

## Impact of the new method of calculating the fresh food price index on year-on-year changes of French CPI

Since January 2016, the consumer price index (CPI) has been calculated with reference to 2015 (the average level of the base year is taken as 100).<sup>1</sup> This change in base is accompanied by a few methodological changes, in particular in the calculation of CPI for fresh food.

### The method of calculating the fresh food price index has changed since January 2016

Since January 2016, the Rothwell aggregation method has been abandoned in favour of the Laspeyres method for calculating the fresh food CPI. The former, using 1998 as the base year, allowed the basket of fresh produce to be varied from one month to the next, whereas the latter, used for other products in the CPI, is fixed over the course of the year. However, unlike the Laspeyres aggregation, the Rothwell method prevented any change in the monthly composition of the basket and the monthly weight of the items from one year to the next, so that they were therefore fixed over the long term.

The prices of fresh food items are now aggregated like other products, with a seasonality treatment that is analogous to that applied to other seasonal products, i.e. by imputing changes observed to the level above: for example, the change in the price of strawberries in winter is imputed on the basis of the change in the price of all fresh fruit. In addition, every year, the basket of fresh food tracked can be modified in order to take account of changes in the structure of household consumption.

### In 2016, this change in method has had an upward influence on the year-on-year change in fresh food prices

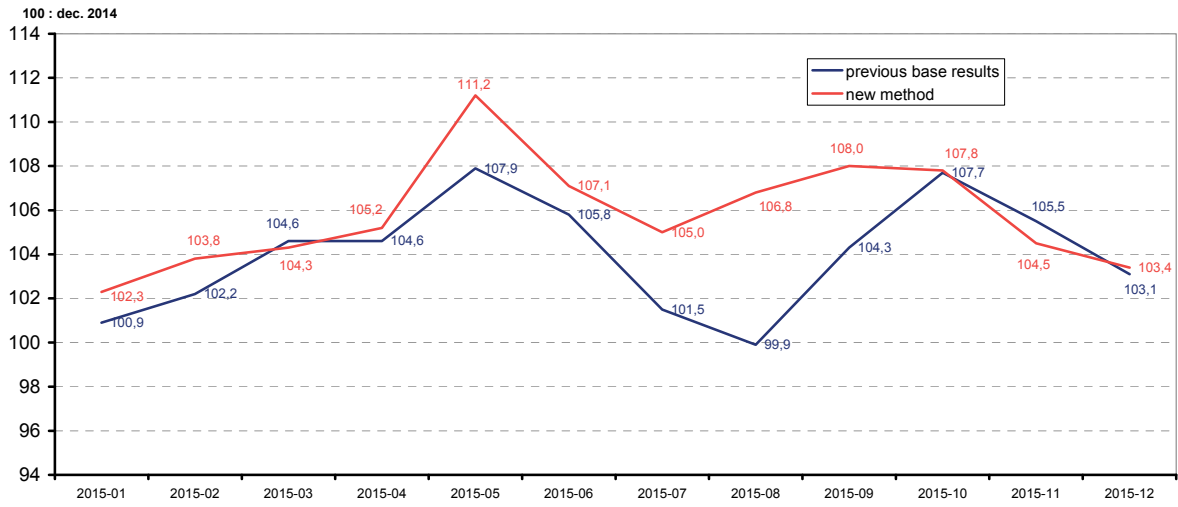
The new treatment of fresh food prices has had an impact on the seasonality of the index; it has affected the year-on-year price changes in 2016. Indeed, in the new series, the fresh food CPI is calculated with the Rothwell method until December 2015 (old method), then with a Laspeyres index from January 2016 (new method). The change in seasonality that results from the change in method (*Graph 1*) therefore creates a break in the year-on-year change in the indices. The effect caused by the change in method can be quantified by comparing the year-on-year change in the index published with that of the series rebuilt without the methodological break (Laspeyres aggregation from January 2015).<sup>2</sup> This difference turns out to be greater in spring and summer: +2.8 points in May, and an expected increase to +3.5 points in July, then to +7.0 points in August and +3.5 points in September. The gap should dwindle at the end of the year (*Graph 2*).

Since fresh food represents 2.2% of household consumption, the headline inflation figures published are expected to be very slightly different to an estimate calculated without the methodological break: it is thought that they will be higher in the year-on-year prices by about 0.06 points in May, 0.08 points in July and September and 0.15 points in August. Over the rest of 2016, the impact of the change in method on the year-on-year CPI should be lower (less than 0.05 point).

<sup>1</sup> Cf. "A brand new base for the Consumer Price Index", *Conjoncture in France*, March 2016, p. 86-87.

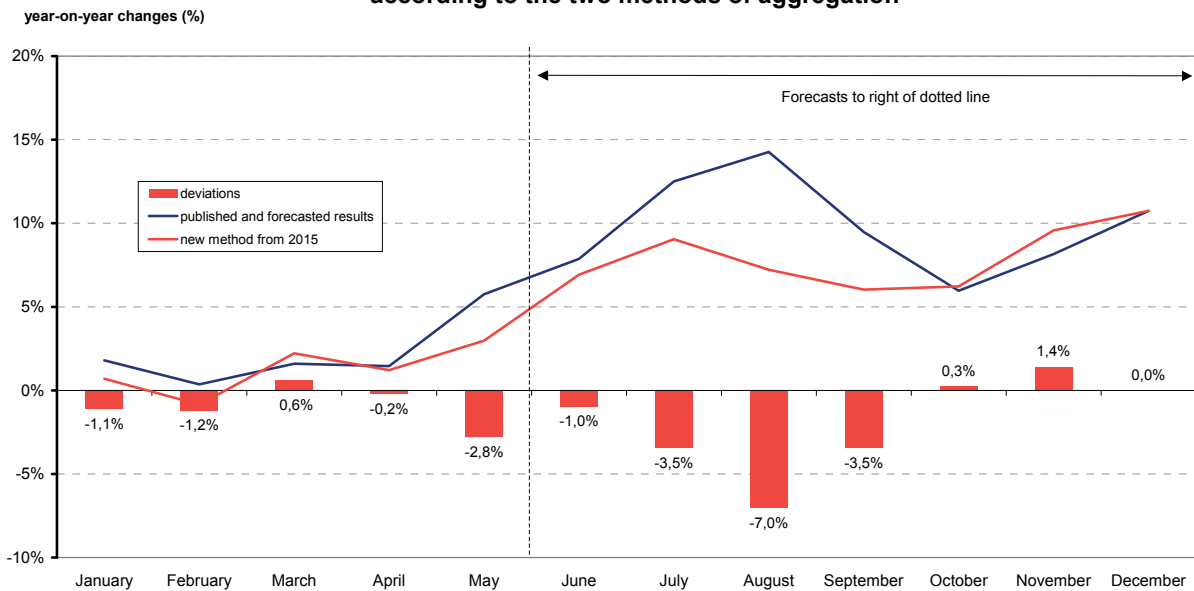
<sup>2</sup> The forecast used, which allows the effect of a change in method to be measured over the whole year, has only a minor effect on the measurement of the differences.

**Graph 1: Fresh food price indices in 2015 according to the two methods of aggregation**



Source : INSEE

**Graph 2: year-on-year changes in fresh food prices in 2016 according to the two methods of aggregation**



Source : INSEE