



Treatment of seasonal products Hungary

**IMPLEMENTATION OF THE
COMMISSION REGULATION (EC) NO 330/2009 OF 22 APRIL 2009**
laying down detailed rules for the implementation of council regulation (EC) no 2494/95 as
regards minimum standards for the treatment of seasonal products in the harmonised indices
of consumer prices (HICP)

1 Introduction

Primary aim of this document is to present the development of price index calculation for seasonal products in the Hungarian CPI and HICP in consideration of implementation of the Commission Regulation (EC) NO 330/2009 of 22 April 2009 laying down detailed rules for the implementation of council regulation (EC) no 2494/95 as regards minimum standards for the treatment of seasonal products in the harmonised indices of consumer prices (HICP).

Regarding the methodology of consumer price index significant and ongoing problem has been the treatment of seasonal products. This is especially true in Hungary where the climate in case of fresh fruits and vegetables or traditions in case of end-of-season sales essentially cause seasonal fluctuations.

The Hungarian Central Statistical Office (HCSO) has always placed great emphasis on the fact that the seasonal price changes that occur in the CPI/HICP be as accurate as possible. In the development strategy between 1998 and 2000 the treatment of seasonal products played an important and key role by preparation of experimental and alternative calculations as well as expert comments of methodologies.

During the annually review of the observed items one of the main priority is the revision of the observation period of seasonal items.

The HCSO complete the available statistical information with supplementary experiences from the CPI co-ordinator¹ of each regional offices and of course the price collectors.

In the list of the observed products the seasonal items are marked in order to make easier the treatment of the price collecting and using the questionnaire. The rules of the price observation of the seasonal items are also priority issue. There is a manual for price collectors (and of course for local staff as well) which contains instructions and guidelines in the 9th chapter 'Treatment of special product groups in the calculation of the CPI'.

The methods used by EU Member States for the treatment of the seasonal products in the HICP were quite varied thus the comparability of the data was questionable. As a result in 2009 Eurostat introduced a Commission Regulation (EC) No 330/2009 laying down detailed rules for the implementation of Council Regulation (EC) No 2494/95 as regards minimum standards for the treatment of seasonal products in the harmonised indices of consumer prices (HICP).

*'The changes deriving from this Regulation, and in particular Article 4 thereof, shall be applied from December 2010 and take effect with the index for January 2011.'*²

The regulation specifies the definition of the seasonal products, their scope, the method and the calculation of the weights and the estimation of price index in the out-of-season period.

Article 3 of the Regulation (Scope): *'the minimum standards shall apply to seasonal products within the following COICOP/HICP classes and groups:*

¹ CPI co-ordinator is the person who is responsible for the CPI work at the regional offices.

² Commission Regulation (EC) No 330/2009, Article 6

- *01.1.3 Fish*
- *01.1.6 Fruit*
- *01.1.7 Vegetables*
- *03.1 Clothing*
- *03.2 Footwear'*

In the following we present those actions which were carried out by the HCSO in order to introducing and implementing the Regulation.

First we present the method used by the HCSO until 2011 about the treatment of seasonal products.

The next part presents the results of the experimental calculations based on the method defined in the Regulation and the implemented method from January 2011 according to the results of the experimental calculations.

There are some words about the communication strategy related to the methodological change and how to inform users.

The last part of the document presents the impact assessment related to the implemented method from January 2011.

2 The treatment of seasonal products in the Hungarian CPI and HICP before 2011

Seasonal items are those products which are completely unavailable in certain seasons or display a price or quantity behaviour which is associated with the time of the year.

According to Article 2 of the Regulation (Definition): *'seasonal products' means those goods and services that are not available for purchase, or purchased in small or negligible volumes, for certain periods in a typical annual cyclical pattern. The in-season period is meant to cover at least one month.*

According to the product groups mentioned in the Regulation HCSO used the following methods until 2011.

2.1 01.1.3 Fish

During the calculation of consumer price index there were 7 products within these group in 2010 (Annex – Table 2). These observed items are not seasonal, all of them are available in the market in the whole year. During the calculation of the price index annual fixed weights are used.

The weights (Annex – Table 1) are based on the macro data of National Accounts complemented by data from the Household Budget Survey and other additional sources. The weights are the same every month throughout the year. The weights are revised annually and they refer to the household expenditure structure of the t-2 year.

2.2 01.1.6 Fruits

During the calculation of consumer price index there were 18 products within these group in 2010 (Annex – Table 3). The price collection covered 12 different fresh fruits. From these prices of apple, pear, lemon, banana and orange were collected in every month of the year while the other products' prices were observed only in certain months of the year. According to the availability of seasonal products the consumer basket could change month by month.

In recent years as a consequence of the various weather circumstances and other factors related to market supply we had to modify the seasonal periods in case of some seasonal items. For example in case of grape the in-season period was between August and October until 2005 but from 2006 expanded to November. In case of melon the in-season period was between July and August but from 2006 expanded to June.

We used the variable weight approach for fresh fruits. During the year the weights for the group fresh fruits are unchanged but inside the group the selected items have variable weights which can change month by month.

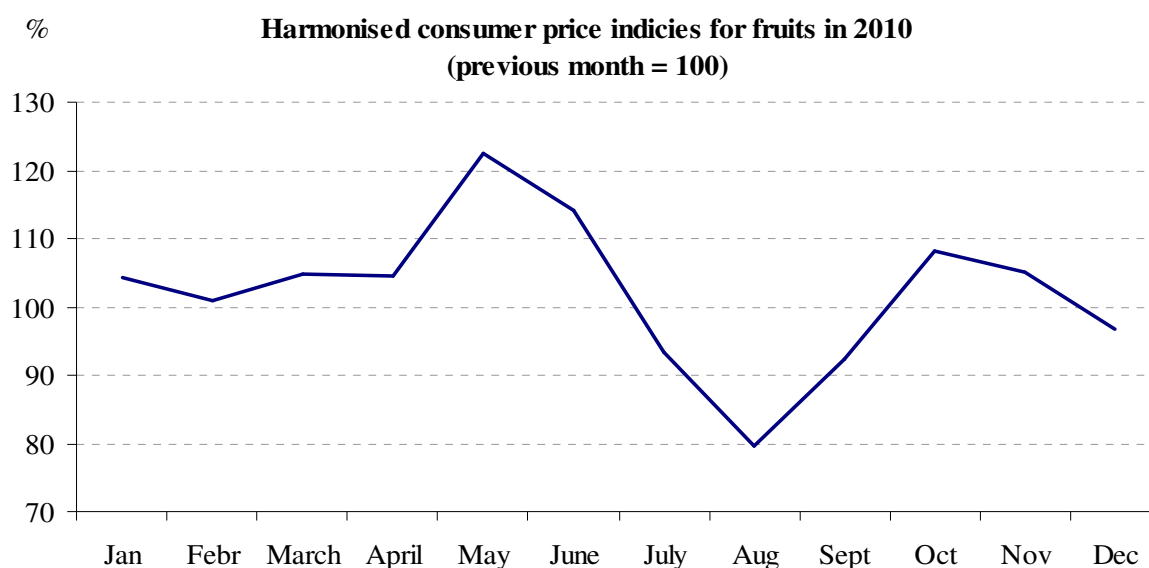
The weights of the group fresh fruits (Annex – Table 1) were based on the macro data of National Accounts complemented by data from the Household Budget Survey and other additional sources. The weights are revised annually and they refer to the household expenditure structure of the t-2 year.

Monthly weights for each product were derived from the data and information supplied by the agricultural statistics department and CSAPI which is Directorate of market places and market-halls (3 year average+adjustment in extreme cases). Calculation of seasonal weights in 2010 based on average of year 2007, 2008 and 2009.

The treatment of out-of-season prices was as follows. The last observed prices are carried forward with imputation till the starting of new season. This imputation is made with the index of the fruit group where this certain item is belonging. If the product was in out-of-season its weight was zero thus this product didn't influence the price index during the month.

The main characteristic of these products is that in the first month of in-season period prices are usually extremely higher than in previous months. Furthermore depending on the season their prices within a year may vary considerably from month to month. According to the price change in the months of the appearance the prices are high and towards to the main season prices are gradually reducing. Those products that can be stored, due to the storage costs price increase are typical again during the winter. As their production depends on weather thus from one year to another compared the same months the market supply may vary and these elements can affect the price level trends.

Figure 1



2.3 01.1.7 Vegetables

During the calculation of consumer price index there were 26 products (together with potatoes) within these group in 2010 (Annex – Table 4). The price collection covered 11 different fresh vegetables (together with potatoes are 13). Within this, prices of onion, cabbage, cole, cauliflower, tomato, cucumber, mushroom and garlic were collected in every month of the year while the other products were observed only in certain months of the year. According to the availability of seasonal products the consumer basket could change month by month.

