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Paris

Cross Cutting Topics – Part 1
SPPIs by customer sector

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Hungary
I. Introduction;
II. SPPIs in Hungary;
III. Aggregation;
IV. Frequency;
V. Temporal disaggregation;
VI. B2E trade;
VII. Summary.
I. Introduction

Current European legislation
STS Regulation (1158/2005/EK)

Variable: 310 Output prices for services (SPPIs)
show the price development for services delivered to
customers that are enterprises or persons representing
enterprises. (B2B, business to business)

Domestic and non-domestic services are monitored
(according to the destination of the product).

Planned new legislation in European Union
Framework Regulation for the Integration of Business Statistics
(FRIBS/STS-package) requires:
SPPIs as deflators for the total Turnover/Output (B2All,
business to all)
Turnover share on type of consumer of the services

Total turnover
  B2All

  Domestic turnover
    B2B
    B2C

  Export turnover
    B2B
    B2C
Observation unit: enterprise
✓ SPPIs are available for the current STS-coverage;
✓ Experimental SPPIs required by FRIBS are under development.

Coverage by the type of the customer

The type of the Hungarian SPPI
✓ B2All - computed as weighted average of B2B and B2C;
  (in Hungary B2Other SPPIs (B2E, public bodies…) are included in B2B SPPIs);
✓ B2B and B2E - based on data of a quarterly SPPI survey;
✓ B2C - estimated by consumer prices (HICP-CT).
Which areas are affected by FRIBS?

Related industries (NACE Rev. 2)

✓ H - Transportation and storage;
✓ I - Accommodation and food service activities;
✓ J - Information and communication;
✓ L - Real estate activities;
✓ M - Professional, scientific and technical activities;
✓ N - Administrative and support service activities;

Note:
Above mentioned industries currently are not fully covered by SPPIs.
### III. Aggregation

**Examples:** The estimated turnover share for B2B and B2C

**Hungary, Total Turnover=100%**

<table>
<thead>
<tr>
<th>CPA'2015</th>
<th>Name</th>
<th>Estimated Turnover share (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>49</td>
<td>Land transport services and transport services via pipelines</td>
<td>SPPI 80, HICP-CT 20</td>
</tr>
<tr>
<td>51</td>
<td>Passenger air transport</td>
<td>SPPI 20, HICP-CT 80</td>
</tr>
<tr>
<td>55</td>
<td>Accommodation services</td>
<td>SPPI 30, HICP-CT 70</td>
</tr>
<tr>
<td>53</td>
<td>Postal activities</td>
<td>SPPI 80, HICP-CT 20</td>
</tr>
<tr>
<td>61</td>
<td>Telecommunication</td>
<td>SPPI 45, HICP-CT 55</td>
</tr>
<tr>
<td>68</td>
<td>Real estate activities</td>
<td>SPPI 55, HICP-CT 45</td>
</tr>
<tr>
<td>74</td>
<td>Other professional, scientific and technical services</td>
<td>SPPI 95, HICP-CT 5</td>
</tr>
<tr>
<td>77</td>
<td>Rental and leasing services</td>
<td>SPPI 95, HICP-CT 5</td>
</tr>
<tr>
<td>79</td>
<td>Travel agency, tour operator and other reservation services and related services</td>
<td>SPPI 30, HICP-CT 70</td>
</tr>
</tbody>
</table>
### III. Weighting together B2B SPPIs and HICP-CT
- a simplified (fictive) example

<table>
<thead>
<tr>
<th>NACE (Rev. 2)/CPA 2015</th>
<th>Division/Class</th>
<th>B2All %</th>
<th>B2B %</th>
<th>B2C %</th>
</tr>
</thead>
<tbody>
<tr>
<td>61</td>
<td>Telecommunication activities</td>
<td>100.0</td>
<td>49.5</td>
<td>50.5</td>
</tr>
<tr>
<td>61.10</td>
<td>Wired telecommunication activities</td>
<td>30.0</td>
<td>40.0</td>
<td>60.0</td>
</tr>
<tr>
<td>61.20</td>
<td>Wireless telecommunication activities</td>
<td>55.0</td>
<td>50.0</td>
<td>50.0</td>
</tr>
<tr>
<td>61.30</td>
<td>Satellite telecommunication activities</td>
<td>5.0</td>
<td>0.0</td>
<td>100.0</td>
</tr>
<tr>
<td>6190</td>
<td>Other telecommunication activities</td>
<td>10.0</td>
<td>100.0</td>
<td>0.0</td>
</tr>
</tbody>
</table>

