SPPI for Rail Transportation in Finland

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Elina Pääkkö
Statistics Finland
INTRODUCTION

- Development work on the SPPI for NACE Rev. 2: 492 Freight rail transport started in 2006
  - Business to business -index
  - CPI monitors passenger rail transportation prices
  - For deflating use of National accounts
  - To increase the coverage of total SPPI index in the future
- Index not public due to confidentiality reasons
In Finland the market share of rail transports of domestic traffic is 25%.

Finland’s national goods traffic in rail transportation was opened to competition at the beginning of 2007.

So far, rail transportation industry in Finland has one dominant enterprise which is responsible for most of the freight rail transports and all of the passenger rail transportation in Finland.
MARKET CONDITIONS AND CONSTRAINTS 2/4

Turnover development of the dominant enterprise

Elina Pääkkö
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In freight rail transportation the dominant enterprise operates mainly as freight carrier in forest, metal and chemical industries in domestic and international traffic:

- raw materials to factories, finished products to ports and target market
- high proportion of carryings are to and from Russia

Transport of wood, products of paper industry, mineral products and products of chemical industry are commodity groups with the largest shares.
MARKET CONDITIONS AND CONSTRAINTS 4/4

- Record keeping practise
  - The dominant enterprise reports price data based on unit value for the SPPI of freight rail transportation quarterly
  - Enterprise reports yearly the turnover distribution between the carriage groups
  - Data of volumes in rail transportation are received at the yearly level from the Transport and Communications Statistical Yearbook
  - Consumer Price Index collects price information on passenger traffic
STANDARD CLASSIFICATION STRUCTURE AND DETAIL RELATED TO THE AREA

- The Finnish standard classification structure TOL 2008 is identical to NACE Rev. 2 at the 3-digit level.
- TOL 2008 does not have more detailed level breakdown of activities in rail transportation industry.
DEFINITION OF THE SERVICE BEING PRICED

- Price information is collected according to the following classification based on most common carriage groups in Finland. Carriage groups are chosen in cooperation with the informant enterprise, cover most of the freight transports in Finland.

- **Freight rail transports of mechanical forest industry:**
  - raw wood
  - sawn timber

- **Freight rail transports of chemical forest industry**
  - paper
  - chemical pulp

- **Freight rail transport of metal industry**

- **Freight rail transport of chemical industry**
INDEX AGGREGATION STRUCTURE (1/2)

492 Freight rail transport

- Transports of mechanical forest industry
  - Raw wood
  - Sawn timber

- Transports of chemical forest industry
  - Paper

- Transports of metal industry
- Transports of chemical industry
  - Chemical pulp
INDEX AGGREGATION STRUCTURE (2/2)

H Transportation and storage

49 Land transport
and transport via pipelines

492 Freight rail transport

494 Freight transport by road

50 Water transport

51 Air transport

511 Passenger air transport

5121 Freight air transport

52 Warehousing and support activities for

521 Warehousing and storage

5224 Cargo handling

53 Postal and courier activities

531 Postal activities under universal service obligation

532 Other postal and courier activities
PRICING UNIT OF MEASURE

- Cents per tonne-kilometre
- Reported prices are averages from different carriage groups
- Prices are reported quarterly by using unit value
- Price data has been collected since the beginning of 2005
PRICING METHOD(S) AND CRITERIA FOR CHOOSING VARIOUS PRICING METHODS 1/2

- Pricing method is unit value (calculated from income, tonne-kilometres)
- Data supplier calculates the average price in cents per tonne-kilometre of each carriage

- Contracts in freight rail transportation
  - yearly, price changes once a year
  - tailored by enterprise
  - loading and unloading excluded

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PRICING METHOD(S) AND CRITERIA FOR CHOOSING VARIOUS PRICING METHODS 2/2

- Unit value prices are affected by
  - distance between the stations
  - characters of cargo
  - gross weight, volume of cargo
  - customer structure during a period

- Contract prices of different customers or model prices preferred
QUALITY ADJUSTMENT METHODOLOGIES

- Monitoring the prices by using unit values is difficult due to structural changes that occur during a quarter (haulage distance, volume of freight, customer structure, type of cargo etc.) that affect the prices.

- Identifying direct price changes is difficult when using unit value

- Important: creation of homogeneous subgroups of services at a very detailed level.

- Some structural changes between carriage groups can be identified since the informant enterprise reports yearly on the distribution of turnover between carriage groups.
The National Accounts Department within Statistics Finland is currently investigating the usefulness of SPPI for rail transportation for deflation purposes in cooperation with the Price Statistics Unit.

- CPI is used in deflating of passenger rail transport
EVALUATION AND COMPARABILITY WITH TURNOVER/OUTPUT MEASURES

- Short term business statistics
  - monthly turnover indices calculated from VAT data
  - index not public in rail transportation due to confidentiality reasons
- Compilation of turnover by product
  - no product level turnover data in rail transportation
  - Turnover data at the level of passenger and freight rail transportation are collected by the Transport and Tourism Unit (published yearly in Transport and Communications Statistical Yearbook)
  - Information on volumes and tonne-kilometres is also collected and published at commodity group level.
SUMMARY

- One major enterprise that dominates the industry in freight and passenger rail transportation
  - Finland's national goods traffic in rail transportation was opened to competition at the beginning of 2007
- Unit value prices for SPPI of rail transportation are reported quarterly by the major enterprise.
  - Structural changes difficult, need for contract prices or unit value on more detailed level
- Price information is collected according to an applied classification on representative service groups selected in co-operation with the enterprise
- Currently evaluating the usefulness of the index for the deflating purposes of NA and for increasing the coverage of SPPI overall index.
Thank you!