METHODOLOGICAL NOTES

The Household Budget Survey (HBS) provides information on expenditure and consumption structure of private households, on differences in consumption patterns of households classified by various aspects, or on impacts of certain factors (e.g. price movements, situation in the market) on expenditure structure. There is no other source of information on consumption behaviour of households.

The scope of the use of HBS is rather wide and serves primarily as a basis for decision-making in the state social policy implementation, for social and economic research, internal use by the CZSO (composition of the consumer basket during periodical consumer price index revisions, an auxiliary data source for the account of the household sector within the national accounts statistics, etc.) and also for the purpose of international comparisons.

The composition of the HBS sample is changing flexibly to cover current changes of basic household attributes (composition, economic activity, income level, etc.). The HBS is, virtually, the only source of information on household expenditure in relation to their income. Net money income is one of sampling attributes and, actually, its development is prescribed. Based on the HBS results, the changes of the income level and its structure can be assessed within the sample and in relation to household expenditure. However, it is not correct to use the HBS to draw conclusions about the nationwide household income development. The income data provided by the HBS should therefore be regarded only as supplementary information and should not be used for in-depth analyses.

With regard to the forthcoming Integrated European Social Statistics (IESS) regulation, which intends to integrate social surveys in households and random sampling surveys, the **CZSO re-designed its HBS**. In 2016 the quota sampling HBS was carried out but its sample size was reduced and wasn't sufficient to calculate representative results in the entirety and full detail.

The 2016 publication is, therefore, somewhat **changed**.
The results for households by net money income per capita, which have been published as deciles so far, are changed to represent quintiles. The table of employee households and households of pensioners without economically active members broken down by net money income per capita is removed from publication altogether. The results for households of unemployed persons, whose occurrence in the sample is insufficient for them to get published, absent from breakdowns by activity status of the head of household. Some breakdowns (households with dependent children by number of children and type of family, households without dependent children by number of members, households by age of the head of household) were added from the electronic publication.

In the tables, published detail is significantly reduced. From income data, just data on net money income total is retained, no balance items are published, as well as detailed breakdowns of consumption in kind, total consumption and expenditure in kind. Only data on personal computers and mobile phones is published in household equipment. By expenditure, this publication means consumption expenditure only (see 2.2). Non-consumption expenditure data is also discontinued, as well as gross and net money expenditure totals. Because of the aforementioned sample reduction it was necessary with most tables to reduce detail of published information (some expenditure items are published as totals only, two tables contain just the rudimentary 12-division COICOP breakdown).

From 2017 on, the new, random sampling method of surveying will be applied, which will have a bearing on both the form and publication times of the data.

1. SAMPLING AND SURVEY DESCRIPTION

The reporting households of the HBS are selected by purposive quota sampling. The sampling unit and reporting unit for the survey is a private household, i.e. persons living together on a common budget (food, housekeeping and routine maintenance costs, etc.).

The CZSO makes a central schedule identifying months when detailed records of expenditure on food and non-alcoholic beverages are kept so that they are (broken down by groups of household,

number of children and income brackets) spread evenly over the whole year. Each household keeps detailed records of expenditure on food and non-alcoholic beverages for the period of 2 months per year; in the remaining months only the total expenditure is reported.

The HBS sample of 1600 households was chosen so that its composition by selected sampling attributes corresponds to the household structure in the CR. The quota frames were the results of the Living Conditions survey (carried out as the national module of EU-SILC surveys).

Since 2006 the group of household derived from the economic activity of the head of household and his/her activity status has become a basic sampling attribute. The head of household in two-parent families is always the man, in one-parent families mostly the parent (if he/she is economically active; if not, the head of household can be an economically active child). In non-family households the head is the person with the highest income.

Households with an economically active head of household are classified by his/her activity status, in households of employees also by his/her education level. Households with an economically inactive head of household are further broken down depending on whether any of the other household members is economically active or whether the head of household is a pensioner. A more detailed description of the main (published) groups of households is provided in chapter 3.2 (published breakdowns).

For three most important groups of household the following sample criteria are used:
- net money income per household member and number of dependent children for households of employees and households of the self-employed;
- pension per household member and number of members (in one-member households also the sex of the person) for households without economically active members.

The municipality size and type of house sampling attribute applies to all groups of household. Independent quotas by municipality size and type of house are set for the above most important groups of household while the remaining groups for this sampling attribute are merged into one category.

2. CLASSIFICATION OF ITEMS

2.1 Incomes

Net money income consists of income from employment and self-employment, social income and other income of individual members and the whole household. Net money income is gross income excluding health and social insurance payments and income tax. Income is net of savings drawn, received loans and credits. In income from self-employment the HBS record only the part of income transferred from business and used to cover the consumption needs of the household and its individual members.

