The Challenge of the Low-cost Airlines

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Outline

• 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
Low cost airline strategy

• 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

30 min turn

45 min turn

8am 9 am 10 am 11 am noon 1 pm 2 pm 3 pm 4 pm 5 pm

Turnaround Flight
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

<table>
<thead>
<tr>
<th>Date</th>
<th>Flight Times</th>
<th>Prices</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sat 08 Dec</td>
<td>dep. 08:45, arr. 10:00</td>
<td>£39.99 incl. taxes and charges</td>
</tr>
<tr>
<td></td>
<td>dep. 12:10, arr. 13:25</td>
<td>£39.99 incl. taxes and charges</td>
</tr>
<tr>
<td></td>
<td>dep. 16:30, arr. 17:45</td>
<td>£22.99 incl. taxes and charges</td>
</tr>
<tr>
<td>Sun 09 Dec</td>
<td>dep. 10:50, arr. 12:05</td>
<td>£22.99 incl. taxes and charges</td>
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<tr>
<td></td>
<td>dep. 14:15, arr. 15:30</td>
<td>£44.99 incl. taxes and charges</td>
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<tr>
<td>Mon 10 Dec</td>
<td>dep. 08:05, arr. 09:20</td>
<td>£39.99 incl. taxes and charges</td>
</tr>
<tr>
<td></td>
<td>dep. 11:30, arr. 12:45</td>
<td>£22.99 incl. taxes and charges</td>
</tr>
<tr>
<td></td>
<td>dep. 16:20, arr. 17:35</td>
<td>£22.99 incl. taxes and charges</td>
</tr>
<tr>
<td></td>
<td>dep. 21:10, arr. 22:25</td>
<td>£44.99 incl. taxes and charges</td>
</tr>
</tbody>
</table>

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*£18.99* incl. taxes and charges

This is how your fare is calculated:

- easyJet flight: £1.99
- Airport operator charges and government taxes: £17.00

Source: EasyJet website 19th Nov 2007
Now including Taxes and charges
...I just flew coast-to-coast for $150!...

...did they pay you cash or check?...
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

<table>
<thead>
<tr>
<th></th>
<th>H1 2007</th>
<th>H1 2006</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ancillary revenue (£m)</td>
<td>77</td>
<td>59</td>
<td>+32%</td>
</tr>
<tr>
<td><strong>Per seat</strong></td>
<td><strong>£3.81</strong></td>
<td><strong>£3.23</strong></td>
<td><strong>+18%</strong></td>
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</table>

### Change per seat

<table>
<thead>
<tr>
<th>Change per seat</th>
<th>H1 2007</th>
</tr>
</thead>
<tbody>
<tr>
<td>Card fees</td>
<td>+ 2%</td>
</tr>
<tr>
<td>Change / Rescue / Speedy boarding fees</td>
<td>+ 15%</td>
</tr>
<tr>
<td>Partner</td>
<td>+ 56%</td>
</tr>
<tr>
<td>Excess baggage / Sporting goods</td>
<td>+ 40%</td>
</tr>
<tr>
<td>In-flight</td>
<td>- 8%</td>
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</tbody>
</table>

Ancillary revenue per seat in order of revenue contribution

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**Speedy boarding**

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.

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‘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

Source: OAG, easyJet
July, 2007

Sum of SumOfSeatCapacity

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


- **Ryanair**
  - (STN-GRO, LTN-GRO, LTN-REU, STN-REU)
- **easyJet**
  - (LTN, LGW, STN-BCN)
- **Iberia**
- **British Airways**

Source: UK CAA
Market stimulation:
Secondary market


Ryanair (STN-VLC)

easyJet (STN,LGW-VLC)

Iberia

British Airways

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

easyJet started STN-OVD 24 March 2005
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 have 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

- British Airways PLC
- easyJet Airline Company Ltd
- BMI British Midland
- BA Connect Ltd
- BMI Baby Ltd
- Ryanair
- BMI Regional
- jet2.com Ltd
- Air Berlin
- VLM (Belgium)
Load Factors important

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

- BMI REGIONAL
- BA CONNECT LTD
- VLM (BELGIUM)
- BMI BABY LTD
- BRITISH AIRWAYS PLC
- RYANAIR
- AIR BERLIN
- EASYJET AIRLINE COMPANY LTD
- AER LINGUS
Do all LCCs follow the same model?
Network choices

- 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

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

HHI by City Pairs (Summer 2021)