In recent years as a consequence of the various weather circumstances and other factors related to market supply we had to modify the seasonal periods in case of some seasonal items. For example in case of green peppers the in-season period was between June and October until 2008 but from 2009 expanded to May.

Within the seasonal vegetables the firstling carrot and parsley as well as the field products are treated as separate items with specific item codes in order to be able to show the seasonal affects during the summer period.

Price changes in case of new and old potatoes are treated separately as well with specific item codes since according to the recent years' experiences their prices seasonally fluctuated rather.

Following these actions more accurate and reliable data are available for these products in order to show the seasonal price developments.

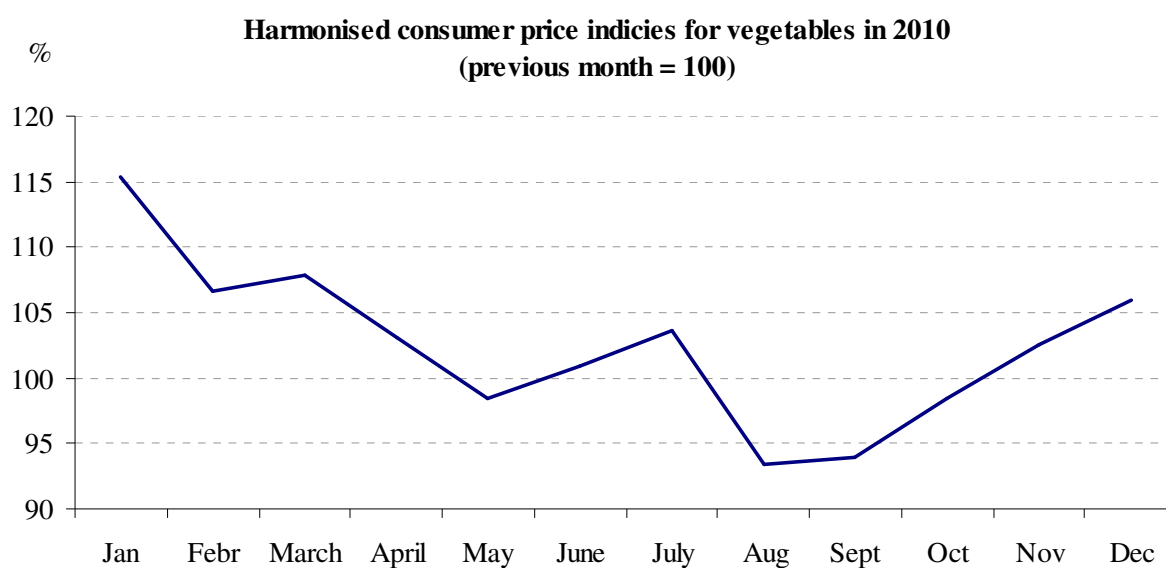
We used the variable weight approach for vegetables. During the year the weights for the group vegetables are unchanged but inside the group the selected items have variable weights which can change month by month.

The weights of the group vegetables (Annex – Table 1) were based on the macro data of National Accounts complemented by data from the Household Budget Survey and other additional sources. The weights are revised annually and they refer to the household expenditure structure of the t-2 year.

Monthly weights for each product were derived from the data and information supplied by the agricultural statistics department and CSAPI which is Directorate of market places and market-halls (3 year average+adjustment in extreme cases). Calculation of seasonal weights in 2010 based on average of year 2007, 2008 and 2009.

The treatment of out-of-season prices was as follows. The last observed prices are carried forward with imputation till the starting of new season. This imputation is made with the index of the vegetables group where this certain item is belonging. If the product was in out-of-season its weight was zero thus these product didn't influence the price index during the month.

Figure 2



2.4 03. Clothing and footwear

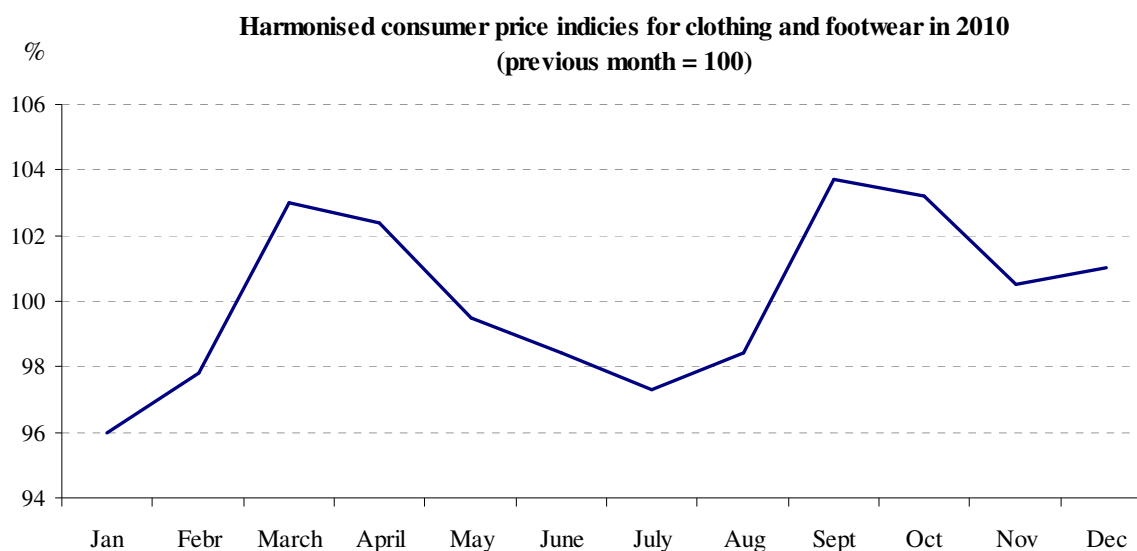
During the calculation of consumer price index there were 159 products within these groups in 2010 (Annex – Table 5). 66 of them were seasonal products depending on the seasonal period which could be winter, summer or spring-autumn season.

In case of 'in-season winter products' the price collection period started in October and ended in March next year. In case of 'in-season summer products' the price collection period started in April and ended in September.

The main characteristic of clothing and footwear products is that towards to the end-of-season more and more products have discounted and reduced prices.

In case of winter season usually in January and February can be observed significant price decrease while in case of summer season the price decrease usually are more powerful in July and August.

Figure 3



The weights (Annex – Table 1) were based on the macro data of National Accounts complemented by data from the Household Budget Survey and other additional sources. The weights are the same every month throughout the year both group and product level. The weights are revised annually and they refer to the household expenditure structure of the t-2 year.

The treatment of out-of-season prices was as follows. The last observed prices (which are often sales prices) are carried forward with imputation till the starting of new season. This imputation is made with the index of the group where this certain item is belonging.

3 Experimental calculations related to the methods detailed in the Regulation

3.1 Compliance with the Regulation, necessity of the methodological changes

Article 3 of the Regulation (Scope): *'the minimum standards shall apply to seasonal products within the following COICOP/HICP classes and groups:*

- *01.1.3 Fish*
- *01.1.6 Fruit*
- *01.1.7 Vegetables*
- *03.1 Clothing*
- *03.2 Footwear'*

In case of group 01.1.3 Fish it is not relevant in Hungary because items within the group are available all year as well as their weights in the household consumption are also low.

In case of group 01.1.6 Fruit and 01.1.7 Vegetables the method used by the HCSO was not in accordance with the requirements of the regulation neither the weighting nor the estimate method of out-of-season prices in the first month. As a result it was inevitable that the previous method had to be replaced to one of two options detailed in the regulation (SAW i.e. strict annual weights or CCSW i.e. class-confined seasonal weights). Furthermore the estimation method of the price for a product that is in out-of-season was also necessary to be replaced (CSE i.e. counter-seasonal estimation or ASE i.e. all-seasonal estimation).

In case of group 03. Clothing and footwear we have already used fixed weights which is in accordance with the method (SAW) detailed in the Regulation. Nevertheless the estimation method of the price for a product that is out-of-season in the first month was necessary to be replaced (CSE or ASE).

In order to decide which method will be introduced from January 2011 experimental calculations were carried out based on the recent years' data. Depending on the assessment of the results decision was made about the new method.

3.2 Estimation of the out-of-season prices and weighting procedures

According to the Article 2 of the Regulation (Definitions) we compared the recommended different estimation and weighting methods with our methods used before 2011.

