The PPI for Road Haulage Services in The Netherlands

Presentation by

Uwe Kirsten

Statistics Netherlands
History of the PPI statistic for road haulage services at Statistics Netherlands

1993  Statistics Netherlands retained confidence by EUROSTAT/ start of development

1995  First publication

2002  Rearrangement of sample and first rebasing on the basis of year 2000

2005  Effects introduction German MAUT

2006  Introduction new computing system for SPPI’s
Road haulage price mutations in recent years

<table>
<thead>
<tr>
<th>Period</th>
<th>Quarterly mutations in %</th>
</tr>
</thead>
<tbody>
<tr>
<td>2003 – Q2</td>
<td>0.6</td>
</tr>
<tr>
<td>2003 – Q3</td>
<td>0.1</td>
</tr>
<tr>
<td>2003 – Q4</td>
<td>0.0</td>
</tr>
<tr>
<td>2004 – Q1</td>
<td>0.5</td>
</tr>
<tr>
<td>2004 – Q2</td>
<td>0.3</td>
</tr>
<tr>
<td>2004 – Q3</td>
<td>0.3</td>
</tr>
<tr>
<td>2004 – Q4</td>
<td>0.9</td>
</tr>
<tr>
<td><strong>2005 – Q1</strong></td>
<td><strong>1.8</strong></td>
</tr>
<tr>
<td>2005 – Q2</td>
<td>0.4</td>
</tr>
<tr>
<td>2005 – Q3</td>
<td>0.3</td>
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<tr>
<td>2005 – Q4</td>
<td>0.3</td>
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<tr>
<td><strong>2006 – Q1</strong></td>
<td><strong>1.5</strong></td>
</tr>
<tr>
<td>2006 – Q2</td>
<td>0.4</td>
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</tbody>
</table>
The new SPPI computing system at Statistics Netherlands – consequences for the road haulage PPI

1. only computing price developments (chain indices)

2. mini-rebasing (annual rebasing at respondent level) next to five-year (branch-wide) rebasing

3. easy replacement of respondents

4. geometric mean on respondent level
Definition of the branch
Freight Transport by Road

Road haulage services are transports of freight on public roads by wheeled road vehicles

– no other logistic services
  (warehousing, whole logistic outsourcings)

– no sub-contractors, no double-counting

– isolation of a net total PPI for road haulage services delivered to other branches
Pricing unit of measure (I)

best unit of measure?

– moving freight from start to destination
– all-in price crucial to customer

Price per trip
(including or excluding the return trip)
Pricing unit of measure (II)

– about 40% of price quotations relate to one of the price mechanism characteristics

– pricing mechanism characteristics: volume, weight or size of cargo, type of lorry, distance, time, etc.

– assumption: price mechanism is a proxy for the transaction price of freight transportation
Example for a unit of measure not being measured per trip

Service description

Distribution transport on pallets (70 box per pallet) in a cooler trailer. From Veghel (NLD) to diverse addresses in The Netherlands. Including loading and unloading (both of which takes one hour) and including Diesel surcharge. Average price per pallet.
Trips containing ferry-boat passages should be observed or not?

1. Ferry-boat passage dominates trip:
   → trip is excluded

2. Road trip dominates whole trip:
   → trip is included

   – Long-run risk for separate PPI for road haulage
Classification structure

- three strata of companies classified according to number of employees
- only companies of more than five employees in the sample
- small companies face relatively high administrative burden
Publication structure

Two criteria

1. National vs international transport
   (= inner-border vs border-crossing transport)

2. Type of lorry: removers, freezers and coolers, tippers, tankers, containers, others
Compatibility of the PPI with national account

**Prices**

1. National PPI
   → deflator for domestic intermediate consumption

2. International PPI
   → deflator for exports
Compatibility of volumes with national account

**Volumes**

- Volume of international trips
  \[ \text{export volume} + \text{volume of domestic intermediate consumption of border-crossing trips} \]

(key: weight distance)

- Domestic intermediate consumption volume
  \[ \text{volume of national trips} + \text{volume of domestic intermediate consumption of border-crossing trips} \]
Pricing methods

Model pricing
Contract pricing

proportion between model and contract price quotations:

revenue proportion between ad-hoc and long-term customer (per respondent)
Service description characteristics:

- type of lorry
- type of cargo
- packing material
- weight, size or volume of cargo
- inclusion of loading and unloading
- places of loading and unloading
- ferryboat boat passages and toll
- inclusion of return of cargo
- reimbursement for waiting
- rent for lorries and drivers
- diesel surcharges
1st example for a service description for a price quotation

Transported by a tanker,
cargo weight of 30 tons
from Zevenbergen to Veghel,
bill price of client ‘Suikerunie’,
price per trip.
2nd example for a service description for a price quotation

Truck and trailer 25 ton.
From Assen to Mayer (DEU), 217 km, ± 6.5 hours.
Advance notice of 3 days.
Excluding return cargo, including loading, unloading and reimbursement for waiting.
Including German toll.
Contract price for a fixed client No. 10502.
Price per ton.
Procedure to choose pricing method

- no explicit decision criteria
- consultation of branch organizations
- consultation of branch-typical companies
- stimulation of willingness to cooperate
- low administrative burden as an argument to cooperate
Quality adjustment

- preferably: overlap method

If overlap period lacks then overlap period is designed by

- expert guess

- targeted mean imputation method
Summary (I)

- unit of measure:
  price per trip, specific price mechanisms

- trips with ferry-boat passages
  only included if road part dominates

- publication structure:
  national/international, type of lorry

- National Account: national and international PPI’s
  → domestic intermediate consumption and export deflator, respectively
Summary (II)

- National Accounts: split of international volumes
- model and contract pricing
- low administrative burden goal - incentive for companies to cooperate
- quality adjustment preferably through overlap method, otherwise expert guess, targeted mean imputation method