



Quality Reports Structure (ESQRS)

Compiling agency: Statistical Service of Cyprus (CYSTAT)

Eurostat metadata
Reference metadata
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3. Statistical processing
4. Quality management
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Related Metadata
Annexes (including footnotes)

For any question on data and metadata, please contact: <u>EUROPEAN STATISTICAL DATA</u> <u>SUPPORT</u>

1. Contact	<u>Top</u>
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2. Statistical presentation

2.1. Data description

The main focus of the Household Budget Survey (HBS) is Consumption Expenditure, though Household Characteristics and to some extent Income, are also covered. HBS micro-data can be used to measure economic well-being.

1. Title of the survey

Household Budget Survey

2. Title of the survey at a National level

Household Budget Survey 2015 / 2016

3. Year of the survey

July 2015 - June 2016

4. General comments about the survey

The principal aim of the survey is to obtain detailed information on the household consumption expenditure in order to update the weights of the goods and services included in the basket of goods and services, used in the calculation of the Consumer Price Index. Furthermore, the survey data is used to provide an independent source of information for the evaluation and improvement of the figures on private consumption expenditure for the national accounts system, to provide an analysis of the level and distribution of household income with a breakdown by source of income and various socio-economic and demographic groups and to compile various socio-economic indicators of the standard of living of the population, such as, possession of cars and household durables.

The survey is conducted under the provisions of the Statistics Law No. 15(I)/2000.

2.2. Classification system

Name	Version Used			
COICOP	2013			
NUTS	2013			
ISCED	2011			
ISCO	08			
NACE	Revision 2			
Other	ISO 3166			
2.3. Coverage - sector				
Households.				
2.4. Statistical concepts and definitions				
1. Consumption expenditure				

For the purpose of measuring living conditions the essential reference for the HBS is the concept of household consumption expenditure, that is, the expenditure incurred by private households on individual consumption goods and services.

For further details concerning Consumption Expenditure, the reader is referred to the HBS methodology:

(http://ec.europa.eu/eurostat/cache/metadata/Annexes/hbs_esms_an1.pdf)

Consumption Expenditure approaches applied

Actual final consumption	Final consumption
X	x

2. Income

Income components reported						
Income in kind from employment	Income in kind from non-salaried activities	Imputed rent	Monetary net income	Total net income		
x	Х	Х	Х	Х		

3. Inputed rent

N	Method applied to calculate Imputed Rent						
	Self- assessment	Stratification	Log-linear regression	Heckman regression	User cost	Other (indicate)	
	Х						

Variables used

4. Other definitions, explanations, comments

2.5. Statistical unit

The basic unit of data collection and analysis in an HBS is the household. A household is a social unit which meets one or more conditions of "living together" in addition to sharing a common accommodation.

1. Definition of Household used:

Household defined as persons sharing							
Accommodation	Expenditure	Income	Family or emotional ties				
х	x						
Other							
make common provi	sion for food or oth	ner essentials	for living				

Usually resident, related to other member s	Usually resident, not related to other member s	Residen t border, tenant	Visito r	Live-in domesti c servant, au pair	Resident , absent from dwelling in the short- term	Children in househol d in education away from home	Long- term absence with househol d ties: working away from home	Temporar y absence with household ties: in hospital, nursing home or other institution
Х	X			х	х	Х		X
Other								
A memb	er with "lo	ong-term	absence	with house	schold ties	" was inclu	ded in the	household
	e househo	0				was moru		nousenoid
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3.1. Source data

Main sampling c	haracteristics	
Ultimate	Private Household	X
sampling unit	Other	
Probability sampling	X	
Other type of sampling scheme		
Number of sampling stages	The households were stratified by district and urban/rural region. In strata were used. The sampling design used was one-stage stratifica the four urban strata and two-stage sampling for the five rural strata	tion for
Stratification criteria	The households were stratified by district and urban/rural region. In strata were used. The sampling design used was one-stage stratifica the four urban strata and two-stage sampling for the five rural strata For the four urban strata, simple random sampling was used for sele households (which are the primary sampling unit). For the five rural areas, villages are the primary sampling unit households are the secondary sampling units. The sample was as follows: Neighbouring villages with a small number of hou were merged in order to create complexes with a minimum nu households. The sample of villages / complexes was selected probability proportional to the size of the village / complex (P Then, a simple random sample of households is selected from village / complex.	tion for ecting the s, while selected seholds umber of with PS).
Over-sampling of special domains	Over-sampling was not used for the Cyprus HBS 2015/2016. entire population was sampled uniformly.	The
Sampling frame	The list of households from the 2011 Census of Population and supplementary list of newly constructed housing units (build be 2012 and 2014). The Electricity Authority of Cyprus (E.A.C.) the Statistical Service of Cyprus the list of all the new domest electricity consumers, i.e. a list which contained all the new connections of electricity between 2012 and 2014. The E.A.C distinguishes domestic consumers from other consumers (e.g. etc.) and it has been established that each domestic electricity registered by the E.A.C. corresponds to the statistical definition housing unit. Therefore, each of these new electricity meter connections represented one new household.	between provided ic industrial consumer
Description		
3.2. Frequency of a	lata collection	
Every five years		
3.3. Data collection	1	

