

## Inflation and Consumer Prices



---

The main task of the ECB is to [maintain price stability](#). The ECB's Governing Council considers that price stability is best maintained by aiming for 2% over the medium term.

In the euro area, the Harmonised Index of Consumer Prices (HICP) is used to measure consumer price inflation. That means the change over time in the prices of consumer goods and services purchased by euro area households.

It is "harmonised" because all the countries in the European Union follow the same methodology. This ensures that the data for one country can be compared with the data for another.

The HICP is compiled by Eurostat and the national statistical institutes in accordance with harmonised statistical methods. The inflation rate is also used in assessing whether a country is ready to join the euro area.

### Data services

#### Breakdown by purpose of consumption

- [Annual percentage changes](#)
- [Indices](#)
- [Expenditure weights](#)

#### Breakdown by type of product (mainly used by the ECB)

- [Annual percentage changes](#)
- [Indices](#)
- [Expenditure weights](#)
- [Statistics Explained: HICP](#)

### Concept

The HICP aims to be representative of the developments in the prices of all goods and services available for purchase within the euro area by consumers.

It measures the average change over time in the prices paid by people for a specific, regularly updated basket of consumer goods and services.

#### Which goods and services are covered?

Basically all consumer goods and services purchased by means of monetary transactions come within the scope of the HICP. The technical name for these expenditures is "household final monetary consumption expenditure". This includes everyday items such as food, newspapers and petrol, durable goods such as computers and washing machines, and services such as hairdressing, insurance and rented housing.

Following the 2021 Strategy Review, the Governing Council recommended that home-ownership costs be included in the Harmonised Index of Consumer Prices to better reflect people's experiences of rising prices.

Implementing this will take time. The Governing Council welcomes the European Statistical System's related work on the statistical compilation of owner-occupied housing. This could pave the way for a move to an HICP that includes owner-occupied housing costs as the main index to be used for monetary policy.

Until then, we will use available measures of inflation that include home-ownership costs to support our understanding of how prices are changing in the economy. This will inform the Governing Council's monetary policy assessments.

Only monetary transactions conducted directly by households are included in the HICP. This is important to remember when analysing some expenditure categories, such as healthcare and education, where provision by the state is common. For example, if a student pays a fixed tuition fee to a university, only the amount of the fee is included in the HICP consumption basket even if the full cost of providing the education is much higher. Similarly, goods and services produced by households for their own consumption (such as home-grown vegetables) are not included.

The full range of product groups covered by the HICP consumption basket is given by the European Classification of Individual Consumption by Purpose (ECOICOP/HICP).

### What types of household are covered?

The HICP covers the expenditure of all households within a country's economic territory. This includes spending by both resident and non-resident households in that territory (following the so-called "domestic concept").

Unlike some national consumer price indices, all types of households (including all income classes as well as foreign tourists) and all geographical areas are included.

### The HICP and cost-of-living indices

In the literature on consumer price indices, two index types have a prominent role. **Fixed-basket price indices**, i.e. "Laspeyres price indices", define a basket of goods and services in the base period that is priced in each subsequent period. These goods and services are weighted according to their share in overall consumption in a certain base period.

By contrast, in **cost-of-living indices** it is the "consumer utility" obtained from the purchases in the base period that is kept constant. The cost-of-living index therefore measures the change in expenditure necessary to maintain the utility of the base period.

Conceptually, the HICP is a Laspeyres-type price index rather than a cost-of-living index. But the HICP is not a strict fixed-basket index. It measures the development of prices over time for fixed product categories according to the European Classification of Individual Consumption by Purpose (ECOICOP). Although these categories are fixed, the specific products that are included in particular categories may change over time. In other words, certain items may be removed from the basket and new ones may be added as they become relevant to household consumption expenditure.

In the same way, and also different from a fixed basket price index, the HICP weights are updated every year to reflect – to the extent possible – the latest changes in expenditure patterns.

In any case, the conceptual differences between the two types of price index do not generally lead to substantial differences in practice.

### Quality of the HICP

The HICP is supported by a set of [legally binding standards](#) that cover the essential aspects of the index. Eurostat has a programme of compliance-monitoring visits, during which the compilation practices of individual national statistical institutes are scrutinised.

The HICP has been developed according to international standards and benefits from the experience of all EU Member States in consumer price statistics. It is the best measure of inflation in the euro area and is well-suited to assess the maintenance of price stability. However it is not perfect. Further work is ongoing to improve the quality and comparability of the index. The key priorities for the coming years are the integration of price indices of owner-occupied housing into the HICP and increased harmonisation of methods for quality adjustment and sampling.

© For personal and private use only. Reproduction must be permitted by the copyright holder. Email to [copyright@mindbyte.eu](mailto:copyright@mindbyte.eu).

Another main working area for Eurostat and the National Statistical Institutes is how to utilise new data sources (such as supermarket scanners, transactions and web scraping).

## Prices

### Basket of goods and services

In practice, prices cannot be collected for all of the millions of different goods and services available in the euro area. Sampling is used to derive a representative basket of goods and services to be priced every month. The national statistical institutes are responsible for defining the precise basket by selecting the most representative items for each [product category](#). Therefore, each national HICP will cover bread and cars, but the type of bread and the brand and model of car may differ across countries, reflecting national consumption habits. Nowadays prices can also be obtained directly from retailers using supermarket scanners. However, in these cases the process of obtaining valid and representative price indices can be challenging.

