

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

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

24 – 26 November 2014

**SIDS Economic Development and the  
Role of Air Transport**

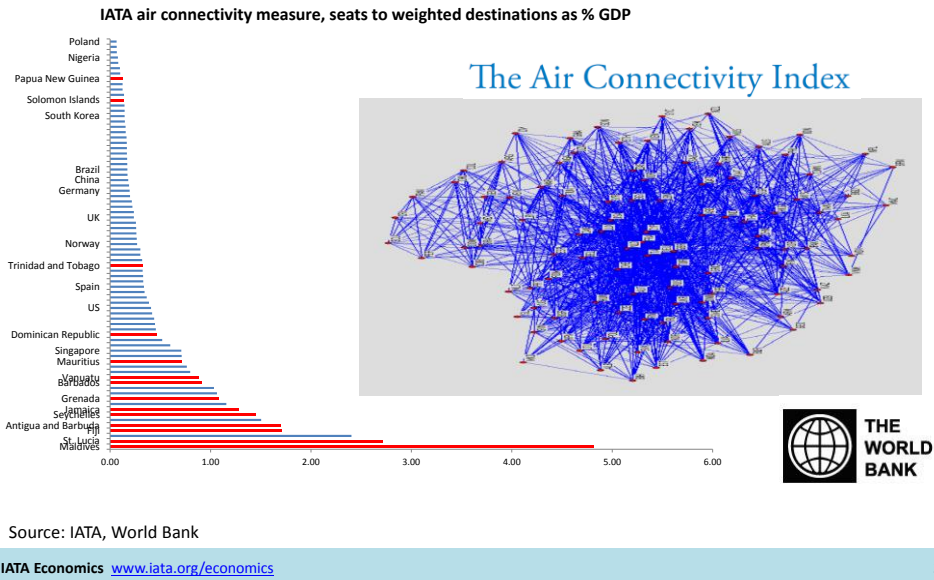
Presentation by

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## How to measure the degree of air connectivity?



## 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)

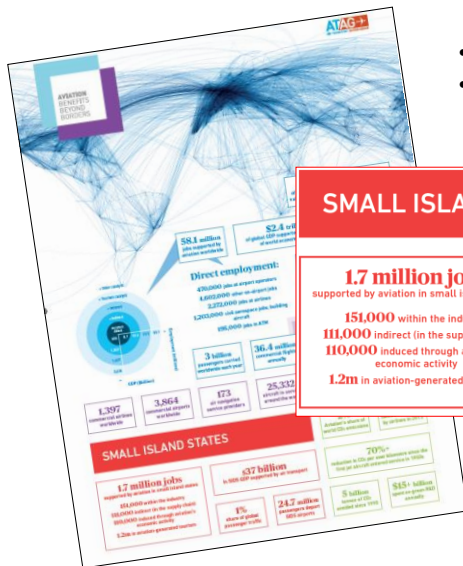


**Table 3.3: Economic impact of additional capacity at Heathrow - Scenario 2**

	Benefit (£m, 2009 prices, PV over 60 years)
Delay	1,250
Reliability	900
Frequency	4,700
New international destinations	1,300
Regional connectivity	850
<b>Total</b>	<b>9,000</b>

Source: [http://www.britishchambers.org.uk/assets/downloads/policy\\_reports/BCC\\_Economic\\_Impacts\\_of\\_Hub\\_Airports.pdf](http://www.britishchambers.org.uk/assets/downloads/policy_reports/BCC_Economic_Impacts_of_Hub_Airports.pdf)

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



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

**SMALL ISLAND STATES**

**1.7 million jobs**  
supported by aviation in small island states  
 151,000 within the industry  
 110,000 indirect (in the supply chain)  
 110,000 induced through aviation's economic activity  
 1.2m in aviation-generated tourism

**\$37 billion**  
in SIDS GDP supported by air transport

**1%**  
share of global passenger traffic

**24.7 million**  
passengers depart SIDS airports

Source: <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](http://www.iata.org/economics)

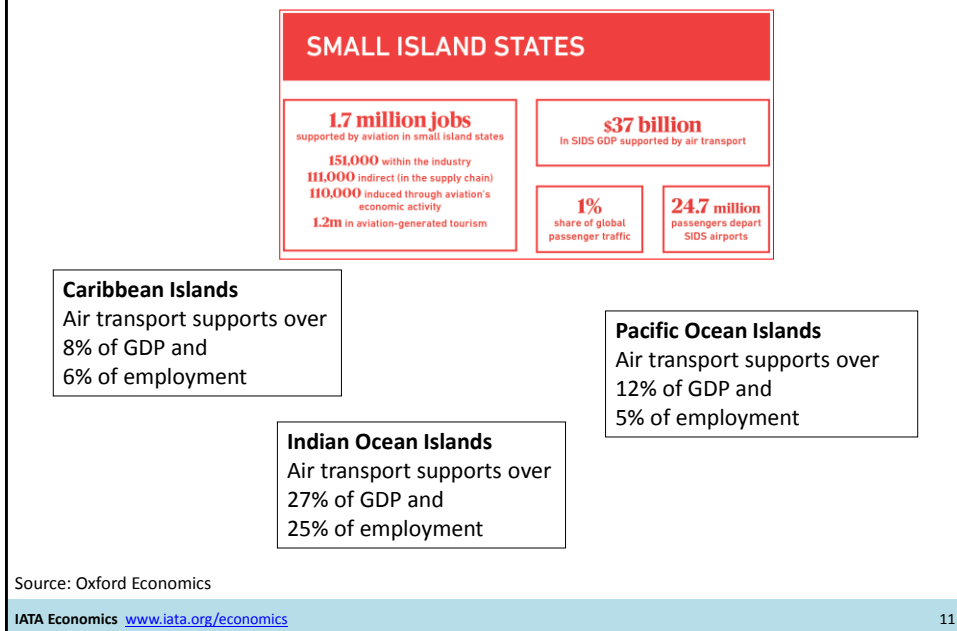
## Oxford Economics economic benefit studies for the SIDS



Source: <http://www.iata.org/publications/economics/public-policy/Pages/benefits.aspx>

IATA Economics [www.iata.org/economics](http://www.iata.org/economics)

## Air transport has a large 'economic impact' on SIDS



## 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?



Source: Dave Lintott [www.lintottphoto.co.nz](http://www.lintottphoto.co.nz)

IATA Economics [www.iata.org/economics](http://www.iata.org/economics)

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## 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?

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## 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

Dell's global supply chain, made possible by air transport



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