1. Reference year	
2015 / 2016	
2. Survey instruments	
Diaries	
Traditional paper	х
Computer-based Diary	
Web-Diary	
Cash Register Receipts	
Receipt Scanner	
Metadata from Customer loyalty cards?	
Other (e.g. Administrative Data)	

Recording unit

Household

Household Member

Recording period

Fourteen days for completing the daily expenditure of each household in the diary.

Х

х

Items covered in the diaries

Everything that was purchased or produced by the household, during the fourteen day period, and is included in COICOP.

Instrument	A questionnaire was completed using the CAPI method.
Recording unit	The reference person gave all the information for the main part of the questionnaire. Usually two interviews were held during the recording period. In the first interview mostly background characteristics were covered, while in the second interview expenditure and income questions were covered.
Items covered	All expenditure of the household, which are included in COICOP for given periods of time, as well as background characteristics of the household and income questions. For each item the way of its acquisition was recorded.

5. National Questionnaire

The national questionnaire is available on the CYSTAT website through the following link: <u>http://www.mof.gov.cy/mof/cystat/statistics.nsf/All/84BEE41E44415EFAC2257F460</u> <u>04C98B1/\$file/HOUSEHOLD_BUDGET_SURVEY-2015-EN-</u> <u>260116.pdf?OpenElement</u>

3.4. Data validation

Basic Data validation workflow

As the method for data collection for the main questionnaire was CAPI, the data was entered directly in electronic form at the interviewer's laptop using the BLAISE software. Validation of specific questions was possible during the data collection due to the fact that the electronic questionnaire facilitated the inclusion of validation and consistency checks. After the data was collected, it was then transferred to the supervisor's laptop for checking and for coding the questions which were not pre-coded (Citizenship, Birthplace, Occupation, Economic Activity etc.). The supervisors also performed further checks for any deficiencies or logical inconsistencies. The edited data from the supervisors was randomly rechecked by the Statistics Officers and then saved in the dataset in BLAISE format. After the end of the data collection, the data was exported in ASCII files (which were converted in Excel files) and were later imported in the Statistical Package SAS. All the necessary variables were constructed according to the recommendations and requirements of EUROSTAT. Additional consistency checks were performed using SAS software, as well as the final analysis of the data, including the calculation and assignment of the weights.

As far as the diaries is concerned the subsequent procedure was charted: as soon as the diaries were collected from the households, the interviewers made sure that all the receipts and items were included and checked that the dates were correct. The supervisors checked in detail each diary and contacted the household when needed. Afterwards, people who were specially trained for this job, the coders, started coding all the items of each diary. After each diary was coded, the Statistics Officers involved in the survey, randomly checked that the codes were inserted correctly and that specific items were in relevance to the electronic questionnaire and not recorded twice. Then, all the items recorded in each paper coded diary, were entered in a database using the MS Office Access software, in which specific consistency checks were further inserted.

3.5. Data compilation

1. Calculation of the household design weights

Please see attached document "HBS1516_CY_Design weights"

2. Weight adjustments for non-response at household level

Please see attached document "HBS1516_CY_Design weights"

3. Any other weight adjustments

None

Annexes:

Information on the calculation of the design weights

3.6. Adjustment

Weight adjustments to external data sources (calibration)

Calibration was carried out at personal level using the variables age and sex, as well as the number of households within each stratum.

4. Quality management

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4.1. Quality assurance

The quality of statistics in CYSTAT is managed in the framework of the European Statistics Code of Practice which sets the standards for developing, producing and disseminating European Statistics as well as the ESS Quality Assurance Framework (QAF). CYSTAT endorses the Quality Declaration of the European Statistical System. In addition, CYSTAT is guided by the requirements provided for in Article 12 of the Statistics Law No. 15(I) of 2000 as well as Article 12 of Regulation (EC) No 223/2009 on European statistics, which sets out the quality criteria to be applied in the development, production and dissemination of European statistics. Additionally, all the interviewers, coders and supervisors were trained for 2 weeks and all the questions and answers were explained in detail. Throughout the data collection phase the interviewers visited once a week their supervisors at the office for checking their progress and quality of their work, as well as for delivering the completed questionnaires. Supervisors made call-backs to the households, and checked randomly some of the answers given, as well as, made clarifications where needed. The coders were in daily contact with the supervisors, as well as the Statistics Officers, in order to solve questions concerning the codification of each item in the diaries.

