Multi-year Expert Meeting on Transport, Trade Logistics and Trade Facilitation:

Third Session:
Small Island Developing States: Transport and Trade Logistics Challenges

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SIDS Economic Development and the Role of Air Transport

Presentation by

Mr. Brian Pearce
Chief Economist
International Air Transport Association (IATA)

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SIDS economic development and the role of air transport

Brian Pearce, Chief Economist
www.iata.org/economics

To represent, lead and serve the airline industry

Air connectivity is a key development driver for SIDS

Source: SRS Analyser
How to measure the degree of air connectivity?

IATA air connectivity measure, seats to weighted destinations as % GDP

Connectivity is a means to an economic end

- Infrastructure asset
  - Bridge to distant markets
- Channel for economic flows
  - Tourists
  - Workers
  - Goods
  - Investment
  - Ideas
  - (Social cohesion)
  - (Competition)
  - (Diversification)
- Flows can be outward as well as inward
- Flows from overseas could just displace flows from residents
- Economic flows not the same thing as resident welfare
Making the economic case for transport investments

- Cost-benefit appraisal or economic impact assessment?
- Welfare and/or GDP?
- Partial or general equilibrium tools?

Standard transport appraisal

- Welfare not GDP
- Value of time savings and choice gains for residents only
- Considers supply chain jobs a cost not a benefit
- Macro effects usually assumed to be crowded out i.e. zero
  - But this assumes an economy in full-employment equilibrium
Focus on welfare of users (residents i.e. outbound)

Table 3.3: Economic impact of additional capacity at Heathrow – Scenario 2

<table>
<thead>
<tr>
<th>Benefit (£m, 2009 prices, PV over 60 years)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Delay</td>
</tr>
<tr>
<td>1.250</td>
</tr>
<tr>
<td>Reliability</td>
</tr>
<tr>
<td>900</td>
</tr>
<tr>
<td>Frequency</td>
</tr>
<tr>
<td>4,700</td>
</tr>
<tr>
<td>New international destinations</td>
</tr>
<tr>
<td>1,300</td>
</tr>
<tr>
<td>Regional connectivity</td>
</tr>
<tr>
<td>850</td>
</tr>
<tr>
<td>Total</td>
</tr>
<tr>
<td>9,000</td>
</tr>
</tbody>
</table>


'Economic impact' studies e.g. ATAG focus on GDP/jobs

- Not benefits for users
- Service supplier costs and their use of local labour

Source: [http://aviationbenefits.org/](http://aviationbenefits.org/)
WTTC tourism economic impact studies

Source: http://www.wttc.org/focus/research-for-action/economic-impact-analysis/country-reports/

IATA Economics  www.iata.org/economics

Oxford Economics economic benefit studies for the SIDS


IATA Economics  www.iata.org/economics
Air transport has a large ‘economic impact’ on SIDS

**SMALL ISLAND STATES**

<table>
<thead>
<tr>
<th>Caribbean Islands</th>
<th>Indian Ocean Islands</th>
<th>Pacific Ocean Islands</th>
</tr>
</thead>
<tbody>
<tr>
<td>Air transport supports over 8% of GDP and 6% of employment</td>
<td>Air transport supports over 27% of GDP and 25% of employment</td>
<td>Air transport supports over 12% of GDP and 5% of employment</td>
</tr>
</tbody>
</table>

Source: Oxford Economics

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**Economic impact assessments**

- Widespread use
- Starting point is the spending on the investment
  - its cost not use of the asset
- Input-output matrix -> ‘multiplied’ spending
  - Direct, indirect, induced and ‘catalytic’ spending
- Assumed ‘additional’ i.e. no crowding out
  - Polar opposite to standard transport appraisal
- Gives nice big numbers
- Projects often add up to more than 100% of economy!
- As a result bad reputation with academics
  - But has its place if used properly
  - Jobs and spending may be additional if under-employment is alternative
A GDP ‘leakage’ for Samoa or a welfare gain?

Tourism economic effects

• Outbound travellers
  – welfare beneficiaries or spending leakage?
• Inbound tourists
  – Spending diverts labour/capital from other local markets?
  – Spending by tourists crowds out spending by residents?
  – Or are there persistently under-employed resources available?
  – How much of the spending/macro effects are additional?
  – What is the right counter-factual?
The right counter-factual

- Resource use in absence of air transport links?
  - Diverted resources and pressure on wages and prices?
  - Or under-employed labour, under-utilized capital?

- Counter-factual is likely to be under-employment for SIDS
  - All or part of ‘direct’ construction spending and resource employment additional?
  - Additionality of multiplier effects through ‘indirect’ and ‘induced’ spending?
  - Additionality of ‘catalytic’ spending by inbound tourists?
  - What about the ‘leakage’ of outbound travellers?
  - CGE model ideal if feasible and if baseline counter-factual is suitable
  - Partial approach of transport appraisal may be more practical but economic benefits are largely from employing under-utilized resources rather than traditional time savings.

Global Value Chains – diversification and development

An opportunity for SIDS?

Source: ATAG
Air transport clearly does matter for SIDS development

- Air transport connections key channel for economic flows
- Flows can be outward but inbound tourism clearly critical for SIDS
- Standard transport investment appraisal needs to be challenged
- The key for appraisal is getting counter-factual right
- Economic impact assessment often dismissed in developed world
- Large numbers: e.g. 27% of GDP/25% jobs for Indian Ocean Islands
- But GDP and jobs results may well be ‘additional’ in SIDS
- Correctly set up CGE model may produce similar results
- Don’t ignore other economic flows: trade, investment, ideas, competition, social cohesion
- Global Value Chains may offer diversification and development
- Policy should support cost-effective air transport connectivity