METHODOLOGICAL NOTE

HOUSEHOLD BUDGET SURVEY 2018

1. Sample Design

1.1 Type of sample design and sampling units

The two-stage area sampling was applied for the Household Budget Survey 2018. The sample of private households was selected in two stages. The primary units are the areas (one or more unified building blocks) and the ultimate sampling units selected in each sampling area are the households.

1.2 Stratification and sub-stratification criteria

There are two levels of area stratification in the sampling design. The first level is the geographical stratification based on the partition of the total country area into thirteen (13) Regions corresponding to the European NUTS 2 level. The two former major city agglomerations of Greater Athens and Greater Thessaloniki constitute separate major geographical strata.

The second level of stratification entails grouping municipal and local communities within each NUTS 2 Region by degree of urbanization, i.e., according to their population size. The scaling of urbanization was finally designed in three groups:

Urban	Municipal or Local Communities with 10.000 inhabitants or more
Semi-urban	Municipal or Local Communities with 2.000 to 9.999 inhabitants
Rural	Local Communities up to 1.999 inhabitants

The number of the final strata in the thirteen (13) Regions of the Country (except Greater Athens Area & Greater Thessaloniki Area) is 39. These were derived from the crossing of Region by the degree of urbanization. Additionally, the Greater Athens Area was divided into 31 strata taking into consideration socio-economic criteria. Similarly, the Greater Thessaloniki Area was divided into 9 strata. Thus, the total number of strata of the survey is 79. The two Major City Agglomerations account for about 37% of total population.

1.3 Sample size and allocation criteria

The initial sample size was 6,641 households (sampling fraction $\frac{1}{\lambda} \cong 0.16\%$). This fraction was the same in each Region.

1.4 Sample selection schemes

1st stage of sampling

In this stage, from any final stratum, say stratum h, n_h primary units (areas) were drawn. The number n_h of draws was approximately proportional to the population size X_h of the stratum. The population size X_h of the stratum is defined by the number of households according to the population census of the year 2011.

In each final stratum attention was paid so as the primary units drawn, to be a multiple of four. Thus, the sample of primary units can be divided in 4 sub-samples of equal size. The reference period for the household data of each one of the 4 sub-samples corresponds to each one of the 4 quarters of the year, in order to allow for full representativeness of the household consumption expenditures.

Each area unit (primary sampling unit) of the stratum had a selection probability proportional to its size. So, if X_{hi} was the number of households, according to the 2011 census population, of the area of order i in the sample, then the selection probability of the unit was:

$$P_{hi} = \frac{X_{hi}}{X_h} \tag{1}$$

The total number of the primary sampling units is 1,068. Due to non-response, the actual total number of primary sampling units is 1,064.

Additionally, as in each year the 25% of the sample households is replaced, the new households belong to different primary sampling units

2ⁿᵈ stage of sampling

In this stage from each primary sampling unit (selected area) the sample of ultimate units (households) is selected. Actually, in the second stage we draw a sample of dwellings. However, in most cases, there is one to one relation between household and dwelling. If the selected dwelling consists of one or more households then all of them are interviewed.

Let M_{hi} be the number of households during the survey period in the selected area i of stratum h. Out of them a systematic sample of m_{hi} households is selected with equal probabilities. Each of the m_{hi} households has the same chance to be included in the survey, equal to: $\frac{m_{hi}}{M_{hi}}$

In every selected primary unit, remains the determination of the sample size m_{hi}. The total number of households to be interviewed of the n_h selected primary sampling units will be

$$m_h = \sum_{i=1}^{n_h} m_{hi} \tag{2}$$

i.e. finally by applying the two stage sampling procedure, the sampling rate of households in stratum h is $\frac{m_h}{M_h}$, where $M_h = \sum_{i=1}^{n_h} M_{hi}$.

In repeated sampling, the numerator of this fraction will vary from sample to sample; to be more specific the fraction $\frac{m_h}{M_h}$ is a random variable. Within each primary sampling unit the calculation of the sampling interval $\delta_{hi} = \frac{M_{hi}}{m_{hi}}$ is carried out, so that the following two desired conditions are satisfied.

a) The expected result $\dfrac{m_h}{M_h}$ is the predetermined over sampling fraction $\dfrac{1}{\lambda}$ in each

Region (NUTS 2): $E\left(\dfrac{m_h}{M_h}\right) = \dfrac{1}{\lambda}$

b) The estimator of the stratum total Y_h (for any characteristic) should be self-weighting. In other words, the calculated estimator is the result derived from the sum of the values of the characteristic over the m_h sample households by the overall raising factor λ, which is the same in each Region.