Experimental calculations were made in case of fruits and vegetables based on different estimation and weighting methods recommended in Article 2 of the Regulation. We compared the results with the calculation method we used before 2011 in order to decide which method will be introduced from January 2011.

3.2.1 Vegetables and fruits

In case of fruits and vegetables due to the number of observed items within the rate of seasonal products, and the experiences of the recent years' practice we decided not to apply method CSE to estimate the out-of-season prices.

The reason for this decision is that the rate of the seasonal products observed at the same period within fruits and vegetables are rather low. Thus from the second out-of-season month if the estimated price would be equal to the estimated price for the preceding month adjusted by the change in observed prices on average over all seasonal products that are in-season in the same subdivision of COICOP/HICP it would be significantly distort the price index of fruits and vegetables as well the overall CPI/HICP.

Depending on the tentative calculations the aim was to be able to decide which method for weighting (SAW or CCSW) would be the most appropriate while using the method ASE.

In order to select the most appropriate method we prepared experimental calculations based on recent five years data between 2006 and 2010. The examination of this period was necessary because in recent years the variable weather and agricultural output extremely affected the CPI/HICP within these groups. To ensure to make accurate conclusions we chose this five-year period.

To define the estimated price in the first month of the out-of-season period we used the last five years data also. In case of every observed items a 'typical price' is the observed average price in a typical month in the previous in-season period. Typical month means when the largest volume of sales made.

Nevertheless, in case of some products it has been shown that this approach not always applicable as the prices of the in-season products varied significantly from month to month and / or sales volume was about the same. Thus, we decided that in these cases the 'typical price' is equal to an average price which was calculated from the two or three typical months' average prices.

Using the method of strict annual weights and class-confined seasonal weights we calculated the two different types of weights for the recent five years. As a result of application of the price estimation and price index calculation methods in the out-of-season described in the Regulation three methodologically different time series were created (Annex – Table 6, 7, 8, 9).

- **Method 'A': former seasonal indexes, where index calculation based on variable weights (before year 2011)**
 - We use the variable weight approach for fruits and vegetables. During the year the weights for the group vegetables and fruits are unchanged but inside the group the selected items have variable weights which can change month by month.

- **Method 'B': All-seasonal estimation, strict annual weights index (ASE and SAW)**³
 - In the first month of the out-of-season period, the estimated price is equal to a typical price observed in the previous in-season period, and
 - from the second month, the estimated price is equal to the estimated price for the preceding month adjusted by the change in observed prices on average over all available products in the same subdivision of COICOP/HICP
 - A price index using weightings that
 - do not differ between months within the same year at all levels of index calculation;

- **Method 'C': All-seasonal estimation, class-confined seasonal weights index (ASE and CCSW)**⁴
 - In the first month of the out-of-season period, the estimated price is equal to a typical price observed in the previous in-season period, and
 - from the second month, the estimated price is equal to the estimated price for the preceding month adjusted by the change in observed prices on average over all available products in the same subdivision of COICOP/HICP
 - A price index using weightings that within the same year:
 - do not differ between months for any COICOP/HICP subdivision taken as a whole,
 - do not differ between months for products within any COICOP/HICP subdivision that does not contain any seasonal product,
 - within the in-season period do not differ between months for products within any COICOP/HICP subdivision that contains seasonal products, except to the extent that it is necessary to allow for month-on-month changes in the composition of the basket

The tentative calculations started in January 2006 and ended in December 2010.

The following figures show the time series of the indices based on the three different methods mentioned above (Method A, B and C).⁵

Given that the price of potatoes is surrounded by large interest in Hungary we calculated separately the price indices for potatoes according to each method besides the other vegetables and fruits.

³ Commission Regulation (EC) No 330/2009, Article 2 (4), (5)

⁴ Commission Regulation (EC) No 330/2009, Article 2 (4), (6)

⁵ *During the tentative calculations national consumer price index was under examination which based on national classification. However, the results and conclusions are valid according to the HICP COICOP classification also.*

