Signs of a structural improvement in airlines’ financial health?

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International Air Transport Association
Structural not cyclical gains (or just cheap fuel)?

Global GDP growth, airline industry ROIC and air traffic growth

- Growth in global GDP (right scale)
- Growth in air travel and cargo volumes

Airlines' return on capital

Source: ICAO, McKinsey, EIU, IATA
Travel business very strong, cargo very weak

Airlines revenues from passengers and cargo

Revenue from tickets and ancillaries

Revenue from cargo

Source: ICAO, IATA
Not all structural change is good

International trade compared to global industrial production

Index ratio, 2005 equals 1

Source: Netherlands CPB
Airline investors paid a ‘normal’ return for 1st time

Return on capital invested in airlines

Cost of capital (WACC)

Return on capital (ROIC)

Source: McKinsey, IATA

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Ending decades of investor capital destruction (?)

Difference between investing in airlines and investing in similar assets elsewhere

Source: McKinsey, IATA
And awful relative performance

Source: McKinsey
Debt finance markets still sceptical of change

<table>
<thead>
<tr>
<th>Investment grade</th>
<th>Company Names</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>AA+/-</strong></td>
<td></td>
</tr>
<tr>
<td><strong>A+/-</strong></td>
<td></td>
</tr>
<tr>
<td><strong>BBB+/-</strong></td>
<td>ANZ, Qantas, Lufthansa, Ryanair, Southwest, Alaska, Westjet</td>
</tr>
<tr>
<td><strong>BB+/-</strong></td>
<td>Delta, American, United, Allegiant, Spirit, BA, Turkish, LATAM</td>
</tr>
<tr>
<td><strong>B+/-</strong></td>
<td>Air Canada, Hawaiian, JetBlue, Avianca, GOL, SAS, Virgin Australia</td>
</tr>
</tbody>
</table>

As are equity markets

US transportation sector

2016 forward P/E ratio

<table>
<thead>
<tr>
<th>Category</th>
<th>P/E Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Legacy airlines</td>
<td>10</td>
</tr>
<tr>
<td>LCCs</td>
<td>11</td>
</tr>
<tr>
<td>Trucking</td>
<td>14</td>
</tr>
<tr>
<td>Rail</td>
<td>14</td>
</tr>
<tr>
<td>Integrators</td>
<td>16</td>
</tr>
<tr>
<td>Logistics</td>
<td>17</td>
</tr>
</tbody>
</table>

43%

Source: Datastream
ROIC improvement in 2014 was narrowly based.

37 airlines: ROIC > WACC
38% of industry capital

Source: The Airline Analyst, IATA Economics
ROIC > WACC concentrated mostly in US in 2014

Source: The Airlines Analyst, IATA Economics
But last year ROIC improvement spread

47 airlines: ROIC > WACC
60% of industry capital

Source: The Airline Analyst, IATA
Returns rose in US, Europe and spread to Asia

Source: The Airlines Analyst, IATA Economics

Average cost of capital
Unprecedented FCF in the US

Cash flow from operations, 2015 Q1-3
Capex, 2015 Q1-3

Source: The Airline Analyst, IATA Economics
Allowing significant balance sheet repair for some

2014 free cash flow and adjusted net debt

- Median airline $3 billion net debt
- -3% FCF/net debt

6 airlines could repay all debt in next 5 years

Source: The Airline Analyst, IATA
It’s not just cheap fuel

Fuel unit costs and airline return on capital

Source: ICAO, McKinsey, IATA

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Suppliers mostly generate much better returns

Return on capital across the air transport supply chain

Source: McKinsey for IATA
But this is not the main issue for airline earnings

Average yearly economic profit, USD billion, 2007-2014

Source: McKinsey for IATA
Most of the value created ends up with consumers

Unique city-pairs and real transport costs

Source: ICAO, Boeing, OAG, IATA

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Step change in airlines’ asset use since the GFC

Breakeven and achieved load factor (LF)

% ATKS

Achieved LF

Breakeven LF

Source: ICAO, IATA

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And the productivity of capital is improving

Source: ICAO, McKinsey, IATA

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Still driven primarily by the US

Operating profit margins by region, 2016 vs 2010

Source: ICAO, IATA

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Only a few generated economic profits consistently

