Revisited Sector paper on Air transport

SPPIs

Christian Puchter
Josef Auer
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ISIC 51 Air transport
1995 (Voorburg): Presentation of an European-wide study on transport activities

2003 (Tokyo): Mini presentations UK, Sweden, Austria
Summary by Sonia Collins

2004 (Ottawa): Principal Paper Statistics New Zealand
(Sonia Collins)
Methodological description U.S. Bureau of Labour Statistics (William J. Page)
Countries collecting prices and/or turnover information for air transport

According to the VBG inquiry:

ISIC 5110 Passenger Air Transport:

- SPPI: 14
- Turnover: 17

ISIC 5120 Freight Air Transport:

- SPPI: 10
- Turnover: 17
Countries developing or having developed SPPIs for air transport

According to the OECD inquiry:

28 Countries: AUS, AUT, BEL, BGR, CYP, CZE, DEU, DNK, ESP, EST, FIN, GBR, GRC, HUN, JPN, KOR, LTU, MEX, NLD, NOR, NZL, POL, SVN, SWE, USA, HKG, VNM

Price Collection: Quarterly: 17
Monthly: 15

Pricing Method: Unit Values: 7
Prices of repeated services: 21
Contract pricing: 4
Countries developing or having developed SPPIs for air transport (cont.)

According to the OECD inquiry:

Type of index:

- B2b: 12
- B2all: 22

Availability:

- Publishing the index: 11
- Development phase: 6
Definition of service being priced

Air transport

ISIC Rev. 4: Code 51
NAICS 2007: Code 481
ANZSIC 2006: Code 4900
NACE Rev. 2: Code 51

This division includes:

• the transport of passengers or freight by air or via space.

This division excludes:

• the overhaul of aircraft or aircraft engines (see class 3315) and support activities, such as the operation of airports, (see class 5223).

• activities that make use of aircraft, but not for the purpose of transportation, such as crop spraying (see class 0161), aerial advertising (see class 7310) or aerial photography (see class 7420)
## Industry Classification

<table>
<thead>
<tr>
<th>ISIC Rev.4</th>
<th>Title</th>
<th>NAICS 2007</th>
<th>Title</th>
<th>ANZSIC 2006</th>
<th>Title</th>
<th>NACE Rev.2</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>51</td>
<td>Air transport</td>
<td>481</td>
<td>Air Transportation</td>
<td>490</td>
<td>Air and Space Transport</td>
<td>51</td>
<td>Air transport</td>
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<td>511</td>
<td>Passenger air transport</td>
<td>4811</td>
<td>Scheduled Air</td>
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<td>Air passenger transport</td>
<td>51.1</td>
<td>Passenger air transport</td>
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<td>Transportation</td>
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<tr>
<td>512</td>
<td>Freight air transport</td>
<td>4812</td>
<td>Non-Scheduled Air</td>
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<td>Air freight transport</td>
<td>51.2</td>
<td>Freight air transport and space transport</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Transportation</td>
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</tr>
</tbody>
</table>

Aircraft charter, lease or rental, with crew, for freight and/or passengers
## Product Classification

<table>
<thead>
<tr>
<th>CPC Ver.2</th>
<th>Title</th>
<th>NAPCS (Provisional)</th>
<th>Title</th>
<th>CPA 2008</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>51</td>
<td>Air transport</td>
<td>481</td>
<td>Air Transportation</td>
<td>51</td>
<td>Air transport services</td>
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<tr>
<td>6424</td>
<td>Air transport services of passengers</td>
<td>64241</td>
<td>Domestic scheduled air transport services of passengers</td>
<td>51.10.1</td>
<td>Passenger air transport services</td>
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<tr>
<td>64245</td>
<td>Space transport services of passengers</td>
<td>64242</td>
<td>Domestic non-scheduled air transport services of passengers</td>
<td>51.21</td>
<td>Freight air transport</td>
</tr>
<tr>
<td>6531</td>
<td>Air transport services of freight</td>
<td>64243</td>
<td>International scheduled air transport services of passengers</td>
<td>51.22</td>
<td>Space transport services</td>
</tr>
<tr>
<td>6532</td>
<td>Space transport services of freight</td>
<td>64244</td>
<td>International non-scheduled air transport services of passengers</td>
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<tr>
<td></td>
<td></td>
<td>65311</td>
<td>Air transport services of letters and parcels</td>
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<td></td>
<td></td>
<td>65319</td>
<td>Air transport services of other freight</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>65320</td>
<td>Space transport services of freight</td>
<td></td>
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</tr>
</tbody>
</table>
Pricing unit of measure

Depends on the chosen pricing methodology

- Prices of repeated services
- Unit Values
- Model pricing
- Component pricing
Direct use of prices of repeated services

- Real transaction prices are surveyed
- Representative destinations (airline, travel agency)
- Representative ticket types per destination (airline, travel agency)
- Remain constant quality for the chosen tickets (seat distance, baggage weight, etc.)
- Get additional price information (discounts, surcharges)
- Burdensome for the respondent
SPPI Pricing Methods (cont.)