Figure 4

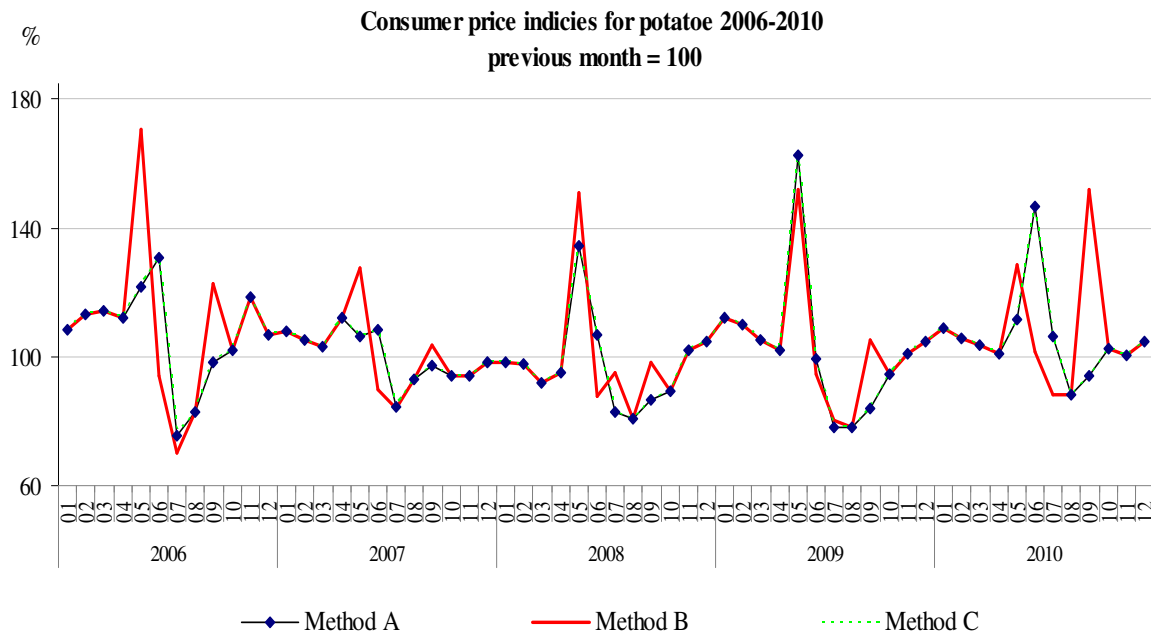


Figure 5

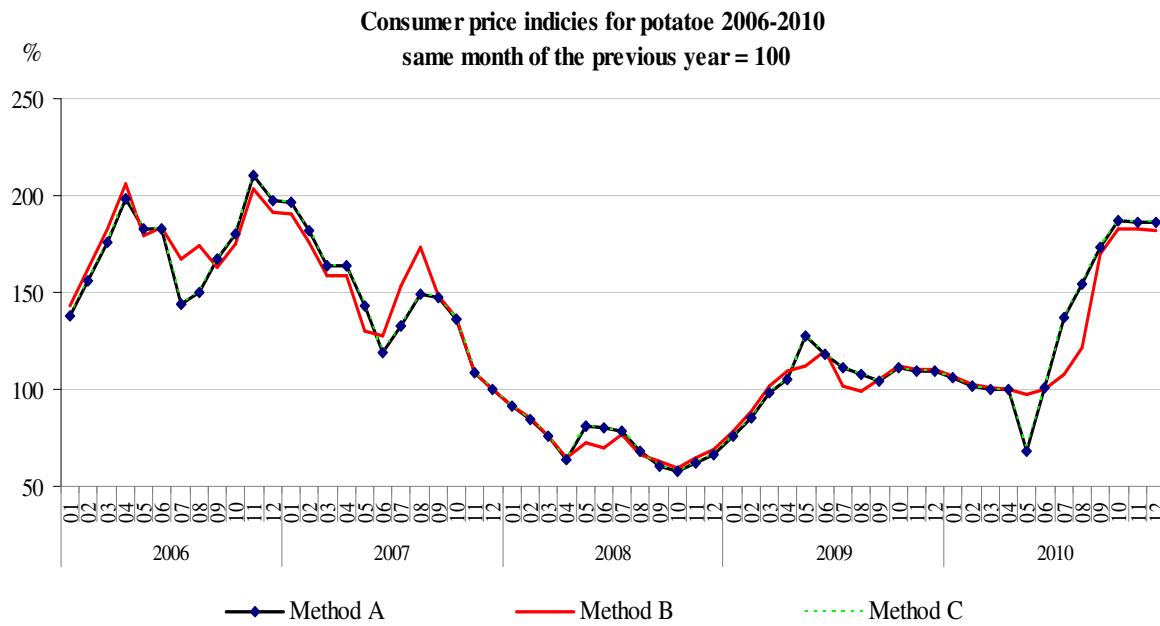


Figure 6

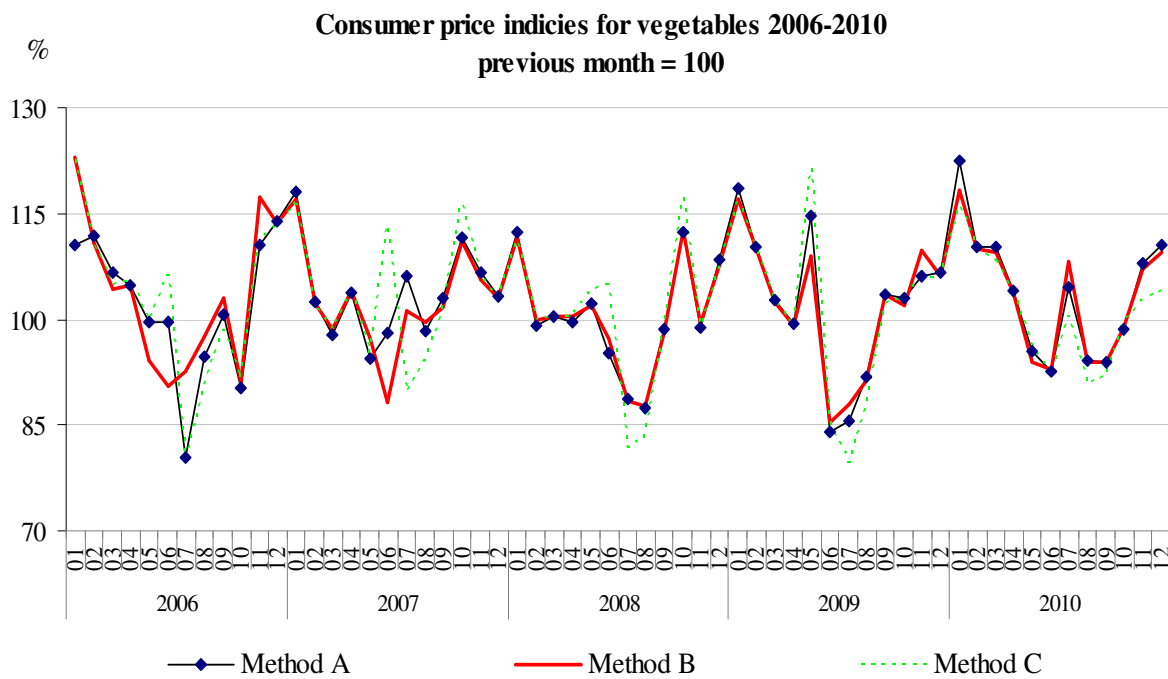


Figure 7

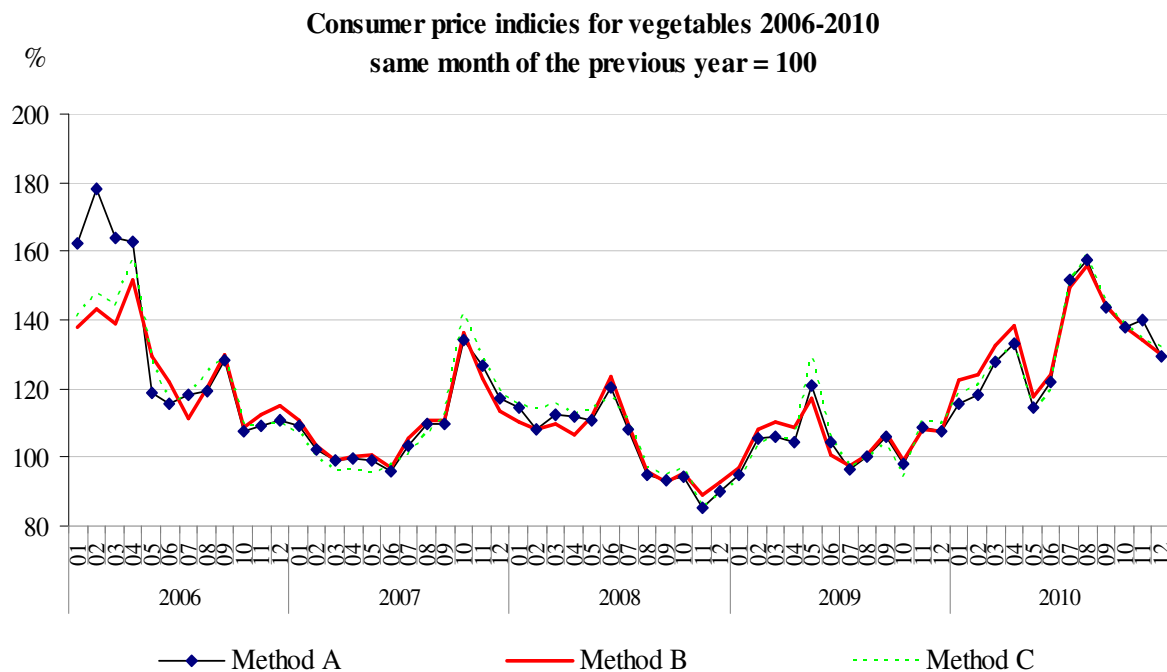


Figure 8

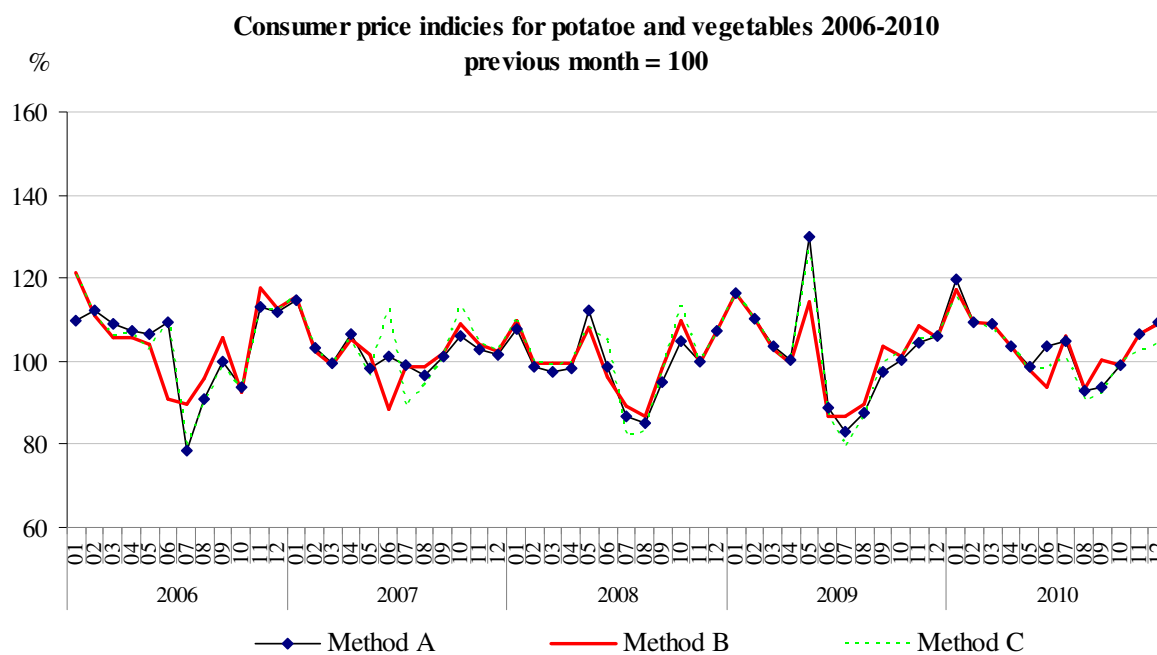
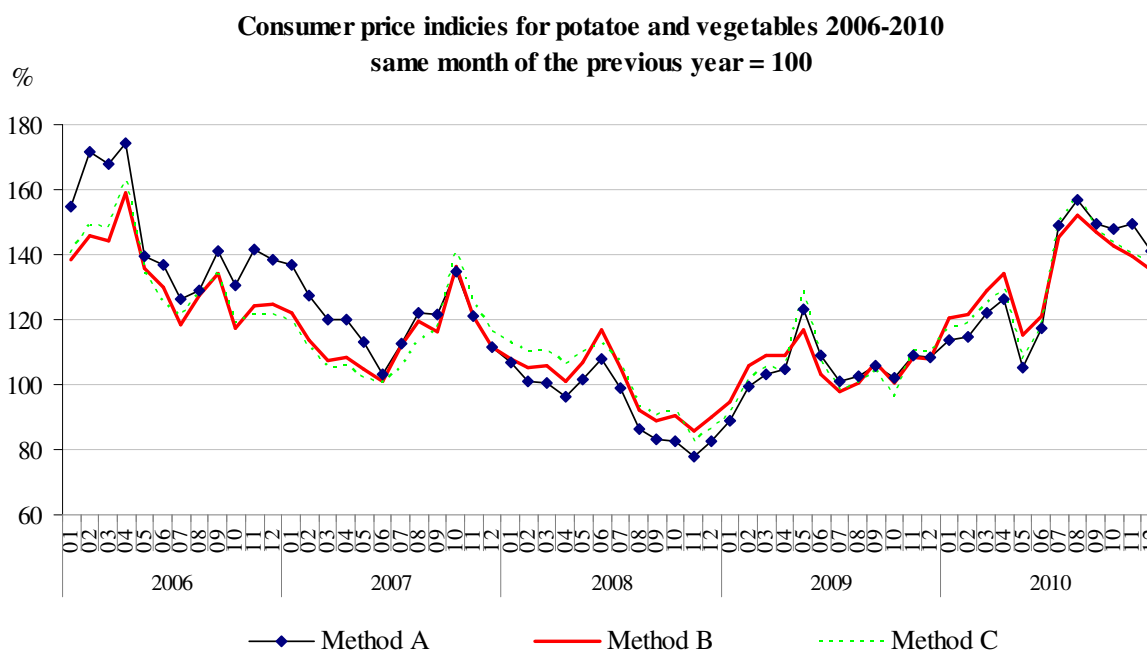


