Nature of Airline Demand

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The Airline Industry

- Big and Wide and Tall
- Characteristics
- Changes in Demand
- Key Issues
Big and Wide and Tall

2,100 million passengers (4.1% increase)
753 million international passengers (6.7% increase)

ICAO preliminary figures
IATA Members Operations

IATA members Air Transport Operations

Tonnes-Kilometres Performed (millions)

- Mail
- Freight
- Passenger

IATA Share of World RPKs, 2006

Source: IATA, WATS, 2007
Major Passenger Traffic Flows (RPKs)

Source: IATA WATS 2004

North America: 20.6%
Europe: 8.9%
Middle East: 1.0%
Asia & SW Pacific: 19.4%

IATA scheduled RPKs 2006
Passenger traffic growth forecast

Figure 5-1. Trends in scheduled passenger traffic — World (1992–2015) (ICAO Contracting States)

ICAO, Outlook for Air Transport to 2015, Cir 304 AT/127
IATA Members’ Passenger Load Factors

IATA Member Passenger Load Factors

- International
- Domestic
- System

Percent


2001: 62%
2002: 64%
2003: 66%
2004: 68%
2005: 70%
2006: 72%
Airline Industry Characteristics
Airline industry characteristics

- Strongly influenced by economic cycles
- Seats cannot be stored
- High operating gearing
- Many markets highly seasonal
- Long aircraft ordering lead times
- Poor financial performance
World GDP & scheduled traffic growth

Source: IMF, ICAO Air Transport Reporting Form A.
## Aircraft Manufacturer Forecasts (Passenger-kms)

<table>
<thead>
<tr>
<th>Av. Annual Growth:</th>
<th>Airbus</th>
<th>Boeing</th>
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<tbody>
<tr>
<td><strong>2006/7 to 2025/6</strong></td>
<td></td>
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<tr>
<td>Intra-Europe</td>
<td>5.6%</td>
<td>3.5%</td>
</tr>
<tr>
<td>Europe - N. America</td>
<td>3.7%</td>
<td>4.7%</td>
</tr>
<tr>
<td>Asia - N. America</td>
<td>5.5%</td>
<td>6.2%</td>
</tr>
<tr>
<td>Europe - Asia</td>
<td>5.3%</td>
<td>5.6%</td>
</tr>
<tr>
<td>Domestic China</td>
<td>10.8%</td>
<td>8.8%</td>
</tr>
<tr>
<td>Domestic India</td>
<td>9.8%</td>
<td>9.9%</td>
</tr>
<tr>
<td><strong>Total World</strong></td>
<td>6.0%</td>
<td>5.0%</td>
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</table>
High Operational Gearing

- Variable costs (escapable in short-term):
  - approx. 40% of total

- Indirect costs (escapable in medium-term):
  - approx. 40%

- Fixed aircraft-related costs (escapable medium-term):
  - approx. 20%

- High Operational Gearing = Large Swings in Profitability
Route Seasonality (Winter)


LTNGVA

BTRC
Business Travel Research Centre

www.cranfield.ac.uk
Route Seasonality (Business)

Heathrow - Frankfurt Main (2006)

World Cup

LHR-FRA
Financial return & traffic growth

Source: ICAO Air Transport Reporting Forms A and EF.
Financial return & aircraft supply

Source: ICAO. Air Transport Reporting Form EF and aircraft manufacturers.
Recent jet orders
Boeing and Airbus

- 2005
  - Boeing = 1004
  - Airbus = 1055

- 2006
  - Boeing = 1044
  - Airbus = 790
What strategy are airlines pursuing?

- Higher yield passengers
  - v.
  - Low seat cost

\[\text{Non-stop, hub bypass} \quad v. \quad \text{Multi-stop, hub to hub consolidation}\]
The more capacity/frequency share captured, the greater the share of the market achieved.

*ACME: Airlines Collective Management Effect*
ACME Market Share (S-Curve) Strategy

The more capacity/frequency share captured, the greater the share of the market achieved.

*ACME: Airlines’ Collective Management Effect

NB: Both the X & Y scales are the same.
• Implicit assumption that all passengers along the Y-axis are of the same value
• Model is predicated on desire to gain market share to
  • Capture best traffic
    • Frequency dominance will bring high yield business traffic
  • Deter entrants
    • Dominate distribution channels
    • FFP
  • Earn abnormal profits
• But on long haul routes the various routings (e.g LON-SYD via DXB, BKK, HKG, SIN, etc.) mean that market share cannot be protected
So to review…

• In growth phase of cycle airlines tend to adopt a market share strategy
  • An indirect service at low seat cost can afford to carry lower value traffic and will capture market share (but at increasingly lower yields) perhaps enabling market dominance in some markets.
    • This strategy has higher exposure and the defence of the market position is more difficult in today’s airline environment
  • But a carrier that puts a direct service or restricts capacity is likely to capture yield although costs may be higher

• In a downturn airlines tend to adopt a market share strategy
  • Again the carrier with the smaller aircraft and the more direct service is going to capture better yielding passengers
  • The carrier with the larger aircraft may lose passengers unless they drop fares further. Low seat costs are not very worthwhile if you have no one sitting in the seat.
World scheduled airline financial results: US$

Source: ICAO and IATA for 2006 estimate
World scheduled airline financial results: margins

Source: ICAO and IATA for 2006 estimate
Profitability by sector (2006)