Links to all of the above documents can be found at the following sites:

• European Statistics Code of Practice:

https://ec.europa.eu/eurostat/documents/4031688/8971242/KS-02-18-142-EN-N.pdf/e7f85f07-91db-4312-8118-f729c75878c7

• ESS Quality Assurance Framework (QAF):

http://ec.europa.eu/eurostat/documents/64157/4392716/ESS-QAF-V1-2final.pdf/bbf5970c-1adf-46c8-afc3-58ce177a0646

• Quality Declaration of the European Statistical System:

http://ec.europa.eu/eurostat/documents/4031688/8188985/KS0217428ENN_corr.pdf/116f7c85cd3e-4bff-b695-4a8e71385fd4

• Statistics Law No. 15(I) of 2000:

http://www.mof.gov.cy/mof/cystat/statistics.nsf/legislation_en/legislation_en?OpenDocument

• Regulation (EC) No 223/2009 on European statistics (consolidated text):

http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:02009R0223-20150608&qid=1504858409240&from=EN

4.2. Quality management - assessment

The main strengths of the survey were:

- The validation and consistency checks that were incorporated in the electronic questionnaire, secured the minimisation of field work errors.
- The fact that interviews were face-to face helped reduce non-response.
- The data collection phase was closely monitored and checked, while the post checking and coding were performed by a well-trained team.
- Call-backs were systematically made to respondents for clarifications and verification purposes.
- Once the ASCII data were extracted from Blaise, additional consistency and validation checks were performed.
- It was possible to cross-check some of the data with data from administrative sources.
- Any problems encountered during the survey were reported to senior management and actions aiming at improving the quality of the survey were proposed and implemented.

The weaknesses of the survey were:

- In some cases, the long reference periods may have resulted in recall errors.
- The size of the questionnaire as well as the fact that the households had to keep track of their daily expenses for fourteen days.

5. Relevance

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5.1. Relevance - User Needs

The main users of the HBS data are:

- Government departments, ministries and public administrations that use the data for economic and social policy planning purposes.
- Academic and research organizations (e.g. University of Cyprus), which use the data for research on living conditions of private households.
- Private firms, which usually analyze consumption patterns of households in order to promote the marketing of specific products.
- Trade unions.
- International bodies, which use the data for comparability purposes with other countries.

• The general public, which is informed on household living conditions in Cyprus through CyStat's publications or the Eurostat website.

5.2. Relevance - User Satisfaction

Since 2008 (with the exception of 2010 and 2013) CYSTAT carries out an annual online "Users Satisfaction Survey". The results of the surveys are available on CYSTAT's website at the link attached below.

Overall, the users of statistical data published by CYSTAT are satisfied.

Results of CYSTAT's User Satisfaction Surveys:

http://www.mof.gov.cy/mof/cystat/statistics.nsf/dmlquality_en/dmlquality_en?OpenDocu ment.

5.3. Completeness

Variable Name	Label	Delivered
HE00	TOTAL CONSUMPTION EXPENDITURE	x
HE01	FOOD AND NON-ALCOHOLIC BEVERAGES	X
HE02	ALCOHOLIC BEVERAGES_ TOBACCO AND NARCOTICS	х
HE03	CLOTHING AND FOOTWEAR	X
HE04	HOUSING_WATER_ELECTRICITY_GAS AND OTHER FUELS	X
HE042	Imputed Rents for housing	X
HE05	FURNISHINGS_ HOUSEHOLD EQUIPMENT AND ROUTINE HOUSEHOLD MAINTENANCE	x
HE06	HEALTH	X
<i>HE07</i>	TRANSPORT	x
HE08	COMMUNICATION	x
HE09	RECREATION AND CULTURE	x
HE10	EDUCATION	x
HE11	RESTAURANTS AND HOTELS	x
HE12	MISCELLANEOUS GOODS AND SERVICES	x
HH099	Net Income	X
HH032	Imputed rent (as Income)	x
HI11	Main Income Source	x
HI12	Main Income Source Primary/Secondary	x
HA09	Population Density-Level	x
HB05	Household Size	x
HB061	Equiv. OECD Household Size	x
HB062	Modified OECD Equiv. Household Size	X