The conditions (a) and (b) are satisfied when:

$$\frac{1}{n_h} \cdot \frac{1}{P_{hi}} \cdot \frac{M_{hi}}{m_{hi}} = \lambda \quad \Rightarrow \tag{3}$$

$$\frac{1}{n_h} \cdot \frac{1}{P_{hi}} \cdot \delta_{hi} = \lambda \quad \Rightarrow$$

$$\delta_{hi} = \frac{M_{hi}}{m_{hi}} = \lambda \cdot n_h \cdot P_{hi} \tag{4}$$

1.5 Renewal of the sample: rotational groups

The survey is a *simple rotational design* survey. The sample for any year consists of 4 replications, which have been in the survey for 1-4 years. With the exception of the first three years of the survey, any particular replication remains in the survey for 4 years. Each year, one of the 4 replications from the previous year is dropped and a new one is added. Between year T and T+1 the sample overlap is 75%; the overlap between year T and year T+2 is 50%; and it is reduced to 25% from year T to year T+3, and to zero for longer intervals.

2.   Weightings

Let w_{hij} (>0) stand for the survey weight attached to the sample ultimate unit (household) of order j ($j = 1,...,m_{hi}$), belonging to the selected area of order i, of stratum h. The w_{hij} is the product of three factors: a) the inversion of the inclusion probabilities of the ultimate sampling units, b) the inversion of the weighted response rate r_h in stratum h and c) a factor t_{hij}, which makes weighted sample estimates to conform to external total values (values from known totals from censuses, administrative sources, population projections etc). The weight w_{hij} is defined as follows:

$$w_{hij} = p_{hij}^{-1} \cdot r_h^{-1} \cdot t_{hij}$$

where:

p_{hij} : Inclusion probability of the hij ultimate unit

r_h: Weighted response rate of the ultimate units in stratum h

t_{hij}: Factor that adjusts the total of households and individuals to external data

2.1 Inclusion probabilities of households

A two-stage sampling scheme was applied, according to which in the final strata the areas were selected with probabilities proportional to their sizes and within the selected areas the households were selected with equal probabilities. Then the inclusion probabilities of households are defined, as follows:

$$p_{hij} = n_h \cdot P_{hi} \cdot \frac{m_{hi}}{M_{hi}} \Rightarrow p_{hij}^{-1} = \frac{1}{n_h} \cdot \frac{1}{P_{hi}} \cdot \frac{M_{hi}}{m_{hi}} \tag{5}$$

where:

$P_{hi} = \dfrac{X_{hi}}{X_h}$: Selection probability of the hi area

X_{hi}: The number of households that belong to the hi area, according to the population census of 2011

X_h: The number of households that belong to stratum h, according to the population census of 2011

M_{hi}: The number of households in the hi area that are recorded in the <u>updated</u> sampling frame

m_{hi}: The initial sample size of households in the hi area that were selected from the M_{hi} units

2.2 Non-response adjustments

Within each final stratum non-response adjustment of the responding households was carried out by the inverse of the weighted response rate, so as to adjust for non-responding cases in that stratum.

2.3 Adjustment to external data

The adjustment to external data was conducted. This involves the calibration of the household weights in conjunction with external sources. It enables the distribution of auxiliary variables at both household and individual level to coincide with the corresponding population distribution of the external data. The auxiliary variables used at household level are the household size and at individual level the gender and age (ten years age groups).

By applying calibration: a) the estimated households by size conform to the number of households of the reference period resulting from the projection of the trend observed between the population 2017 and 2018 and b) the estimated population by gender and age conforms to the population projections for the reference period. These projections are based

on vital statistics (population census, births, deaths, migration) and the Population Census 2011.

2.4 Triming

The final weights were trimmed iteratively so that to avoid the existence of extreme (large) weights which lead to increment of estimations' variance

3. Sampling Errors

3.1 Estimation of survey characteristics

Let y_{hij} be the value of the characteristic **y** of the sampling household of order j, in the hi primary sampling unit (area). Moreover, Y_h stands for the stratum total, which results when adding the characteristic y for all households or household members included in stratum h.

