UN committee of experts on Business Statistics

Business Demographics and Dynamics
An example in Switzerland

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New production system of BD and SBS since 2011
One single production system for Structural and Business Statistics in Switzerland since 2011

+ Easy conciliation of concept between Business Demography (BD) and Structural Business Statistics (SBS)
  -> for example Nb of employees
+ Strong internal coherence between BD and SBS
+ Easier integration of any new administrative source
+ Quality controls performed once for all statistics (BD and SBS)
- More complexity in data control because of the dependance with SBR and administrative Data
- Revision of data series is heavier to handle because of the dependance between BD and SBS
### Variables produced for SBS and BD

<table>
<thead>
<tr>
<th>EUROSTAT char. Nr.</th>
<th>Characteristics</th>
<th>Available since</th>
<th>Aggregate</th>
</tr>
</thead>
<tbody>
<tr>
<td>11 11 0</td>
<td>Number of enterprises</td>
<td>2011</td>
<td>NACE, municipality</td>
</tr>
<tr>
<td>11 21 0</td>
<td>Number of local units</td>
<td></td>
<td></td>
</tr>
<tr>
<td>16 11 0</td>
<td>Number of persons employed</td>
<td>2011</td>
<td>NACE, municipality</td>
</tr>
<tr>
<td>16 13 0</td>
<td>Number of employees</td>
<td></td>
<td></td>
</tr>
<tr>
<td>16 14 0</td>
<td>Number of employees in full-time equivalent units</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11 96 0</td>
<td>Number of high growth enterprises measured in employment</td>
<td>2014</td>
<td>NACE, municipality</td>
</tr>
<tr>
<td>11 91 0</td>
<td>Population of active enterprises in t</td>
<td>2013</td>
<td>NACE, municipality</td>
</tr>
<tr>
<td>16 91 0</td>
<td>Number of persons employed in the population of active enterprises in t</td>
<td></td>
<td></td>
</tr>
<tr>
<td>16 91 1</td>
<td>Number of employees in the population of active enterprises in t</td>
<td>1990, revised in 2013</td>
<td>NACE, municipality</td>
</tr>
<tr>
<td>11 92 0</td>
<td>Number of births of enterprises in t</td>
<td></td>
<td></td>
</tr>
<tr>
<td>16 92 0</td>
<td>Number of persons employed in the population of births in t</td>
<td></td>
<td></td>
</tr>
<tr>
<td>16 92 1</td>
<td>Number of employees in the population of births in t</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11 93 0</td>
<td>Number of deaths of enterprises in t</td>
<td>2013</td>
<td>NACE, municipality</td>
</tr>
<tr>
<td>16 93 0</td>
<td>Number of persons employed in the population of deaths in t</td>
<td></td>
<td></td>
</tr>
<tr>
<td>16 93 1</td>
<td>Number of employees in the population of deaths in t</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11 94 1 to 5</td>
<td>Number of enterprises newly born in t-i having survived to t (i = 1 to 5 years)</td>
<td>--</td>
<td>NACE, municipality</td>
</tr>
<tr>
<td>16 94 1 to 5</td>
<td>Number of persons employed in the population of enterprises newly born in t-i having survived to t (i = 1 to 5 years)</td>
<td>--</td>
<td></td>
</tr>
<tr>
<td>16 95 1 to 5</td>
<td>Number of persons employed in the year of birth in the population of enterprises newly born in t-i having survived to t (i = 1 to 5 years)</td>
<td>--</td>
<td></td>
</tr>
</tbody>
</table>
Statistical production system: outputs

1. Population active enterprises (yearly STATENT)
   ∈ OASI universe in year T

2. Births
   ∈ Population in year T
   ∉ Population in year T-1
   ∉ Population in year T-2
   and new ex-nihilo according to FIRST-Survey

3. Deaths
   ∈ Population in year T
   ∉ Population in year T+1
   ∉ Population in year T+2
   combined information from FIRST-Survey, SBR and VAT

4. High-growth
   Avg. employ in Population T->T+3
   combined information from FIRST-Survey, SBR and VAT
Full Time Equivalent employment estimation

Step #1 – Employees level

Employment

Men

Women

A

B

... 

S

1 ... 7

... 

1 ... 7

0.36 0.36 0.88 0.88 ...

0.20 0.38 0.66 0.96

0.36 0.36 0.88 0.88 ...

0.17 0.31 0.57 0.90

Sex

Activity sector

Major region

Income

FTE estimation
Dataflow between registers, admin. data and STATENT
Statistical production system

The production system produce about 110 variables.

Codes and nomenclature are automatically updated in Metadatasystem (SDMX), for example:

- 27 variables refering to the **Statistical Business Register**
- 13 variables refering to the **General Classification of Economic Activities**
- 12 variables refering to the **Federal Register of Buildings and Dwellings**
- about 25 variables generated by the statistical production system
Outlooks from 2019

Enhancement of demographical characteristics
• Births and deaths of local units

Use of new administrative data sources
• Analysis from information delivered by State Secretariat for Economic Affairs SECO for the statistics of bankruptcy
• Use of customs data
Thank you for your attention!