

HARMONISED INDEX OF CONSUMER PRICES

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A history of the implementation of the harmonised index of consumer prices

In February 1992, when the Treaty on European Union was signed in the Dutch city of Maastricht, the objective was to establish Economic and Monetary Union (i.e. adopting the euro as the single European currency). In order for a member state to introduce the euro, it must fulfil several criteria. One of the criteria, pursuant to Protocol 6 on Convergence Criteria (which is a part of the Treaty on the EU), is to achieve an annual average rate of inflation not exceeding by 1.5 percentage points the average rate of inflation of the three EU member states achieving the best results in price stability. At the same time this Protocol prescribes that “inflation shall be measured by means of an index of consumer prices on a comparable basis which takes account of differences between national definitions”. At the time of the preparations for the third phase of Economic and Monetary Union national price indices differed significantly in terms of items, methods and procedures and thus did not fulfil the basic requirement of the Treaty on the EU. For this reason in 1995 work began on creating a legal basis for a harmonised methodology for compiling consumer price indices in the EU member states. The aim was not to create a common basket of goods, but a common and single system established on the same principles that takes account of differences in national consumer habits. The sponsor behind the creation of this methodology was the EU statistics office, Eurostat. And so in 1995 the basic regulation, Council Regulation (EC) No 2494/95, was adopted. Besides this first (basic) Council Regulation concerning the beginning of calculating the harmonised indices of consumer prices (hereinafter HICP¹) in member states, a further 13 regulations were adopted over the period 1996 – 2001, of which 3 were Council Regulations and 10 Commission Regulations. These developed further, or supplemented the methodology for calculating the HICP. At present a draft codification of these regulations is being worked on, where this would form one regulation from all the 14 regulations. The legislative process in the field of harmonised indices is however not yet completed.

¹ Harmonised Index of Consumer Prices

An important regulation is that of the Commission from 1996 on implementing measures for the introduction of HICP (Commission Regulation (EC) No 1749/96). This regulation concerns the six “technical fields” for calculating the HICP. Specifically, this concerns the initial coverage of the index, “newly significant” goods and services, elementary aggregate price indices, determination of minimum standards for procedures of quality adjustment of goods valued, the setting of minimum standards for sampling and setting minimum standards for collections of prices.

In 1997 the Commission Regulation (EC) No 2454/97 on minimum standards for the quality of HICP weightings was adopted.

A further Commission Regulation (EC) No 2646/98 was adopted in 1998, on minimum standards for the treatment of tariffs in the HICP.

According to regulations concerning the coverage of the HICP it results that the compilation of the harmonised index of consumer prices is not based on pricing a uniform basket for all participant compilation compilation states (it is not the pricing of precisely described goods and services). Despite this, a “single” coverage of the indices is ensured by means of categories of the classification COICOP/HICP², which are to be included in indices. Member states send the harmonised indices of consumer prices to Eurostat in the breakdown by division, group and class. Each member state must, within the Harmonised Index of Consumer Prices, cover by valued goods and services those classes of COICOP/HICP classification (around 100 of them), the share of which exceeds 1 thousandth of total household consumer expenditure (covered in the HICP), i.e. their weighting is more than one thousandth. For example, in the harmonised index of consumer prices for the SR it would be meaningless to cover the class “07.3.4 – passenger transport by sea and inland waterway” in division “07-Transport”, the group “07.3 – transport services”, and monitor in the framework of this class the develop-

² COICOP (Classification Of Individual Consumption by Purpose) is an international classification used in various fields (national accounts, family accounts, purchasing power parity). Its adjusted form – COICOP/HICP has also been adopted as a classification for HICP.



ment of the price representative items “travel ticket by boat Bratislava – Devín”, since the expenditure for such “transport” in Slovakia forms a negligible sum and the price development of this figure would not influence the aggregate price index.

Important is that within the harmonised index coverage we differentiate between “initial coverage” and “extended coverage”. From initial coverage of HICP (according to which member states’ HICP were calculated until the end of 1999) there have been excluded those goods and services inclusion of which in the index would cause incomparability (for example the provision of healthcare in member states is not unified, therefore one of the fields excluded from the initial coverage of member states’ harmonised indices were, for example, hospital services). The initial coverage of HICP was defined by the above-mentioned regulation of 1996.