Figure 9



In case of vegetables, analysing the annual and monthly price changes we observed that Method 'A' i.e. variable seasonal weights approach caused higher volatility in certain periods, especially in case of price indices compared to the previous month. However, we observed that the difference is not significant between the three methods.

Figure 10

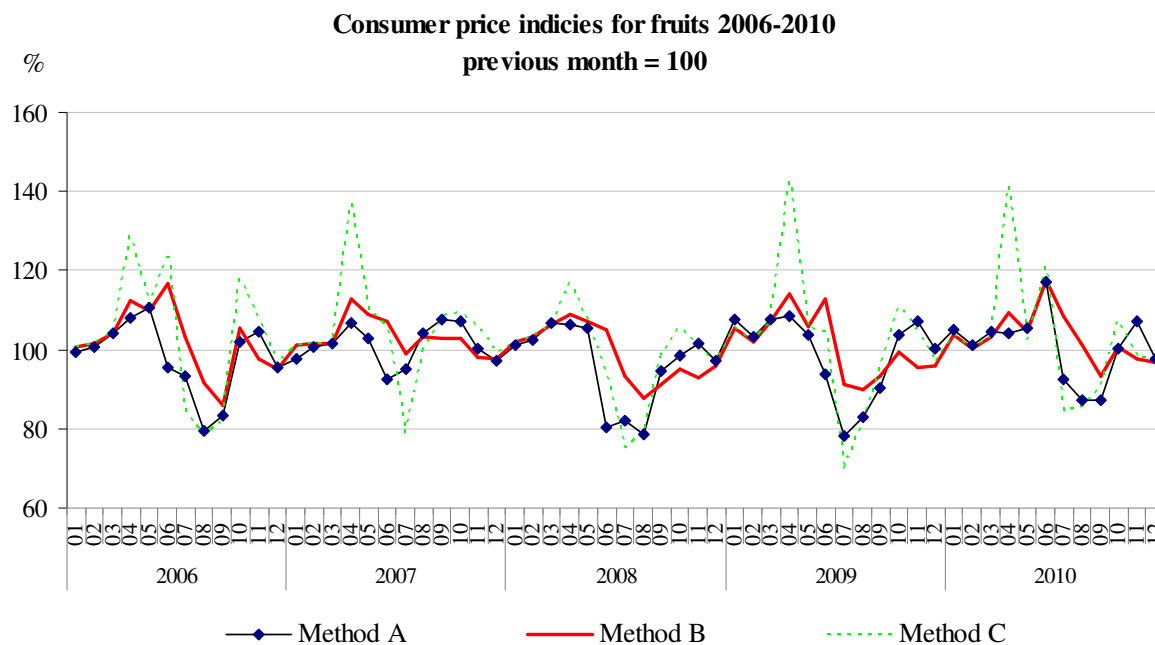
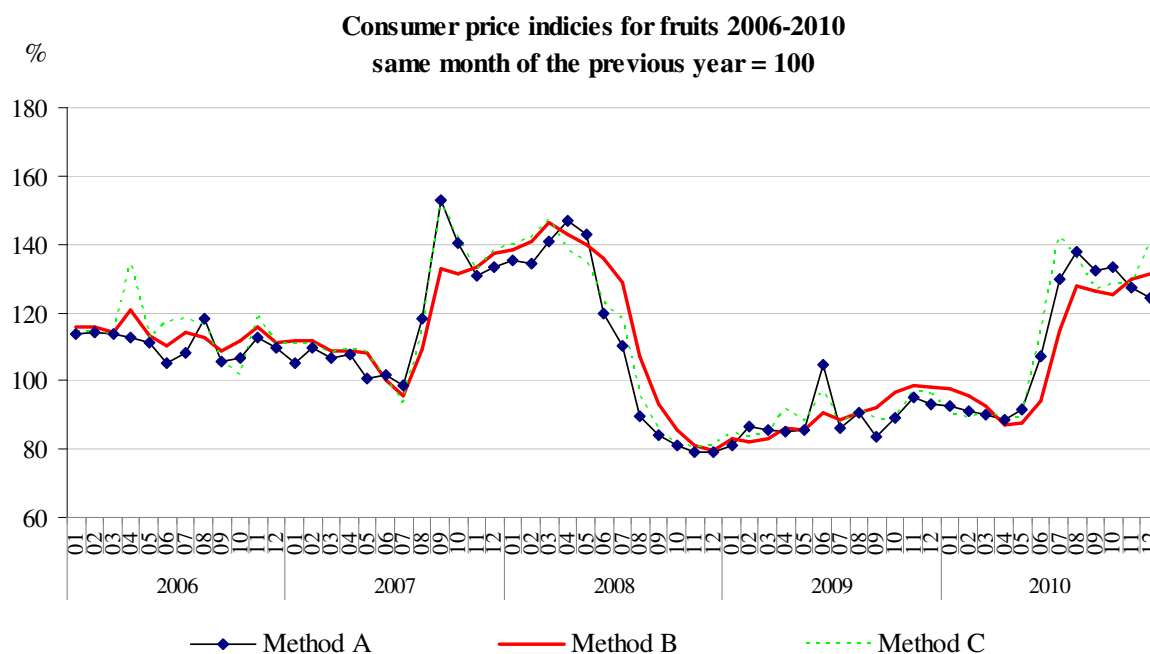


Figure 11



In case of fruits, most of the observed products are available only in certain periods in such quantities that could be considered as representative and involved into the price collection. Consequently, the price movements in some cases much more pronounced than in case of vegetables.

However, the annual price indices based on the three different methods are also moving together. In each period Method 'A' i.e. variable seasonal weights approach cause higher volatility.

Analysing the monthly indices it was clear that there are significant discrepancies between the methods. Moreover, the seasonal volatility was the most significant in case of method CCSW.

Consequently, method of SAW seemed to be the most appropriate. From theoretical point of view, this method is the most applicable method for the consumer price index methodology also, as in case of other product groups we use fixed weights although quantity of the consumption is not stable within one year e.g. heat energy.

3.2.2 Clothing and footwear

As we mentioned earlier, in case of clothing and footwear we have already used fixed weights which is in accordance with the method (SAW) described in the Regulation. Nevertheless, the estimation method of the price for a product that is in out-of-season was necessary to be replaced to one of the methods (CSE or ASE) described in the Regulation.

Due to the number of observed items within the rate of seasonal products and the experiences of the recent years' practice we decided not to apply methods CSE and CCSW for the estimation and weighting.

The reason for this decision that the rate of the seasonal products observed at the same period within sub-group of clothing and footwear are rather low (according to national classification). Thus, from the second out-of-season month if the estimated price would be equal to the estimated price for the preceding month adjusted by the change in observed prices on average over all seasonal products that are in-season in the same subdivision of COICOP/HICP it would be significantly distort the price index of clothing and footwear as well the overall CPI/HICP. On the other hand, separations of the observed items by winter and summer products as well as separations of the price collection period according to winter and summer season accurately show the seasonal price changes in case of clothing and footwear.

In the first month of the out-of-season period to define the estimated price we used the last five years data. In case of every observed items a 'typical price' is the observed average price in a typical month in the previous in-season period.

