# SPPI for Industrial Cleaning in Norway

Jonas A Hansen

25th Voorburg Group Meeting

Vienna, Austria 2010

# Contents

- Definition of the sector

- The Norwegian market

- Pricing method
  - Current method
    - Sampling
    - Weights
    - Data collection
  - New method
    - Sampling and data collection
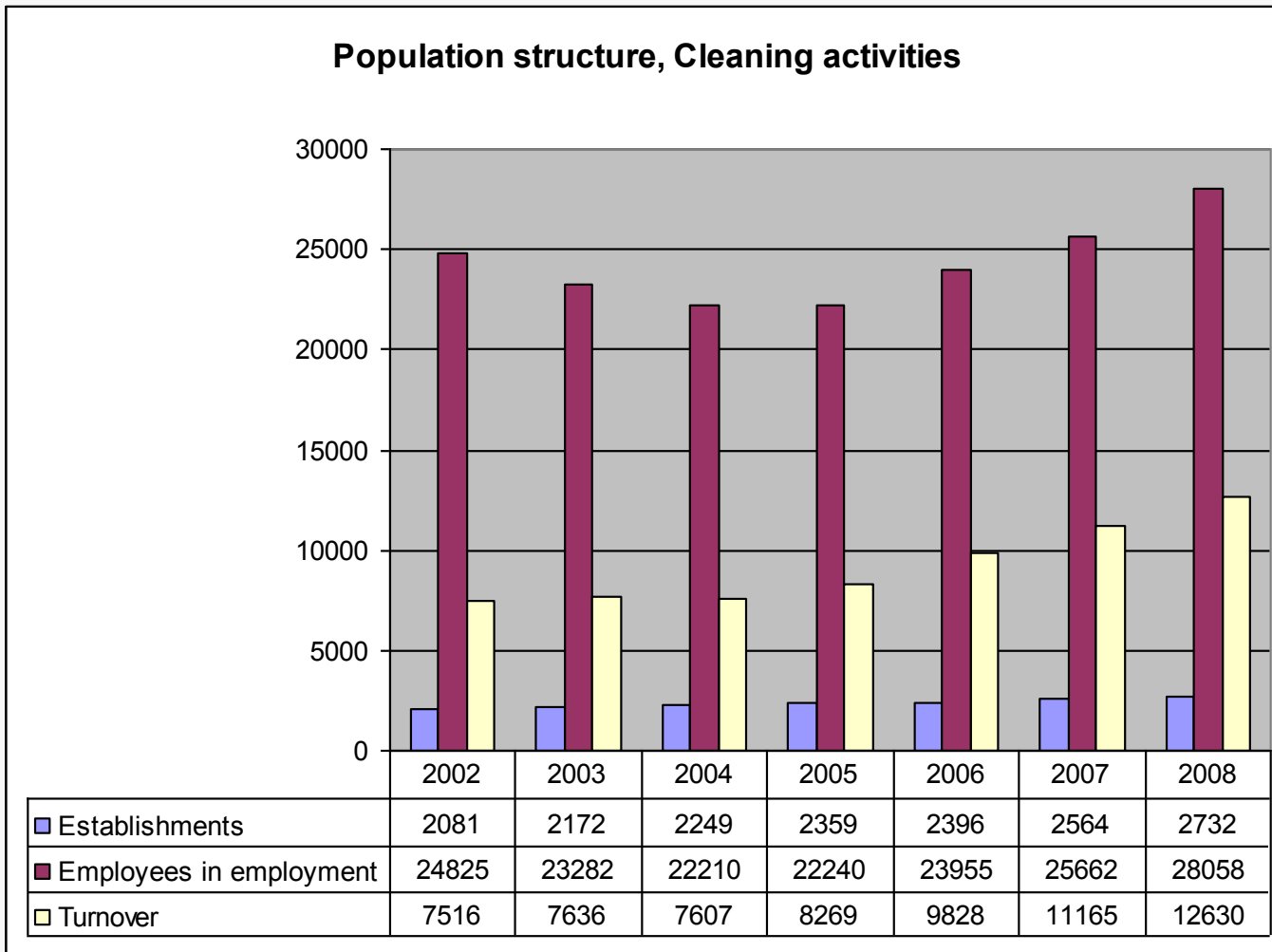
- Results