2.2. Expenditures

Since 1999 for classification of consumption expenditure in the HBS the CZ-COICOP "Classification of individual consumption by purpose" has been used. The classification is of three levels, it has 14 divisions, 58 groups and 157 classes. It was prepared in the framework of the transformation of classification system as the Czech version of international standard COICOP (Classification of Individual Consumption by Purpose) to ensure international comparability of statistical indicators and it is binding for all statistical surveys performed in compliance with Act No. 89/1995 Sb., on State Statistical Service, as amended. The subject of the classification is to classify all kinds of individual consumption (expenditure on goods and services) by purpose. For monitoring of household consumption expenditure the first 12 divisions of the classification are designed. The HBS has partly adjusted the breakdown of expenditure to international standard designed especially for the HBS so that one or more HBS items are assigned to each class of the CZ-COICOP. Missing groups 02.3 Narcotics, 04.2 Imputed rentals and 12.2 Prostitution have not so far been introduced into the HBS.

Expenditures in compliance with CZ-COICOP are arranged in 12 divisions:
01 Food and non-alcoholic beverages
02 Alcoholic beverages, tobacco
03 Clothing and footwear
04 Housing, water, electricity, gas and other fuels
05 Furnishing, household equipment and routine maintenance of the house
06 Health
07 Transport
08 Communication
09 Recreation and culture
10 Education
11 Restaurants and hotels
12 Miscellaneous goods and services

3. CONTENTS OF THE PUBLICATION

Annual data were obtained by adding up detailed monthly expenditure and income items, calculated as an average per household member and rounded to whole CZK. Tables 2 and 3 providing annual averages per household or equivalency make an exception. All aggregate and also detailed items are calculated irrespective of each other directly from the primary data. Relative data are calculated from un-rounded means, the structure is given in % to the nearest tenth. Due to rounding the aggregate items in CZK do not always make a precise total of sub-items and the sum of % does not always have to equal 100 (total) either.

Detailed annual expenditure on food and non-alcoholic beverages is extrapolated because each household makes detailed records only for two months per year. Analysis of the primary data showed that records of food and non-alcoholic beverages consumption during remaining months when households recorded only aggregate sums were less precise and data on total expenditure on food and non-alcoholic beverages were thus overestimated. For this reason corrections were made to expenditure on food and non-alcoholic beverages using detailed records and results of previous years.

3.1 Parts of published tables

Parts "a" contain data on the number and composition of reporting households. The weighted number of households expresses the number of households corresponding to their actual proportion in the population and shows the share of individual types of household in results for „households, total". The number of sample households means the average number of respondents in the sample reduced with respect to the number of reported months per given year.

The number of equivalencies shows the composition of households calculated by weights of consumption of individual household members. The weights of equivalency according to the OECD scale have been defined as follows: first adult member of household = 1.0, every other adult member (person over 13) = 0.7, each child (aged 13 or less) = 0.5. Equivalency under the modified OECD scale is defined as follows: first adult member of household = 1.0, every other adult member (person above 13) = 0.5, each child (aged 13 or less) = 0.3.

These parts also include basic data on money incomes and expenditures, incomes and expenditures in kind and selected characteristics of household's housing situation (number and area of residential rooms, type of house, kind of dwelling, type of heating, etc.), which can be used for analysis of household expenditure on housing. Published data on housing expenditure are in compliance with the above method of calculation always grossed up to all persons of the given sub-sample of households. Hence the presentation of data without detailed explanation or without calculation based on the above housing characteristics may provide distorted picture of housing expenditure (e.g. rentals are calculated for all dwellings although the sample also includes dwellings in detached houses where the owner-occupier of the dwelling does not pay any rentals). The structure of households by type of house and kind of dwelling does not make the total of 100 % because the

published list is not exhaustive. Part "a" further includes household equipment with personal computers and mobile phones.

Parts **"b"** and **"c"** contain detailed consumption expenditure arranged into 12 basic divisions and subdivided into groups and sub-groups in compliance with the CZ-COICOP classification (respecting international standard adjusted to HBS). Tables are mostly supplemented by the consumption expenditure structure.

3.2 Published breakdowns

Table 1 – Households by activity status of the head of household

Households, total – since 2006, the HBS sample has included all types of household represented in the population. The structure of individual groups of household in selection for year 2016 didn't correspond with their percentage as measured by Living Conditions, but this disproportion was eliminated by weight adjustment. In the reference period the average reporting household is usually cca ten percent smaller than the average private household in the CR according to Living Conditions because record keeping in multimember or multigenerational households is time consuming and therefore these households are under-represented in the HBS sample.

Households of employees are households where the head of household is an employee and works on the basis of an employment contract or agreement. Working members of producer co-operatives (including agricultural), members of limited liability companies and limited partners of limited partnership companies who perform work for the company on the basis of an employment contract and collect remuneration, which is an income from dependent activity, are also considered as employees.

Households are broken down by educational attainment of the head of household: employees with lower level of education (persons with basic education, with occupational training, or persons with any kind of secondary education without *maturita* examination) and employees with higher level of education (persons who finished any kind of secondary education with *maturita* examination or persons with higher or university education).