**Calculation/estimation of the B2B:**
A split of the industry into 49.5% B2B transactions and 50.5% B2C transactions results: B2B = 0.3 * 40 + 0.55 * 50 + 0.05 * 0 + 0.1 * 100
Differences could be observed as follows:

- **Frequency** (quarterly, monthly);
- **Overall methodology** used;
- **Classification** (NACE / COICOP);
- **Prices observed** (output (basic) prices / consumer prices);
- **Questions on domestic/non-domestic (export) share of the markets**;
- **Questions on approaches to be followed**:
  - combination of B2B with B2C or
  - observation directly B2All transactions?
Quarterly price indices for Postal activities (H53)

*Hungary (2015=100)*

\[ \text{B-All} = \text{BB+ HICP-CT} \]
Quarterly price indices for Telecommunication (J61) Hungary (2015=100)
B-All = BB+ HICP-CT
How to generate the monthly B-All indices from the quarterly SPPIs?

By **temporal disaggregation (2 options)** as follows:

1. Temporal disaggregation of quarterly B-All SPPIs;
2. Temporal disaggregation of quarterly B-B SPPIs and combination of monthly SPPIs (B-B) with the monthly HICT-CT applying the appropriate weights.

According to pilot study, the **second alternative** is probably better, because the HICT-CT is basically a monthly index and we only estimate the B-B part.

Furthermore in this way the average of the monthly indices are closer to the quarterly indices.
Disaggregation of quarterly SPPIs (B-B) to monthly SPPIs
Disaggregation of quarterly SPPIs (B-B) to monthly SPPIs
Postal activities (H53), B-All = B-B + HICP-CT
VII. B2E (Export) trade

Definition of the export service

The *destination* is determined by the *residency* of the third party that has ordered or purchased the product.

- **Non-domestic market (Export):** products or services sold to the non-resident customers,
- **Domestic market:** products or services sold to the resident customers.
Main challenges

✓ Availability of consistent data sources;
✓ Globalization in general;
✓ Establishing affiliated companies/subsidiaries abroad;
✓ To distinguish between the international services and service exports - different interpretation by the Statistical Office, Tax Office, data suppliers; (e.g. concerning transport, postal and telecommunication services).

Remark:
Export data are influenced by the exchange rate of the foreign currency. In Hungary price data received at foreign currency are converted to the HUF by the quarterly exchange rate of the Hungarian National Bank.
Examples for special cases

✓ Concerning the freight transport by road activities, export is the total sum paid by a non-resident company regardless of national borders;

✓ For postal activities the export is dominated by delivery of letters ( parcels) coming from abroad for an sum agreed between the national post offices concerned.

✓ In the case of telecommunication, mobile network operators must establish Roaming Agreements to govern the exchange of customer billing data for their customers who “roam” on the visited network. Export is highly covered by inboard ( foreign visitor’s) roaming rates. Roamers are not billed directly by the visited operator. They will be billed at home on the regular monthly bill.

✓ As regard the accommodation, export / inbound tourism means accommodation for foreign tourists in Hungary.
Data availability

✓ SPPIs are available for the current STS-coverage;
✓ Experimental SPPIs required by FRIBS are under development.

Coverage by the type of the customer

✓ B2All - computed as weighted average of B2B and B2C;
✓ B2B and B2E - based on data of a quarterly SPPI survey;
✓ B2C - estimated by consumer prices (HICP-CT).

Frequency: quarterly and monthly

Thank you for attention!

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