



**HUNGARIAN
CENTRAL
STATISTICAL
OFFICE**

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Dublin**

**Cross Cutting Topics – Part 2
Sectoring – Turnover and prices for various sectors
(B to B, B to E)**

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- I. SPPIs as deflators;
- II. How to identify **B2B** and **B2C** markets;
- III. Aggregation;
- IV. Examples;
- V. How to identify **B2B** and **B2E** markets.

Observation unit: enterprise

SPPIs are available for the current STS-SPPI coverage

Coverage by the type of the client

B2B, B2C, B2E, B2All

The type of the Hungarian SPPI

- ✓ **B2B** - based on data of a compulsory quarterly survey (in Hungary B2Other SPPIs (B2E, public bodies...) are included in B2B SPPIs);
- ✓ Product-based;
- ✓ **B2C** - estimated by consumer prices (HICP-CT);
- ✓ **B2All** - computed as weighted average of B2B and B2C; currently calculated for 3 and published 2 service areas (air passenger transport, **post, telecommunication**).

General questionnaires

A similar page “**B) Services sold to the non-resident customer**” is also used.

A) Services sold to the resident customer						
Representative service		Unit of measure	Producer price		Turnover B2B (previous year)	Remark, justification of the price change
name of the service	kode		previous quarter	current quarter		
a	b	d	e	f	g	h
	A					

Statistical reflections (quarterly)

http://www.ksh.hu/apps/shop.kiadvany?p_kiadvany_id=32800&p_temakor_kod=KSH&p_session_id=414040653266631&p_lang=EN

Tables

- <http://www.ksh.hu/engstadat>
- http://www.ksh.hu/stadat_infra_3_6
- http://www.ksh.hu/docs/eng/xstadat/xstadat_infra/e_qss001a.html

Data Base

<http://statinfo.ksh.hu/Statinfo/themeSelector.jsp?page=2&zst=QSS&lang=en>

- **Actually** Hungary as well as most of European countries produce basically **B2B SPPIs** (current STS-requirements on SPPIs).
- **To deflate the total turnover/output (e.g. to produce an ISP (new volume indicator by FRIBS))** it seems to be necessary to develop methods for computation of **B2All SPPIs as deflators**.

One of the possible options is the **mixed approach**:
a **weighted average of B2B and B2C SPPIs** (applying an appropriate turnover/output share of elements).

To do this, there is a need to **identify the B2B and B2C trade**

- ✓ according to the content of the service;
- ✓ by the proportion of these markets from the total turnover/output.

II. How to identify B2B and B2C trade

1. Content of the related classifications;
2. Expansion of the data collection(s) on turnover/turnover structure;
3. Weights from the National Accounts;
4. Information received from the trade associations, market leader companies or from the state authorities.

Content of the related classifications

Correspondence table between CPA 2008 - COICOP 1999

CPA 2008: H49

(with limited coverage)

CPA 2008	Name of the service	COICOP 1999	Name of the service	B2B			B2C			B2AII				
				SPPI	CPI	B2AII	SPPI	CPI	B2AII	SPPI	CPI	B2AII	B2B + B2C	
H49	Land transport services and transport services via pipelines			√				√						√
4910	Passenger rail transport services, interurban	07.3.1	Passenger transport by railway		√			√			√			
4920	Freight rail transport services			√			√			√				
4931	Urban and suburban passenger land transport services	07.3.1	Passenger transport by railway		√			√			√			
		07.3.2	Passenger transport by road											
4932	Taxi operation services	07.3.2	Passenger transport by road		√			√			√			
4939	Other passenger land transport services n.e.c.	07.3.2	Passenger transport by road		√			√			√			
4941	Freight transport services by road			√			√			√				
4942	Removal services			√			√			√				
4950	Transport services via pipeline			√			√			√				

Expansion of the data collection(s)

In Hungary information on turnover proportion on submarkets is based on **two data collections**, by CPA 2008:

- ✓ **SPPI questionnaire**: yearly B2B turnover data (at 4 and 6 digit level, 1 year prior to the reference year) are received from companies once a year;
- ✓ **Structural Business Survey (SBS)**: EU requirement according to the Annex VIII. is extended by data on the turnover share of households (4 and 6 digit level turnover data by CPA 2008 are collected.)

However, the coverage is limited concerning the services industries observed, as well as sample selected (enterprises with more than 19 employees).

Weights from the National Accounts

Some of countries use **data from National accounts supply** to calculate a weighted B2All SPPI

In this case it should be taken into account possible differences between

- ✓ product-based and industry-based data
and
- ✓ turnover share and GDP share (gross or net approach).

Information received from the market players

Information received from

- ✓ trade associations or
- ✓ market leader companies

When starting the observation of a new services industry, it is recommended to **build contacts** with related trade organizations. The experts of these organizations probably can provide NSI with a relatively good estimation for the turnover share of the B2B and B2C markets.

