26th Voorburg Group Meeting
Newport, 19-23 September 2011

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Statistics Austria

Presentation on sector paper:
ISIC Revision 4 (2008) Division 81
Services to buildings and landscape activities
Services to buildings and landscape activities

Content

Sources for the sector paper
Documentation (Progress report VBG-meeting 2010)
Data sources (Industry/Product classifications)
Key figures
Turnover statistics (STS/SBS)
Pricing methods (Contract pricing/Model pricing)
Quality adjustment
Sources for the sector paper

Voorburg group meeting 2010
- Mini presentations on turnover/output
- Mini presentations on corresponding SPPIs

Task Force in April, 2008
- Presentations on 812 ‘Cleaning activities’ (NACE Rev. 2)

Papers from the Netherlands
- Spanjaard (2011) SPPI For Industrial Cleaning
- Circa (2006) NL report on cleaning activities SPPI
## Countries developing or producing SPPIs (ISIC Rev. 4) / Turnover data

<table>
<thead>
<tr>
<th>Category</th>
<th>Industry-level prices calculated (Number of countries)</th>
<th>Industry-level turnover collected (Number of countries)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Combined Facilities Support Services (8110)</td>
<td>2</td>
<td>15</td>
</tr>
<tr>
<td>General Cleaning of Buildings (8121)</td>
<td>18</td>
<td>17</td>
</tr>
<tr>
<td>Other Building and Ind. Cleaning (8129)</td>
<td>14</td>
<td>17</td>
</tr>
<tr>
<td>Landscape Care and Maintenance (8130)</td>
<td>1</td>
<td>15</td>
</tr>
</tbody>
</table>
Data sources – Industry classifications (1)

Services to buildings and landscape activities (ISIC Rev. 4)

<table>
<thead>
<tr>
<th>N 811 - Combined facilities support activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>N 812 Cleaning activities</td>
</tr>
<tr>
<td>N 8121 - General cleaning of buildings</td>
</tr>
<tr>
<td>N 8129 - Other building and industrial cleaning activities</td>
</tr>
<tr>
<td>N 813 - Landscape care and maintenance service activities</td>
</tr>
</tbody>
</table>
Data sources – Industry classifications (2)

NACE Rev. 2

- A third four-digit level code: N 8129 Other cleaning activities (e.g. cleaning of trains, buses, planes, etc.)

ANZSIC 2006

- Building exterior cleaning, building interior cleaning, chimney cleaning and other (specialized) cleaning activities in one class (four-digit level)
- Two other classes represent building pest control services and gardening services (four-digit level)

NAICS 2007

- Exterminating and pest control services, janitorial services, landscaping services, carpet and upholstery cleaning services, other services to buildings and dwellings (six-digit level)
Data sources – Product classifications

CPC Ver. 2
- There are three groups in division 85/94
  - Cleaning services (group 853), other support services (group 859), sanitation and similar services (group 945)

CPA 2008
- There are three groups in division 81
  - Combined facilities support services (group 811), cleaning services (group 812), landscape services (group 813)

NAPCS 1999
- Trilateral initiative of Canada, Mexico and the United States
- Products are grouped regardless of industry
Key figures of Division 81 (ISIC Rev. 4)

N 811 ‘Combined facilities support activities’
- Less important regarding number of enterprises and turnover
- Higher turnover significance in future?

N 812 ‘Cleaning activities’
- More establishments than in N 811 (e.g. Germany and Norway 2008)
- High turnover significance presently

N 813 ‘Landscape care and maintenance service activities’
- In Austria of least importance regarding number of enterprises and turnover
Restrictions

- N 813 ‘Landscape care and maintenance service activities’ is mostly not available (ISIC Rev. 4)
- Lack of experience in observing turnover data on product level

Collection of turnover data

- SBS, STS, etc. (surveys)
- Accounts from tax authorities, company reports, VAT-registers, etc. (administrative data)

Other considerations

- Household related activities
- Extensive black economy in the cleaning service sector?
## Turnover statistics (2)

<table>
<thead>
<tr>
<th>Turnover data</th>
<th>Advantages</th>
<th>Disadvantages</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Survey instruments</strong></td>
<td>Precise turnover data</td>
<td>High costs</td>
</tr>
<tr>
<td></td>
<td>The desired periodicity can be defined</td>
<td>Respondent burden is high</td>
</tr>
<tr>
<td></td>
<td>Sample can vary in size</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Sample can vary in complexity</td>
<td></td>
</tr>
<tr>
<td><strong>Administrative data</strong></td>
<td>No additional burden on respondents</td>
<td>They can be less precise</td>
</tr>
<tr>
<td></td>
<td>Normally much cheaper than any survey</td>
<td>Revenues may include service categories not under examination</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Administrative data may not be available sub-annually</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Estimation procedures and data processing facilities may be necessary</td>
</tr>
</tbody>
</table>
## Pricing methods (Contract pricing)

<table>
<thead>
<tr>
<th>Pros</th>
<th>Cons</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Real transaction prices are surveyed</td>
<td>• Complicated task to manage all price determining factors</td>
</tr>
<tr>
<td>• Prices are based on observed market transactions</td>
<td>• Difficulty to determine service quality</td>
</tr>
<tr>
<td>• Contracts are available and provided by respondents</td>
<td>• Service changes take place in practice but must not be expressed in contracts explicitly (Information asymmetry)</td>
</tr>
</tbody>
</table>
# Pricing methods (Model pricing)

<table>
<thead>
<tr>
<th>Pros</th>
<th>Cons</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Real transaction prices are surveyed</td>
<td>• Service product is non-observable (virtual)</td>
</tr>
<tr>
<td>• Information asymmetry is of less relevance</td>
<td>• Representative models have to be prepared by NSIs</td>
</tr>
<tr>
<td>• Service quality is determined by the model</td>
<td>• Price determining factors may change in the service industry but</td>
</tr>
<tr>
<td></td>
<td>models remain unchanged</td>
</tr>
</tbody>
</table>
### Pricing methods

| Contract pricing | • Difficulty to determine service quality
|                  | • No best practices for the different subsectors of services to buildings and landscape activities
| Model pricing    | • Service bundles versus single services
| Prices of repeated services | • Difficulty to determine the price for single services (service bundles)
| Hourly charge-out rates | • Pricing methods may depend on the service provider
| List prices      |
Quality adjustment (1)

Price change/No change of price determining factors

- ‘pure’ price change
- Long term agreement with an automatic adjustment clause and unchanged services

No price change/Change of price determining factors

- Quality of the service gets better/worser
- Training the cleaning personnel, Ecolabel orientated cleaning, etc.?

Price change/Change of price determining factors

- ‘pure’ price change has to be determined
- Long term agreement with price changes and new products being introduced
Quality adjustment (2)

Explicit quality adjustment methods

- Specifications of the repeated service change (frequency of window cleaning may be modified in a complex cleaning contract)
- e.g. expert judgement

Targeted mean imputation

- Substitution of an old contract
- New items enter the index

Cleaning and sustainability

- Is sustainability incorporated in the quality?
Thank you!

Questions?

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