



Statistics
Canada

Statistique
Canada

Canada



Statistics Canada
www.statcan.gc.ca



Sector Paper

Rail Freight Transportation Services

25th Voorburg Group Meeting
Vienna, Austria

September 20-24, 2010

André Loranger,
Statistics Canada

Bernhard Goldhammer,
Federal Statistical Office, Germany

DISTATIS
wissen. nutzen.

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

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

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

Category	Pricing method	Data type in the survey	Quality and accuracy	Cost
Best	Contract pricing	Data is based on real transaction prices .	Detailed service specifications allow time- consistent comparisons.	Most expensive, with highest response burden.
Good	Direct use of repeated prices of repeated services	Data is based on list and tariff prices offered, collected by survey or by internet.	Very good representation of pricing offered. Movements in price reflect those in the industry fairly accurately.	If surveyed on-line, cost is very low.
Minimum	Average unit price	Total revenue, tonnes, and kilometers travelled from respondents are used to estimate revenue per tonne-kilometer as a proxy for price.	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.	Less expensive, and least response burden.



SPPI, selected country approaches

- Germany
 - Hybrid approach using contract pricing for main haulage, pricing of repeated services for const. 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?