



# QUALITY REPORT FOR STATISTICAL SURVEY Household Budget Survey (HBS) For 2017

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# 0. Basic information

• Purpose, goal and subject of the survey

The goal of the Household Budget Survey is to obtain data on the amount and structure of household consumption expenditures.

The data obtained in the Survey are used to update and construct weights for the national consumer price index.

Furthermore, data on the structure of household consumption expenditure are used for the needs of the National Accounts Department, in the calculation of final household consumption, in the calculation of imputed housing rent and for the assessment of data on the grey economy.

Survey data are used in the preparation of analyses and studies on the living standard of the population, in measuring poverty, in the analysis of consumer habits of the population, etc.

Reference period

Calendar year

• Legal acts and other agreements

At the national level: Official Statistics Act (NN, Nos 103/03, 75/09, 59/12 and 12/13 – consolidated text), multi-annual Programme of Statistical Activities of the Republic of Croatia 2013 – 2017 and the Annual Implementation Plan of Statistical Activities of the Republic of Croatia 2017.

There is no legal basis at the European level, but the Survey is conducted on the basis of the Gentlemen's agreement between the Member States of the European Union and Eurostat. Eurostat prepares methodological recommendations for conducting the Survey and applying uniform definitions of variables and international classifications in order to make the survey data comparable at the level of EU Member States.

Classification system

Classification of Individual Consumption by Purpose adjusted to the needs of the Household Budget Survey

National Classification of Activities, 2007 version National Classification of Activities, 2010 version International Standard Classification of Education – ISCED 2011 Classification of Spatial Units for Statistics Code List of Countries

Concepts and definitions

The reporting unit for which data are collected and published is a household. Household is every family or other community of individuals who live together and spend their income together in order to meet the basic existential needs (accommodation, food, etc.).

Household consumption expenditures refer to financial and natural consumption of products and services used for meeting existential needs of household members. Consumption in cash means the purchase of goods and services in the country or abroad for the personal needs of the household. Consumption in kind refers to the value of agricultural food products and beverages produced by a household on its farm or in an enterprise and consumed for its own needs. The structure of the household consumption expenditures is observed according to the international classification COICOP, which classifies them into 12 main divisions: 01 Food and non-alcoholic beverages, 02 Alcoholic beverages and tobacco, 03 Clothing and footwear, 04 Housing and energy consumption, 05 Furnishings, 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. Each division is further broken down into groups, classes and categories.

A reference person is designated in each interviewed household. According to the methodology, it is a person who contributes the most to the household budget, that is, whose income is used for paying the majority of household expenditures. The socio-economic characteristics, activity status, sex, age and other characteristics of the reference person are used for the analysis and classification of households, for estimations of consumption expenditures and for the presentation of results. Therefore, the designation of the reference person is very important because his or hers characteristics are taken to represent the household as a whole. In this Survey, the reference person is the head of a household.

Statistical units

The reporting units for which data are collected and published are private households and their members.

Statistical population

The target population are private households. Household is every family or other community of individuals who live together and spend their income together in order to meet the basic existential needs (accommodation, food, etc.).

The survey does not cover collective or institutional households (such as retirement homes, hospitals for long-term treatment, prisons, military barracks, monasteries, etc.).

# 1. Relevance

# 1.1. Data users

Users from the Croatian Bureau of Statistics: Price Statistics Department, National Accounts Department

National users: scientific and research institutes, ministries, the media, legal entities and public.

International users: UN, ILO, other international institutions, scientific and research institutes, universities, etc.

## 1.1.1 User needs

Price Statistics Department: for creating and updating weights for the consumer price index

National Accounts Department: for the calculation of final household consumption, the calculation of imputed rent and for the assessment of data on the grey economy.

State authorities: for monitoring the economic and social living conditions of households, forming various measures in the field of economic and social policy.

Scientists: for preparing analyses and studies on the living standard of the population, measuring poverty, monitoring consumer habits, etc.

Eurostat: for monitoring the economic and social living conditions of households and the population of the EU Member States.

