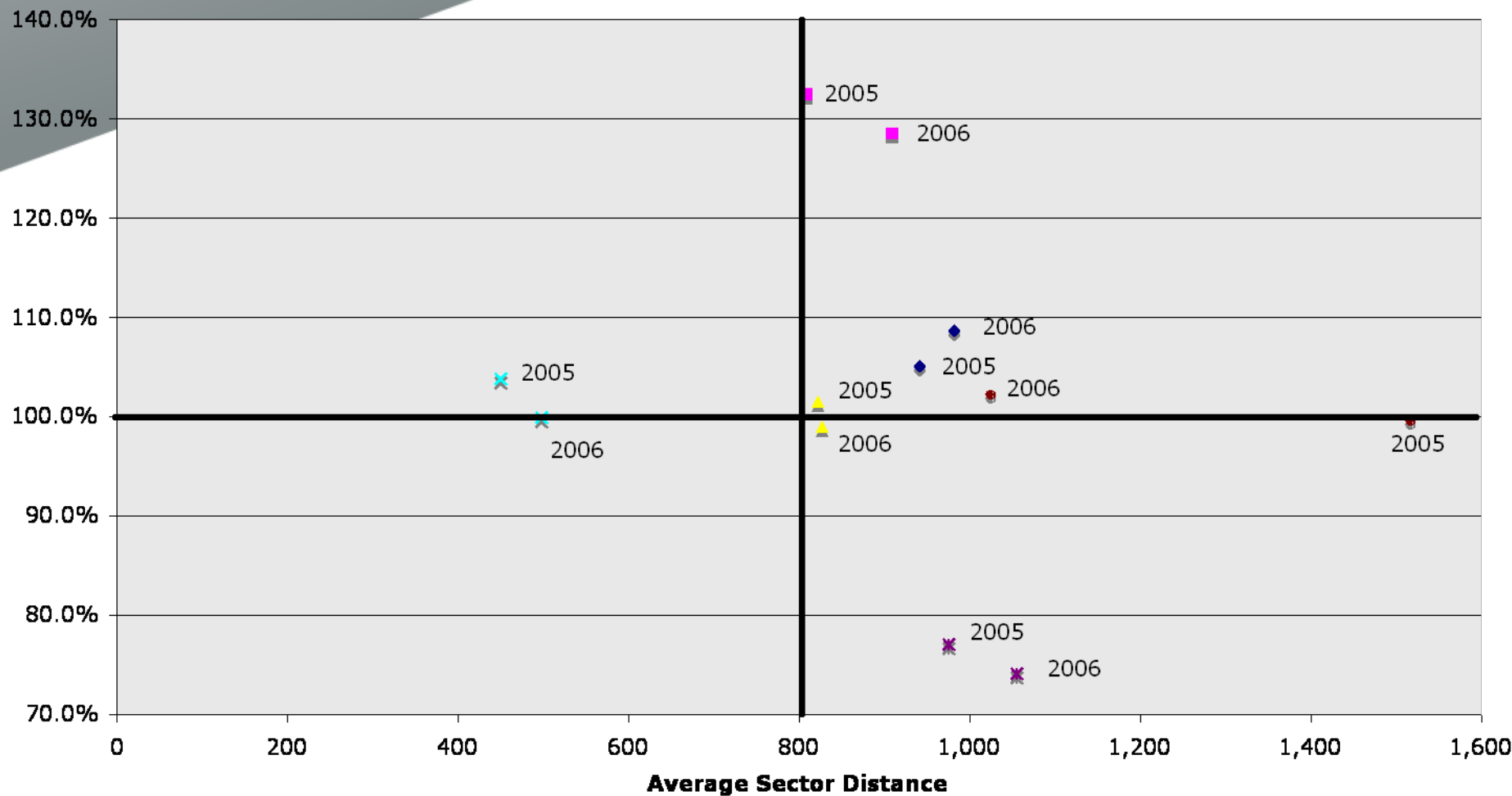
## Operating Ratio and Comfort Index