In case of winter season products the estimated price in the first month of the out-of-season period is equal to the average price of last in-season period's month November and in case of summer season products the estimated price in the first month of the out-of-season period is equal to the average price of last in-season period's month May.

During the price collection procedure there are products which refer to spring and autumn seasons. In these cases the number of in-season periods are two within a year, thus, two average prices was selected in order to estimate the average price in the first out-of-season month based on previous in-season period. For the estimate we used the average prices of April and October.

4 Treatment of seasonal products in the CPI and HICP from January 2011

Based on tentative calculations, in case of vegetables and fruits in our opinion the most appropriate method is using strict annual weights for the weighting and the all-seasonal estimation method for the index calculations, introduced from January 2011 according to the Regulation.

In case of clothing and footwear, for the weighting we have already used the strict annual weights' method which is in accordance with the Regulation and in our opinion the most appropriate method for the index calculations is the all-seasonal estimation method, introduced from January 2011 according to the Regulation.

These methodological changes neither affected the data collection procedure of the seasonal products nor its rules. Moreover, there was no need to build any new data collection procedure and it was necessary to modify only the data processing system.

The newly introduced index and weighting calculation methods were built in the methodology of harmonized consumer price index and the national consumer price index also so there are no differences between the two indicators regarding the treatment of seasonal products.

5 Communication and dissemination

We regularly organized meetings with those experts and major users who are interested in the results of the experimental calculations and the planned methodological changes e.g. National Bank.

The leadership of HCSO was informed by short summaries which included our suggestions for the methods planned to be introduced.

First release

After the decision and the leadership's approval, the first release of consumer price index for January 2011 contained a short methodological note regarding the changes in treatment of the seasonal products in order to inform the users.

'From January 2011 the Hungarian Central Statistical Office uses new method to define the weights of seasonal food items during the calculation procedure of consumer price index. The main reason is the implementation of the new Commission Regulation on treatment of seasonal products. According to the regulation in case of potatoes, fresh vegetables and fruits, at individual product level constant annual weights replace the variable seasonal weights.'

Impact notes

Thereafter, in those months when we observed significant impact for the methodological changes, it was indicated numerically in the monthly press release.

Description	In August 2011	
	Previous month = 100%	Corresponding month of the previous year = 100%
Consumer price index *	99.9	103.6
Harmonized consumer price index	99.9	103.5
Core inflation (seasonally adjusted)	100.2	103.1
Constant tax rate index	99.9	103.5
Consumer price index for pensioners	99.7	104.0

** The methodological change introduced in January – constant weights of seasonal items – increased the consumer price index compared to the corresponding month of the previous year by 0.3 percentage points.'*

Reference Metadata for HICP

The Reference Metadata for harmonized indices of consumer prices (HICP) was updated regarding the methodological information about the treatment of seasonal products released in September 2011.

20 Statistical processing

20.5 Data compilation

Treatment of seasonal items:

Weights:

In case of group 01.1.6 Fruit and 01.1.7 Vegetables from January 2011 HCSO uses new method (strict annual weights) to define the weights of these items. At individual product level constant annual weights replaces the variable seasonal weights according to the implementation of the new Commission Regulation No 330/2009 on the treatment of seasonal products in the HICP.

For group 03. Clothing and footwear, we have used the fixed-weight approach (strict annual weights) in accordance with the Commission Regulation.

Index calculation:

According to the Commission Regulation from January 2011 HCSO uses the “all seasonal estimation” method in case of fruit, vegetables and clothing and footwear: *“In the first month of the out-of-season period, the estimated price is equal to a typical price observed in the previous in-season period and from the second month, the estimated price is equal to the estimated price for the preceding month, adjusted by the change in observed prices on average over all available products in the same subdivision of COICOP/HICP.”*

(As regards the Regulation Article 3, in case of group 01.1.3 Fish it is not relevant in Hungary because items within the group are available all year as well as their weights in the household consumption are also low.)

6 Measuring the impact of the methodological changes

According to our first expectation for 2011 based on the tentative calculations⁶, the impact of the implementation of the new methods on the annual rate of change would not be significant; for the whole year of 2011; probably it would not be higher than 0.1-0.2 percentage points on the all items level compared to the old method.

Analysing the monthly indices during the recent five years, there was no clear pattern in the differences between the old and new methods so we were not able to make forecasts for the expected monthly impacts. Monthly impact estimates are only based on actual data⁷.

According to the Article 7 of the Regulation 1921/2001/EC, in every month of 2011 we analysed the differences between the results of the new implemented and the old methods on the all items level and for the affected COICOP division/group/class.

Regarding the request of the Eurostat, we sent the impact data in every month of 2011.

Country		Impact in 2011 – COICOP/HICP classes and Groups (percentage points)												
		January	February	March	April	May	June	July	August	September	October	November	December	Year
Hungary		-0,03	-0,02	-0,05	-0,06	-0,12	0,02	0,09	0,31	0,23	0,11	0,07	-0,01	0,05
1	Food and non-alcoholic beverages	-0,13	-0,08	-0,22	-0,52	-0,87	-0,22	0,13	1,21	0,89	0,29	-0,01	-0,41	0,00
11	Food	-0,16	-0,09	-0,26	-0,61	-1,03	-0,26	0,15	1,43	1,05	0,34	-0,01	-0,49	0,00
116	Fruits	-1,10	-1,43	-3,55	-6,85	-15,03	-1,98	0,02	17,93	14,80	4,03	-2,08	-6,8	-0,17
117	Vegetables	-0,63	0,07	-0,06	-0,94	0,48	-0,93	1,22	1,12	-0,14	0,42	1,16	0,03	0,15
3	Clothing and footwear	0	0	0	1,14	1,47	1,48	1,43	1,38	1,07	1,18	1,64	1,66	1,04
31	Clothing	0	0	0	1,20	1,66	1,68	1,62	1,56	1,12	1,18	1,81	1,83	1,14
312	Garments	0	0	0	1,09	1,61	1,63	1,57	1,50	0,99	1,34	2,06	2,09	1,16
313	Other articles of clothing and clothing accessories	0	0	0	3,33	3,31	3,32	3,31	3,29	3,31	0,00	0,00	0,00	1,66
32	Footwear, including repair	0	0	0	0,98	0,98	0,98	0,95	0,93	0,95	1,19	1,20	1,20	0,78
321	Shoes and other footwear	0	0	0	1,01	1,01	1,01	0,98	0,96	0,98	1,23	1,23	1,23	0,80
	Other: please specify													

In the first half of year 2011, the impact on the all items level was no significant (it did not reach 0.1 percentage point). However, in August the impact was higher, 0.3 percentage points. Since this number was considered significant our users were informed by a methodological note released in our 'First release of CPI'.

Anyway, in those months when we observed significant impact for the methodological changes, it was indicated numerically in the monthly press release.

⁶ This impact calculation was made in February 2011.

⁷ As regard the CPI and HICP the HCSO does not publish any estimated and forecasted data.

7 Annex

Table 1

Weights in the HICP, 2005-2010 (%)

Code	COICOP group	2005	2006	2007	2008	2009	2010
01.1.3	Fish	0.160	0.161	0.149	0.153	0.146	0.149
01.1.6	Fruits	1.207	1.223	1.223	1.297	1.277	1.256
01.1.7	Vegetables	1.957	1.801	1.823	2.013	2.242	2.071
03.1	Clothing	4.410	4.173	3.858	3.649	3.518	3.374
03.2.	Footwear	1.394	1.419	1.258	1.197	1.154	1.035

Table 2

Observed items in the group 01.1.3 Fish and its price collection periods, 2010

Products	Monthly price collection (1=yes, 0=no)											
	01	02	03	04	05	06	07	08	09	10	11	12
Carp, live	1	1	1	1	1	1	1	1	1	1	1	1
Bighead carp	1	1	1	1	1	1	1	1	1	1	1	1
Sea fish fillet	1	1	1	1	1	1	1	1	1	1	1	1
Fresh salmon	1	1	1	1	1	1	1	1	1	1	1	1
Sardine	1	1	1	1	1	1	1	1	1	1	1	1
Fish in oil	1	1	1	1	1	1	1	1	1	1	1	1
Tuna in its own juice	1	1	1	1	1	1	1	1	1	1	1	1