## 1.1.2 User satisfaction

The user satisfaction survey regarding the quality of data and the quality of services of the Croatian Bureau of Statistics was conducted in 2013 and 2015. The 2015 survey also contained the assessment of user satisfaction for the domain of household consumption and income. According to the results of this survey, of the total number of all data users of the Croatian Bureau of Statistics, 19.9% of them requested data from the domain of consumption and income (to which this survey belongs) and assessed their quality with a score of 3.5. Detailed results of the survey for 2015 are available at

http://www.dzs.hr/Hrv/international/Quality\_Report/Quality\_Report\_Documents/Quality\_Report\_Satisfaction\_Survey.pdf.

# 1.2. Completeness

The Survey is in line with the Eurostat's methodological recommendations and international standards and classifications, and covers all recommended variables.

## 1.2.1 Data completeness rate

Data completeness rate is 100%.

# 2. Accuracy and reliability

# 2.1. Sampling error

The sampling error shows the accuracy of estimating population parameters based on the sample.

As it is a random sample, the assessment of the accuracy of estimate is given in the form of coefficients of variation, standard errors and confidence intervals for the most important variables.

## 2.1.1 Sampling error indicators

Expenditure groups	Coefficient of variation
Consumption expenditure, total	2.4
Food and non-alcoholic beverages	2.2
Alcoholic beverages and tobacco	5.2
Clothing and footwear	4.6
Housing and energy consumption	1.8
Furnishings, household equipment and routine household maintenance	4.6
Health	6.4
Transport	6.2
Communication	2.7
Recreation and culture	4.3
Education	11.0
Restaurants and hotels	6.4
Miscellaneous goods and services	3.4

%

# 2.1.2 Bias in sample selection process

The indicator for this survey is not applicable.

# 2.2. Non-sampling error

Non-sampling errors include all other errors not related to the sample selection, such as the coverage error, the measurement error, the data processing error and the non-response error.

# 2.2.1 Coverage error

Coverage errors occur due to deviation from the sample selection frame. The sample frame used for the selection of dwellings occupied by private households for the survey in 2017 was based on the data from the Census of Population, Households and Dwellings 2011. The rate of valid units (occupied dwellings) for the 2017 HBS was 85.6%.

# 2.2.2 Over-coverage rate

The over-coverage rate is the share of units that do not belong to the target population, which amounted to 14.4% in 2017. In the case of HBS, it represents the share of units selected into the sample, for which it was determined after the fieldwork that they did not exist or that they were not occupied or that the dwelling was no longer intended for permanent residence (business premises, summer houses etc.).

# 2.2.3 Measurement errors

Measurement errors are all errors that may occur during the fieldwork data collection or entry of data into the software application. Those errors can be minimised by properly defining the Survey questionnaire, regular training of interviewers, implementing an adequate data collection method as well as by checking collected data during and after the field work. The control of the collected survey data includes detailed data editing, checks of values according to defined ranges, checks of minimal and maximal values, logical checks between individual answers, etc.

## 2.2.4 Non-response error

Non-response errors show the number of statistical units that did not respond to the questionnaire, that is, data on the number of households that did not accept participation in the Survey. In 2017, the non-response rate at the household level was 62%.

#### 2.2.5 Unit non-response rate

#### Unweighted non-response rate:

Coverage	Value of coverage	Non-response rate
Croatia	Croatia	62
County	Zagreb	63
County	Krapina-Zagorje	23
County	Sisak-Moslavina	50
County	Karlovac	64
County	Varaždin	24
County	Koprivnica-Križevci	35
County	Bjelovar-Bilogora	54
County	Primorje-Gorski kotar	76
County	Lika-Senj	26
County	Virovitica-Podravina	48
County	Požega-Slavonia	80
County	Slavonski Brod-Posavina	54
County	Zadar	61
County	Osijek-Baranja	60
County	Šibenik-Knin	77
County	Vukovar- Sirmium	47
County	Split-Dalmatia	70
County	Istria	74
County	Dubrovnik-Neretva	74
County	Međimurje	69
County	City of Zagreb	69

#### 2.2.6 Item non-response rate

The indicator for this survey is not computed.

#### 2.2.7 Processing errors

During the data processing, a detailed verification of all responses is performed, such as, verification of all expenditure items, checks of values by ranges, checks of possible answers, logical data checks on economic activity, activity codes and occupation codes, educational status etc.