Households of self-employed are households with the head of household performing an independent gainful activity on the basis of trade license or special provisions, members of joint ventures on the basis of agreement (limited liability companies, commercial companies) unless they perform for the company work on the basis of an employment contract, and, further, professionals (doctors, lawyers, tax advisors) and persons working for royalties (artists, interpreters).

Households of pensioners without economically active members are households with the head of household drawing any type of pension save for orphan's pension and does not work at all or his/her work activity is of a limited scope (i.e. income from work activity does not exceed CZK 55 200 per year); the condition of limited economic activity applies also to other household members.

Table 2 – Households by activity status of the head of household, annual averages per household

It is the same type of breakdown as in Table 1 but results are presented as annual **averages per household** in CZK.

Detailed expenditures ("b") is made brief in this table, mainly the expenditures are published which it makes sense to relate to the entire household.

Table 3 – Households by activity status of the head of household, annual averages per equivalency

It is the same type of breakdown of households as in tables 1 and 2 but results are presented as annual **averages per equivalency** in CZK. The equivalency as defined by the OECD (see point 3.1) was used for calculation of the average.

Table 4 – Households by municipality size and by tenure of dwelling

In the table two classifying aspects allowing assessment of relations between housing costs and municipality size or type of dwelling are applied. The part depending on municipality size is processed

for the whole HBS sample and the second part is not exhaustive because it does not cover households who live in their own residential building, free of charge at their relatives´ place or in tied dwelling.

A rental dwelling is used on the basis of a contract with the dwelling owner or can be sublet from the occupier.

Co-operative dwelling is used on the basis of membership in a co-operative established in accordance with the Act No. 89/1995 Sb. ("standard" housing co-operative) or on the basis of membership in a dwelling renters co-operative.

Owner-occupier dwellings are used on the basis of private ownership or co-ownership of a part of commonly owned rooms in a house according to the Dwelling ownership law.

Table 5 – Households by level of net money income per person (quintiles)

In this table households are broken down by level of income into quintiles. Households were arranged by net money income per person and then split into five groups of the same size. For these groups independent results were computed.

The line "Upper limit of net money income" in part "a" sets forth the top limit of annual net money income per person which defines individual quintile groups.

Table 6 – Households by cohesion region (NUTS 2)

Regional data on households by 8 cohesion regions (former areas) at level NUTS 2. Due to the size of the HBS sample representative data are not available at more detailed levels.

Table 7 – Households with dependent children by number of children and type of family

The **dependent child** is a child up to 26 years of age if he / she is permanently in schooling or training for his / her future occupation even if he / she has his / her own income (orphan pension, scholarship, social benefits, income from short-term work activities), and then a child who is unable to undergo such schooling or training due to his / her mental or physical state and has not been granted the disability pension yet.

The results pertain to households in which at least one dependent child was present at least half of the reporting period. Furthermore we publish data for a subset of households with dependent children, namely two-parent nuclear families with children (broken down by type of family and number of children).

Two-parent nuclear families with children are families of couples (married or cohabitating) with dependent children and no other persons or economically active members living in the household.

Lone-parent nuclear families are families of a single parent and dependent children (one or more); no other persons (relatives, economically active children) live in the household.

Household type was defined by predominant situation during the reporting period (the greatest number of month with the same characteristics), in the case of equality in the number of months, the variable was determined by situation as of the 31st December or the last day of the reporting period.

Table 8 – Households without dependent children by number of members

Working persons are persons, who were in a paid employment (employees) or in self-employment (own-account workers, family workers) all the year, or most of the year. The type of work activities, if they are permanent, temporary, seasonal, or occasional, is not decisive for persons to be classified to this category. The decisive factor is the persons have some type of a formal relation to their employment (including vacations, sick leaves, parental leaves, etc.). This category also includes persons who have regular income from employment or self-employment and are studying, receiving pension or parental benefits. On the contrary, persons, who were unemployed all the year, or most of the year, are not included.

Households with working persons and without children are split only into single person households and two-person households; this breakdown is not exhaustive because it does not cover households with three or more persons.

Households of pensioners without economically active members (definition is given in Table 1) and without children are split only into single person households and two-person households;

this breakdown is not exhaustive because it does not cover households of pensioners with three or more persons.

Table 9 – Households by age of the head of household

Households broken down into six groups by age of their head (definition of the head of household is given in point 1).

4. PUBLICATIONS AND PRODUCTS

Data on expenditure and consumption collected from reporting households of household budget statistics are released under thematic group 3 – Work and Social Statistics, subgroup 30 – Standard of Living. For 2016 there is only one publication output:

Expenditures and Consumption of Households Included in the Household Budget Survey in 2016 (both printed and electronic publication)

Annual results of the Household Budget Survey broken down by activity status and age of the head of household, municipality size, tenure of dwelling, by net money income per person, by cohesion region (NUTS 2), families with dependent children by type. Annual averages per capita – expenditure items in CZK, structure of expenditure in %, selected housing characteristics, major durables.