### Updating the basket

The HICP basket is updated on an annual basis to include new products that have become an important part of household consumption expenditure (such as music and video streaming services), while other products that are no longer representative (such as video tapes) are eliminated. In addition, within the year, old models of some products are replaced with newer ones. This occurs, for example, when sales of the old model are so low that its price falls sharply.

### Collecting prices

For the HICP, millions of prices are collected in shops and online thanks to automated web-scraping, cash desk scanners, and surveys. They cover the whole euro area and are grouped into up to 295 product categories.

These price observations should reflect the prices actually paid by the consumer by including product taxes such as VAT, taxes on alcohol and tobacco, as well as reductions in prices. To combine all prices collected every month into a single figure for the euro area, information is needed on the relative share of each product category in households' spending.

### Adjusting for changes in quality

The aim of the HICP is to measure "pure" price changes over time. Whenever a product's characteristics (e.g. package size and technical performance) change, observed prices are adjusted for these differences in specifications or quality in order to derive the pure price development.

**Example:** Car prices may have gone up but new models often include, as standard, features that were previously sold as optional extras (for example, satellite navigation systems, air conditioning and airbags). In such cases, the price increase is due partly to an increase in quality and not only to inflation. If car prices went up 5% on average, but one fifth of this change was due to quality increases, then the HICP would reflect a 4% price increase for this product.

National statistical institutes use several methods to account for quality adjustment, including methods based on expert judgments, regression techniques ("hedonic methods") and methods that derive estimates of the pure price change from similar products, for example those that are available at unchanged quality ("bridged overlap method").

While the effect of quality changes is usually small for many items in the HICP (e.g. butter), for some items the effect can be large (e.g. for cars and computers). Work is underway in Eurostat to ensure that all countries use comparable techniques for quality adjustment.

## Weights

### Product weights

The HICP for each euro area country is calculated as a weighted average of price changes for a wide range of product groups, using the respective share of each group in the total expenditure of all households for the goods and services covered by the index.

The information used to calculate the weight of each product group is collected mainly from national accounts and cross-checked and updated with information from other sources (e.g. VAT revenue statistics and households budget surveys). The product group weights are representative for the total household consumption expenditure at national level. As such, for each country they capture national consumption habits, which

© For personal and private use only. Reproduction must be permitted by the copyright holder. Email to [copyright@mindbyte.eu](mailto:copyright@mindbyte.eu).

may depend on climate, product taxes, lifestyles, cultural traditions and other factors (e.g. the availability of products).

The HICP takes into account the consumption expenditure of all the households in a country and not some “typical” household (see “Concept” section above). For example, expenditure on petrol is included for those households with a car and, at the same time, expenditure on bus tickets is included for those that use public transport. What is important in the HICP is its composition, which encompasses the total consumption expenditure of all households together.

In order to keep the index up-to-date, product weights are updated regularly to reflect changes in consumer expenditure patterns. By law, the weights are updated every year.

### From national to euro area HICP

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**. The weights are updated annually and are derived from national accounts data.

The 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.

The HICP is compiled by Eurostat together with the National Statistical Institutes of the Member States of the European Union. Currently 34 countries (all EU Member States, Iceland, Norway, Switzerland, the USA, and the European countries seeking to join the EU: North Macedonia, Serbia and Turkey) compile national HICPs.

## Breakdowns of data

Two breakdowns are available, both based on the same 90 product groups:

Eurostat also publishes some special aggregates, such as the overall index excluding unprocessed food and energy and the overall HICP excluding tobacco.

1. **By purpose of consumption**: data is broken down according to the European version of the international Classification of Individual Consumption by Purpose (COICOP) classification, the so-called [ECOICOP](#). Most statistical offices around the world use a variant of COICOP. [HICP breakdown by purpose of consumption: latest data for euro area](#).
2. **By type of product**: this is the breakdown generally used by the ECB and referred to in its Economic Bulletin. This breakdown divides the basket into components comprising 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. Food prices are divided into processed and unprocessed food, because prices of unprocessed food are more strongly influenced by factors such as weather conditions and seasonal patterns than those of processed food. Services prices are subdivided into five components which, on account of different market conditions, typically show distinct developments. [HICP breakdown by type of product: latest data for euro area](#).

### Seasonal adjustment

Many prices show a seasonal pattern. For example, end-of-season sales often cause the HICP to fall systematically in spring and summer. In order to extract the “news” from these seasonal changes and therefore aid short-term inflation analysis, the ECB compiles seasonally adjusted figures for the main HICP components. These data are published on the ECB’s website on the same day as the regular HICP figures are published by Eurostat.

### Release calendar

HICP data are published every month by Eurostat, the statistical office of the European Union.

At the end of each month, a euro area flash estimate for headline inflation is released for that month. This is accompanied by flash estimates for the main components of the euro area HICP: energy, food (including alcohol and tobacco), non-energy industrial goods and services. Flash estimates for the special aggregates “all items excluding energy” and “all items excluding energy and food” are provided as well. The data are available for the euro area as a whole as well as for its Member States. The flash estimate is followed by a full release in the middle of the month, which comprises all country and euro area breakdowns and special indices.

### Revisions

© For personal and private use only. Reproduction must be permitted by the copyright holder. Email to [copyright@mindbyte.eu](mailto:copyright@mindbyte.eu).

HICPs are not normally revised. The HICP for the current month is final with its full release. Revisions are only made in the event of errors. Further revisions of the national HICPs have to be agreed with Eurostat.

Source: [European Central Bank](#)

Image Credit: [iStock](#)

Published on : Thu, 5 Oct 2023