Table 3

Observed items in the group 01.1.6 Fruits and its price collection periods, 2010

Products	Monthly price collection (1=yes, 0=no)											
	01	02	03	04	05	06	07	08	09	10	11	12
Apple	1	1	1	1	1	1	1	1	1	1	1	1
Melon	0	0	0	0	0	1	1	1	1	0	0	0
Cherry	0	0	0	0	1	1	1	0	0	0	0	0
Peach	0	0	0	0	0	0	1	1	1	1	0	0
Grape	0	0	0	0	0	0	0	1	1	1	1	0
Plum	0	0	0	0	0	0	0	1	1	1	0	0
Sour cherry	0	0	0	0	0	1	1	0	0	0	0	0
Strawberry	0	0	0	1	1	1	0	0	0	0	0	0
Pear	1	1	1	1	1	1	1	1	1	1	1	1
Lemon	1	1	1	1	1	1	1	1	1	1	1	1
Banana	1	1	1	1	1	1	1	1	1	1	1	1
Orange	1	1	1	1	1	1	1	1	1	1	1	1
Nutmeat	1	1	1	1	1	1	1	1	1	1	1	1
Poppy	1	1	1	1	1	1	1	1	1	1	1	1
Roasted salted peanuts	1	1	1	1	1	1	1	1	1	1	1	1
Canned pineapple	1	1	1	1	1	1	1	1	1	1	1	1
Cherry (frozen)	1	1	1	1	1	1	1	1	1	1	1	1
Raspberry (frozen)	1	1	1	1	1	1	1	1	1	1	1	1

Table 4

Observed items in the group 01.1.7 Vegetables and its price collection periods, 2010

Products	Monthly price collection (1=yes, 0=no)											
	01	02	03	04	05	06	07	08	09	10	11	12
Carrot	1	1	1	1	0	0	1	1	1	1	1	1
Parsley	1	1	1	1	0	0	1	1	1	1	1	1
Onion	1	1	1	1	1	1	1	1	1	1	1	1
Cabbage	1	1	1	1	1	1	1	1	1	1	1	1
Cole	1	1	1	1	1	1	1	1	1	1	1	1
Cauliflower	1	1	1	1	1	1	1	1	1	1	1	1
Tomato	1	1	1	1	1	1	1	1	1	1	1	1
Green pepper	0	0	0	0	1	1	1	1	1	1	0	0
Cucumber	1	1	1	1	1	1	1	1	1	1	1	1
Mushroom	1	1	1	1	1	1	1	1	1	1	1	1
Garlic	1	1	1	1	1	1	1	1	1	1	1	1
Carrot (Firstling)	0	0	0	0	1	1	0	0	0	0	0	0
Parsley (Firstling)	0	0	0	0	1	1	0	0	0	0	0	0
Potato early (new)	0	0	0	0	1	1	1	1	0	0	0	0
Potato (old)	1	1	1	1	1	1	0	0	1	1	1	1
Dried beans	1	1	1	1	1	1	1	1	1	1	1	1
Lens	1	1	1	1	1	1	1	1	1	1	1	1
Green pea (frozen)	1	1	1	1	1	1	1	1	1	1	1	1
Green beans (frozen)	1	1	1	1	1	1	1	1	1	1	1	1
Mixed vegetables (frozen)	1	1	1	1	1	1	1	1	1	1	1	1
Canned green pea	1	1	1	1	1	1	1	1	1	1	1	1
Tomato paste	1	1	1	1	1	1	1	1	1	1	1	1
Mixed pickles	1	1	1	1	1	1	1	1	1	1	1	1
Pickled cucumber	1	1	1	1	1	1	1	1	1	1	1	1
Natural baby food	1	1	1	1	1	1	1	1	1	1	1	1
French fries	1	1	1	1	1	1	1	1	1	1	1	1

Table 5

Observed seasonally items in group 03 Clothing and footwear and its price collection periods, 2010

Code of products	Monthly price collection (1=yes, 0=no)											
	01	02	03	04	05	06	07	08	09	10	11	12
31002	1	1	1	0	0	0	0	0	0	1	1	1
31071	0	0	1	1	1	0	0	0	1	1	1	0
31072	1	1	1	0	0	0	0	0	0	1	1	1
31073	0	0	0	1	1	1	1	1	1	0	0	0
31074	0	0	0	1	1	1	1	1	1	0	0	0
31080	1	1	1	1	0	0	0	0	1	1	1	1
31086	1	1	1	1	0	0	0	0	1	1	1	1
31087	0	0	0	0	1	1	1	1	1	0	0	0
31089	1	1	1	0	0	0	0	0	0	1	1	1
31090	1	1	1	0	0	0	0	0	0	1	1	1
31092	0	0	1	1	1	1	1	1	1	1	0	0
31093	1	1	1	0	0	0	0	0	0	1	1	1
31096	0	0	0	1	1	1	1	1	1	0	0	0
31511	0	0	0	1	1	1	1	1	1	0	0	0
31517	1	1	1	0	0	0	0	0	0	1	1	1
32001	1	1	1	0	0	0	0	0	0	1	1	1
32004	1	1	1	0	0	0	0	0	0	1	1	1
32071	0	0	1	1	1	0	0	0	1	1	1	0
32072	0	0	0	1	1	1	1	1	1	0	0	0
32073	0	0	0	1	1	1	1	1	1	0	0	0
32074	1	1	1	0	0	0	0	0	0	1	1	1
32075	0	0	0	1	1	1	1	1	1	0	0	0
32076	0	0	1	1	1	1	1	1	1	1	0	0
32077	1	1	1	1	0	0	0	0	1	1	1	1
32078	1	1	1	1	0	0	0	0	1	1	1	1
32079	0	0	0	1	1	1	1	1	1	0	0	0
32080	0	0	0	1	1	1	1	1	1	0	0	0
32081	1	1	1	1	0	0	0	0	1	1	1	1
32083	1	1	1	0	0	0	0	0	0	1	1	1
32084	0	0	0	1	1	1	1	1	1	0	0	0
32085	1	1	1	0	0	0	0	0	0	1	1	1
32087	0	0	0	0	1	1	1	1	1	0	0	0
32089	1	1	1	1	0	0	0	0	1	1	1	1
32090	1	1	1	0	0	0	0	0	0	1	1	1
32091	0	0	1	1	1	1	1	1	1	1	0	0
32092	1	1	1	0	0	0	0	0	0	1	1	1
32506	0	0	0	1	1	1	1	1	1	0	0	0
32507	0	0	0	1	1	1	1	1	1	0	0	0
32509	1	1	1	0	0	0	0	0	0	1	1	1
33003	0	0	1	1	1	1	1	1	1	1	0	0
33052	1	1	1	0	0	0	0	0	0	1	1	1
33055	1	1	1	0	0	0	0	0	0	1	1	1

Observed seasonally items in group 03 Clothing and footwear and its price collection periods, 2010 (continue)

Code of products	Monthly price collection (1=yes, 0=no)											
	01	02	03	04	05	06	07	08	09	10	11	12
33072	1	1	1	1	0	0	0	0	1	1	1	1
33074	0	0	0	1	1	1	1	1	1	0	0	0
33075	0	0	0	0	1	1	1	1	1	0	0	0
33078	0	0	0	1	1	1	1	1	1	0	0	0
33080	1	1	1	1	0	0	0	0	1	1	1	1
33081	0	0	0	1	1	1	1	1	1	0	0	0
33082	0	0	0	1	1	1	1	1	1	0	0	0
33083	0	0	1	1	1	1	1	1	1	1	0	0
33084	1	1	1	1	0	0	0	0	1	1	1	1
33086	1	1	1	1	0	0	0	0	1	1	1	1
33087	0	0	0	1	1	1	1	1	1	0	0	0
33519	1	1	1	0	0	0	0	0	0	1	1	1
33520	1	1	1	0	0	0	0	0	0	1	1	1
33523	1	1	1	0	0	0	0	1	1	1	1	1
33623	1	1	1	1	0	0	0	0	1	1	1	1
33808	0	0	0	0	1	1	1	1	1	0	0	0
33812	1	1	1	0	0	0	0	0	0	1	1	1
34002	1	1	1	0	0	0	0	0	0	1	1	1
34003	1	1	1	0	0	0	0	0	0	1	1	1
34016	1	1	1	0	0	0	0	0	0	1	1	1
34023	1	1	1	0	0	0	0	0	0	1	1	1
34024	1	1	1	0	0	0	0	0	0	1	1	1
34025	1	1	1	0	0	0	0	0	0	1	1	1
34026	1	1	1	0	0	0	0	0	0	1	1	1

Table 6

Consumer price indices for potato and vegetables according to method A, B, C, 2006-2010**(previous month = 100)**

