Quality Adjustment of Air Transport

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Contents of Today's Presentation

- How countries are measuring quality change in air transport

- Quality Adjustment

- What we cover in ANZSIC 06 (Australian and New Zealand Standard Industry Classification)

- Highlights of a Paper by Christopher Jenkins and Christian Puchter – Adjusting for Quality Change : ISIC 51 Air Transport

- What we should do

Key Points

- Definition and Characteristics (Route, Flight altitude, Fuel consumption, Customer clientele, Ticket attributes)

- Quality Adjustment & contrasting methodologies of PPI and SNA measures

- Practical perspective and Issues (technology advancements, market shuffle & reweighting, use of hedonics, measuring output through airline margins, own-account transportation)

- Limitations

What other countries are doing

- Currently 28 countries have been developing and/or producing SPPIs for Air Transport activities.

- Previously a volunteer questionnaire was sent out to participants. Of the eleven countries that produce air transport price indices, four countries currently don't apply any method of quality adjustment to the price data.

- Two countries use the explicit method of quality adjustment. This method is not very popular.

- The implicit method is the more popular method.

What we cover from ANZSIC 06

- Division I – Transport, Postal and Warehousing, Subdivision 49 – Air and Space Transport. Group 490 and Class 4900

- The primary activities include the following:
- Air Freight Transport Service
- Aircraft charter, lease or rental with crew, for freight and or/passengers.
- ISIC - International Standard Industrial Classification. All should concord.

Quality adjustment:

- Two groups of quality adjustment methods can be identified - implicit and explicit.
- Fixed basket PPI
- **SNA volume measures – What are we trying to measure?**

What is the volume we are trying to measure

- Variables attached to the service include:

  - Baggage weight restrictions
    - Meal service
    - Ticket flexibility and check in processes

  - Seat configuration

  - Entertainment

- Detailed specification descriptions

- Volume measures

Practical perspective - Not as plane & simple...

- Technology advancements in the industry

- Adjusting for market shift and substitution from premium to budget airlines

- Practicality of the use of hedonics in air transport quality adjustment methods – Measuring airline output and impact on volume measures

- Own-account transportation

Limitations

- Hedonic regression (ticket a function of numerous price determining characteristics). Data intensive.

- Alternative explicit adjustment – careful consideration when price change is attributed to quality and 'pure' price change

But is this enough?

- Sector splits of air passenger transport.
  - Corporate
  - Public
  - Government
- Imports and Exports of travel services