The form of the estimator on the basis of the two-stage design is:

$$\hat{Y}_h = \sum_{i=1}^{n_h} \sum_{j=1}^{m_{hi}} w_{hij} \cdot y_{hij} \tag{6}$$

Where w_{hij} is the final (adjusted) weight of the household

For estimating the characteristic **y** at country level, all stratum estimates $\hat{Y}_h$ should be added, as follows:

$$\hat{Y} = \sum_h \hat{Y}_h \tag{7}$$

3.2 Estimation of a Ratio

The estimation of the number of households X_h in stratum h is calculated using the formula:

$$\hat{X}_h = \sum_{i=1}^{n_h} \sum_{j=1}^{m_{hi}} w_{hij} \tag{8}$$

while the estimation of the relevant characteristic in country level is calculated by adding all strata estimations, that is:

$$\hat{X} = \sum_h \hat{X}_h$$

<div align="right">(9)</div>

The form of the estimator $\hat{R}$ (mean household consumption expenditure) on the basis of the two-stage design is:

$$\hat{R} = \frac{\hat{Y}}{\hat{X}} = \frac{\sum_{h=1}^{H} \sum_{i=1}^{n_h} \sum_{j=1}^{m_{hi}} w_{hij} y_{hij}}{\sum_{h=1}^{H} \sum_{i=1}^{n_h} \sum_{j=1}^{m_{hi}} w_{hij}}$$

3.3 Variance Estimation

In order to estimate the variances of the required characteristics (mean household consumption expenditure for the various categories of expenditures), the following steps should be applied.

a. For every selected PSU i of the stratum h, we calculate the quantities T_{hi} and F_{hi} using the following formulas:

$$T_{hi} = n_h \cdot \sum_{j=1}^{m_{hi}} w_{hij} \cdot y_{hij}$$

<div align="right">(10)</div>

$$F_{hi} = n_h \cdot \sum_{j=1}^{m_{hi}} w_{hij}$$

<div align="right">(11)</div>

b. After having calculated T_{hi} and F_{hi} for every PSU i ($i = 1,2,...,n_h$) of stratum h, then :

$V\left(\hat{Y}_h\right)$ is calculated as:

$$V\left(\hat{Y}_h\right) = \frac{1}{n_h \cdot (n_h - 1)} \cdot \left[\sum_{i=1}^{n_h} T_{hi}^2 - \frac{1}{n_h} \cdot \left(\sum_{i=1}^{n_h} T_{hi}\right)^2\right]$$

<div align="right">(12)</div>

and

$V\left(\hat{Y}\right)$ (country level) is calculated by adding $V\left(\hat{Y}_h\right)$ for all strata h, that is:

$$V\left(\hat{Y}\right) = \sum_h V\left(\hat{Y}_h\right) \tag{13}$$

Correspondingly, $V\left(\hat{X}_h\right)$ is given by:

$$V\left(\hat{X}_h\right) = \frac{1}{n_h \cdot (n_h - 1)} \cdot \left[\sum_{i=1}^{n_h} F_{hi}^2 - \frac{1}{n_h} \cdot \left(\sum_{i=1}^{n_h} F_{hi}\right)^2\right] \tag{14}$$

and

$V\left(\hat{X}\right)$ (country level) is calculated by adding $V\left(\hat{X}_h\right)$ for all strata h, that is:

$$V\left(\hat{X}\right) = \sum_h V\left(\hat{X}_h\right) \tag{15}$$

The variance of $\tilde{R}$ can be calculated using the formula below

$$V(\hat{R}) = \frac{V(\hat{Y}) + \hat{R}^2 V(\hat{X}) - 2\hat{R} Cov(\hat{X}, \hat{Y})}{\hat{X}^2}$$

(166)

where

$$Cov(\hat{X}_h, \hat{Y}_h) = \frac{1}{n_h(n_h - 1)} \left[\sum_{i=1}^{n_h} T_{hi} F_{hi} - \frac{1}{n_h}\left(\sum_{i=1}^{n_h} T_{hi}\right)\left(\sum_{i=1}^{n_h} F_{hi}\right)\right]$$