Council Regulation (EC) No 1687/98 concerns mainly the extension of the HICP coverage by goods or services in the fields of healthcare, social services, education and insurance. This first regulation was followed by further regulations in 1999, specifying more closely requirements as regards the HICP relating to the extension of the coverage of the above mentioned areas. The preparatory work for the extended coverage of HICP was carried out until the end of 1999; member states began to send their indices in the new classification commencing January 2000. From January 2001 the coverage of the indices was again extended – this time to include hospital services, other social care services provided at home (for example transport of handicapped, or infirm persons) and care homes for the handicapped.

The field of HICP coverage by goods and services is not yet fully harmonised (even if there are regulations stipulating what and at what date HICP should cover). To a certain extent an open question remains the inclusion of prices for owner-occupiers’ housing (house, apartment) into HICP (including prices for the acquisition of dwellings). One of the problems is that the purchase of a house (apartment) is connected with investment, or saving, which is usually not captured by consumer price indices. Nonetheless, the “permanent” exclusion of expenditures for acquisition of dwellings (house, apartment), or the exclusion of expenditures connected with major repairs of owner-occupiers’ dwellings from the coverage of the HICP is not a satisfactory solution with regard to the fact that the main feature of the harmonised indices of consumer prices is their comparability. Excluding the mentioned expenditures from the HICP coverage leads to differences concerning the coverage of expenditures connected with

housing, since home ownership rates in individual member states of the EU ranges between 40% and 80%³. At present therefore a temporary solution is used, approved by the Statistical Programme Committee⁴. Only following its evaluation will it be decided whether the price indices for acquiring a residence into ownership shall be included into the HICP.

To the regulations concerning coverage of the HICP by goods and services there are followed by Council Regulation (EC) No 1688/98. This regulation, derived from the European System of Accounts (ESA) 1995, in the framework of specifying the definition of expenditures for household final consumption determines the geographical and population coverage of HICP. According to this regulation households final monetary consumption expenditure is defined as household expenditure (irrespective of their nationality or residence status) on goods and services on the economic territory of the Member State – termed the “domestic concept”. According to this regulation the households sector also includes persons living in institutional households. More simply we can say that HICP should cover the consumption expenditure of residents on products and services directly satisfying their individual needs, as well as the expenditure of tourists on the territory of the given state, while the expenditures of residents outside the territory of the state should not be covered. The HICP should also cover, on an individual basis, consumer expenditures of persons living in institutional households (prisons, care homes for the elderly, etc.).

In 2000 two Commission regulations were adopted setting the time for entering prices for goods and services into the HICP (Commission Regulation (EC) No 2601/2000) and a regulation regarding the minimum criteria for the treatment of price reductions (Commission Regulation (EC) No 2602/2000). In 2001 a further two regulations were adopted, concerning in particular financial services (Commission Regulation (EC) No 1920/2001) and a regulation regarding revisions of already published HICP data (Commission Regulation (EC) No 1921/2001). At present further regulations are under preparation (on the amendment of the base period for HICP from 1996 to 2005, on rounding rules in the publication and recalculations of indices in HICP, on seasonal goods, and on requirements for the period of ascertaining prices). The treatment process also contains binding procedures to be used in taking account of changes in the quality of the goods and services valued.

The harmonised indices of individual countries provide

³ Information taken from HICP 00/305 documents – “Owner occupied housing in the HICP – Background document by the ECB” – see page 6 [4] Literature.

⁴ The Statistical Programme Committee meet regularly 4 times per year (March, May, September and November) and is composed of the chairpersons, or their representatives, of the statistics offices of the member states and the chairperson of the committee representing Eurostat.



the data source for calculating the harmonised indices in the eurozone and the EU as a whole.

On the basis of applicable regulations the first harmonised indices were published in March 1997. Despite the fact that the methodology of the harmonised indices is still being specified in more detail and supplemented, they at present provide the best statistical base for the international comparison of inflation.

Differences between the HICP and CPI for Slovakia

The differences between the HICP and the CPI in Slovakia are not significant. The main difference lies in the coverage of the index, where the HICP takes account of only current consumer financial expenditures and, in comparison with the CPI, goods and services relating to large repairs and the maintenance of houses and apartments are excluded from its coverage. A further significant difference between the HICP and the CPI is the fact that imputed rent for houses and apartments in personal ownership does not feature in the HICP, whereas this expenditure does in the CPI. The HICP is therefore calculated on the basis of a narrower consumer basket, i.e. it includes fewer items of goods and services.