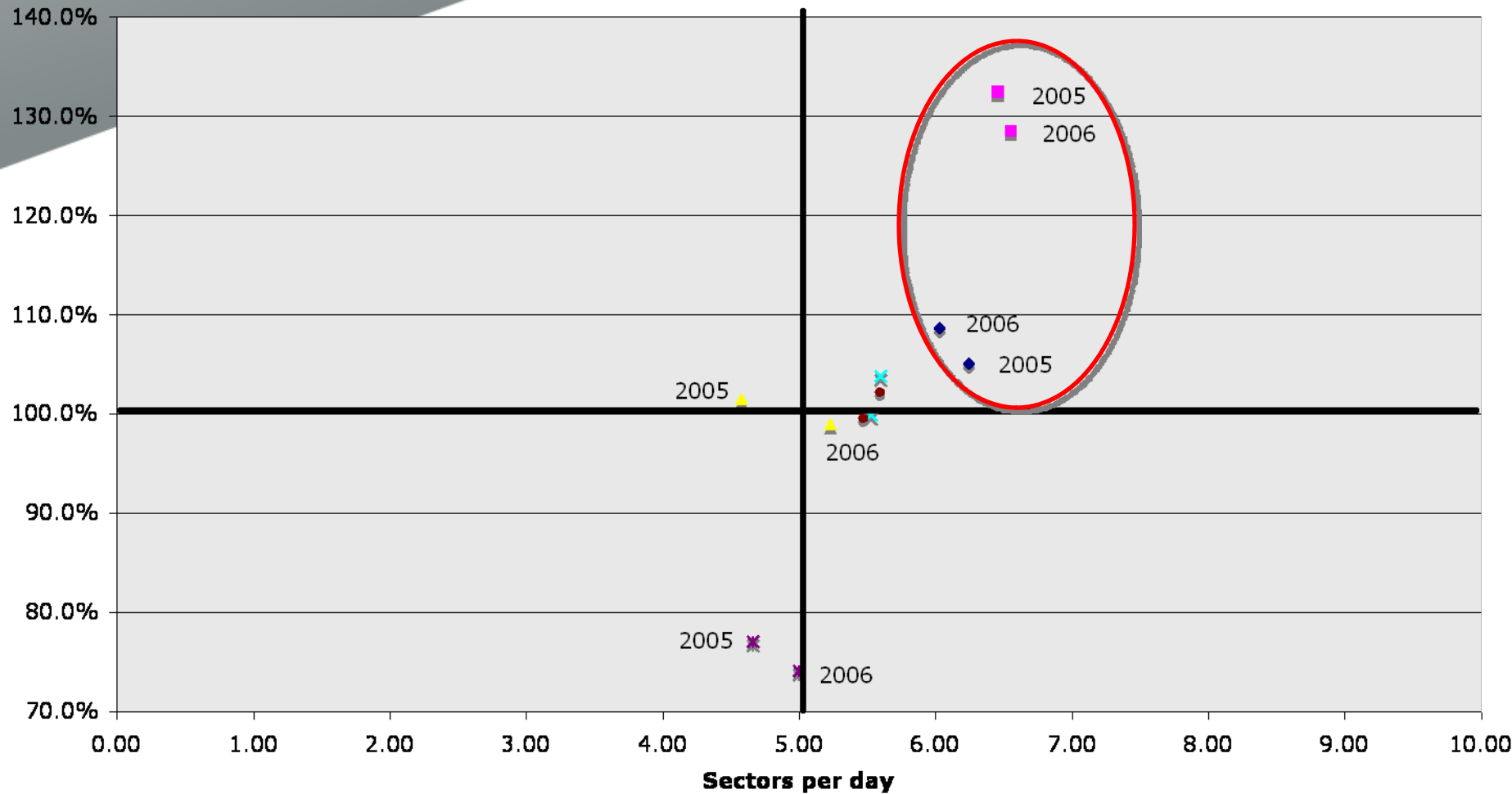
## Operating Ratio and Connectivity Index