#### 2.2.8 Imputation rate

The indicator for this survey is not computed.

### 2.2.9 Editing rate

The indicator for this survey is not computed.

# 2.2.10 Hit rate

The indicator for this survey is not computed.

%

## 2.2.11 Model assumption error

The indicator for this survey is not applicable.

### 2.3. Data revision

### 2.3.1 Data revision - policy

The users of statistical data are informed about data revisions (e.g. provisional data, final data) on the website of the Croatian Bureau of Statistics <u>www.dzs.hr</u>.

### 2.3.2 Data revision - practice

There is no publication of the provisional data for HBS; therefore, there are no data revisions.

2.3.3 Data revision - average size

The indicator for this survey is not applicable.

## 2.4. Seasonal adjustment

Not applied.

# 3. Timeliness and punctuality

## 3.1. Timeliness

3.1.1 Time lag – first results

Time lag – first results is T + 15 months.

3.1.2 Time lag - final results

Time lag – final results is T + 15 months.

## 3.2. Punctuality

3.2.1 Punctuality – delivery and publication

Delivery and publication is 1.

## 4. Accessibility and clarity

Data and notes on methodology are available in electronic and printed form.

#### 4.1. News release

First Releases "Basic Characteristics of Household Consumption"

# 4.2. Other publications

Statistical Reports "Results of Household Budget Survey" Statistical Yearbook Statistical Information

# 4.3. Online database

Not available.

# 4.4. Micro-data access

The conditions under which certain users can access microdata are regulated by the Ordinance on the Conditions and Manner of Using Confidential Statistical Data for Scientific Purposes (NN, No. 137/13).

# 4.5. Documentation on methodology

The basic notes on methodology are a part every First Release and Statistical Report. More detailed notes on methodology of these surveys are published in the methodological handbook for the Household Budget Survey, available on the website of the Croatian Bureau of Statistics <u>www.dzs.hr</u> at https://www.dzs.hr/Hrv/publication/metodologije/metod 72.pdf.

Eurostat's methodological documentation is available at http://ec.europa.eu/eurostat/web/household-budget-surveys.

# 5. Comparability

## 5.1. Asymmetry for mirror flows statistics

The indicator for this survey is not applicable.

## 5.2. Comparability over time

5.2.1 Length of comparable time series

Length of comparable time series is 16.

## 5.2.2 Reasons for break in time series

Due to the change in the periodicity of data collection from annual to multi-annual, data are available for the years from 1998 to 2011, and then for 2014 and 2017.

Survey data for 2017 are not fully comparable with data from previous survey years due to a more detailed breakdown of individual items of expenditure in the survey questionnaire for 2017 and changes in the method of data collection (until 2014, data were collected by printed survey questionnaires and diaries, and in 2017, they were replaced by a combined method of data collection - electronic questionnaire and a printed diary).

# 6. Coherence

# 6.1. Coherence – short-term and structural data

The indicator for this survey is not applicable.

## 6.2. Coherence – national accounts

The indicator for this survey is not computed.

## 6.3. Coherence – administrative sources

The indicator for this survey is not applicable.

# 7. Cost and burden

### 7.1. Cost

The costs of field data collection amounted to about 280 000 kuna, which referred to the costs of external interviewers hired under contractual basis. This amount does not include the costs of interviewers who are the employees of the Croatian Bureau of Statistics, nor the costs of methodological and technical preparation of the survey, training of interviewers, processing and publication of data.

The households that participated in the survey and kept the diary received a small money incentive. These costs amounted to about 138 000 kuna.

## 7.2. Burden

The collection of survey data was conducted by a combination of two methods: interviewing, performed by the interviewer using a laptop and self-recording of data in a diary by the respondent.

The interview conducted by the interviewer collected data on the demographic and socioeconomic characteristics of household members, detailed data on the amount and structure of expenditure by purpose and data on housing conditions. The interview lasted an average of 45 minutes per household.

The diary collected data on daily household expenditure on food, beverages, tobacco and consumer goods (such as newspapers and magazines, personal hygiene products and regular cleaning products). Households kept the diary for a period of fourteen days.

Given the extensive and very detailed questions in the interview as well as the household's obligation to record daily expenses, participation in the Survey was a heavy burden and extremely demanding for households.