Eurostat tabular approach

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- Developed for the projects on Exhaustiveness of National Accounts with EU Candidate Countries
- First project (1998 – 2000): Tabular approach T1 – T8;
Eurostat tabular approach

- Defines standard set of non-exhaustiveness types (N1 to N7) and presents them in a tabular framework;
- Provides a comprehensive and systematic assessment to ensure exhaustiveness of NA;
- Facilitates cross-country comparisons of adjustments and adjustment methods and provides for similar level of coverage of NA.

Non-exhaustiveness types

- Starting point is the output approach due to the more uniform data sources; the adjustment are based on a breakdown of producers;
- Expenditure approach: more than one data source can be used for the same component; when sources are similar as in the output approach adjustments have to be consistent;
- Income approach: similar data sources as in output approach; often the estimates are not independent and the adjustments are linked.
Non-exhaustiveness types (cont’d)

**N1. Producer deliberately does not register (underground)**

- Producer does not register in order to avoid tax and social security obligations or not to lose social benefits;
- Typically includes small producers with income above the set threshold;
- Does not include illegal producers (N2) and misreporting of underground activities (N6);
- Methods used: Labour input (LFS), supply-use method, demand-based method, commodity flow.
Non-exhaustiveness types (cont’d)

N2. Not registered illegal producers

- Producer deliberately fails to register because he is involved in illegal activities;
- Includes prostitution, sale of stolen goods, sale of drugs, smuggling, gambling, etc.;
- Excludes illegal production of registered producers (N6 or under legal activity) and illegal production covered by estimates of units not required to register (N3);
- Methods used: quantity-price method; unit per input or use; expert judgement.

Non-exhaustiveness types (cont’d)

N3. Producer not required to register

- Producers are not required to register because they do not have market output or it is below a set threshold;
- Involves production for own FC, own FCF and small-scale market output of households, paid domestic services, etc.;
- No adjustment needed if the estimation method for a certain activity implicitly includes N3 type of output;
- Methods used: HBS, building permits, commodity flow methods, administrative data, time use surveys, etc.
Non-exhaustiveness types (cont’d)

N4. Legal persons (LPs) not surveyed

- The LPs are registered but systematically excluded from the BR and/or enterprise surveys;
- Involves deficiencies of the BR: BR excludes certain LP, newly registered LP are not included due to updating procedures, incorrect identification of statistical units; wrong activity or size code;
- Methods used: register quality surveys, review of update procedures, cross-checking with other administrative sources.

Non-exhaustiveness types (cont’d)

N5. Registered entrepreneurs (REs) not surveyed

- The REs are not included in the BR and/or is excluded from the statistical surveys;
- Includes deficiencies of BR: exclusion of some entrepreneurs (“natural persons”) e.g consultants, private teachers, writers, journalists, incorrect updating and coding of the BR;
- Methods used: register quality surveys, cross-checking with other administrative sources, income statements, specialised surveys.
Non-exhaustiveness types (cont’d)

N6. Misreporting by producers

- Under-reporting of revenues (GO) and over-reporting of expenditures (IC) in order to avoid payment of income tax, VAT, other taxes, or social security contributions;
- Typically includes concealed sales, hidden secondary activities, cash settlements, VAT fraud, concealed salaries or salaries recorded as external services (IC);
- Methods used: use of tax audits data, comparisons of average salaries and profits, input/output ratios, special surveys and experts judgement.

Non-exhaustiveness types (cont’d)

N7 Other statistical deficiencies

- Data are not directly available from surveys (7a) or are incorrectly processed (7b);
- The following items should be considered:
  - 7a: wages and salaries in kind, production for own final use by market producers, tips, etc;
  - 7b: non-response, valuation techniques, adjustments for accruals, etc.
Standard tables

The Tabular Approach involves the completion of three standard tables both for output and expenditure approaches:

1. Elements of non-exhaustiveness (detailed breakdown by type of unit, activity, non-exhaustiveness type and adjustment procedure);
2. Exhaustiveness adjustments (including the absolute and relative size of the adjustments listed above);
3. Summary of adjustments (by institutional sector and NACE activity or expenditure component).

Exhaustiveness adjustments - results

Exhaustiveness adjustments for the nine new EU member states, 2000

<table>
<thead>
<tr>
<th>Non-exhaustiveness type</th>
<th>N1</th>
<th>N2</th>
<th>N3</th>
<th>N4</th>
<th>N5</th>
<th>N6</th>
<th>N7</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total 9 countries (%)</td>
<td>15.5</td>
<td>6.4</td>
<td>7.9</td>
<td>7.5</td>
<td>5.8</td>
<td>48.6</td>
<td>8.2</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Exhaustiveness adjustments for the Western Balkan Region, 2003*

<table>
<thead>
<tr>
<th>Non-exhaustiveness type</th>
<th>N1</th>
<th>N2</th>
<th>N3</th>
<th>N4</th>
<th>N5</th>
<th>N6</th>
<th>N7</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Western Balkans</td>
<td>7.9</td>
<td>1.3</td>
<td>16.8</td>
<td>4.4</td>
<td>3.2</td>
<td>59.7</td>
<td>6.7</td>
<td>100.0</td>
</tr>
</tbody>
</table>

*2002 for Croatia, FYR of Macedonia and Montenegro, 2001 for Albania
Conclusions

• TAE provides a consistent procedure to achieve exhaustiveness and has already been used by a big number of ECE countries: 13 EU member countries, 6 Western Balkan Countries, Azerbaijan, Kyrgyzstan, Turkmenistan and Ukraine;

• However, the distinction between the N-types is important but is not the main goal;

• Main goal: produce accurate NA and GDP estimates.