R&D Turnover
in the Netherlands

Voorburg group on Services Statistics, September 2010
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Statistics Netherlands
A small number of big enterprises dominates R&D

<table>
<thead>
<tr>
<th>2010 ranking</th>
<th>2009 ranking</th>
</tr>
</thead>
<tbody>
<tr>
<td>Philips</td>
<td>Philips</td>
</tr>
<tr>
<td>ASML</td>
<td>ASML</td>
</tr>
<tr>
<td>NXP</td>
<td>Schering-Plough</td>
</tr>
<tr>
<td>DSM</td>
<td>Shell</td>
</tr>
<tr>
<td>Océ</td>
<td>NXP</td>
</tr>
<tr>
<td>Unilever</td>
<td>DSM</td>
</tr>
<tr>
<td>KPN/Getronics</td>
<td>Océ</td>
</tr>
<tr>
<td>Corus</td>
<td>Unilever</td>
</tr>
<tr>
<td>Thales</td>
<td>KPN/Getronics</td>
</tr>
<tr>
<td>AkzoNobel</td>
<td>Thales</td>
</tr>
<tr>
<td>Crucell</td>
<td>Crucell</td>
</tr>
<tr>
<td>Stork</td>
<td>AkzoNobel</td>
</tr>
</tbody>
</table>
Measurement problems

1) Tracing relevant enterprises engaged in R&D, but another main activity

2) Data collection SME’s promises made to reduce administrative burden

3) Combine data sources
   Structural Business Statistics
   R&D Statistics
   \[\text{partially overlapping, partially complementary}\]
Structural Business Statistics (2008)

2260 enterprises in NACE 72
main activity R&D

37 100 persons employed, 31 200 fte’s

60%  one-person enterprises
88%  enterprises with < 10 employees
2%  enterprises with 100 or more employees
R&D statistics (2008)

3232 enterprises with 10 or more employees
main activity: can be any NACE

60 300 employees, 48 600 fte’s

13 universities
33 000 fte’s

106 research institutions
12 100 fte’s
Combination of SBS and R&D Statistics, 2008

- 2260 enterprises
  - 31 200 fte’s
  - NACE 72

- Structural Business Statistics

- R&D statistics
  - 3232 enterprises
    - all NACE
    - > 10 employees
    - 13 universities
    - 106 research institutions

- Overlap 275 units
  - 25 450 fte’s

- Total 95 700 fte’s
### R&D activities in the Netherlands – totals, 2008

<table>
<thead>
<tr>
<th>Enterprises and other units</th>
<th>#</th>
<th>5336</th>
<th>%</th>
<th>0.7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employment</td>
<td>fte</td>
<td>99 400</td>
<td>%</td>
<td>1.3</td>
</tr>
<tr>
<td>Turnover</td>
<td>million €</td>
<td>11 187</td>
<td>% GDP</td>
<td>1.9</td>
</tr>
</tbody>
</table>

Source: SBS and R&D Statistics
## Imports and exports, 2009 (million euro)

<table>
<thead>
<tr>
<th></th>
<th>Imports total</th>
<th>Imports EU</th>
<th>Exports total</th>
<th>Exports EU</th>
</tr>
</thead>
<tbody>
<tr>
<td>R&amp;D</td>
<td>1746</td>
<td>832</td>
<td>2161</td>
<td>1353</td>
</tr>
<tr>
<td>Royalties and</td>
<td>11725</td>
<td>1817</td>
<td>14974</td>
<td>4464</td>
</tr>
<tr>
<td>manufacturing rights</td>
<td></td>
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</tr>
</tbody>
</table>

*Not only R&D results, also commercial brands and music copyrights*

*Source: Statistics on International Trade in Services*
Summary, conclusions and recommendations (1)

Statistical information on R&D

- partly in SBS: main activity R&D, 60% one-person enterprises
- partly in R&D statistics: any NACE, intramural R&D, 10 or more employees

. . . . . . which is confusing
Summary, conclusions and recommendations (2)

...and can be and should be improved

Dissemination:
- Publish a complete picture of R&D, based on combined data from both SBS and R&D statistics

Data collection:
- Use the same sets of questions on R&D in both SBS and R&D statistics
- Include small enterprises in R&D statistics