Unit Value method

- Provision of turnover and quantity data
- Advisable for hommogeneous groups of service products
- Delivered by the accounting system of the enterprises
- Not so burdensome
- Discounts are already incorporated
- Probably collected by national/international authorities
SPPI Pricing Methods - Alternatives

Air freight transport

- International Air Transport Association (IATA)
- Cargo Account Settlement System (CASS)
- Air-Waybill (standardised freight document)
- Consolidated report including:
  - Origin-destination
  - Net revenue
  - Weight
  - Average yield per destination
- Resulting in an unit value
## Choices for developing SPPIs

<table>
<thead>
<tr>
<th>Category</th>
<th>Pricing method</th>
<th>Data type in the survey and frequency</th>
<th>Quality and Accuracy</th>
<th>Costs</th>
</tr>
</thead>
</table>
| **Best** | Prices of repeated services, Contract pricing, Unit Values | Data are based on real transaction prices | **Advantages:** Resulting price index is based on real transaction prices  
**Disadvantages:** Hard to keep the service specifications constant | Relatively high. Much work is needed to maintain constant quality. If unit values are used a time lag has to be accepted |
| **Good** | Model Pricing | Expert estimate. The data are fictitious prices estimated by the respondent | **Advantages:** Ability to incorporate productivity changes  
**Disadvantages:** High respondent burden | High. Good industry contacts are needed |
| **Minimum** | List Prices | List prices without additional information on discounts and surcharges | **Advantages:** Easy and fast to obtain for the NSI  
**Disadvantages:** No “transaction” prices | Low. |
Special conditions or restrictions

- Limited number of national airlines
- Difficult to split into B2b and B2c services
- Prices are a sensitive subject in this highly competitive service branch
- Difficult to maintain constant quality of the chosen service product
Turnover for air transport services

Content

- Documentation
- Data sources and methods in general
- Production level
- Methods applied
- Evaluation of sources and methods
Turnover for air transport services

Documentation

• Report on the Pilot Survey on Transport Services undertaken by EU Member States, Voorburg, 1995

• Inquiry to countries (15 of which 5 gave substantial information)

• Austrian experience
Data sources and methods in general

- Survey (census, sample survey)
- Administrative data (VAT tax data, company reports, trade association statistics)
- Combination of survey instruments and use of administrative data sources (plus ev. regression model)
### Turnover for air transport services

<table>
<thead>
<tr>
<th>Turnover by activity</th>
<th>Countries</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Air transport services</td>
<td>All countries</td>
<td></td>
</tr>
<tr>
<td>Scheduled air transport</td>
<td>AT, SW, MX, UK</td>
<td></td>
</tr>
<tr>
<td>Scheduled passenger air transport</td>
<td>UK</td>
<td></td>
</tr>
<tr>
<td>Other scheduled air transport</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-scheduled air transport</td>
<td>AT, SW, MX, UK</td>
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</tr>
<tr>
<td>Space transport</td>
<td>UK</td>
<td></td>
</tr>
<tr>
<td>Turnover by Product (CPA 5-digit)</td>
<td>IRL, MEX, SW, CZ, UK</td>
<td>CZ: 6-digit level, MX: every 5 years</td>
</tr>
</tbody>
</table>
Turnover for air transport services

Sources and methods applied

– Survey instruments (UK, NL, IR, Cor, MEX, ES, CZ)

– Administrative data (SF)

– Combination (DE, SW, AT)
## Evaluation of sources and methods

<table>
<thead>
<tr>
<th>Category</th>
<th>Data source and method of collection</th>
<th>Level of detail collected</th>
<th>Frequency</th>
<th>Advantages</th>
<th>Disadvantages</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Best practice</strong></td>
<td>Surveys - One or many - Different frequencies May include Economic Census</td>
<td>Industry detail (ISIC, NACE, NAICS, ANZSIC) and Product detail (CPC, NAPCS, CPA)</td>
<td>Annual and sub-annual (quarterly or monthly)</td>
<td>Turnover data on a detailed level can be collected Timely data</td>
<td>Most expensive Large response burden</td>
</tr>
<tr>
<td><strong>Good</strong></td>
<td>- One or many surveys - Combination of survey instruments with administrative data ev. plus regression model</td>
<td>Industry detail only</td>
<td>Annual and sub-annual (quarterly or monthly)</td>
<td>- Turnover data on a detailed level Timely data - Less expensive</td>
<td>- Expensive - Large response burden - admin. data base may need many imputations (missing VAT declaration, non-taxable turnover abroad, group taxation)</td>
</tr>
<tr>
<td><strong>Minimum</strong></td>
<td>Administrative data (tax data, industry association data etc.)</td>
<td>Industry detail only</td>
<td>Annual, quarterly, monthly</td>
<td>- Least expensive - Little or no response burden - Large coverage - Satisfying data quality (depending on data base)</td>
<td>- Less precise (level of detail) - Least timely - Difficult to check incomplete or wrong data with the respondent - may need many imputations</td>
</tr>
</tbody>
</table>
Thank you for your attention

Please contact:

Josef Auer
josef.auer@statistik.gv.at

Christian Puchter
christian.puchter@statistik.gv.at