The Consumer Price Index: changes for 2023

The Consumer Price Index (CPI) follows each month the prices of a fixed basket of products. This basket is updated each year in order to remain representative of the consumption and in order to take into account the evolution in the consumer habits (Laspeyres-type index). Each year, a chain-linking of the index is performed in January and enables to update the basket of products and their weights and possibly permits to introduce some methodological improvements.

The update of the products in the CPI basket

Each year, the product sample is updated in order to take into account changes in the household consumption. The products that are no more representative in 2022 are dropped from the CPI basket meanwhile new products, which represent a huge or an increasing market share (connected watches, for example), are introduced. It is also an opportunity to take into account new habits of consumption (internet consumption in particular) and sometimes to adapt the collection protocol to track prices at best. The number of data collections by product varieties is also optimized according to the weight of the variety and the variability of the prices evolution (for example, the number of data collections for the fresh produces has been slightly revised in 2023). The prices of these new products are collected from December 2022 in order to measure their price evolution between December 2022 and January 2023 and so that they contribute to the CPI from January 2023.

The 2023 weights update

As every year in January, the weights of the CPI and the Harmonized Consumer Price Index (HICP) have been updated for the current year. These weights represent the share of expenditure associated with the index concerned with regard to household consumption covered by the CPI.

In accordance with European regulations, these weights are usually updated based on semi-final estimates of consumption by the national accounts for year Y-2, valued at the prices of December of year Y-1 and possibly supplemented by volume corrections between year Y-2 and Y-1.

This method is usually acceptable to obtain representative weights of consumption for year Y-1 because changes in this consumption are slow. With the health crisis, however, the structure of consumption has changed markedly between 2019 and 2020 and between 2020 and 2021. This is why additional work has been carried out in accordance with the new European directives¹ on updating weights in the event of a major shock on consumption.

For the calculation of the 2023 weights, the first estimates of the quarterly accounts for the whole of 2022, used at a finer level of detail than that at which they are published (95 positions), were used to apply changes to volume 2021 consumption amounts provided by the annual accounts. If necessary, adjustments have been made to an even finer level of nomenclature by mobilizing turnover indices.

^{1 2021: &}lt;u>https://ec.europa.eu/eurostat/documents/10186/10693286/Guidance-on-the-compilation-of-HICP-weights-in-case-of-large-changes-in-consumer-expenditures.pdf</u>

^{2022:} https://ec.europa.eu/eurostat/documents/10186/10693286/Derivation-of-HICP-weights-for-2022.pdf/ 2023: https://ec.europa.eu/eurostat/documents/272892/11336726/Derivation+of+HICP+weights+for+2023.pdf/

The weights in the 2023 CPI basket of food, petroleum products, housing-related services, transport and communication services, return to a level close to that of the 2020 basket. The weights of manufactured products and tobacco continue to fall in the 2023 basket. The weight of "other services", notably catering and accommodation services, continues to rise, at higher level than that of the 2020 basket.



Figure 1: weighting of short-term aggregations in the CPI basket for 2020, 2021, 2022 and 2023, in %

Scope: France

Source: INSEE, quarterly accounts detailed results Q1, Q2, Q3 2022 and first estimate Q4 2022; semi-final national accounts 2021.

Reading note: the weight of food in the CPI basket stands at 16.1% in 2020, 17.9% in 2021, 16,5% in 2022 and 16.2% in 2023.

These differences between the 2020, 2021, 2022 and 2023 baskets have consequences on the measurement of the overall consumer price index, in particular because products with very seasonal or very volatile prices are not weighted in the same way in the different baskets. This phenomenon was already present and detailed the last two years.

The weights of overseas departments have also been updated with using the Family Budget Survey. At the same time, the consumer structure used for category indicators has also been updated.

The update of seasonal adjustments and seasonal adjusted indices

As each year, seasonal adjustments for the all-item index (France, all household) and for four indexes of core inflation have been revised over the period January 2000- December 2022. The coefficient estimate in 2020, 2021, 2022 and 2023 is complicated by the fact that the sanitary crisis could change the prices seasonality without having the necessary distance to estimate that. The weight update in 2021, 2022 and 2023 also changed the seasonality, by allocating a different weight for products with marked seasonal prices (transport, tourism). For this reason, the seasonal adjustments in 2021, 2022 and 2023 have been estimated with the revised series taking into account the 2021, 2022 and 2023 weights for the whole period of estimation.

Extended scope: Mayotte

In January 2023, the geographic scope of CPI and HICP expands. The indices about "France" now cover the department of Mayotte. The month-on-month monitoring of consumption prices in Mayotte is based on 3 000 price statements concerning 330 product varieties and a common methodology to the whole French territory. A Mayotte index is also published as for each oversea department.

Collection schedule

The CPI is based on scanner data, price collected by collectors on the field or recorded centrally. The centralized collection is made throughout the calendar month.

The field collection is carried out according to a specific calendar fixed a year in advance. This collection calendar differs from the civil calendar. Every month, prices for CPI are collected during 20 days, throughout the working days of four consecutive weeks.

Each product in the sample is tracked on a specific day among the 20 days of field collection (numbered from 1 to 20) and the price collector responsible for this collection returns every month to observe in the same outlet, the same product, the same day among the collection month: this organization ensures that we measure changes on average over a month, guarantees the opening of the outlet and neutralizes possible "day of the week" effects on the prices.

A calendar month consists of 28 to 31 days and doesn't correspond to a whole number of weeks. So, every year, INSEE adapts the field collection calendar so that the 48 weeks of collection coincide at best with the civil calendar. This adaptation consists of fixing weeks without collection, four on average in a year. In 2023, the field collection calendar has four weeks without collection as in 2022.

Regardless of this exercise, the month-on-month changes in the CPI integrate calendar effects which may affect the year-on-year comparability of monthly changes. In general, the calendar effects in the index level disappear after one or two months and are limited to specific consumption segments. For example, every year, the school holidays or some days off are not located on the same month. These generate variations in the index evolution for the accommodation and passenger transports. If such effects are seeing, they are commented in the publication *Informations Rapides* published at the same time as the CPI. It is the same for the sale calendar when it changes.

The INSEE's field collection calendar aims as much as possible to reproduce the calendar effects: a shift in the sales observed in the civil calendar will have to be found, as far as possible, in INSEE's collection calendar.

Calendar		2020	2021	2022	2023
Winter sales					
January	CPI	13	8	13	13
	Civil	24	12	20	21
February	CPI	7	20	7	7
	Civil	4	28	8	7
March	CPI	0	2	0	0
	Civil	0	2	0	0
Summer sales					
June	CPI	0	0	3	0
	Civil	0	0	9	3
July	CPI	3	17	16	17
	Civil	17	27	19	25
August	CPI	12	0	0	0
	Civil	11	0	0	0

Figure 2 : Number of sale days in the CPI calendar and the civil calendar