Herfindahl-Hirschman Index
EasyJet’s Long Tail
ex-London

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BTRC
Business Travel Research Centre

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Ryanair’s Longer Tail

Ryanair’s ex-London Long Tail

Cumulative number of City-Pairs

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Which model is best?
Average Fare Trends

Average Fares Trends: Southwest, easyJet, Ryanair

Operating Rev/Pax (USD)


EasyJet EasyJet
Ryanair Ryanair
Southwest Southwest
EasyJet BELF and LF Trends

EasyJet break even and load factor trends
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:
    - Norwegian – 2003, 2004
    - Flybe – 2003, 2004
    - Air Berlin – 2004, 2005
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

<table>
<thead>
<tr>
<th>Correlation Matrix</th>
<th>Operating Ratio</th>
<th>Cost driver Index</th>
<th>Revenue Index</th>
<th>Connectivity Index</th>
<th>Convenience Index</th>
<th>Comfort Index</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating Ratio</td>
<td>1.00</td>
<td>0.27</td>
<td>-0.25</td>
<td>0.47</td>
<td>-0.60</td>
<td>-0.75</td>
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<td>Cost driver Index score</td>
<td>0.27</td>
<td>1.00</td>
<td>-0.71</td>
<td>0.33</td>
<td>-0.44</td>
<td>-0.76</td>
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<tr>
<td>Revenue Index</td>
<td>-0.25</td>
<td>-0.71</td>
<td>1.00</td>
<td>-0.02</td>
<td>0.74</td>
<td>0.48</td>
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<tr>
<td>Connectivity Index</td>
<td>0.47</td>
<td>0.53</td>
<td>-0.02</td>
<td>1.00</td>
<td>0.03</td>
<td>-0.58</td>
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<tr>
<td>Convenience Index</td>
<td>-0.60</td>
<td>-0.44</td>
<td>0.74</td>
<td>0.03</td>
<td>1.00</td>
<td>0.62</td>
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<td>Comfort Index</td>
<td>-0.75</td>
<td>-0.76</td>
<td>0.48</td>
<td>-0.58</td>
<td>0.62</td>
<td>1.00</td>
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<tr>
<td>Distribution/Sales index</td>
<td>0.70</td>
<td>0.36</td>
<td>-0.61</td>
<td>0.14</td>
<td>-0.93</td>
<td>-0.63</td>
</tr>
<tr>
<td>Aircraft Index</td>
<td>0.51</td>
<td>0.27</td>
<td>-0.74</td>
<td>-0.03</td>
<td>-0.79</td>
<td>-0.44</td>
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<tr>
<td>Labour Index</td>
<td>0.86</td>
<td>0.66</td>
<td>-0.49</td>
<td>0.59</td>
<td>-0.73</td>
<td>-0.94</td>
</tr>
<tr>
<td>Airports Index</td>
<td>0.59</td>
<td>0.23</td>
<td>-0.72</td>
<td>-0.20</td>
<td>-0.88</td>
<td>-0.40</td>
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<td>-0.03</td>
<td>-0.49</td>
<td>-0.31</td>
<td>-0.11</td>
<td>0.16</td>
</tr>
</tbody>
</table>

- 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

<table>
<thead>
<tr>
<th>Correlation Matrix</th>
<th>Distribution/ Sales index</th>
<th>Aircraft Index</th>
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<td>-0.31</td>
</tr>
<tr>
<td>Convenience Index</td>
<td>-0.93</td>
<td>-0.79</td>
<td>-0.73</td>
<td>-0.88</td>
<td>-0.11</td>
</tr>
<tr>
<td>Comfort Index</td>
<td>-0.63</td>
<td>-0.44</td>
<td>-0.94</td>
<td>-0.40</td>
<td>0.16</td>
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<td>Labour Index</td>
<td>0.78</td>
<td>0.52</td>
<td>1.00</td>
<td>0.54</td>
<td>-0.16</td>
</tr>
<tr>
<td>Airports Index</td>
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<td>0.79</td>
<td>0.54</td>
<td>1.00</td>
<td>0.49</td>
</tr>
<tr>
<td>Market Structure Index</td>
<td>0.08</td>
<td>0.47</td>
<td>-0.16</td>
<td>0.49</td>
<td>1.00</td>
</tr>
</tbody>
</table>

- 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
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

45 min turn

60 min turn

8am 9 am 10 am 11 am noon 1 pm 2 pm 3 pm 4 pm 5 pm

Turnaround  Flight
The future

• 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