Air Transport Services as Economic Catalysts for Asia-Pacific: an Introduction

Prof. Rigas Doganis

Visiting Professor Cranfield University
Non-executive Director easyJet and Hyderabad Airport
rigas@doganisassociates.co.uk

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2001-2006: A crisis too far?

Economic downturn, Iraq War, SARS
rocketing fuel prices after 2004, credit crunch

Total IATA net losses 1990-93 = US$ 15 billion .....but....
($11 billion state aid given European carriers 1992-97)

Total IATA net losses 2001 to 2005 = US$ 37.4 billion
(after $5 + 3 billion aid to US carriers 2002-2003)

2006 loss = $0.5 billion (after US restructure cost 2.6 bil.)
2007 profit = + $5.6 billion ?
2008 loss = $6.0 bil....... if oil c. $130/bbl

Downturn is deeper/longer than just another industry cycle
A Cyclical Industry – A Marginal Industry
Profit/Loss ICAO Member Airlines

Operating Result as % Revenues
Net Result as % Revenues

Source: ICAO and IATA for 2007 is estimate

Source: ICAO/Prof.P.Morrell

2007 is estimate

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Major Challenges Affecting the Airline Industry

1. Long downturn creating structural instability
2. Accelerating liberalisation of international air services
3. Low-cost revolution undermining short haul markets
4. Economic pressures to consolidate through mergers and alliances
5. Declining yields require new pricing strategies
6. Continued cost reduction a long-term necessity as fuel prices rise
7. Need for effective IT strategy
8. Growing environmental pressures

ALL THE ABOVE ARE INTER-LINKED
Airline Challenges

Structural Instability

Long financial downturn has created structural instability

- made worse by fuel increases since 2004
### Rising Fuel Prices
Deepen Crisis and Pessimism

<table>
<thead>
<tr>
<th>Annual Average price</th>
<th>Fuel Price (cents/US gal)</th>
<th>Change/Year Ago %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year 2002</td>
<td>67.9</td>
<td></td>
</tr>
<tr>
<td>Year 2003</td>
<td>81.1</td>
<td>+ 19</td>
</tr>
<tr>
<td>Year 2004</td>
<td>116.1</td>
<td>+ 43</td>
</tr>
<tr>
<td>Year 2005</td>
<td>167.7</td>
<td>+ 45</td>
</tr>
<tr>
<td>Year 2006</td>
<td>194.8*</td>
<td>+ 16</td>
</tr>
<tr>
<td>Year 2007</td>
<td>213.7</td>
<td>+ 10</td>
</tr>
<tr>
<td>2008 March</td>
<td>316.8</td>
<td>+ 72</td>
</tr>
<tr>
<td>June</td>
<td>394.6</td>
<td>+ 91</td>
</tr>
</tbody>
</table>
Rising fuel prices may destroy airline business model

<table>
<thead>
<tr>
<th>Year</th>
<th>Fuel as % of total operating costs</th>
<th>Brent Crude US $ per Barrel</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>14 %</td>
<td>28.8</td>
</tr>
<tr>
<td>2001</td>
<td>13 %</td>
<td>24.7</td>
</tr>
<tr>
<td>2002</td>
<td>13 %</td>
<td>25.1</td>
</tr>
<tr>
<td>2003</td>
<td>14 %</td>
<td>28.8</td>
</tr>
<tr>
<td>2004</td>
<td>16 %</td>
<td>38.3</td>
</tr>
<tr>
<td>2005</td>
<td>22 %</td>
<td>54.5</td>
</tr>
<tr>
<td>2006</td>
<td>26 %</td>
<td>65.1</td>
</tr>
<tr>
<td>2007</td>
<td>29 %</td>
<td>73.0</td>
</tr>
<tr>
<td>2008 estimated</td>
<td>30-35 % ???</td>
<td>105.0 Jan to June</td>
</tr>
</tbody>
</table>

HELP !!
## Airline failures during 2008

<table>
<thead>
<tr>
<th>United States</th>
<th>Europe</th>
<th>Asia</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maxjet (Dec. 07)</td>
<td>Euromanx (April)</td>
<td>Oasis (April)</td>
</tr>
<tr>
<td>BigSky (Jan)</td>
<td>Silverjet (June)</td>
<td></td>
</tr>
<tr>
<td>Aloha (Mar.)</td>
<td>XL (Sept.)</td>
<td></td>
</tr>
<tr>
<td>ATA Airlines (April)</td>
<td>Alitalia (Sept)</td>
<td></td>
</tr>
<tr>
<td>Skybus (April)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Eos (April)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Champion Air (May)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Who is next?
# Annual Growth Rates (Pass-Kms)
## 12 Largest Markets 2007-2026