Besides this coverage, there are also differences between the HICP and the CPI in the calculation of the weightings featuring in the calculation of these indices. While in calculating weightings the CPI takes account of the expenditures of Slovak households, the HICP on the other hand uses the domestic concept, that is taking account of the expenditure of not only Slovak households but also the expenditures of foreigners in the territory of Slovakia, while excluding the expenditures of Slovak households outside Slovakia. The weightings for insurance in the HICP are calculated according to Commission Regulation (EC) No 1617/1999 as a share of the estimate of aggregate expenditures for the households' fees for non-life insurance services from three years in the total expenditure covered in HICP, where however CPI takes account of household's fees for non-life insurance services from the reference year for the weightings. Differing procedures are still used in calculating weightings for the HICP, nevertheless their impact on the overall indices is minimal.

A further difference is the fact that the derived HICP indices are calculated from indices rounded to one decimal place, while indices in the CPI are derived from unrounded indices.

The last difference is, or was, the fact that the har-

Graph 1 Comparison of year-on-year inflation calculated on HICP and CPI bases

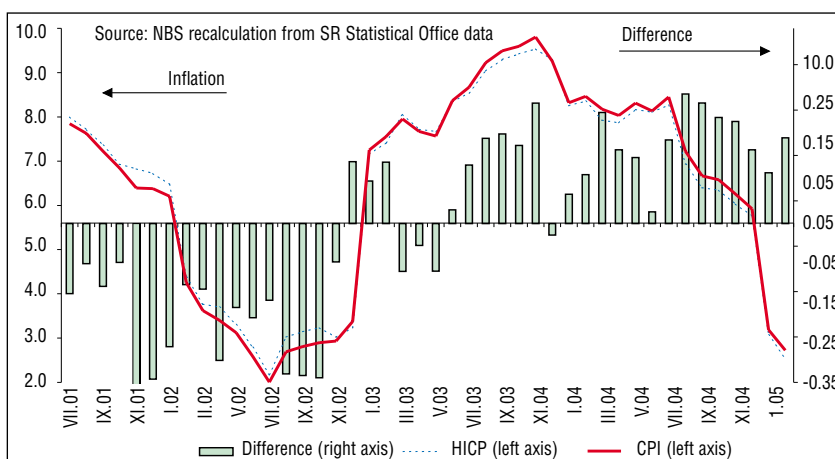


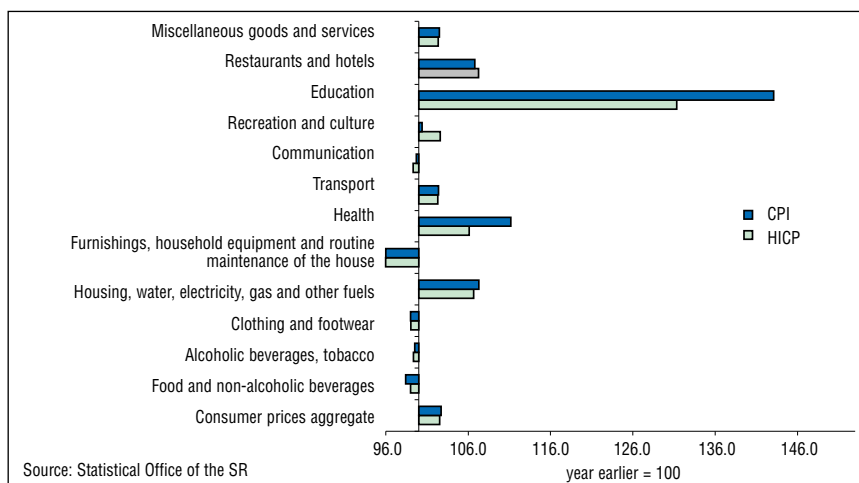
Table 1 Differences between HICP and CPI

