Sector Paper
Rail Freight Transportation Services

25th Voorburg Group Meeting
Vienna, Austria

September 20-24, 2010

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Industry and product classifications

- 4 main industrial classifications in use
  - Australian and New Zealand Standard Industrial Classification (ANZSIC 2006, Rev. 1.0)
  - International Standard Industrial Classification (ISIC, Rev. 4.0)
  - Statistical Classification of Economic Activities in the European Community, Rev. 2 (NACE, Rev. 2)
  - North American Industrial Classification System (NAICS 2007)
- Broadly cover and define same activities
Industry and product classifications (2)

- Differences in the industry classifications
  - ANZSIC, ISIC, NACE combine short-haul and mainline freight activities. NAICS 2007 separates these activities at the 6 digit level.
  - JSIC (Japanese Standard Industrial Classification) provides more sub-classes for rail transport than ISIC 4.0 but does not separate freight vs. passenger transport.
Industry and product classifications (3)

3 main product classifications in use

- Central Product Classification Version 2 (CPC Ver. 2)
- Classification of Products by Activity (CPA 2008)
- North American Product Classification System (NAPCS Ver.1)
Industry and product classifications (4)

- Differences in the product classifications
  - Lot’s of overlap. Focus is on type of container used to transport (refrigerated car, tanker cars, intermodal containers)
  - NAPCS provides more detail and approximates better the type of commodity being transported
    - Examples:
      - 482002.9 Transportation of livestock by rail
      - 482002.10 Transportation of waste by rail
Turnover, recommended development options

<table>
<thead>
<tr>
<th>Category</th>
<th>Data source</th>
<th>Level of detail collected</th>
<th>Frequency</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Best</td>
<td>Survey, census</td>
<td>Industry and product turnover detail</td>
<td>Sub-annual (monthly or quarterly)</td>
<td>Most expensive, largest response burden</td>
</tr>
<tr>
<td>Good</td>
<td>Survey, census and administrative data</td>
<td>Industry detail only</td>
<td>Sub-annual</td>
<td>Expensive, high response burden, reconciling admin. Data with survey variables</td>
</tr>
<tr>
<td>Minimum</td>
<td>Administrative data</td>
<td>Industry detail only</td>
<td>Annual</td>
<td>Least expensive, little or no response burden</td>
</tr>
</tbody>
</table>

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Turnover, other considerations

- Confidentiality of data due to highly concentrated industries (Canada, Finland) limits data publication
- Lack of accurate data records due to industrial organization (Mexico, state-run rail transport companies)
- Combined data for freight and passenger (Netherlands, Japan)
  - Japan is able to produce separate estimates
### SPPI, recommended development options

<table>
<thead>
<tr>
<th>Category</th>
<th>Pricing method</th>
<th>Data type in the survey</th>
<th>Quality and accuracy</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Best</td>
<td>Contract pricing</td>
<td>Data is based on real transaction prices.</td>
<td>Detailed service specifications allow time-consistent comparisons.</td>
<td>Most expensive, with highest response burden.</td>
</tr>
<tr>
<td>Good</td>
<td>Direct use of repeated prices of repeated services</td>
<td>Data is based on list and tariff prices offered, collected by survey or by internet.</td>
<td>Very good representation of pricing offered. Movements in price reflect those in the industry fairly accurately.</td>
<td>If surveyed on-line, cost is very low.</td>
</tr>
<tr>
<td>Minimum</td>
<td>Average unit price</td>
<td>Total revenue, tonnes, and kilometers travelled from respondents are used to estimate revenue per tonne-kilometer as a proxy for price.</td>
<td>Transactions in a group must be sufficiently homogeneous (i.e. quality of individual services is unchanged and their quantities in the transactions do not vary). Otherwise, changes can be highly volatile and non-comparable. Revenues have to be well-defined for consistency in comparison.</td>
<td>Less expensive, and least response burden.</td>
</tr>
</tbody>
</table>
SPPI, selected country approaches

- **Germany**
  - Hybrid approach using contract pricing for main haulage, pricing of repeated services for constant and shunting services, unit value for track const.

- **Canada**
  - Direct use of prices for repeated services collected by internet pricing

- **Finland**
  - Unit values
**SPPI, quality adjustment**

- Detailed information about transactions is required (type of shipment, origin/destination, terms of shipment, type of price)
- For contract pricing quality adjustment may be problematic when contracts expire as new contracts have different conditions.
- Unit pricing makes quality adjustment difficult as information required for adjustment is not available
SPPI, appropriate classifications

- Current classifications may not be ideal for the collection of price statistics
- Classification should fulfill the following requirements:
  - it distinguishes between service product categories with different price determining characteristics, i.e. different price mechanisms
  - price developments within one service product category are homogenous.
SPPI, confidentiality

- Highly concentrated industries pose a problem with respect to the confidentiality of statistics.
- Publishing price indexes requires consent of the respondents.
Questions?