Economic profit, cumulated 2005-2014

<table>
<thead>
<tr>
<th>Airline</th>
<th>Economic Profit, US$ million</th>
<th>Average ROIC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ryanair</td>
<td>24.1%</td>
<td>12.5%</td>
</tr>
<tr>
<td>Easyjet</td>
<td>11.8%</td>
<td>11.8%</td>
</tr>
<tr>
<td>Emirates</td>
<td>10.0%</td>
<td>10.0%</td>
</tr>
<tr>
<td>COPA</td>
<td>12.5%</td>
<td>12.5%</td>
</tr>
<tr>
<td>Aeroflot</td>
<td>10.5%</td>
<td>10.5%</td>
</tr>
<tr>
<td>Westjet</td>
<td>9.6%</td>
<td>9.6%</td>
</tr>
<tr>
<td>Spirit</td>
<td>12.1%</td>
<td>12.1%</td>
</tr>
<tr>
<td>Allegiant</td>
<td>24.1%</td>
<td>24.1%</td>
</tr>
<tr>
<td>Allegiant</td>
<td>12.4%</td>
<td>12.4%</td>
</tr>
<tr>
<td>Wizz</td>
<td>7.6%</td>
<td>7.6%</td>
</tr>
<tr>
<td>Alaska</td>
<td>7.3%</td>
<td>7.3%</td>
</tr>
<tr>
<td>Vuelling</td>
<td>8.7%</td>
<td>8.7%</td>
</tr>
<tr>
<td>Aegean</td>
<td>7.2%</td>
<td>7.2%</td>
</tr>
</tbody>
</table>

Source: McKinsey for IATA

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What differentiates the few?

- Route network with time advantages/high QSI
- A brand that consumers value in some way
- Cost advantage versus key competitors
- Less capital?
- Shorter-haul?
Are we measuring the right thing?

• Economic losses persisted for 70 years
• No apparent shortage of capital
• Operating cash flow covers leasing cost/depreciation
• Are aircraft really capital?
• Is WACC overstated?
• Are airlines doing better than we think?
Wide variation in travel growth by country

Economic and passenger growth in 2015 to date

% change over previous year

GDP Pax

Source: Datastream, IATA Statistics
Equity markets not always a good signal

Index (January 2005 = 100)

Shanghai composite share

Domestic China air passenger trips (seasonally adjusted)

Int'l air passenger trips to/from China (seasonally adjusted)

Source: Datastream, IATA
Partly driven by major exchange rate shifts

Jet fuel price index (Jan 2014 = 100)

% changes in jet fuel prices since Jan 2014

- US dollar: -63%
- Indian rupee: -60%
- Chinese yuan: -61%
- Euro: -54%
- Brazil: -40%
- Russian ruble: -23%

Source: Datastream

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Premium slowing yield decline in some markets

Each route's share of industry-wide premium revenues

<table>
<thead>
<tr>
<th>Region</th>
<th>Change in premium's share of revenues (Nov'15 vs. Nov'14, %)</th>
</tr>
</thead>
<tbody>
<tr>
<td>North And Mid Pacific</td>
<td>12.4%</td>
</tr>
<tr>
<td>Europe-Asia</td>
<td>14.7%</td>
</tr>
<tr>
<td>South Atlantic</td>
<td>3.2%</td>
</tr>
<tr>
<td>North Atlantic</td>
<td>24.6%</td>
</tr>
<tr>
<td>Europe-Southern Africa</td>
<td>4.4%</td>
</tr>
<tr>
<td>Europe-Middle East</td>
<td>5.8%</td>
</tr>
<tr>
<td>Within Asia</td>
<td>8.4%</td>
</tr>
<tr>
<td>Asia-Southwest Pacific</td>
<td>3.3%</td>
</tr>
<tr>
<td>Within Europe</td>
<td>4.2%</td>
</tr>
<tr>
<td>North-South America</td>
<td>2.9%</td>
</tr>
</tbody>
</table>

Source: PaxIS+, IATA
Still vast potential in air travel marketes

A) The expected increase in living standards in Iran now that sanctions have been lifted will underpin a rise in the average number of air journeys taken each year...

B) ...but a much bigger increase in trip frequencies is possible if the Iranian air market 'normalizes' over the coming years.