(17)

and

(17)

$$Cov(\hat{X}, \hat{Y}) = \sum_h Cov(\hat{X}_h, \hat{Y}_h)$$

In order to estimate the variances for mean household consumption expenditure for certain population subsets, the same procedure described above is followed. For that case, we also defined domain indicator variables in order to represent the specific population subsets (domains) required, (e.g. age of the household' s reference person: less than 30, 30-44, 45-59 and 60+ years)

Let,

-   the specific population subset (the domain) be denoted U_d, where $U_d \subset U$ (whole population)
-   the size of U_d be denoted N_d

then the value for the j unit (household or household reference person) in the selected area i of the final stratum h of the domain indicator variable is denoted as:

$$y_{hij} = \begin{cases} y_{hij} & if & i \in U_d \\ 0 & otherwise \end{cases}$$

$$w_{hij} = \begin{cases} w_{hij} & if & i \in U_d \\ 0 & otherwise \end{cases}$$

With the use of the domain indicators above and the procedure and formulas already described we estimated the characteristics and the sampling errors of the mean household final consumption expenditure of the specific subpopulations.

3.4 Standard Errors and Coefficients of Variation

Standard errors and coefficients of variation were calculated for mean household consumption expenditure for certain expenditure categories and population subsets. They are presented in the following tables.

For an estimate $\hat{R}$, the coefficient of variation is defined as:

$$CV\left(\hat{R}\right) = \frac{\sqrt{V\left(\hat{R}\right)}}{\hat{R}} * 100 \tag{18}$$

4. Design Effect

The design effect for survey estimates is used as a tool to measure sample efficiency and to assess the effect of sample design beyond the variability in Simple Random Sampling. The design effect is defined as the ratio of the variance of an estimate under the complex sample design to the variance of the same estimate that would have been obtained from a simple random sample of the same size. The Household Budget Survey employs complex sample design that involves stratification, unequal weighting and clustering.

The design effect was calculated by the following formula:

$$deft^2(\widehat{\boldsymbol{\theta}}_{swc}) = \frac{V(\widehat{\boldsymbol{\theta}}_{swc})}{V(\widehat{\boldsymbol{\theta}}_{srs})}$$

where:

θ : parameter such as R (Ratio)

s : represents stratification

w : represents weighting

c : represents clustering

SRS: Simple Random Sampling

In our study, $\widehat{\theta} \equiv \widehat{R}$, therefore for the calculation of $V(\widehat{R})$ in the nominator, we use formulae (16) above.

For the calculation of the denominator we apply the formula,

$$V(\widehat{R}_{SRS}) = \frac{V(\widehat{Y}_{SRS}) + \widehat{R}_{SRS}^2 V(\widehat{X}_{SRS}) - 2\widehat{R}_{SRS} Cov(\widehat{Y}_{SRS}, \widehat{X}_{SRS})}{\widehat{X}_{SRS}^2}$$

where,

$\widehat{Y}_{SRS}$: Estimation of a characteristic **y** after applying SRS
$\widehat{X}_{SRS}$: Estimation of the number of households after applying SRS

Table 1 : *Standard Errors, Coefficients of Variation and Design Effects for mean household final consumption expenditure in expenditure categories (purchases)*

Expenditure Category	Estimate	Standard Error	CV(%)	Design Effect
TOTAL CONSUMPTION	16.752,50	254,06522	1,5%	2,267
FOOD	3.495,90	42,165	1,2%	3,090
ALCOHOLIC_BEVERAGES_TOBACCO	638,50	17,302	2,7%	2,167
CLOTHING_AND_FOOTWEAR	998,89	28,006	2,8%	2,260
HOUSING	2.418,70	31,350	1,3%	2,068
DURABLE	753,23	24,187	3,2%	2,151
HEALTH	1.295,90	38,292	3,0%	1,866
TRANSPORT	2.053,45	54,577	2,7%	1,490
COMMUNICATION	711,86	8,417	1,2%	1,877
RECREATION_AND_CULTURE	813,00	37,486	4,6%	1,681
EDUCATION	556,02	35,646	6,4%	2,683
RESTAURANTS_AND_HOTELS	1.875,80	45,408	2,4%	2,322
OTHER_GOODS_AND_SERVICES	1.141,25	23,286	2,0%	2,142

