

Supply of Statistical Services for Methodological Support to Price Statistics

**Project implemented by ICON-INSTITUT Public Sector GmbH
in consortium with INE Portugal**

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Studies: „The use of scanner data as source for HICP“

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1. How scanner data (SD) can **best be used for** the monthly **HICP**?
2. How this **fits** in the **current methodology** for CPI compilation?
 - *Price concept*
 - *Formula restrictions*
 - *Coverage*
3. How to deal with **new products & EAN codes volatility** during the year?
4. The possible use of the complete set of SD for the **analysis** and **benchmarking of HICP**
5. The potential use of SD for **multipurpose price statistics**

1. Replacing **traditional price collection** in the stores
2. As a powerful **source for CPI/HICP** computation (prices / weights)
3. As a **source** of price and sales data **for PPPs**
4. Computation of **Detailed Average Prices**
5. As a **benchmark for** the present **HICP**
6. As a **source** for computing **COLIs**
7. As a **source** of data to **improve the coverage for multipurpose price statistics**

1. What **transactions** are **covered** by SD?
 - *Household expenditure or more?*
 - *All outlets?*
 - *All country?*
 - *All HICP basket?*
2. What **measure of price** is there in SD?
 - *Price at a point of sale (PPOS)?*
 - *Shelf price (SP)?*
3. Are those prices with **discounts** or not?
 - *Price reductions captured?*
4. What is the **price concept** underlying the monthly average prices generated by SD?
 - *Ratio between turnover and quantities?*
 - *Transaction prices? (PPOS/SP)*
5. What is the data collection **frequency**?

Transaction price and unit value

		Geomean quantities	Geomean price	Arithmetic quantities	Arithmetic price	Unit value
Month 1	Week1	101.475	4.480	102.429	4.571	4.462
	Week2	86.345	4.988	86.714	5.014	4.981
	Week3	97.001	4.387	99.000	4.457	4.309
	Week4	91.075	4.510	93.571	4.586	4.397
Month 2	Week1	75.647	5.343	75.714	5.343	5.342
	Week2	130.966	3.850	133.857	3.943	3.772
	Week3	107.735	4.458	110.000	4.500	4.377
	Week4	94.496	4.770	95.571	4.800	4.722
Month 1		93.798	4.585	95.429	4.657	4.524
Month 2		100.214	4.573	103.786	4.646	4.438
Monthly rate of change		6.8%	-0.3%	8.8%	-0.2%	-1.9%



Potential problems

1. HICP

- *Scope/Coverage*
- *Comparability/Harmonisation*
- *Price concept*
- *Minimum standards for procedures of quality adjustment*
- *Timing of entering purchase prices (services)*
- *Price reductions*

2. PPPs

- *No problems identified*

1. Pros

- *Efficiency gains allowed by the use tools for increased automation in index compilation*
- *No errors in the prices collected.*
- *No errors of data entry*

2. Cons

- *Process of mapping EAN identifiers to the appropriate COICOP classification*
- *Risk of delaying the release of the index*
- *Quality adjustments and substitutions*
- *Coverage of all outlet types especially markets*

1. Pros

- *Scope/Coverage*
- *Higher collection frequency*
- *Improved geographic coverage and temporal adjustment*
- *Efficiency gains in data collection and centralised computation*
- *Representative items identification*
- *Pattern of consumption*

2. Cons

- *SD will not cover all outlet types especially markets*
- *Many services not covered*

1. Preserve **compliance** with **HICP regulations**:
 - *The Laspeyres concept*
 - *Comparability*
 - *Accuracy, timeliness and efficiency*
2. Further work is recommended in **developing the benchmarking of SD and HICP** results over a period of time
3. Compliance to the **fixed basket** approach must be retained
4. Weights and basket update SD based must **exclude expenditure** other than those of households (e.g. companies or social institutions)
5. In order to overcome incomplete basket, outlet and geographic coverage a **combination of SD with traditional methods of price collection** is the most appropriate approach

6. Requesting SD in the **appropriate concepts, timing** and **format** is a essential factor for the success of achieved improvements in price statistics
7. Assurance that companies are giving **timely** and **accurate** information
8. Consistency among the outputs from HICP/PPPs/DAP
9. EANs compatibility with COICOP could benefit the most from:
 - ***Automated process for mapping EAN identifiers to the appropriate COICOP classification***
 - ***Sharing between NSIs, EAN to COICOP mapping lists***
- 10.PPPs is the price index** that **can mostly benefit** from the use of SD

Areas where further research may be worthwhile

1. Is the **use of SD a practical solution** for price statistics improvement concerning all the “dimensions” of this information system?
2. Is **SD cost effective** as it could be **expensive** and will not replace current price collection in their entirety?
3. What are the **potential efficiencies for using the same data set** for HICP/PPP/DAP?
4. Is **harmonisation an issue** when SD combined with traditional price collection is used with different “intensity” among MSs?

Further work and research based on MSs experiences and specific pilot exercises should be developed in order to explore:

- ***The feasibility of a centralised dataset for price statistics focused in efficiency/cost/quality dimensions of the outputs***
- ***Harmonisation and legislation compliance***

Thank you

**Further questions for paper's
improvement/correction can be addressed to:**

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