Year		Jan	Febr	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec
2006													
Method A		109,95	112,22	109,08	107,14	106,68	109,50	78,71	90,94	99,99	93,91	112,99	111,70
Method B		121,15	111,06	105,48	105,83	103,94	90,89	89,79	95,62	105,62	92,44	117,43	112,79
Method C		120,88	111,17	105,97	106,39	102,67	109,60	78,88	89,83	98,58	92,93	112,23	112,46
Year													
2007													
Method A		114,71	103,25	99,48	106,49	98,27	101,31	99,13	96,67	101,27	106,02	102,68	101,62
Method B		115,73	102,50	99,09	105,23	101,55	88,44	98,78	98,64	102,05	108,79	104,02	102,38
Method C		115,36	102,47	99,11	105,13	96,74	112,59	89,02	94,02	100,78	113,38	104,30	102,29
Year													
2008													
Method A		107,89	98,67	97,65	98,20	112,32	98,87	86,82	85,26	94,84	105,01	100,00	107,29
Method B		109,86	99,55	99,32	99,64	108,26	96,12	89,23	86,74	98,10	109,72	99,68	107,27
Method C		109,76	99,61	99,23	99,61	108,19	104,99	81,88	82,87	97,19	113,68	98,91	107,03
Year													
2009													
Method A		116,56	110,22	103,53	100,26	130,02	88,95	83,13	87,42	97,25	100,30	104,48	105,94
Method B		116,35	110,32	102,93	99,38	114,50	86,64	86,83	89,51	103,63	101,11	108,67	105,86
Method C		116,23	110,26	102,90	99,48	126,75	86,74	79,37	86,23	99,83	101,86	105,12	105,79
Year													
2010													
Method A		119,66	109,29	109,03	103,44	98,66	103,48	104,76	92,96	93,94	99,28	106,39	109,27
Method B		117,22	109,50	108,87	103,52	97,69	93,72	105,92	93,18	100,24	99,14	106,33	108,94
Method C		115,41	109,71	107,78	103,66	97,70	98,07	101,29	90,58	92,26	99,86	102,53	104,13

Table 7

Consumer price indices for potato and vegetables according to method A, B, C, 2006-2010
(same month of the previous year = 100)

Year 2006	Jan	Febr	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec
Method A	154,61	171,35	167,65	174,27	139,29	136,74	126,43	129,11	141,01	130,76	141,35	138,44
Method B	138,58	145,72	144,45	158,88	135,95	129,77	118,40	127,25	134,26	117,19	124,10	124,67
Method C	140,79	148,89	148,32	163,16	134,42	124,51	120,86	128,02	134,11	118,80	121,63	121,59
Year 2007	Jan	Febr	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec
Method A	136,91	127,54	119,78	120,04	113,12	102,96	112,74	122,15	121,75	134,80	120,98	111,79
Method B	122,08	113,66	107,49	108,16	104,80	101,24	112,06	119,29	116,10	136,22	121,07	111,55
Method C	119,53	111,38	105,28	105,94	102,04	100,35	105,09	112,94	116,64	141,30	125,43	116,13
Year 2008	Jan	Febr	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec
Method A	107,02	100,84	100,72	96,51	101,32	107,64	98,74	86,49	82,94	82,48	77,90	82,51
Method B	107,74	105,19	105,65	101,26	106,69	116,74	105,35	91,97	88,94	90,62	86,04	89,78
Method C	112,66	110,25	110,58	106,22	109,79	112,65	106,85	93,30	90,63	91,84	82,54	86,34
Year 2009	Jan	Febr	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec
Method A	88,77	99,30	103,41	104,58	122,96	108,90	101,28	102,61	105,62	101,97	109,09	108,32
Method B	94,77	105,66	109,17	108,74	116,69	103,33	98,14	100,63	106,99	100,64	108,63	107,80
Method C	91,17	101,69	105,07	104,77	128,91	107,11	98,62	100,50	104,00	96,58	110,52	109,91
Year 2010	Jan	Febr	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec
Method A	113,59	114,79	122,20	126,40	105,20	117,51	148,79	156,94	149,56	147,85	149,42	140,84
Method B	120,63	121,50	129,16	134,00	115,24	121,21	145,03	152,13	146,90	142,66	139,35	135,51
Method C	117,26	118,83	124,90	129,58	108,15	117,42	149,48	158,12	147,96	143,94	140,17	137,86

Table 8

Consumer price indices for fruits according to method A, B, C, 2006-2010**(previous month = 100)**

Year 2006	Jan	Febr	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec
Method A	99,49	100,81	104,14	108,21	110,55	95,63	93,49	79,68	83,40	101,88	104,75	95,29
Method B	100,82	101,44	104,30	112,39	109,76	116,83	103,39	91,56	86,11	105,40	97,59	95,09
Method C	100,82	101,44	104,30	128,87	111,47	123,44	84,33	78,20	82,26	118,22	107,72	96,52
Year 2007	Jan	Febr	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec
Method A	97,66	100,84	101,40	106,69	102,90	92,60	95,12	104,30	107,47	107,40	100,39	97,19
Method B	101,19	101,51	101,67	112,73	109,03	107,32	98,99	103,40	103,00	103,01	98,07	97,85
Method C	101,18	101,51	101,67	137,18	110,32	105,26	79,18	100,00	108,45	109,17	105,77	99,06
Year 2008	Jan	Febr	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec
Method A	101,00	102,55	106,55	106,44	105,31	80,25	82,02	78,70	94,77	98,40	101,47	97,42
Method B	101,78	103,12	106,51	108,79	107,01	105,23	93,12	87,70	91,09	95,04	92,87	95,99
Method C	101,78	103,11	106,51	117,17	107,28	93,13	75,16	79,14	98,53	105,98	100,73	96,83
Year 2009	Jan	Febr	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec
Method A	107,65	103,41	107,67	108,30	103,55	93,71	78,20	82,90	90,50	103,72	107,31	100,08
Method B	105,39	101,83	107,33	114,20	106,02	112,98	91,21	90,00	93,25	99,47	95,32	95,73
Method C	105,39	101,82	107,33	142,76	105,46	104,72	69,57	82,09	95,02	110,92	104,38	96,98
Year 2010	Jan	Febr	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec
Method A	105,03	101,23	104,66	104,00	105,37	116,99	92,53	87,08	87,25	100,13	107,09	97,71
Method B	103,53	100,11	103,29	109,36	104,48	117,44	108,67	101,01	93,51	100,79	97,57	96,88
Method C	103,53	100,10	103,29	141,25	102,22	121,11	84,46	85,75	90,79	107,67	98,09	98,15

Table 9

Consumer price indices for fruits according to method A, B, C, 2006-2010**(same month of the previous year = 100)**

Year 2006	Jan	Febr	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec
Method A	113,66	114,09	113,57	112,73	110,99	105,02	107,99	118,36	105,80	106,75	112,57	109,80
Method B	115,65	115,53	114,44	120,92	113,27	110,26	114,05	112,72	108,66	111,93	115,91	111,42
Method C	114,07	113,98	113,06	134,17	112,10	117,42	118,02	116,44	105,60	101,78	118,92	110,60
Year 2007	Jan	Febr	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec
Method A	105,01	109,66	106,49	107,58	100,56	101,82	98,69	118,02	153,06	140,26	130,68	133,26
Method B	111,70	111,70	108,89	108,84	108,20	100,19	95,65	109,00	132,61	131,34	133,07	137,45
Method C	110,79	110,75	107,96	109,81	108,41	100,34	93,56	114,35	152,03	141,95	132,44	138,55
Year 2008	Jan	Febr	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec
Method A	135,52	134,18	140,60	146,90	142,67	119,85	110,32	89,87	84,15	81,21	79,19	79,18
Method B	138,57	140,70	146,54	142,84	139,68	135,71	128,62	107,36	93,27	85,45	81,21	79,83
Method C	139,83	141,95	147,39	138,16	135,12	122,73	117,94	95,61	85,06	81,69	80,61	81,12
Year 2009	Jan	Febr	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec
Method A	80,97	86,79	85,49	85,02	85,66	104,68	85,95	90,45	83,76	88,95	95,17	93,12
Method B	83,11	82,09	83,01	86,16	85,44	90,74	88,51	90,51	92,11	96,49	98,75	98,30
Method C	84,70	83,68	84,76	91,45	88,35	97,03	87,25	91,72	88,38	89,13	97,23	96,35
Year 2010	Jan	Febr	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec
Method A	92,88	90,93	90,13	88,37	91,54	107,43	129,67	137,69	132,35	133,11	127,31	124,38
Method B	97,52	95,79	92,55	87,34	87,39	93,94	114,7	127,92	126,26	125,28	129,78	131,37
Method C	90,84	89,26	90,5	88,9	89,13	113,8	142,17	135,9	126,88	128,21	128,13	140,23