- Future work

# Definition of the sector

| NACE Rev. 2 | | | ISIC Rev. 4 |
|---|---|---|---|
| **Group** | **Class** | **Description** | |
| 81.2 Cleaning services | **81.21 General cleaning services of buildings** | Normal, non-specialised cleaning of buildings | 8121 |
| | 81.22 Other building and industrial cleaning services | Industrial, window, furnace, chimney and other specialised cleaning services | |
| | 81.29 Other cleaning services | Disinfection, exterminating, sweeping, snow removal and sanitation services | 8129 |

# The Norwegian cleaning market

| Class | Turnover | Percent |
|---|---|---|
| General cleaning services of buildings | 8.7 | 79.8 |
| Other building and industrial cleaning services | 0.9 | 8.3 |
| Other cleaning services | 1.3 | 11.9 |

The Norwegian SPPI focus on general cleaning, but we may include parts of the other classes at a later point. Still the turnover in these classes are fairly low

# The Norwegian cleaning market

**Population structure, Cleaning activities**



| | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 |
|---|---|---|---|---|---|---|---|
| ◻ Establishments | 2081 | 2172 | 2249 | 2359 | 2396 | 2564 | 2732 |
| ◼ Employees in employment | 24825 | 23282 | 22210 | 22240 | 23955 | 25662 | 28058 |
| ◻ Turnover | 7516 | 7636 | 7607 | 8269 | 9828 | 11165 | 12630 |

# Pricing methodology

- Labour-intensive industry
  - At least 60 per cent of price change due to wages
- Currently following long-term contracts over time
  - Trade organisation believes our index is incorrect, and we have started working on an alternative method
- The new method gives prices (turnover) per m$^2$ cleaned

- More on both methods follow

# Current method



1. Name on contract
2. M$^2$
3. M$^2$ that needs thorough cleaning
4. INSTA 800-level (Nordic quality standard)
5. Hours used
6. This quarters price
7. Previous quarters price
8. Price control (If there has been a price change, is this a genuine price change?)
9. How much of the price change is a result of changes in the contract (not price related)?
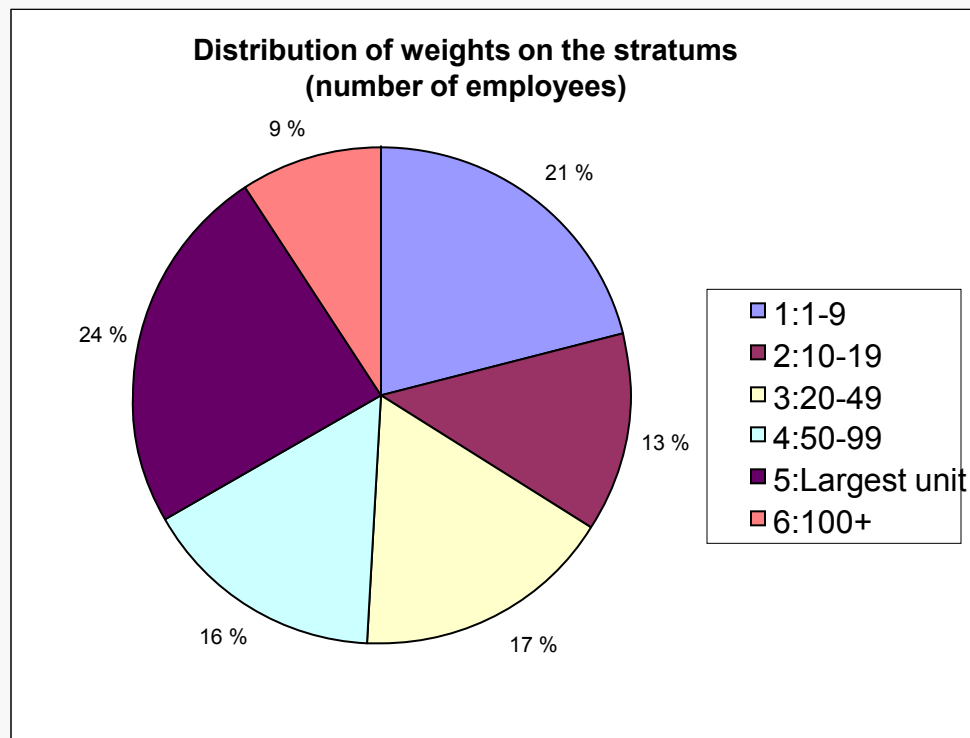
# Current method
## - sampling