Top 150 Airline Profitability

-2.00% 0.00% 2.00% 4.00% 6.00% 8.00% 10.00%

Cargo  Flag  Independent  Leisure  Low cost  Major  Total

Net Margin  Op Margin

Major = Pax airline with revenues of $2bn, Flag = Mainline National Carrier

(Top 150 airlines, Airline Business, Aug 2007)
# Top 150 airline groups - six year record

(Airline Business, Aug 2007)

<table>
<thead>
<tr>
<th></th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
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<tbody>
<tr>
<td>Revenues ($bn)</td>
<td>320.7</td>
<td>318.8</td>
<td>340.6</td>
<td>392.3</td>
<td>439.9</td>
<td>486.6</td>
</tr>
<tr>
<td>Operating Results ($bn)</td>
<td>-5.7</td>
<td>-0.4</td>
<td>2.8</td>
<td>9.6</td>
<td>10.3</td>
<td>20.3</td>
</tr>
<tr>
<td>Operating Margin</td>
<td>-2.0%</td>
<td>-0.1%</td>
<td>0.9%</td>
<td>2.6%</td>
<td>2.5%</td>
<td>4.2%</td>
</tr>
<tr>
<td>Net Results ($bn)</td>
<td>-12.6</td>
<td>-8.8</td>
<td>-6.8</td>
<td>-3.1</td>
<td>-20.7</td>
<td>2.1</td>
</tr>
<tr>
<td>Net Margin</td>
<td>-5.2%</td>
<td>-2.8%</td>
<td>-2.2%</td>
<td>-0.8%</td>
<td>-5.1%</td>
<td>0.4%</td>
</tr>
</tbody>
</table>

(Airline Business, Aug 2007)
Changes in Demand
Change in business market

- Downgrading
- Adoption of low cost airlines
- Change in booking behaviour
  - Increase in fare transparency
  - As fares have fallen route deals have been less attractive
  - No longer prepared to pay high multiples for business class
  - Increase in price elasticity
  - Increase in “value for money” purchasing
- Use of other forms of communication
  - 45% of US business travellers working for firms with managed travel programmes report that they had substituted at least one trip with tele or web-conference while 25% of those who worked for companies with unmanaged travel policy (NBTA Annual survey 2004)
Profitability by class of passenger service

Source: IATA, Task Force
Propensity to fly premium

% of business travellers in premium cabins, 4 quarter moving average

Source: BA

Longhaul
Shorthaul
Class of travel booked for last trip

- First Class
- Business Class
- Premium Economy Class
- Full Economy Class
- Restricted Economy Class
- Low Cost Carrier

Source: Mason, Cranfield University, 2006
Business Travel in good economic times

• In economic good times we would expect the market to be price inelastic and demand increased service.

• However the market seems to be splitting into:
  • A diminishing proportion of business class and first class customers
  • Corporates define when business class can be used and this definition is getting more strict and more effectively controlled
  • The proportion left will be likely customers for business class only services (e.g. EOS), hub-bypass direct (LH - PrivateAir) etc.
  • Can A380 interiors/sleeper cabins attract these travellers away from direct services?
  • And an increasing proportion of “downgraders”, premium economy users, and LCC adopters.
    • Corporates are getting tools (online SBTs) that enable real-time appraisal of the best fare and can use these systems to ensure travel policy compliance
    • Seeking greater choice/flexibility from airlines - unbundling
    • SME customers tend to choose the budget option
Business Travel in poor economic conditions

- In economic downturns, the business travel market shows increased price elasticity and downgrading activity.
  - Business class in short haul has become virtually extinct.
  - Increased use of premium economy services in long haul.
  - Greater management of the decision to travel on ROI basis.
    - Increasing substitution of less essential travel by other forms of communication.
  - Greater management of the travel selection decisions using real time systems that incorporate value of time/well being of traveller.
    - Can A380 interiors/sleeper cabins attract travellers away from direct services and avoid extra hotel accommodation?
Leisure traveller - Lifestyle changes

- Lengthier and more flexible holiday entitlements
- Increased job and educational mobility
- Rise of the ‘grey panthers’
- The Gap Year phenomenon
- 2nd Homes overseas
- Sporting, cultural events
Reason for travel influences airline choice

Source: BAA
Leisure travel in good economic times

• Increasing disposable income, low interest rates and reduced incentive to save means:
  • Increasing number of leisure trips (shorter duration)
  • Increasing dramatically in European short haul market
    • Leading to significant orders for B737s and particularly A320s
    • Of the 2000+ aircraft ordered in 2005 over 70% were A320/B737 types
  • Growing long haul demand
  • Markets in India and China with a growing monied middle class

• Limits to growth are amount of free time, surface mode substitutes (esp. rail) and other ways of spending money (new iPods and iPhones, HDTV, “experience events”, etc.)
Leisure travel in poor economic conditions

• With falling disposable incomes, job insecurity, saving for rainy days means:
  • When economy turns down hasn’t been a decrease in number of leisure trips. But not sure that will continue in future
  • Will environmental taxes reduce demand?
  • Quicker consolidation in LCC sector
    • Leading to cancellations and lower uptake of options
  • Weaker demand for long haul services and people seeking best prices – airlines will have to fight harder to protect markets
  • Market protection and retrenchment from network carriers
Thank you for your participation