<table>
<thead>
<tr>
<th>Markets</th>
<th>% of World Pass-Kms 2025</th>
<th>Annual % Growth Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>India Domestic</td>
<td>2.1</td>
<td>+ 11.5</td>
</tr>
<tr>
<td>China Domestic</td>
<td>7.3</td>
<td>+ 8.4</td>
</tr>
<tr>
<td>Asia - PRC</td>
<td>1.9</td>
<td>+ 6.8</td>
</tr>
<tr>
<td>W. Europe - PRC</td>
<td>1.8</td>
<td>+ 6.6</td>
</tr>
<tr>
<td>W. Europe - Middle East</td>
<td>1.8</td>
<td>+ 6.5</td>
</tr>
<tr>
<td>W. Europe - South America</td>
<td>2.5</td>
<td>+ 6.2</td>
</tr>
<tr>
<td>USA - Asia</td>
<td>2.1</td>
<td>+ 5.9</td>
</tr>
</tbody>
</table>

**World Average**

<table>
<thead>
<tr>
<th>Markets</th>
<th>% of World Pass-Kms 2025</th>
<th>Annual % Growth Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>W. Europe - Asia</td>
<td>5.3</td>
<td>+ 4.8</td>
</tr>
<tr>
<td>W. Europe - USA</td>
<td>7.3</td>
<td>+ 4.5</td>
</tr>
<tr>
<td>Japan - USA</td>
<td>2.3</td>
<td>+ 4.2</td>
</tr>
<tr>
<td>Intra- Western Europe</td>
<td>8.7</td>
<td>+ 3.8</td>
</tr>
<tr>
<td>USA Domestic</td>
<td>15.1</td>
<td>+ 2.4</td>
</tr>
<tr>
<td>Share of World</td>
<td>58.2</td>
<td></td>
</tr>
</tbody>
</table>

Source: Compiled using Airbus: Global Market Forecast
Airline Challenges
Spread of liberalisation

• Regional Agreements, e.g. Asean, Nov 2004
• Asian bilaterals opening up
  • e.g. 2005 India agrees increased flights on many bilaterals - UK/India from 21 to 80 per week,
  • e.g. June 2007 China-US double flights permitted and unlimited cargo by 2012
• EU - USA 'Open Skies' agreement from April 2008
• EU block nationality agreements eg Lebanon, Australia, Malaysia, UAE
• Neighbour states to join European Aviation Area, e.g. Morocco 2006

• Result:
  • More open deregulated markets
  • More intense competition
  • New point-to-point services

BUT: More Govt. taxes on air travel
EU Emissions trading scheme by 2011
Airline Challenges

Low Cost Revolution

1. Structural instability
2. Accelerating liberalisation
3. Low-cost revolution


- Has undermined short-haul scheduled and charter markets in US, Europe and Australia
- Now spreading in South America, Middle East, Africa
## Low-cost carriers in Asia/Pacific

<table>
<thead>
<tr>
<th>2001</th>
<th>by 2007</th>
<th>2007 (contd)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating in liberalised domestic markets</td>
<td>Many new entrants</td>
<td></td>
</tr>
<tr>
<td></td>
<td>More international routes</td>
<td></td>
</tr>
<tr>
<td>Air Asia</td>
<td>Air Deccan</td>
<td>Paramount</td>
</tr>
<tr>
<td>Cebu Pacific ?</td>
<td>Air Do</td>
<td>SpiceJet</td>
</tr>
<tr>
<td>Freedom Air</td>
<td>Air India Express</td>
<td>Star Flyer</td>
</tr>
<tr>
<td>Lion Air</td>
<td>Fly Pacificblue</td>
<td>Thai Air Asia</td>
</tr>
<tr>
<td>Virgin Pacific</td>
<td>Go Air</td>
<td>Tiger Air</td>
</tr>
<tr>
<td></td>
<td>Indonesia Air Asia</td>
<td>Valuair</td>
</tr>
<tr>
<td></td>
<td>Indigo</td>
<td>Virgin Blue Macau</td>
</tr>
<tr>
<td></td>
<td>Jetstar</td>
<td>and in China ..........</td>
</tr>
<tr>
<td></td>
<td>Jetstar Asia</td>
<td>United Eagle</td>
</tr>
<tr>
<td></td>
<td>Kingfisher</td>
<td>Spring</td>
</tr>
<tr>
<td></td>
<td>Nok Air</td>
<td>Okay</td>
</tr>
<tr>
<td></td>
<td>One-Two-Go</td>
<td>East Star etc........</td>
</tr>
</tbody>
</table>
Share of “Low-cost” seats on domestic and intra European routes in each country – Sept. 2008

Average share in 2003 was 17%

Source: compiled using OAG data,
1. Structural instability
2. Accelerating liberalisation
3. Low-cost revolution undermining short-haul markets
4. Economic Pressure to Consolidate
   - Benefits of larger network/wider market spread
   - Need to reduce costs and over-capacity
   - Need to reduce number of players especially long-haul
   - Relaxing 'nationality' will facilitate cross-border mergers
   - Airlines must plan or renew alliance/merger strategy

*e.g. Air France/KLM (2004), Lufthansa/Swissair (2005), Air China/Cathay link-up (2007), Delta-Northwest (2008 ?), BA-Iberia (2009 ?)*
Airline Challenges
Declining Yields