- Randomly drawn sample based on probability proportional to size (= the larger the unit is, the bigger the chance is to end up in the sample)

- About 90 units (establishments) in the sample, from a total 2 500 units in the population (all the units in NACE rev 2. 81.2)

- The sample covers about 40 per cent of the turnover in the population

- Some large units are included longer, but the participation for smaller units are limited to maximum four years
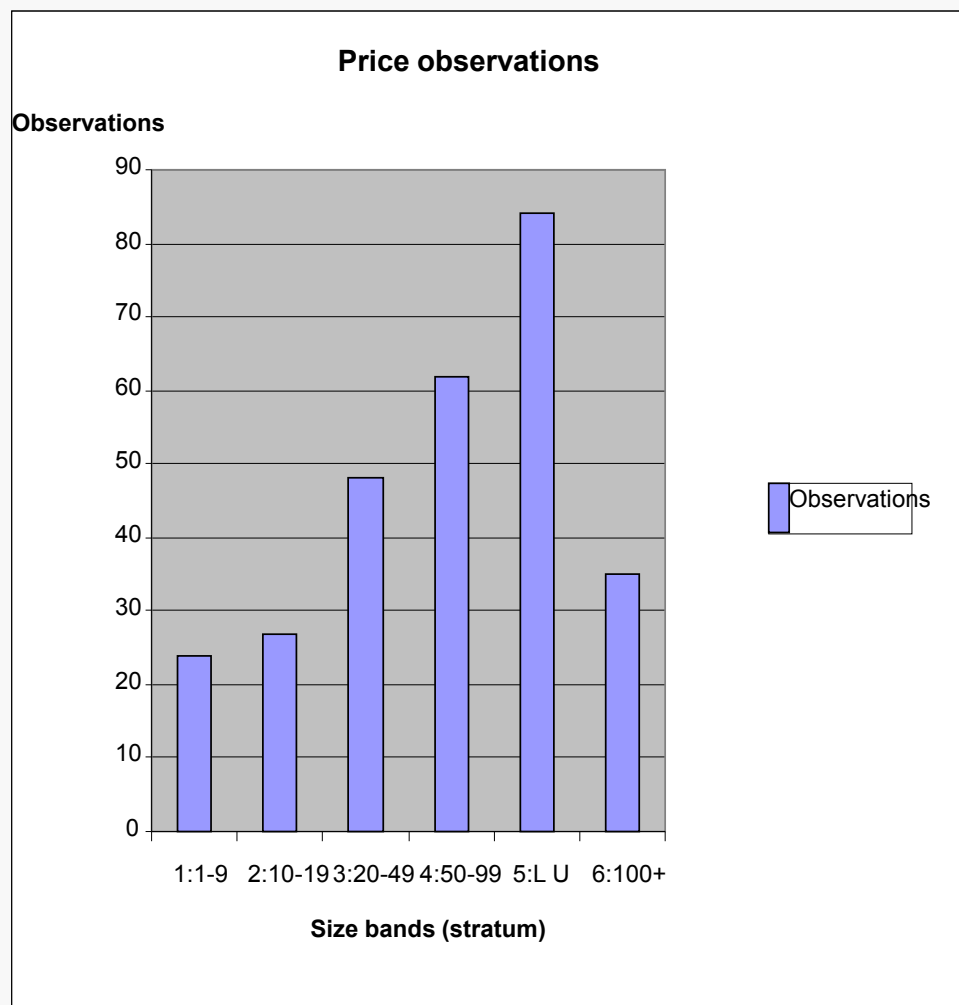
# Current method
## - weights