HB074	Household Type			x
HB075	Household Type 2			
HC04	Age in completed years of the Reference Person.			x
HC23	Socio-Econ. Situation of th	e Reference Person		X
HC24	Socio-Econ. Situation of the Reference Person (Aggregated Classification)			
HD20	No. of Household members economically active			x
HQ*	Quantities Consumed variables			X
HJ00	Total consumption expendi	ture effected abroad		
HJ90	Consumption expenditure on travelling and holidays abroad			
5.3.1. Data	a completeness - rate			
Groups of HBS 2015 variables		Total number of Variables per sub-group	Number of deliver Variables per sub-group	ed %
Basic variable	es at household level	1	1	
[HA] Identification, weighting, demographic characteristics		7	7	100
[HC] Reference Person variables		6	6	100
[HH] Income		5	5	100
[HI]Main source of the household's income		2	2	100
[HE] Household's consumption expenditure		475	454	95.58
[HJ]Cross border consumption expenditure		14	0	0
[HQ] Household's consumption in Quantities		87	71	81.61
Derived varia	bles at household level			
[HB] Household size and Type		14	13	92.86
[HD] Activity		1	1	100
Basic and de	rived variables at househ	old level		
[MA] Identification, weighting, demographic characteristics		2	2	100
[MB] Basic demographic characteristics		8	8	100
[MC] Education		2	2	100
[ME] Activity		2	2	100
[ME] Activity		7	7	100

6. Accuracy and reliability

6.1. Accuracy - overall

Like in any sample survey, the statistics generated from the HBS data may be liable to errors which are inherent in the survey method used. Usually, a sample of households is selected in a way that the probability of a household being selected is known. In this way, the results can be reliably projected from the sample to the household reference population with known levels of precision, i.e. standard errors and confidence intervals for survey estimates can be constructed.

631

578

The HBS data are weighted. Sample weights are needed to correct for imperfections in the sample that might lead to bias and also to rectify other departures between the sample and the reference population. The design weights are calculated for each sampled household as the inverse of its probability of selection as part of the sample.

6.2. Sampling error

The size of the sampling error depends on the sample size: the higher the sample size, the higher the accuracy. In the past, in comparison to other EU household surveys, e.g. Labour Force Survey (LFS) or Statistics on Income and Living Conditions (EU-SILC), the HBS sample sizes attained have been rather low. Furthermore, the effective sample size can be even smaller as a result of the way the sample has been designed.

6.2.1. Sampling error - indicators

1. Achieved sample size

2.876

Eurostat will calculate the Effective Sample Size, Deff and estimate the Variance, as well as calculate the structure of household consumption expenditure and Confidence Interval for all the Countries that deliver 2015 HBS micro-data, using the same method as for the 2005 and 2010 waves, to ensure comparability of these data between countries.

Another key HBS indicator is the structure of household consumption expenditure: this is the distribution of the total mean expenditure between the different 2-digit COICOP groups. This indicator is essential to examine how households split their expenditures among the COICOP categories, and to monitor how the structure can be affected over time by price changes.

2. Comments on Sampling errors and measures to reduce them

A good measure for reducing the sampling error would be the use of an updated sampling frame.

6.3. Non-sampling error

Non-sampling errors are basically of 4 types: coverage errors, measurement errors, processing errors and non-response errors. More details on each type of error can be found in the subsequent paragraphs.

6.3.1. Coverage error

Even though the amount of coverage errors was reduced, since the sampling frame used was the 2011 Census of Population list, as well as, the list of the newly constructed housing units (i.e.

91.6

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units which were built after 2011 and up to 2014), as obtained from the list of domestic electricity consumers of the Electricity Authority of Cyprus, there were still some coverage errors. Following, is a list of the coverage errors encountered:

a) The frame of the 2011 Census of Population was somehow outdated and as a result some housing units were found to be empty or to be used for other purposes other than housing.

b) Some houses included in the E.A.C list were used as secondary residence, so they were out of scope for the survey.

c) Some houses listed by the E.A.C were impossible to be located due to incomplete information regarding their address.

d) Housing units built after September 2014, were not included in our sampling frame.

6.3.1.1. Over-coverage - rate

Not applicable.

6.3.1.2. Common units - proportion

Not applicable.

6.3.2. Measurement error

Possible sources of measurement errors are the questionnaire (design, content and wording), the method of data collection, the diaries, the interviewers and the respondents.

The questionnaire

The questionnaire for 2015 HBS was developed using Eurostat's methodological guide. The basis for the 2015 HBS questionnaire was the 2009 HBS questionnaire, which was also based on Eurostat's guidelines. The structure of the questions remained quite similar to the one used for the 2009 questionnaire, although new questions were added and some of the existing questions were modified. After the questionnaire was completed, the cohesion of the questionnaire referred to different time periods, i.e. some had a reference period of 1 month, some of 3 months and some of 12 months, in order to minimize memory lapses of the respondent. In addition, for expenditure / income questions, with a reference period more than a quarter of a year, a reminder by the interviewer was often made of all the services applicable during that period, something that proved useful. Furthermore, in order to minimize memory lapse problems respondents were asked to prepare pay slips, utility bills and all other documents that could have been helpful in completing the questionnaire. However, there were still some questions which were difficult to be answered with precision, as well as questions where items were understated (e.g. income from interest, dividends and shares).