## Operating Profit and Sector Length



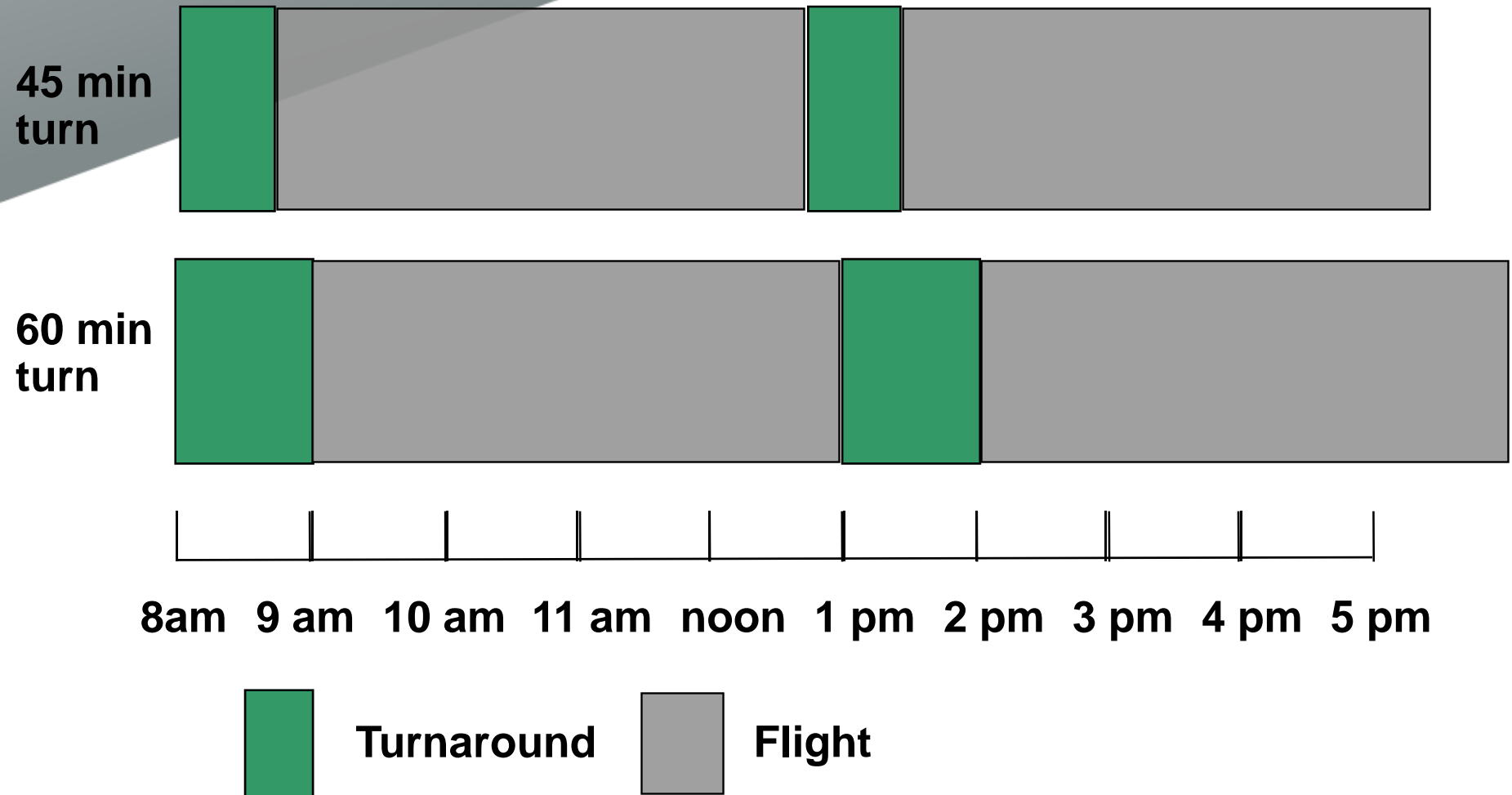
## Operating Ratio and Sectors per day



# LCCs in long haul?

- Opportunity to gain lower costs and significantly undercut incumbents is limited
- Less likely to stimulate this market as much as short haul
- The analyses we've performed suggest any model require a business class/economy configuration
- However, increasing likelihood that passengers will self connect at LCC airport “hubs”
  - Opportunity to sell insurance for self connections?

# Higher utilisation harder on long haul



- Cranfield forecast in 2005 for 2015
  - LCA sector dominated by 2 or 3 large carriers  
est. upto 80m pax with circa. 250 aircraft
    - Plus and a number of smaller players
  - Maturation/fatigue?
  - Environmentally taxation reduces the demand significantly



**Thank you  
for your attention**