

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

> **Christian Stock** 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

Documentation



Category	Industry-level prices calculated (Number of countries)	Industry-level turnover collected (Number of countries)	
Countries developing or producing SPPIs (ISIC Rev. 4) / Turnover data			
Combined Facilities Support Services (8110)	2	15	
General Cleaning of Buildings (8121)	18	17	
Other Building and Ind. Cleaning (8129)	14	17	
Landscape Care and Maintenance (8130)	1	15	

Data sources – Industry classifications (1)



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

N 811 - Combined facilities support activities

N 812 Cleaning activities

N 8121 - General cleaning of buildings

N 8129 - Other building and industrial cleaning activities

N 813 - Landscape care and maintenance service activities

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

Turnover statistics (1)



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)



Turnover data	Advantages	Disadvantages	
Survey instruments	Precise turnover data The desired periodicity can be defined Sample can vary in size Sample can vary in complexity	High costs Respondent burden is high	
Administrative data	No additional burden on respondents Normally much cheaper than any survey	They can be less precise Revenues may include service categories not under examination Administrative data may not be available sub-annually Estimation procedures and data processing facilities may be necessary	

Pricing methods (Contract pricing)



Pros

- •Real transaction prices are surveyed
- Prices are based on observed market transactions
- Contracts are available and provided by respondents

Cons

- Complicated task to manage all price determining factors
- •Difficulty to determine service quality
- •Service changes take place in practice but must not be expressed in contracts explicitly (Information assymetry)

Pricing methods (Model pricing)



Pros

- •Real transaction prices are surveyed
- •Information asymmetry is of less relevance
- •Service quality is determined by the model

Cons

- •Service product is non-observable (virtual)
- •Representative models have to be prepared by NSIs
- •Price determining factors may change in the service industry but models remain unchanged

Pricing methods



Contract pricing

Model pricing

Prices of repeated services

Hourly charge-out rates

List prices

- •Difficulty to determine service quality
- •No best practices for the different subsectors of services to buildings and landscape activities
- •Service bundles versus single services
- •Difficulty to determine the price for single services (service bundles)
- Pricing methods may depend on the service provider

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?



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Thank you!

Questions?