Data collection

As the method of data collection was Computer Assisted Personal Interviews (CAPI), many validation and consistency checks were implemented during the interview. This had a positive impact on the quality of the data collected. Furthermore, problems usually accounted to the routing of the questionnaire were fully avoided and during the recording of the interview, basic validation and consistency checks were carried out and skips of questions were done automatically, thus giving the interviewer the opportunity to save time and follow the correct flow of the questionnaire. For the design of the electronic questionnaire, the collaboration of the Officers involved in the HBS with an Officer from the IT Unit of CyStat was necessary. The program was prepared in the environment of BLAISE, a long time before the initiation of the HBS in order to have significant time to test it. The program was tested for any possible mistakes, especially as far as routing was concerned.

The interviewers

The interviewers had to perform a crucial task during the survey, since the success of the survey was based on the accuracy of the collected data. Great effort was made for the interviewers' best selection as well as for their training. The personnel participating in the 2015 HBS was experienced in Household Surveys – some had even worked for previous HBS. In order to reduce the interviewer effects, a two-week training session was organized by the Officers involved in the HBS. The aim of the training was to ensure that the interviewers were uniformly trained as regards the content of the questionnaire as well as their behavior during the interview. During the training, it was repeatedly pointed out that the success of the survey depended on the cooperation of the households, and for this, they had to be as friendly as possible in order to avoid refusals and to try to get as clear and accurate answers as possible.

During the first week, the training mainly focused on the understanding of the questionnaire and the terminology used in it. A lot of emphasis was also given on the different definitions used. In order to avoid possible mistakes, the interviewers were given a manual that was as detailed as possible, containing numerous examples. Apart from the very detailed notes on how each question had to be treated, it contained general information about the survey including the objectives, the coverage and the organization, as well as very important guidelines on how the household would be contacted, located and approached.

During the second week, the interviewers were introduced to the electronic questionnaire in the environment of BLAISE. They had intensive sessions on working with their laptops and by the end of the training, they became familiar and confident with the use of the electronic questionnaire. This was very important, because despite the fact that the interviewers had experience in household surveys (and some even worked for previous HBS), some of them had no past experience in electronic questionnaires.

Apart from the completion of the questionnaire, the interviewers were responsible for assisting the household in the completion of the daily diaries, that a household member aged 15 and over had to complete for 14 successive days. The interviewers were instructed to visit the household 3-4 times during the period of the interview, to fill in the questionnaire and to assist in the updating of the diary. It is believed however, that in most cases the interviewers were able to visit the households only twice as the households were not happy to be interrupted by the interviewer more than that. This had an impact on the diaries as some of them were not updated and were left incomplete.

<u>The respondents</u>

Households were more reluctant in participating in the 2015 HBS than they were in participating in the previous HBS. It is believed that the reason for this is the fact that Cyprus is a small country with a limited number of private households and a lot of surveys being conducted at the same time (surveys are carried out by Government Departments and private firms), therefore resulting to households being repeatedly chosen to participate in these surveys. Even though, according to the Statistics Law No. 15(I)/2000, all households selected in the sample are obligated to cooperate, the Statistical Service decided that for this survey they would not pursue the households that were not cooperating, since the most effective data collection depended solely on the household's cooperation. However, the involved Officers went to great lengths in persuading the households which refused to cooperate and finally managed to achieve a low percentage of refusals.

It is also believed that income was underestimated, in cases where the respondents were either employers or self-employed persons. The employers and the self-employed persons were the least cooperative and the reason being that CyStat is part of the Ministry of Finance and its activities are wrongly related to the activities of the Inland Revenue Department. Although the interviewers were instructed to clear this issue, people remained reluctant in stating their income.

<u>The diaries</u>

Another non-sampling error resulted from the daily diaries that had to be completed separately by all members of the household aged 15 and over. It was noticed that in practice only one diary was completed for the whole household, due to the unwillingness of the household members to fill in their own personal diary. The completion of the diary was mainly the responsibility of the housewife and as a result the expenses of some members of the households were not recorded, especially expenses made by the children of the family. In addition, there were cases when the expenditure was provided, but the quantities were missing. In such cases, where it was possible, the people that were responsible for the codification of the diaries had to make imputations or contact the household or the shops/supermarkets if there was a receipt. The people responsible for the codification of the diaries the best possible results.