Table 2 : *Standard Errors, Coefficients of Variation and Design Effects for mean household final consumption expenditure (€) in specific population subsets by expenditure categories (purchases)*

Age Group (yrs)	Expenditure Category	Estimate	Standard Error	CV(%)	Design Effect
1 (0-29)	TOTAL CONSUMPTION	11.885,59	739,53	6,2%	1,674
	FOOD	2.090,76	94,06	4,5%	1,776
	ALCOHOLIC_BEVERAGES_TOBACCO	430,55	56,56	13,1%	1,558
	CLOTHING_AND_FOOTWEAR	705,27	78,18	11,1%	1,616
	HOUSING	2.603,12	159,02	6,1%	1,973
	DURABLE	472,29	98,49	20,9%	1,641
	HEALTH	421,89	120,65	28,6%	1,678
	TRANSPORT	1.326,80	223,18	16,8%	1,398
	COMMUNICATION	528,68	22,64	4,3%	1,450
	RECREATION_AND_CULTURE	422,41	51,51	12,2%	1,884
	EDUCATION	229,34	73,05	31,9%	1,516
	RESTAURANTS_AND_HOTELS	1.851,65	104,06	5,6%	1,423
	OTHER_GOODS_AND_SERVICES	802,82	68,24	8,5%	1,377
2 (30-44)	TOTAL CONSUMPTION	19.918,77	488,83	2,5%	1,739
	FOOD	3.811,65	73,28	1,9%	2,147
	ALCOHOLIC_BEVERAGES_TOBACCO	772,12	44,68	5,8%	2,690
	CLOTHING_AND_FOOTWEAR	1.315,95	55,93	4,2%	1,631
	HOUSING	3.196,96	77,60	2,4%	1,882
	DURABLE	841,28	56,63	6,7%	2,022
	HEALTH	1.277,50	88,46	6,9%	1,815
	TRANSPORT	2.711,55	139,32	5,1%	1,646
	COMMUNICATION	751,95	13,69	1,8%	1,744
	RECREATION_AND_CULTURE	1.023,74	79,35	7,8%	1,156
	EDUCATION	695,49	55,85	8,0%	1,702
	RESTAURANTS_AND_HOTELS	2.175,78	82,80	3,8%	1,808
	OTHER_GOODS_AND_SERVICES	1.344,78	45,57	3,4%	1,914
3 (45-59)	TOTAL CONSUMPTION	21.569,96	579,47	2,7%	2,246

	Expenditure Category	Estimate	Standard Error	CV(%)	Design Effect
	FOOD	4.175,75	83,05	2,0%	2,656
	ALCOHOLIC_BEVERAGES_TOBACCO	846,30	31,27	3,7%	1,683
	CLOTHING_AND_FOOTWEAR	1.311,66	54,91	4,2%	1,661
	HOUSING	2.575,73	58,01	2,3%	2,000
	DURABLE	843,95	54,06	6,4%	2,730
	HEALTH	1.418,48	77,29	5,4%	1,509
	TRANSPORT	2.947,29	119,41	4,1%	1,410
	COMMUNICATION	915,37	18,98	2,1%	1,681
	RECREATION_AND_CULTURE	1.221,72	96,04	7,9%	1,842
	EDUCATION	1.193,74	107,65	9,0%	3,185
	RESTAURANTS_AND_HOTELS	2.670,14	107,78	4,0%	2,352
	OTHER_GOODS_AND_SERVICES	1.449,81	48,31	3,3%	1,889
4 (60+)	TOTAL CONSUMPTION	12.639,59	220,04	1,7%	1,565
	FOOD	3.040,89	44,61	1,5%	2,240
	ALCOHOLIC_BEVERAGES_TOBACCO	462,32	18,15	3,9%	1,453
	CLOTHING_AND_FOOTWEAR	677,38	25,75	3,8%	1,610
	HOUSING	1.936,33	29,79	1,5%	1,432
	DURABLE	679,17	26,09	3,8%	1,440
	HEALTH	1.304,37	39,86	3,1%	1,394
	TRANSPORT	1.241,43	52,02	4,2%	1,240
	COMMUNICATION	580,23	9,30	1,6%	1,633
	RECREATION_AND_CULTURE	489,32	28,91	5,9%	1,179
	EDUCATION	115,11	16,58	14,4%	1,222
	RESTAURANTS_AND_HOTELS	1.233,21	43,83	3,6%	1,747
	OTHER_GOODS_AND_SERVICES	879,83	25,57	2,9%	1,631

