The EU harmonized HICP

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Harmonisation of consumer price indices is one of European Statistical System's success stories.

The success can be attributed to:

- long CPI tradition
- strong & high level policy need
- vision of harmonising outputs instead of inputs
- close cooperation between Eurostat, National Statistical Institutes & European Central Bank
- stepwise approach
• Context
• Aim
• Harmonisation process

• Methodology
• Data
• Dissemination

• Future
Context

1600
- United Kingdom

1800
- Sweden, Iceland, Belgium, Norway
- Netherlands, Denmark
- Iceland, Germany, Turkey

1900
- Helsinki Olympics

1920
- World War I

1940
- World War II

1960
- Greece, Portugal, Malta

1980
- Cyprus

2000
- Fall of the Berlin Wall

- Poland, Romania, Czech Republic, Bulgaria, Lithuania, Latvia, Hungary, Slovakia, Croatia, Slovenia, Estonia, Serbia, FYROM, Kosovo, Albania, Montenegro, Bosnia and Herzegovina

- Greece, Portugal, Malta

- Cyprus

- Helsinki Olympics

- EU

- Introduction of euro 1999

- United Kingdom 1661

- Fleetwood 1871

- Laspeyres 1871

- Fleetwood 1707

- HICP
Harmonisation of consumer price indices started in the run-up of the euro in early 1990s
"Inflation shall be measured by means of a consumer price index on a comparable basis, taking into account differences in national definitions"

(Article 140 of the Treaty on the Functioning of the European Union, and Article 1 of the Protocol, No 13)
The HICP is set up to provide a high-quality, comparable measure of consumer price inflation.

It serves two main purposes:

- indicator for assessing price convergence with a view to a country's possible membership in the monetary union.
- measure of price stability in the European Central Bank's (ECB) monetary policy strategy;
Price convergence: Inflation of no more than 1.5 percentage points above the average rate of the three EU Member States with the lowest inflation over the previous year.
The ECB's primary objective is to maintain price stability

"Price stability is defined as a year-on-year increase in the Harmonised Index of Consumer Prices for the euro area of below 2%."
In addition to the specific EU uses, the HICP is used like any other consumer price index: for economic analyses, indexing contracts, etc.

Some Member States have issued inflation-indexed bonds that are linked to the 'euro area HICP excluding tobacco'
Harmonised index of consumer price index was released in 1997

EU ANNUAL INFLATION: 2.2% IN JANUARY

EU Annual inflation in January was 2.2%. This is as measured by the new Harmonized Indices of Consumer Prices (HICPs), published today for the first time by Eurostat, the Statistical Office of the European Communities in Luxembourg.
The HICP was developed in cooperation with the statistical offices of the Member States of the EU

- Price Statistics Working Group has been the platform for developing minimum standards
- Dedicated Task Forces support the work of Eurostat and report to the Working Group
- Opinion of the European Statistical System Committee is sought on all HICP standards
European rules define the frame for compiling the HICP

The **basic act** adopted by the European Parliament and Council = specifies the most important requirements of the HICP)

Plus a set of implementing acts = details aspects that the Member States HICPs need to comply with)

Complemented with recommendations and Working Group decisions

The HICP manual to support compilers
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Methodology

Coverage
- Goods and services
- Geographic area
- Population

Compilation
- Weights for the HICP sub-indices
- Index formulae
- Elementary aggregate indices
- Missing or rejected price observations
- Quality adjustment methods
- ...

European Commission
New weights introduced and chaining done each December

All countries follow the same classification

Product sample varies from country to country
How exactly the compilation is done is left to Member States' discretion
Differences in the HICPs should reflect only differences in price changes or expenditure patterns and not be the result of differences in methods
Methodology

The HICP is an annually chain-linked Laspeyres-type fixed basket index

$$ p^{0,t} = \sum \frac{p^t}{p^0} \cdot w^{0,b} . $$

- It measures the average change in prices from the price reference period to a comparison period using expenditure shares from a period prior to the price reference period, and where the expenditure shares are adjusted to reflect the prices of the price reference period.
Methodology

A measure of price change of all goods and services purchased in monetary transactions for consumption by private households on the economic territory of a Member States
The HICP compares prices by measuring the cost of a fixed basket of products; this implies that prices of identical or almost identical product-offers should be followed.
34 countries

3 European aggregates

- European economic area
- European union
- Euro area
Full HICP release

Country data

ECOICOP indices

Special aggregates

European aggregates

Produced by the countries
Produced by Eurostat
Euro area aggregate

- The HICP for the euro area as a whole is calculated as an average of the national HICPs for the euro area countries, weighted by the countries’ relative household consumption expenditure shares in the euro area total.
Evolving composition

- The evolving euro area HICP covers those EU Member States whose currency was the euro during the time period to which the data relate.
- When a country joins the euro area, the national HICP for that country is included in the euro area HICP using a chain index formula.

Fixed composition

- Euro area 19, all Member States throughout the whole time series.
European classification of individual consumption according to purpose (ECOICOP) aggregates:

L0: all-items
L1: 12 divisions
L2: 47 groups
L3: 117 classes
L4: 303 categories

09 | RECREATION AND CULTURE
---|--------------------------
09.1 | Audiovisual, photographic and information processing equipment
09.1.3 | Information processing equipment
09.1.3.1 | Personal computers
09.1.3.2 | Accessories for information processing equipment
09.1.3.3 | Software
09.1.3.4 | Calculators and other information processing equipment

Available in RAMON in 24 languages
Special aggregates

Product groups that are assumed to be influenced by certain economic developments. For example, developments in energy prices are grouped together since they are closely related to oil price movements.

- Processed/unprocessed food, Services, Industrial goods excluding energy, Energy, All-items excluding energy, All-items excluding energy and unprocessed food, ...
Euro area flash estimate:
- all-items, main components & three exclusion aggregates (= special aggregates)
- index levels, monthly and annual rates
- news release, dissemination database, etc.

- also country data disseminated (only of those who agree)
Timetable:

- Full HICP release: ~15 days after the end of the reference month
- Flash estimate: last working day of the reference month, or shortly after
Dissemination

Dissemination channels:

Data and metadata are accessible via Eurostat web portal:

21 years of the HICP:
- First HICP release 1997
- Flash estimate 2001
- Flash breakdown 2012
- ECOICOP 5-digit 2016
- Country flash data
- ...
Challenges

- Globalisation
- E-commerce
- Dynamic pricing
- Rapid product change

Opportunities

- Scanner data
- Web scraping
- Data matching
- Use of new formulae

We provide high-quality statistics for Europe