<u>Quality control</u>

Apart from the 14 interviewers, the training session was attended by 3 supervisors. Each one of them was responsible for a group of 3-4 interviewers. During the fieldwork, supervisors had meetings with each one of the interviewers once a week. During these meetings, apart from discussing problems or questions raised during the week the supervisors also collected (from the interviewers' laptops) all completed questionnaires. Their main duty during the data collection period was to examine the interviewers' work and refer back to them for inconsistencies or for problems identified in connection with terminology. Furthermore, the supervisors had to double check some of the answers with respondents by telephone, especially in the case of unusual answers or missing data.

6.3.3. Non response error

1. Reasons for non-response

Reasons for non-response in the HBS in Cyprus are the following: refusal of the households selected in the sample to cooperate, members of the household selected may be absent for a long period of time, the dwelling might not be located with the information stated in the sample or the household may be unable to respond due to other reasons (such as health issues or language barrier etc.).

2. Achieved Household response rates (%)

74.41%

3. Efforts to reduce non-response

In order to reduce the error of non-response due to the refusal of the respondents to cooperate, the involved Officers went to great lengths in persuading them. In the cases where the household was absent for a long period of time or was not responding due to other issues, then towards the end of the data collection, interviewers were instructed to visit all the cases which might have cooperated if the time period was different. It can be stated that some of the households actually respondent this time!

4. Use of substitute Households to replace non-responding households				
Gross sample size	4.500			
Number of eligible units	3.865			
Number of units successfully contacted –	3.865			

BEFORE SUBSTITUTION	
Number of units successfully contacted – AFTER SUBSTITUTION	3.865
Number of responding households – BEFORE SUBSTITUTION	2.876
Number of responding households – AFTER SUBSTITUTION	2.876
Response rate before substitution	74.41%
Response rate after substitution	74.41%

5. Comments regarding non-response errors

- The households were aware of the survey through an informing letter sent to them in advance by post.
- The fact that interviews were face-to face helped reduce non-response.
- Call-backs were systematically made to respondents for clarifications and verification purposes.
- The minimum number of visits in order to contact the people was three, but in several cases the interviewers overcame that number.

6.3.3.1. Unit non-response - rate

Comments regarding unit non-response rate

The unit non-response rate was calculated by adding the total number of units which did not respond (989) and then dividing this number with the total number of units successfully contacted (3.865). Please note that the non-response rate was based on the number of households which did not respond and not on the number of households which completed the main questionnaire, but not the diary. For the households which did not complete the diary, an imputation was conducted based on the socio-economic characteristics of the household. Therefore, the unit non-response rate was estimated at 25.29%.

<u>Eligible households:</u>

Households which refused to cooperate: 626

Households absent for a long period of time: 149

Households not located: 31

Households which did not respond due to other reasons (such as illness, grieve, language barrier etc.): 183

<u>Non-eligible households:</u>

The dwelling has been destroyed: 12

The dwelling was empty: 521

The household was temporarily occupied by people who had their main residence elsewhere: 73

The household was used for other purposes: 29

6.3.3.2. Item non-response - rate

Comments regarding item non-response rate

Not applicable

6.3.4. Processing error

Comments regarding Processing Error

Checking errors

During the survey, the interviewers were under the continuous supervision of their supervisors, as well as of the responsible Statistics Officers in charge of the HBS in order to keep errors to a minimum. The use of CAPI and the implementation of validation and consistency checks proved to be a great advantage as regards keeping errors to a minimum.

The questionnaires were checked in three stages in regards to completeness, logical consistency of the data and correct data entry. When possible, data was correlated with data of other households in the same geographical region, in order to verify the correctness of the answers. In case of any enquiries coming up, the interviewers were firstly contacted. If the interviewers were not in a position to solve the enquiry or give clarifications, then either the interviewers were instructed to contact the household or the supervisors conducted the household themselves.

At the first stage, the interviewers checked the completed questionnaires for errors before handing their work over to their supervisors. At the second stage, the Statistics Officers who were responsible for supervising the survey, performed the necessary checks. At this point, a new program was used in the computerized system, which calculated the different expenses of the household, as well as the income from the different sources, making it easier for mistakes to be identified. At the third stage, the Officers in charge of the HBS conducted the final checks on the corrected questionnaires.