HOUSEHOLD TYPE	Expenditure Category	Estimate	Standard Error	CV(%)	Design Effect
1 – single person	TOTAL CONSUMPTION	9.103,98	218,53	2,4%	1,511
	FOOD	1.948,43	28,43	1,5%	1,425
	ALCOHOLIC_BEVERAGES_TOBACCO	287,46	15,30	5,3%	1,160
	CLOTHING_AND_FOOTWEAR	487,17	28,28	5,8%	1,507
	HOUSING	1.854,51	37,57	2,0%	1,172
	DURABLE	536,24	34,16	6,4%	1,582
	HEALTH	791,21	39,47	5,0%	1,283
	TRANSPORT	788,23	61,31	7,8%	1,162
	COMMUNICATION	412,90	6,93	1,7%	1,125
	RECREATION_AND_CULTURE	365,55	35,34	9,7%	1,289
	EDUCATION	47,14	8,06	17,1%	1,077
	RESTAURANTS_AND_HOTELS	958,67	39,70	4,1%	1,360
	OTHER_GOODS_AND_SERVICES	626,48	25,39	4,1%	1,243
2- two adults	TOTAL CONSUMPTION	21.001,24	432,72	2,1%	1,673
	FOOD	4.409,73	66,40	1,5%	2,144
	ALCOHOLIC_BEVERAGES_TOBACCO	957,90	37,65	3,9%	1,740
	CLOTHING_AND_FOOTWEAR	1.280,38	55,90	4,4%	2,014
	HOUSING	2.864,57	69,65	2,4%	1,834
	DURABLE	820,85	39,05	4,8%	1,397
	HEALTH	1.608,15	82,99	5,2%	1,416
	TRANSPORT	2.752,94	116,22	4,2%	1,450
	COMMUNICATION	895,97	17,36	1,9%	1,556
	RECREATION_AND_CULTURE	1.033,29	79,31	7,7%	1,409
	EDUCATION	458,54	47,17	10,3%	1,685

	RESTAURANTS_AND_HOTELS	2.449,76	80,92	3,3%	1,810
	OTHER_GOODS_AND_SERVICES	1.469,17	46,23	3,1%	2,171
3 – three or more adults	TOTAL CONSUMPTION	25.029,53	998,98	4,0%	2,297
	FOOD	4.573,41	94,23	2,1%	1,959
	ALCOHOLIC_BEVERAGES_TOBACCO	814,33	41,09	5,0%	1,401
	CLOTHING_AND_FOOTWEAR	1.678,75	85,90	5,1%	1,452
	HOUSING	2.735,07	70,80	2,6%	1,349
	DURABLE	1.068,55	105,67	9,9%	2,265
	HEALTH	1.579,34	117,41	7,4%	1,251
	TRANSPORT	3.209,30	180,86	5,6%	1,182
	COMMUNICATION	982,08	23,66	2,4%	1,611
	RECREATION_AND_CULTURE	1.564,16	162,67	10,4%	1,517
	EDUCATION	2.275,91	239,22	10,5%	3,507
	RESTAURANTS_AND_HOTELS	2.903,58	186,18	6,4%	2,612
	OTHER_GOODS_AND_SERVICES	1.645,04	81,22	4,9%	2,010
4-single parent with dependent children	TOTAL CONSUMPTION	14.057,84	268,28	1,9%	1,171
	FOOD	3.104,98	36,41	1,2%	1,337
	ALCOHOLIC_BEVERAGES_TOBACCO	532,54	20,90	3,9%	1,172
	CLOTHING_AND_FOOTWEAR	801,33	36,19	4,5%	1,282
	HOUSING	2.227,43	42,84	1,9%	1,259
	DURABLE	724,54	31,24	4,3%	1,158
	HEALTH	1.309,75	48,47	3,7%	1,140
	TRANSPORT	1.647,02	74,16	4,5%	1,105
	COMMUNICATION	630,40	9,23	1,5%	1,090
	RECREATION_AND_CULTURE	598,51	44,51	7,4%	,966
	EDUCATION	92,74	16,74	18,0%	1,027
	RESTAURANTS_AND_HOTELS	1.396,80	49,14	3,5%	1,196
	OTHER_GOODS_AND_SERVICES	991,81	30,07	3,0%	1,283
5 – two adults with dependent children	TOTAL CONSUMPTION	15.575,17	943,51	6,1%	,873
	FOOD	3.313,31	179,26	5,4%	,931
	ALCOHOLIC_BEVERAGES_TOBACCO	543,58	72,59	13,4%	,802
	CLOTHING_AND_FOOTWEAR	961,03	136,19	14,2%	,851
	HOUSING	2.199,76	162,72	7,4%	,915
	DURABLE	520,84	76,26	14,6%	,909
	HEALTH	950,07	213,37	22,5%	,854
	TRANSPORT	1.313,33	157,17	12,0%	,836
	COMMUNICATION	678,78	37,89	5,6%	,827
	RECREATION_AND_CULTURE	722,18	110,95	15,4%	,930
	EDUCATION	1.204,68	184,62	15,3%	,973
	RESTAURANTS_AND_HOTELS	2.150,34	221,85	10,3%	,848
	OTHER_GOODS_AND_SERVICES	1.017,28	96,51	9,5%	,857
6- three or more adults with dependent children	TOTAL CONSUMPTION	25.263,54	893,85	3,5%	1,955
	FOOD	5.352,46	167,44	3,1%	3,196
	ALCOHOLIC_BEVERAGES_TOBACCO	925,12	95,90	10,4%	3,706
	CLOTHING_AND_FOOTWEAR	1.463,76	101,02	6,9%	2,023
	HOUSING	3.079,93	125,30	4,1%	2,912
	DURABLE	902,56	74,57	8,3%	2,307
	HEALTH	1.548,78	169,68	11,0%	2,628
	TRANSPORT	3.687,79	300,17	8,1%	2,356
	COMMUNICATION	990,87	40,10	4,0%	2,557
	RECREATION_AND_CULTURE	1.222,81	130,06	10,6%	1,585