1. Structural instability
2. Accelerating liberalisation
3. Low-cost revolution undermining short-haul markets
4. Economic Pressure to Consolidate
5. Declining yields require new pricing strategies
   - Over-capacity in long-haul markets
   - Impact of low-cost airlines on short-haul/domestic
   - Impact of internet

Are Airlines Losing Price Control?
Are new pricing strategies needed
Average Fares in Real Values in Deregulated Markets

![Graph showing average fares in real values for US and European airlines. The graph compares domestic and intra-EU routes with long-haul routes.](image)

**Source:** Mark Smyth "Low-cost is necessary; Will it be sufficient" IATA Nov. 2006
## Yields European Network Airlines 1999 to 2006

<table>
<thead>
<tr>
<th>Traffic Region</th>
<th>1999</th>
<th>2006</th>
<th>% change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Domestic</td>
<td>17.72</td>
<td>14.74</td>
<td>-16</td>
</tr>
<tr>
<td>Europe – Middle East</td>
<td>10.89</td>
<td>7.78</td>
<td>-29</td>
</tr>
<tr>
<td>Intra-European</td>
<td>16.00</td>
<td>11.65</td>
<td>-27</td>
</tr>
<tr>
<td>North Atlantic</td>
<td>6.68</td>
<td>6.05</td>
<td>-9</td>
</tr>
<tr>
<td>Europe – Far East/Australia</td>
<td>6.27</td>
<td>5.77</td>
<td>-8</td>
</tr>
</tbody>
</table>

Real = adjusted for exchange rate and inflation

NB. North-Atlantic 2005 was 5.53

Source: compiled from AEA data
Airline Challenges

Continued Cost Reduction

1. Structural instability
2. Continued liberalisation
3. Low-cost revolution undermining short haul markets
4. Declining yields require new pricing strategies
5. Economic Pressure to Consolidate
6. Continued cost reduction critical as fuel prices rise
   - Labour is the key (15-30% of total costs in Europe – 12-25% Asia)
   - Cut distribution costs (up to 15% total costs)
   - Rationalise network/fleet
   - Out-sourcing
Airline Challenges

Information Technology Critical

1. Structural instability
2. Continued liberalisation
3. Low-cost revolution undermining short-haul markets
4. Declining yields require new pricing strategies
5. Economic pressure to consolidate
6. Continued cost reduction a long-term necessity
7. Information Technology (IT) increasingly critical tool
Airline Challenges

Environmental Pressures

1. Structural instability
2. Continued liberalisation
3. Low-cost revolution undermining short-haul markets
4. Declining yields require new pricing strategies
5. Economic pressure to consolidate
6. Continued cost reduction is long-term necessity
7. IT increasingly critical
8. Growing environmental pressures

eg. European Emissions Trading scheme 2012 will add $3.5 bil. costs
Airline Challenges
Capacity Constraints

1. Structural instability
2. Continued liberalisation
3. Low-cost revolution undermining short-haul markets
4. Declining yields require new pricing strategies
5. Economic pressure to consolidate
6. Continued cost reduction long-term necessity
7. Developing effective IT strategy
8. Growing environmental pressures
9. Airport and ANS capacity shortage worsening

eg European Single Sky still not implemented
Network Airlines will be Challenged by

- Spread of deregulation $\rightarrow$ over-capacity and more competition
- Alliances $\rightarrow$ aggravate over-capacity and weaken smaller carriers
- Low-cost carriers $\rightarrow$ undermine conventional short-haul
- Internet selling $\rightarrow$ shifts market power to consumers, and pushes fares down
- Continued high fuel prices
- Losses or only marginal profits for many carriers

Continued structural instability inevitable
Survival strategies must be re-thought
Strategies for low-cost carriers

✓ Grow rapidly .. + 15% p.a. in Europe, faster in India, China, S.E.Asia
✓ Many new-entrant LCCs but most will not survive
✓ Consolidation into 2-4 majors in each region (e.g. Air Berlin + DBA + LTU + or Germanwings+Eurowings+TUIfly ? - )
✓ Become dominant on most short-haul routes
✓ Attack smaller national/regional carriers, e.g. Malaysian, Thai Airways, Alitalia,
✓ Some product differentiation?
✓ New, longer-haul LCCs may emerge (e.g Air Asia, Jetstar, or Ryanair)
1. Lower fuel prices – if any – will only be short-term palliative

2. Deep cost-cutting essential – but not enough to ensure long-term viability

3. A key to survival in age of growing low-cost dominance in short-haul markets and imminent over-capacity in long-haul is:
   - radical network restructuring
   - capacity reduction/rationalisation
   - product improvement/differentiation
For these and other current issues see new 2006 revised edition of

**The Airline Business**

For a more in-depth economic study of the industry see

**Flying Off Course: the Economics of International Airlines**

both by

*Rigas Doganis*

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www.amazon.com or www.amazon.co.uk