Codification

The code used for the HBS was Eurostat's COICOP (Classification of Individual Consumption by Purpose) nomenclature. Due to the fact that the weights obtained from each COICOP category are used in the calculation of the Consumer Price Index, the COICOP was further elaborated in collaboration with Officers of the Statistical Service Unit responsible for the Consumer Price Index. In addition to COICOP, occupation and economic activity had to be codified; for the codification of questions relating to occupation, ISCO-08 was used (2-digit codification), while the codification system NACE Rev.2 (2-digit codification) was used for the codification of the economic activity of the local unit. In both cases a drop-down list was used, helping to keep errors to a minimum.

It is worth noting, that people responsible for carrying out the codification were carefully selected (most of them were experienced personnel who worked in other surveys) and had received a 5-day training.

6.3.4.1. Imputation - rate

Percentage of imputed values of all possible values

As it was mentioned in point 6.3.3.1, an imputation was carried out only for the households which completed the main questionnaire, but not the diary. For these households an imputation was performed for the diaries, based on the socio-economic characteristics of the household.

6.3.5. Model assumption error

Not applicable.

6.4. Seasonal adjustment

Not applicable.

6.5. Data revision - policy

Comments regarding Data Revision Policy

A data revision policy is in place at CYSTAT. It is published on CYSTAT's website, at the following link:

http://www.mof.gov.cy/mof/cystat/statistics.nsf/dissemination_en/dissemination_en?OpenDocum ent

CYSTAT also publishes a list of scheduled revisions (regular or major revisions), also published on its website, at the following link:

http://www.mof.gov.cy/mof/cystat/statistics.nsf/releasecalendar_en/releasecalendar_en?O penDocument

6.6. Data revision - practice

Comments regarding Data Revision Practice

6.6.1. Data revision - average size

Not applicable.

7. Timeliness and punctuality

7.1. Timeliness

Data Collection Year

July 2015 – June 2016

7.1.1. Time lag - first result

Time lag for the first published results, in terms of months

15 months

7.1.2. Time lag - final result

Time lag for the final published results, in terms of months

15 months

7.2. Punctuality

The number of months between the actual delivery of the data to Eurostat and the announced date for delivery

NA

7.2.1. Punctuality - delivery and publication

Not applicable.

8. Coherence and comparability

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Data Published Year
2017

8.1. Comparability - geographical

Comments regarding geographical comparability

For the 2015/2016 HBS, Cyprus has used the EUROSTAT COICOP – HBS classification system for breaking down household final consumption expenditure. Therefore, no problems should appear in the comparability of final consumption expenditure with other EU countries.

8.1.1. Asymmetry for mirror flow statistics - coefficient

Not applicable.

8.2. Comparability - over time

Comments regarding Comparability - over time

	MAIN CATEGORY OF GOODS	AVERAGE ANNUAL CONSUMPTION EXPENDITURE PER HOUSEHOLD EURO		
AND SERVICES		2003	2009	2015/2016
	TOTAL	29.250	38.547	31.206
01	FOOD AND NON-ALCOHOLIC BEVERAGES	4.410	4.735	4.781
02	ALCOHOLIC BEVERAGES AND TOBACCO	552	507	502
03	CLOTHING AND FOOTWEAR	2.266	2.639	1.807
04	HOUSING, WATER, ELECTRICITY, GAS AND OTHER FUELS	6.312	10.236	7.967
05	FURNISHINGS, HOUSEHOLD EQUIPMENT AND ROUTINE HOUSEHOLD MAINTENANCE	1.717	2.207	1.615
06	HEALTH	1.389	2.061	1.614
07	TRANSPORT	4.258	5.351	3.748
08	COMMUNICATION	996	1.364	1.267
09	RECREATION AND CULTURE	1.748	2.082	1.371
10	EDUCATION	1.157	1.314	1.408
11	HOTELS, CAFES AND RESTAURANTS	2.419	3.290	2.786
12	MISCELLANEOUS GOODS AND SERVICES	2.026	2.762	2.341

Comparability between the years 2009 and 2015/2016

It is noted that in all the main categories of goods and services decreases were recorded in the expenditure compared to 2009, with the exception of the category of "Food and non-alcoholic beverages" and the category of "Education". In these two categories, increases of 1,0% and 7,2% were recorded, respectively. The highest decrease in expenditure compared to 2009, was recorded in the category "Recreation and culture", with a decrease of 34,1%, followed by the category "Clothing and footwear" with a decrease of 31,5% and the category "Transport" with 30,0% decrease.

8.2.1. Length of comparable time series

Not applicable.

8.3. Coherence - cross domain

1. Comparison with EU-SILC

Eurostat will calculate various indicators based on the HBS micro-data and compare these with similar indicators based on EU-SILC data. These indicators include:

- At-risk-of-poverty threshold (EUR)
- At-risk-of-poverty rate (%)
- Relative at-risk-of-poverty gap
- Income quintile share ratio S80/S20
- Gini coefficient

2. Comparison with HICP

Eurostat will calculate the structure of Consumption Expenditure at 2-digit COICOP level using HBS micro-data and compare these with similar values based on HICP data

3. Additional comments regarding cross-domain coherence

8.4. Coherence - sub annual and annual statistics

Not applicable.