Indicator		No. of representatives	Weighting in 2005
Consumer prices aggregate	HICP	706	100
	CPI	712	100
	difference	-6	0
in which:			
Food and non-alcoholic beverages	HICP	138	19.1
	CPI	138	18.5
	difference	0	+0.6
Alcoholic beverages, tobacco	HICP	11	6.2
	CPI	11	5.1
	difference	0	+1.1
Clothing and footwear	HICP	101	4.3
	CPI	101	4.8
	difference	0	-0.5
Housing, water, electricity, gas and other fuels	HICP	42	20.6
	CPI	45	28.2
	difference	-3	-7.6
Furnishings, household equipment and routine maintenance of the house	HICP	90	5.0
	CPI	91	4.9
	difference	-1	+0.1
Health	HICP	37	3.0
	CPI	38	1.6
	difference	-1	+1.4
Transport	HICP	75	11.3
	CPI	75	9.8
	difference	0	+1.5
Communication	HICP	20	4.3
	CPI	20	3.9
	difference	0	+0.4
Recreation and culture	HICP	78	8.4
	CPI	77	9.0
	difference	1	-0.6
Education	HICP	5	1.3
	CPI	6	0.9
	difference	-1	+0.4
Restaurants and hotels	HICP	39	9.9
	CPI	39	7.3
	difference	0	+2.6
Miscellaneous goods and services	HICP	70	6.7
	CPI	71	6.0
	difference	-1	+0.7

Source: Statistical Office of the SR



Graph 2 Comparison of the development of HICP and CPI by COICOP classification in February 2005



nised index is calculated as an annual chain index, which allows the weightings of individual items to be changed each year, while the national index until December 2004 was calculated as a base index with fixed weightings at the level of COICOP classification classes (its weightings were fixed to the base period, the year 2000).

The harmonised index of consumer prices has been published regularly each month since May 2004 by the Statistical Offi-

Table 2 Comparison of year-on-year development of HICP and CPI

Indicator		2004				2005	
		9.	10.	11.	12.	1.	2.
Consumer prices aggregate	HICP	106.4	106.3	106.0	105.8	103.1	102.5
	CPI	106.7	106.6	106.3	105.9	103.2	102.7
	difference	-0.3	-0.3	-0.3	-0.1	-0.1	-0.2
in witch:							
Food and non-alcoholic beverages	HICP	106.4	105.0	104.0	102.8	102.2	99.4
	CPI	106.3	104.9	103.9	102.6	102.0	98.9
	difference	0.1	0.1	0.1	0.2	0.2	0.5
Alcoholic beverages, tobacco	HICP	103.9	101.8	101.4	100.3	100.6	100.1
	CPI	103.9	101.8	101.3	100.3	100.6	100.1
	difference	0.0	0.0	0.1	0.0	0.0	0.0
Clothing and footwear	HICP	100.4	100.1	100.0	99.6	99.4	99.3
	CPI	100.4	100.1	100.0	99.6	99.4	99.2
	difference	0.0	0.0	0.0	0.0	0.0	0.1
Housing, water, electricity, gas and other fuels	HICP	115.8	115.8	115.8	115.9	115.9	108.2
	CPI	113.3	113.3	113.3	113.7	113.7	108.4
	difference	2.5	2.5	2.5	2.2	2.2	-0.2
Furnishings, household equipment and routine maintenance of the house	HICP	97.1	96.7	96.6	96.6	96.3	96.1
	CPI	97.2	96.8	96.6	96.6	96.4	96.2
	difference	-0.1	-0.1	0.0	0.0	-0.1	-0.1
Health	HICP	108.8	109.1	109.8	109.9	109.6	107.2
	CPI	116.1	116.6	118.2	116.9	112.9	112.2
	difference	-7.3	-7.5	-8.4	-7.0	-3.3	-5.0
Transport	HICP	105.8	105.2	106.8	106.7	104.5	101.6
	CPI	106.9	106.4	108.2	108.0	105.7	101.6
	difference	-1.1	-1.2	-1.4	-1.3	-1.2	0.0
Communication	HICP	104.6	98.9	98.9	98.9	98.7	99.4
	CPI	104.8	99.1	99.1	99.1	99.1	99.8
	difference	-0.2	-0.2	-0.2	-0.2	-0.4	-0.4
Recreation and culture	HICP	103.3	104.8	104.8	104.6	104.5	103.7
	CPI	100.7	101.3	101.3	101.1	101.0	100.6
	difference	2.6	3.5	3.5	3.5	3.5	3.1
Education	HICP	109.4	111.1	110.5	111.0	123.0	130.5
	CPI	131.4	140.9	140.7	141.2	152.0	156.6
	difference	-22.0	-29.8	-30.2	-30.2	-29.0	-26.1
Restaurants and hotels	HICP	109.8	110.9	111.2	111.4	111.5	108.5
	CPI	109.4	110.3	110.5	110.7	110.8	108.0
	difference	0.4	0.6	0.7	0.7	0.7	0.5
Miscellaneous goods and services	HICP	103.4	103.4	103.3	103.8	103.7	102.2
	CPI	106.9	107.0	106.9	106.8	106.7	102.4
	difference	-3.5	-3.6	-3.6	-3.0	-3.0	-0.2



