

## Methodological notes

Starting from the year 2007, the development of consumer price indices (cost of living) is observed on new consumer baskets based on the set of selected kinds of goods and services paid by the population.

The new revised consumer baskets (index schemes) were discussed and approved by a commission set up of representatives of statistical authorities, ministries (MLSA CR, MF CR, MRD CR, MIT CR, MAg CR, MEYS CR), CNB, University of Economics, trade unions etc.

A new selection of goods and services (price representatives) was made for the consumer baskets, and a new weighting system was built up. The structure of the aggregate consumer price indices (cost-of-living) is based on the international Classification of Individual Consumption by Purpose (COICOP), which classifies goods and services into **12 divisions**.

1. **Food and non-alcoholic beverages** – comprises all food including non-alcoholic beverages
2. **Alcoholic beverages and tobacco** – comprises alcoholic beverages and tobacco products
3. **Clothing and footwear** – comprises textile products, ready-made clothing, footwear, including repair
4. **Housing, water, electricity, gas and other fuels** – comprises rentals, payments for the use of cooperative dwellings, miscellaneous services relating to the dwelling, materials and services for the maintenance and repair of the dwelling, water supply, all kinds of energy (electricity, gas, heat), solid fuels
5. **Furnishings, household equipment and routine household maintenance** – comprises furniture and furnishing, household textiles, bed and table linen, household appliances, cleaning and maintenance products, glassware, tableware and household utensils, dry-cleaning services, laundering services, repair of household appliances
6. **Health** – comprises pharmaceutical and other medical products, dental products, services of optometrists, services of physicians, thermal bath care
7. **Transport** – comprises personal transport equipment including repair and spare parts, insurance, automotive fuel, transport services (by railway, by road, by air, local), school transport services
8. **Communications** – comprises postal services, telephone equipment (mobile phones), telephone services
9. **Recreation and culture** – comprises radio and television receivers including repair, tape and cassette recorders, books, periodicals, toys, musical instruments, stationery, sport equipment, cultural services, sporting services, domestic and foreign holiday
10. **Education** – comprises all levels of education including language teaching
11. **Restaurants and hotels** – comprises meals and drinks provided by restaurants, dinner in works canteens, catering services of canteens in schools and universities, accommodation services of hotels, boarding houses, chalets, accommodation in boarding schools and universities
12. **Miscellaneous goods and services** – comprises personal care services, electrical appliances for personal care, beauty products, jewellery, clocks, leather fancy goods, insurance (life insurance, insurance connected with the dwelling, insurance connected with health, insurance connected with transport), social and financial services, administrative fees charges

### Selection of representatives

The price representatives are especially products and services which have a significant share in population's expenditure and cover the entire sphere of consumption.

The numbers of price representatives in the new consumer basket for calculation of the consumer price indices are as follows:

<b>Group of goods and services</b>	<b>Number of representatives</b>
Total	730
1. Food and non-alcoholic beverages	167
2. Alcoholic beverages and tobacco	21
3. Clothing and footwear	71
4. Housing, water, electricity, gas and other fuels	37
5. Furnishings, household equipment, repair	82
6. Health	51
7. Transport	83
8. Communications	2
9. Recreation and culture	112
10. Education	12
11. Restaurants and hotels	44
12. Miscellaneous goods and services	48

The selection of representatives is the same for all types of indices but some products and services are not represented in particular social groups of households.

### **Method of the consumer price survey**

Prices of individual kinds of goods and services are collected monthly, directly in selected shops (about 10100) by statistical staff in 35 chosen districts across the Czech Republic and in Prague.

**Average price** of individual representatives for the Czech Republic is calculated from the collected prices, which is involved in the calculation in all types of the consumer price indices except indices for households living in Prague. Average prices of representatives involved in the calculation of indices for households living in Prague are the same as average prices collected in Prague for the calculation of consumer price indices for the Czech Republic, with the exception of representatives spa treatment, ski lift ticket, accommodation in hotels, boarding houses, chalets, accommodation in boarding schools and universities, catering in university canteens, examination fee for university enrolment procedure, tuition fee at higher professional school, and tuition fee at private university, whose calculation involves average consumer prices for the Czech Republic.

### **Weighting system**

The weights were calculated for the following groups of households: **households in total, households of employees, households of pensioners, low income households with children, households living in Prague.**

All types of indices have weights derived from household expenditures measured by the household budget survey for 2005 and corrected by the national accounts statistics. The aggregate consumer price index has weights based on the structure of average expenditures for all households; the other CPI indices have weights based on the structure of expenditures of a given social group of households or on the structure of expenditures of households living in Prague.

### **Computation of indices**

Calculation of the consumer price indices (cost-of-living) is based on constant weights according to the Laspeyres formula:

$$I = \frac{\sum \frac{p_1}{p_0} * p_0 q_0}{\sum p_0 q_0} * 100$$

$p_1$  = the reference (current) period price of a good (service),

$p_0$  = the basic period price of a good (service)

$p_0 q_0$  = constant weight: expenditures of households on a good (service) in the basic period.

The basic period for the computation of indices is the year 2005 (weights) and December 2005 (prices). Besides, also indices corresponding period of the previous year = 100, previous month = 100 and average 2005 = 100 are published in statistical information for the needs of users. These indices are computed in a derived way using constant base December = 2005.

To make the indices published up to the end of 2006, which remain valid, comparable with the new indices published from January 2007, coefficients (conversion bridges) are employed. The coefficient is defined as the ratio of revised and original December 2006/December 2005 indices. The recalculated time lines of indices for the previous years will be released in the CZSO publication "Revision 2005" and on the CZSO web pages.

### **Definition of social groups of households**

**Households of employees** – households where the head of the household is a person in employment. Social group of other members of the household is irrespective.

**Households of pensioners** – for the purposes of Czech HBS they are defined as households without economically active members where the head of the household is a non-working pensioner and none of the other members is economically active. Only short-term working activity is permissible, and annual income from work of any member of the household is not allowed to exceed CZK 12 000.

**Low-income households with children** – a special, so-called supplementary sample was generated in 1991 by HBS for the purposes of observing incomes and expenditures of low-income families with children. In the sample are selected households with dependent children whose net monthly income is not higher than the 1.3 multiple of subsistence minimum at the time the family is addressed. Net income of the household does not include savings withdrawn and loans. Social group of the household is not decisive, they can be, e.g., families of pensioners, unemployed, mothers with children receiving parental benefits.

Actual income of each household calculated according to the above-mentioned definition is compared with the subsistence minimum; the highest permissible income may reach the 1.4 multiple of subsistence minimum. Included in the processing are also households from the basic sample, if they have dependent children and their money income is in accordance with this rule.

According to Government Regulation No. 664/2004 Sb., the following amounts of subsistence minimum were effective in 2005:

Child aged	up to 5	CZK 1720	Household:	lone person	CZK 1940
	6 – 9	CZK 1920		two persons	CZK 2530
	10 – 14	CZK 2270		3 – 4 persons	CZK 3140
	15+	CZK 2490		5 persons and more	CZK 3520
Other persons	CZK 2360				

Subsistence minimum is calculated for each household as the sum of amounts for each member of the household and amount for the household. Children are included in age categories according to the age attained in a given year (e.g. in processing for 2005 children born in 1999 were handled as 6 years old).