8.5. Coherence - National Accounts

Eurostat will calculate the structure of Consumption Expenditure at 2-digit COICOP level using HBS micro-data and compare these with similar values based on NA data

8.6. Coherence - internal

9. Accessibility and clarity

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9.1. Dissemination format - News release

http://www.mof.gov.cy/mof/cystat/statistics.nsf/All/F91A6F55B78DF091C22581B10031 EB35?OpenDocument&sub=5&sel=1&e=&print

9.2. Dissemination format - Publications

http://www.mof.gov.cy/mof/cystat/statistics.nsf/populationcondition_25main_ n_en/populationcondition_25main_en?OpenForm&sub=5&sel=2

http://www.mof.gov.cy/mof/cystat/statistics.nsf/populationcondition_25main_gr/populati oncondition_25main_gr?OpenForm&sub=5&sel=4

9.3. Dissemination format - online database

Not available

9.3.1. Data tables - consultations

Not applicable.

9.4. Dissemination format - microdata access

Statistical micro-data from CYSTAT's surveys are accessible for research purposes only and under strict provisions as described below:

Under the provisions of the Statistics Law, CYSTAT may release microdata for the sole use of scientific research. Applicants have to submit the request form "APPLICATION FOR DATA FOR RESEARCH PURPOSES" giving thorough information on the project for which micro-data are needed.

The application is evaluated by CYSTAT's Confidentiality Committee and if the application is approved, a charge is fixed according to the volume and time consumed for preparation of the data. Micro-data may then be released after an anonymisation process which ensures no direct identification of the statistical units but, at the same time, ensures usability of the data. The link for the application is attached below.

Link to the application for access to microdata on CYSTAT's website:

http://www.cystat.gov.cy/mof/cystat/statistics.nsf/dissemination_en/dissemination_en?OpenDocu ment

9.5. Dissemination format - other

9.6. Documentation on methodology

Not available

9.7. Quality management - documentation

9.7.1. Metadata completeness - rate

Not applicable.

9.7.2. Metadata - consultations

Not applicable.

10. Cost and Burden

1. Cost to the NSI (€)

For the completion of the 2015/2016 HBS fieldwork and analysis 2 Statistical Officers (total period of time: 60 months), 3 supervisors (total period of time: 45 months), 14 enumerators (total period of time: 168 months) and 3 coders (total period of time: 36 months) were involved.

2. Burden on the Household (Hours)

Not applicable

3. Measures to reduce Costs and Burden

In order to reduce the cost and burden of the survey some administrative sources were used in relation to income. Also, the use of Blaise helped reduce the burden of the work concerning the data entry and the codification of specific variables.

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11. Confidentiality

11.1. Confidentiality - policy

Official statistics are released in accordance to all confidentiality provisions of the following:

- National Statistics Law No. 15(I) of 2000 (especially Article 13 on statistical confidentiality).
- Regulation (EC) No 223/2009 of the European Parliament and of the Council of 11 March 2009 on European statistics and its later amendments (especially Chapter 5 on statistical confidentiality).
- European Statistics Code of Practice (especially Principle 5 on statistical confidentiality).
- CYSTAT's Code of Practice for the Collection, Publication and Storage of Statistical Data.

All the links of the above mentioned documents can be found in the following paragraph:

• Statistics Law No. 15(I) of 2000:

http://www.mof.gov.cy/mof/cystat/statistics.nsf/legislation_en/legislation_en?OpenDocument

• Regulation (EC) No 223/2009 on European statistics (consolidated text):

<u>http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:02009R0223-</u> 20150608&qid=1504858409240&from=EN

• European Statistics Code of Practice:

https://ec.europa.eu/eurostat/documents/4031688/8971242/KS-02-18-142-EN-N.pdf/e7f85f07-91db-4312-8118-f729c75878c7

• Code of Practice for the Collection, Publication and Storage of Statistical Data:

http://www.mof.gov.cy/mof/cystat/statistics.nsf/dmlquality_en/dmlquality_en?OpenDocument

11.2. Confidentiality - data treatment

The treatment of confidential data is regulated by CYSTAT's Code of Practice for the Collection, Publication and Storage of Statistical Data, which can be located at the following link:

<u>http://www.mof.gov.cy/mof/cystat/statistics.nsf/dmlquality_en/dmlquality_en?OpenDocu</u> <u>ment</u>

12. Comment

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