ce of the SR on its website. In numerical terms the differences in the year-on-year rate of inflation as measured by the harmonised and national consumer price index over the course of the years 1996 - 2005 ranged ± 0.3 percentage points.

A comparison of the year-on-year rate of inflation calculated on the basis of the HICP and the CPI and the differences between them is shown in Graph 2.

The differences in inflation expressed by the HICP and CPI in individual divisions of the COICOP/HICP classification can be seen in the tables below. Besides differences in coverage and the calculation of weightings, there are also differences in the different classification of representatives in individual divisions. The largest differences between the HICP and the CPI are in the divisions education, miscellaneous goods and services, recreation and culture, housing, water, electricity, gas and other fuels, transport and in the division hotels, cafes and restaurants.

The difference in the division "miscellaneous goods and services" is caused primarily due to the differing approach to calculating weightings for insurance. The different international dynamic in the HICP against the CPI in the division "housing, water, electricity, gas and other fuels" is caused by the non-inclusion of the imputed rent of goods and services relating to large repairs and maintenance in the HICP.

Differences in the division "education, recreation and culture and transport" are caused not only by the difference in weightings, but also by the harmonisation of incorporating individual representatives of the consumer basket according to HICP methodology (for example, the item primary school of art is in the CPI in the "education" division, but in the HICP falls within the division "recreation and culture", or another example is rent paid for a garage, which is included in the transport division in the CPI, but in the HICP falls within the division "housing, water, electricity, gas and other fuels").

Table 3 Structure of inflation measured by CPI

	% weighting in 2005	February inflation on y/y basis
TOTAL	100.0	2.7
Regulated prices	21.9	7.6
Influence of indirect tax change		0.09
Core inflation	78.1	1.1
Foodstuffs	16.6	-1.6
Foodstuffs - processed	9.6	-1.3
Foodstuffs - unprocessed	7.0	-2.4
Tradable goods	34.7	-1.0
Tradables – excl. motor fuels	31.1	-1.2
Motor fuels	3.6	1.2
Lubricant	0.0	7.4
Market services	26.7	6.9
Net inflation (excl. ind. tax changes)	61.5	2.1
Net inflation excl. fuels (excl. ind. tax changes)	57.9	2.2

Table 4 Structure of inflation measured by HICP

	% weighting in 2005	February inflation on y/y basis
TOTAL	100	2,5
Goods	66.9	0.9
Industrial goods	41.6	2.0
Industrial goods (excl. energy)	24.0	-0.3
Energy	17.6	5.2
Electricity, gas and other energy	14.1	5.9
Motor fuel	3.5	2.3
Foodstuffs	25.3	-0.9
<i>Foodstuffs – processed (incl. alcohol and tobacco)</i>	<i>17.5</i>	<i>-1.3</i>
<i>Foodstuffs – unprocessed</i>	<i>7.8</i>	<i>-0.5</i>
Services	33.1	6.4
TOTAL excl. energy and unprocessed foodstuffs	74.6	2.2
TOTAL excl. energy	82.4	2.0

Besides the differences in the COICOP basic classification there are differences also in the structure used by the NBS. The basic structure of the breakdown of the CPI inflation includes the influence of changes in regulated prices, the influence of changes in indirect taxes in unregulated prices and core inflation. The structure of core inflation is formed by foodstuffs (processed and unprocessed), tradable goods (including motor fuels) and market services. Conversely, the structure of the HICP does not exclude regulated prices and does not clean individual items of changes in indirect taxes, rather it comprises only two large divisions, goods and services. Goods are broken down into industrial goods, excluding energies, and energies having a motor fuel, electricity, gas or other fuel component. Foodstuffs, as in the case of the CPI, are broken down into processed and unprocessed foodstuffs. A difference against CPI is that foodstuffs include alcoholic beverages, tobacco and tobacco products, whereas in the CPI these items are included in tradable goods.

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