- Stratified based on number of employees (size bands)

- Largest unit with its own strata

- New weights collected every other year

**Distribution of weights on the stratums
(number of employees)**



- 21 %
- 9 %
- 24 %
- 13 %
- 16 %
- 17 %

Legend:
- 1:1-9
- 2:10-19
- 3:20-49
- 4:50-99
- 5:Largest unit
- 6:100+

# Current method
## - data collection

- All units send in data for three contracts each quarter

- All questionnaires are electronic (paper version available if asked for)

- Pre-printed information

- An expired contract is replaced with a similar contract

- 280 price observations

- High respons rate, close to 100 per cent (compulsory fine)

**Price observations**

Observations

Size bands (stratum)

Legend: Observations

# New method

| NACE (cleaning location) | Region | 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|---|---|
| MINING AND QUARRYING | | 0 | 0 | 0 | 0 | 0 |
| MANUFACTURING | | 0 | 0 | 0 | 0 | 0 |
| WATER SUPPLY, SEWERAGE | | 0 | 0 | 0 | 0 | 0 |
| CONSTRUCTION | | 0 | 0 | 0 | 0 | 0 |
| WHOLESALE AND RETAIL TRADE | | 0 | 0 | 0 | 0 | 0 |
| TRANSPORTATION AND STORAGE | | 0 | 0 | 0 | 0 | 0 |
| ACCOMMODATION AND FOOD SERVICE | | 0 | 0 | 0 | 0 | 0 |
| FINANCIAL AND INSURANCE ACTIVITIES | | 0 | 0 | 0 | 0 | 0 |
| ADMINISTRATIVE AND SUPPORT SERVICE | | 0 | 0 | 0 | 0 | 0 |
| PUBLIC ADMINISTRATION AND DEFENCE | | 0 | 0 | 0 | 0 | 0 |
| EDUCATION | | 0 | 0 | 0 | 0 | 0 |
| HUMAN HEALTH AND SOCIAL WORK | | 0 | 0 | 0 | 0 | 0 |
| ARTS, ENTERTAINMENT AND RECREATION | | 0 | 0 | 0 | 0 | 0 |
| ACTIVITIES OF HOUSEHOLDS AS EMPLOYERS | | 0 | 0 | 0 | 0 | 0 |
| EXTRATERRITORIAL ORGANISATIONS | | 0 | 0 | 0 | 0 | 0 |