- ✓ state authorities

Some countries aggregate SPPIs and CPIs using the share of markets (business and consumers) provided by the **Regulatory Authorities** (regarding telecommunication e.g. Spain, Norway).

III. Aggregation

B2All indices for product-based SPPIs

Compilation of B2All indices

- ✓ By aggregation of the SPPI and CPI using the estimated share of submarkets (business and consumers).

Examples:

The turnover share and SPPIs for B2B and B2C markets

Hungary, Total Turnover=100%, 2012=100

CPA 2008	Name	Estimated Turnover share		SPPI		
		B2B	B2C	B2B	B2C	B2All
H51	<i>Passenger air transport</i>	20	80			
H53	<i>Postal activities</i>	75	25	104,0	112,4	106,1
J61	<i>Telecommunication</i>	35	65	84,3	103,5	96,8



IV. Example, Case 1

Weights for H49, B2All (based on SBS 2011)

CPA 2008	Name	Turnover share SBS 2011	Estimated Turnover share of submarkets			Deflators/proxies		
		B2All	B2All	B2B	B2C	B2All (B2B+B2C)	B2B	B2C
		%	%	%	%			
49	Land transport services and transport services via pipelines	100	100	79	21	SPPI +HICP-CT	SPPI	HICP-CT
4910	Passenger rail transport, interurban	3,9	100		100			HICP-CT
4920	Freight rail transport	6,5	100	100			SPPI	
4931	Urban and suburban passenger land transport	8,6	100		100			HICP-CT
4932	Taxi operation	1,0	100		100			HICP-CT
4939	Other passenger land transport n.e.c.	7,3	100		100			HICP-CT
4941	Freight transport by road	65,6	100	100			SPPI	
4942	Removal services	0,1	100					
4950	Transport via pipeline	7,1	100	100			SPPI	

Example, Case 2

Weights for H49, B2All (based on SBS 2011)

CPA 2008	Name of the service	Turnover share SBS 2011	Estimated Turnover share of submarkets			Deflators/proxies		
		B2All	B2All	B2B	B2C	B2All (B2B+B2C)	B2B	B2C
		%	%	%	%			
49	Land transport services and transport services via pipelines	100	100	83	17	SPPI + HICP-CT	SPPI	HICP-CT
4910	Passenger rail transport, interurban	3,9	100	20	80		HICP-CT	HICP-CT
4920	Freight rail transport	6,5	100	100			SPPI	SPPI
4931	Urban and suburban passenger land transport	8,6	100	20	80		HICP-CT	HICP-CT
4932	Taxi operation	1,0	100	20	80		HICP-CT	HICP-CT
4939	Other passenger land transport n.e.c.	7,3	100	20	80		HICP-CT	HICP-CT
4941	Freight transport by road	65,6	100	100			SPPI	SPPI
4942	Removal services	0,1	100					
4950	Transport via pipeline	7,1	100	100			SPPI	SPPI

Experimental calculation

B2All SPPIs for H49

Q1/2014 (previous quarter=100)

Results of the experimental calculation

Case 1.

Type of the SPPI	Turnover share %	SPPI
B2All	100	100,6
B2B	79	101,3
B2C	21	97,7

Case 2.

Type of the SPPI	Turnover share %	SPPI
B2All	100	100,6
B2B	83	101,1
B2C	17	97,7

Definition of export

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

- *Domestic market:* as third parties resident in the same national territory as the observation unit.
- *Non-domestic market: the opposite*

How to identify B2E trade

Export: products or services sold to the non-resident customers

- ✓ In Hungary within the frame of the SBS and STS statistics, export data are aggregated **using data of companies performing dual accounting** (the coverage and quality of these statistics is limited).
- ✓ STS-SPPI: based on SBS data sources, the **share of export services in eight services groups exceeded of 10%**. The highest proportion was accounted for **warehousing and storage** followed by **information service activities** and **freight transport by road and removal services**.



B2E Turnover share (SBS 2012, 20+) European STS-SPPI coverage

NACE Rev.2	Name	Domestic market %	Non-domestic market %
49.4	Freight transport by road and removal services	70	30
52.1	Warehousing and storage	54	46
52.24	Cargo handling	83	17
53	Postal activities	95	5
61	Telecommunications	96	4
62	Computer programming, consultancy and related activities	74	26
63	Information service activities	55	45
69.1+ 69.2+ 70.2	Legal and accounting activities; management consultancy activities	75	25
71	Architectural and engineering activities; technical testing and analysis Advertising and market research	88	12
73	Advertising and market research	88	12
78	Employment activities	95	5
80	Security and investigation activities	98	2
81.2	Cleaning activities	99	1

Main challenges

- ✓ **Availability of consistent data sources**
(*Inconsistency* between turnover data regarding different sources: SBS, foreign trade statistics , TAX data);
- ✓ **Rapid development of technology;**
- ✓ **Globalization in general;**
- ✓ **Establishing affiliated companies/subsidiaries abroad;**
- ✓ **To distinguish between the resident consumption of 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

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

Thank you for attention!

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