SOCIOECONOMIC SITUATION	Expenditure Category	Estimate	Standard Error	CV(%)	Design Effect
	EDUCATION	1.385,94	114,04	8,2%	1,841
	RESTAURANTS_AND_HOTELS	3.121,10	205,59	6,6%	2,275
	OTHER_GOODS_AND_SERVICES	1.582,41	89,57	5,7%	1,841

SOCIOECONOMIC SITUATION	Expenditure Category	Estimate	Standard Error	CV(%)	Design Effect
1	TOTAL CONSUMPTION	16.752,11	368,66	2,2%	1,633
	FOOD	3.658,93	75,35	2,1%	2,060
	ALCOHOLIC_BEVERAGES_TOBACCO	786,72	38,79	4,9%	1,913
	CLOTHING_AND_FOOTWEAR	981,82	48,70	5,0%	1,678
	HOUSING	2.848,53	65,55	2,3%	1,847
	DURABLE	626,17	46,70	7,5%	2,239
	HEALTH	916,27	64,48	7,0%	1,367
	TRANSPORT	2.083,41	105,71	5,1%	1,522
	COMMUNICATION	694,73	16,99	2,4%	2,043
	RECREATION_AND_CULTURE	699,29	58,96	8,4%	1,229
	EDUCATION	584,96	46,93	8,0%	1,672
	RESTAURANTS_AND_HOTELS	1.796,72	80,68	4,5%	1,955
	OTHER_GOODS_AND_SERVICES	1.074,56	38,88	3,6%	1,960
2	TOTAL CONSUMPTION	24.999,19	798,46	3,2%	2,352
	FOOD	4.336,73	106,68	2,5%	2,465
	ALCOHOLIC_BEVERAGES_TOBACCO	723,33	30,26	4,2%	1,527
	CLOTHING_AND_FOOTWEAR	1.625,72	81,31	5,0%	1,892
	HOUSING	3.189,18	79,58	2,5%	1,477
	DURABLE	1.137,29	81,71	7,2%	1,910
	HEALTH	1.742,47	117,54	6,7%	1,633
	TRANSPORT	3.633,04	196,03	5,4%	1,610
	COMMUNICATION	927,44	17,84	1,9%	1,543
	RECREATION_AND_CULTURE	1.422,81	113,29	8,0%	2,136
	EDUCATION	1.349,72	171,75	12,7%	3,449
	RESTAURANTS_AND_HOTELS	3.131,40	152,24	4,9%	2,484
	OTHER_GOODS_AND_SERVICES	1.780,07	70,03	3,9%	2,100
3	TOTAL CONSUMPTION	23.429,17	738,84	3,2%	1,506
	FOOD	4.124,69	91,62	2,2%	2,038
	ALCOHOLIC_BEVERAGES_TOBACCO	1.082,57	67,08	6,2%	2,409
	CLOTHING_AND_FOOTWEAR	1.557,74	89,38	5,7%	1,799
	HOUSING	2.855,77	107,48	3,8%	2,486
	DURABLE	942,20	60,81	6,5%	1,796
	HEALTH	1.607,07	119,64	7,4%	1,558
	TRANSPORT	3.192,07	175,46	5,5%	1,329
	COMMUNICATION	991,51	27,94	2,8%	1,513
	RECREATION_AND_CULTURE	1.550,23	147,11	9,5%	1,013
	EDUCATION	1.056,78	85,55	8,1%	1,522
	RESTAURANTS_AND_HOTELS	2.915,40	123,54	4,2%	1,669
	OTHER_GOODS_AND_SERVICES	1.553,15	62,53	4,0%	1,347
4	TOTAL CONSUMPTION	11.361,25	675,67	5,9%	1,773
	FOOD	2.802,89	199,58	7,1%	3,079
	ALCOHOLIC_BEVERAGES_TOBACCO	544,31	57,36	10,5%	1,858
	CLOTHING_AND_FOOTWEAR	566,51	57,82	10,2%	1,294
	HOUSING	1.801,75	79,60	4,4%	1,205
	DURABLE	307,28	25,62	8,3%	1,393
	HEALTH	749,86	107,37	14,3%	1,191