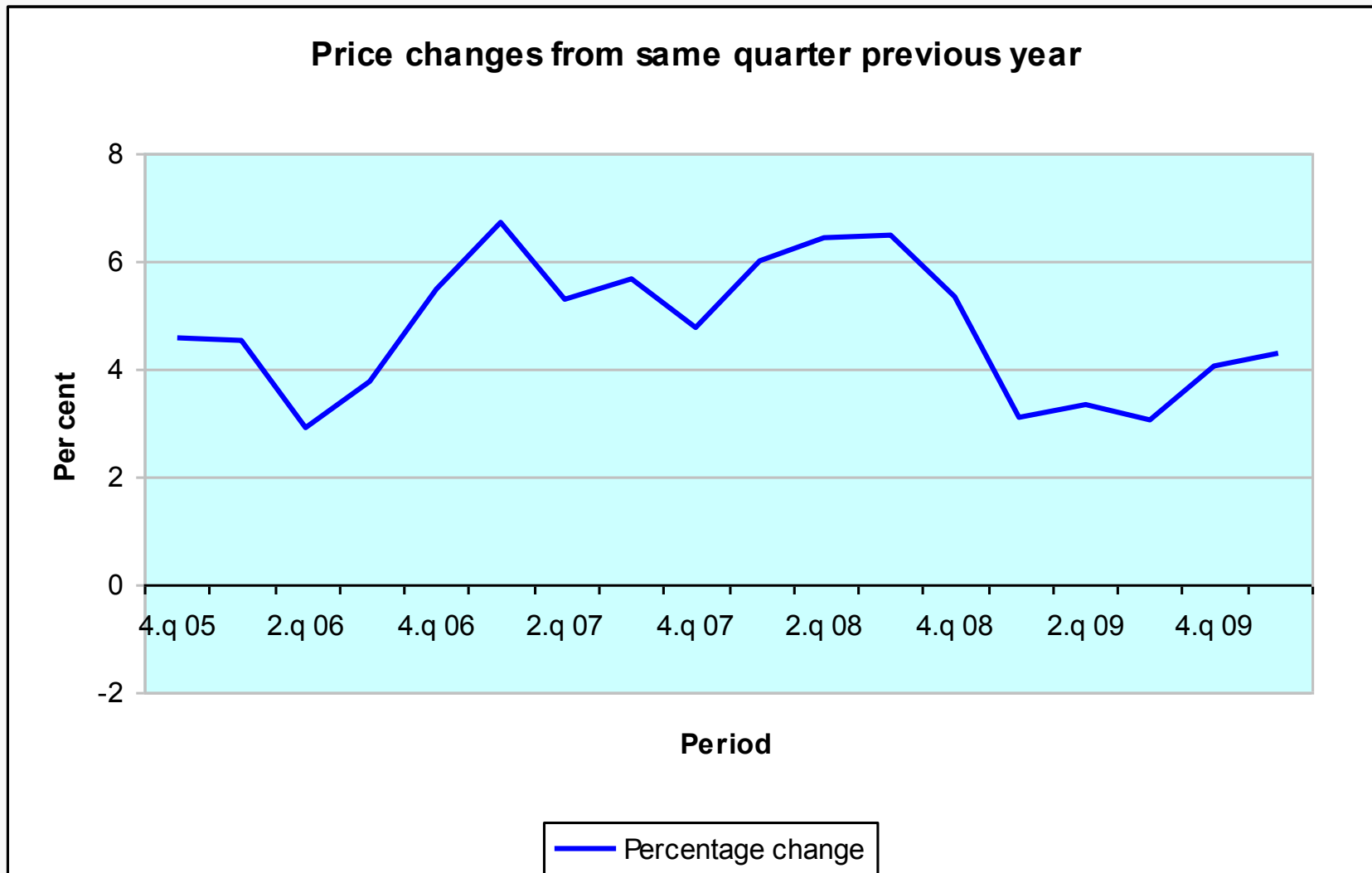One questionnaire for turnover and one for cleaning surface

# New method
## - sampling and data collection

- The sample will consist of members of the trade organisation, NHO Service

- The only changes in the sample will be if there are new members of the trade organisation or if anyone leave them

- The sample size will be about the same as now

- NHO Service will collect the data, and forward to us

- No compulsory fine will give a lower response rate

# Results



Price index for cleaning services. 2006=100

- Total growth: 27.5 per cent

# Results



**Price changes from same quarter previous year**

# Future work

- Analyse data on the new method when available

- Compare the two methods over time

- Make a final decision on which method to use

- Either implement the new method, or rotate our current sample, collect new weights and continue as before

# Thank you for listening!