2011 meeting of Voorburg Group

Mini-Presentation

Service Producer Price Index for Non-Life Insurance

September 19th – 23rd 2011

Newport, South Wales
Definition of the sector

Insurance industry – specific sector of the economy dealing with

- Insurance
- Reinsurance
- Intermediary activities (field of insurance)
Definition of the sector

Institutions related to the insurance industry can be divided into following types:

- Universal insurance companies
- Life insurance companies
- Non-life insurance companies
- Specialized insurance companies
- Captive insurance companies
Definition of the sector

Non-life insurance includes coverage of a wide range of risks of non-life character (namely):

- ..... endangering health and human life
- ..... evoking direct material damage
- ..... evoking financial loss
Definition of the sector

Non-life insurance comprises following services:

- Accident and health insurance s.
- Motor vehicle insurance s.
- Marine, aviation and other insurance s.
- Fire and other damage to property insurance s.
- General liability insurance s.
- Credit and surety ship insurance s.
- Travelling and assistance, legal expenses and miscellaneous financial loss instance
- Other non-life insurance s.
Definition of the sector

Basic economic indicators
Total revenues – Total expenses = Profit or Loss

Total revenues:

• Earned premiums (gross premiums written – premiums ceded to reinsurers)
• Return on financial placements (investments)
• Other technical income
Definition of the sector

Basic economic indicators cont.

Total expenses:

- **Claims incurred**
- **Bonuses and rebates**
- **Operating expenses (acquisition costs of insurance contracts, administration expenses etc.)**
- **Other technical charges**

*Amount of gross premiums written represents turnover*
Market conditions and constraints - size of the industry

Total value of gross premiums written (turnover) for the whole insurance market in 2009

5.8 billion €, thereof

3.36 billion € for non-life insurance services
Market conditions and constraints - size of the industry

Number of companies: 614, thereof
- 35 domestic insurers
- 16 foreign insurance branches from the EU
- 1 branch of a third-country insurance company (Switzerland)
- the rest (freedom to provide temporary services)
<table>
<thead>
<tr>
<th>Premiums written by industry insurance</th>
<th>CPA 2008</th>
<th>Turnover</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Bill. €</td>
</tr>
<tr>
<td>Total non-life insurance</td>
<td>65.12</td>
<td>3.36</td>
</tr>
<tr>
<td>Motor third-party liability insurance</td>
<td>65.12.21</td>
<td>0.98</td>
</tr>
<tr>
<td>Damage to property insurance</td>
<td>65.12.4</td>
<td>0.79</td>
</tr>
<tr>
<td>Motor damage insurance</td>
<td>65.12.29</td>
<td>0.67</td>
</tr>
<tr>
<td>General liability insurance</td>
<td>65.12.5</td>
<td>0.47</td>
</tr>
<tr>
<td>Accident and health insurance</td>
<td>65.12.1</td>
<td>0.18</td>
</tr>
<tr>
<td>Other non-life insurance</td>
<td>65.12.3, 65.12.6, 65.12.7, 65.12.9</td>
<td>0.27</td>
</tr>
</tbody>
</table>
Market conditions and constraints - size of the industry

The share of the largest insurance companies on the insurance market according to premiums written

- Total Insurance Market
- Non-life insurance serv.
- Life insurance serv.

- 3 largest insurance comp.
- 5 largest insurance comp.
- 10 largest insurance comp.
Market conditions and constraints – special condition

- List of all insurance segments
- License permission
- VAT (freed)
Market conditions and constraints – record keeping

- Method of data collection: monthly statistical survey
- Source of respondents: SBS survey, Czech Insurance Association
- Sample method: purpose selection
- Number of respondents: 4 insurance companies (65% coverage)
- Data surveyed: insurance premium, insurance rate, yearly turnover
- Number of representatives: 42 (168 price observations)
Classification used

65.12.29 Other motor vehicle insurance

65.12.29.1 Passenger vehicle

Car 1 Car 2 Car 3 Car 4 Car 5

65.12.29.2 Utility vehicle

Car 1 Car 2
Motor damage insurance
Pricing methods and determining factors

- Combination of ‘Model pricing/Direct use of prices of repeated services
- B2B and B2C approach
- Determining factors:
  - vehicle type
  - age of the vehicle
  - model of the given type of vehicle
  - complicity (5%)
Property insurance
Pricing methods and determining factors

- Combination of ‘Model pricing/Direct use of prices of repeated services
- B2B approach only
- Determining factors:
  - sphere of small and medium risks
  - field (car repair service, restaurant, drugstore)
  - size of the city
  - specification of the object
  - value of the building itself and its own movable assets and stocks
  - complicity (€ 200), number of employees etc.
Classification used cont.

- 65.12.90 Other non-life insurance services
  - 65.12.90.1 Crop insurance against hail
    - Winter wheat
  - 65.12.29.2 Animal insurance against the risk of infection
    - Cow
Agriculture risks insurance
Pricing methods and determining factors

- Combination of ‘Model pricing/Direct use of prices of repeated services
- B2B approach only
- Determining factors:
  - type of commodities or animal
  - yield of commodities and productivity
  - complicity (10%)
National accounts vs. Price statistics

- Compilation of national accounts based on value of production

Production = Gross premiums written - Insurance
- Indemnity costs - Change in technical reserves

- Compilation of price index based only on gross premiums written

SBS data
Annual data from Czech National Bank

GROSS PREMIUMS WRITTEN - INSURANCE - INDENMITY COSTS - CHANGE IN TECHNICAL RESERVES
Quality adjustment

- Principle of model case of representatives
- Quality of the individual services determined by factors and parameters
- Object insured is changed → Obligatory for all respondents
- New insurance premium → Quality adjustment (expert estimation)
Conclusion and summary

- SPPI for insurance services since 1994
- CPI for insurance services (accident insurance, household contents insurance, household insurance, motor damage insurance, motor third-party liability insurance) since 1991
- B2B and B2C price indices are not aggregated to B2all
- Fictitious models based on the most commonly offered insurance
- Price = Insurance premium
- Only 4 respondents, but very concentrated market
Thank you for your attention.

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