	TRANSPORT	1.428,48	203,45	14,2%	1,727
	COMMUNICATION	583,68	39,76	6,8%	2,798
	RECREATION_AND_CULTURE	401,49	53,09	13,2%	1,473
	EDUCATION	232,07	49,80	21,5%	1,130
	RESTAURANTS_AND_HOTELS	1.131,19	106,26	9,4%	1,579
	OTHER_GOODS_AND_SERVICES	811,75	62,10	7,6%	1,548
5	TOTAL CONSUMPTION	13.204,97	231,42	1,8%	1,622
	FOOD	3.212,15	52,99	1,6%	2,341
	ALCOHOLIC_BEVERAGES_TOBACCO	467,96	19,19	4,1%	1,293
	CLOTHING_AND_FOOTWEAR	693,50	27,16	3,9%	1,535
	HOUSING	1.992,55	31,41	1,6%	1,332
	DURABLE	703,18	28,61	4,1%	1,385
	HEALTH	1.353,44	43,94	3,2%	1,331
	TRANSPORT	1.357,28	58,81	4,3%	1,268
	COMMUNICATION	600,45	10,31	1,7%	1,683
	RECREATION_AND_CULTURE	481,76	23,99	5,0%	1,468
	EDUCATION	141,00	23,28	16,5%	1,604
	RESTAURANTS_AND_HOTELS	1.296,42	48,75	3,8%	1,753
	OTHER_GOODS_AND_SERVICES	905,28	27,57	3,0%	1,666
6	TOTAL CONSUMPTION	8.267,02	255,30	3,1%	1,362
	FOOD	2.211,85	61,14	2,8%	1,644
	ALCOHOLIC_BEVERAGES_TOBACCO	224,59	24,02	10,7%	1,365
	CLOTHING_AND_FOOTWEAR	445,91	33,09	7,4%	1,220
	HOUSING	1.553,48	53,77	3,5%	1,287
	DURABLE	444,48	37,22	8,4%	1,094
	HEALTH	799,49	53,47	6,7%	1,368
	TRANSPORT	450,59	41,36	9,2%	1,420
	COMMUNICATION	421,62	13,65	3,2%	1,422
	RECREATION_AND_CULTURE	270,13	24,00	8,9%	1,156
	EDUCATION	75,23	15,40	20,5%	1,233
	RESTAURANTS_AND_HOTELS	792,15	56,77	7,2%	1,551
	OTHER_GOODS_AND_SERVICES	577,48	38,83	6,7%	1,432