



CYPRUS

FINAL QUALITY REPORT

**STATISTICS ON INCOME AND LIVING CONDITIONS
2007**

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PREFACE

The present quality report complies with the Commission Regulation (EC) No 1177/2003 Article 16. The structure of the report follows Commission Regulation No 28/2004 and presents results on accuracy, comparability and coherence of the EU-SILC survey 2007. The common longitudinal EU indicators based on the longitudinal component of EU-SILC cannot be computed since this is the 3rd wave and they will be given after the completion of 4 waves.

1. COMMON LONGITUDINAL EUROPEAN UNION INDICATORS

1.1. Common longitudinal EU indicators based on the longitudinal component of EU-SILC

The common longitudinal EU indicators based on the longitudinal component of EU-SILC cannot be computed since this is the 3rd wave and they will be given after the completion of 4 waves.

1.2. Other indicators

Not applicable at this stage.

2. ACCURACY

2.1. Sample design

2.1.1. Type of sample design (stratified, multi-stage, clustered)

The longitudinal component of EU-SILC 2007 as transmitted to EUROSTAT consists of rotational groups R3 and R4 for the years 2005, 2006 and 2007 and of the rotational group R1 for the years 2006 and 2007. The rotational groups R3 and R4 for the years 2005 – 2007 were drawn with the sample of 2005 and the rotational group R1 with the sample of 2006.

The cross-sectional component of EU-SILC 2007 included the rotational groups of R3, R4, R5 and R6. The rotational group R6 was the new sub-sample added in 2007.

The sample was drawn from the 2001 Census of Population sampling frame, which was updated by the Electricity Authority of Cyprus (E.A.C.) list of new domestic consumers (between 2002 and 2005). The sample design was one-stage stratification.

2.1.2. Sampling units (one stage, two stages)

The sampling units are private households, which were selected with simple random sampling within each stratum.

2.1.3. Stratification and sub-stratification criteria

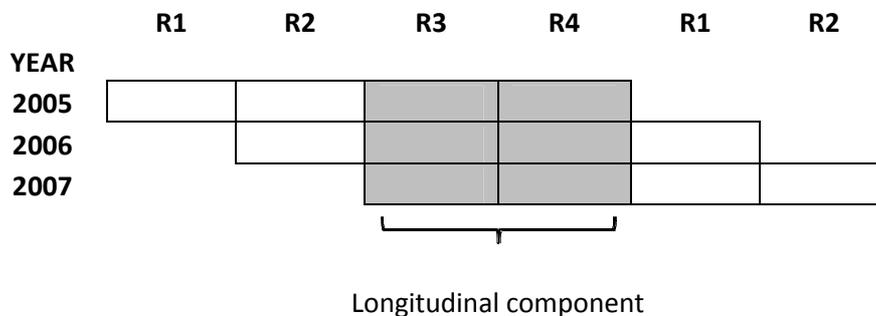
Geographical stratification criteria were used for the sample selection. The households were stratified in 9 strata based on District (Urban / Rural), i.e. 1) Lefkosia Urban, 2) Lefkosia Rural,

3) Ammochostos Rural⁽¹⁾, 4) Larnaka Urban, 5) Larnaka Rural, 6) Lemesos Urban, 7) Lemesos Rural, 8) Pafos Urban, 9) Pafos Rural.

2.1.4. Sample size and allocation criteria

According to the Regulation (EC) No 1177/2003 Article 9, the minimum effective sample size for Cyprus for the cross-sectional component is 3.250 households and 7.500 persons aged 16 or over and for the longitudinal component is 2.500 households and 5.500 persons aged 16 or over.

The longitudinal component for the years 2005 to 2007, the 3-year trajectory is illustrated in the figure below:



The dataset of longitudinal component consists, in total of 6.020 households. These households are broken down to the original households selected in the first wave 2005 (N=2.268), the follow-up households of 2006 (N=1.843), the split households of 2006 (N=59), the follow-up households of 2007 (N=1.805) and the split households of 2007 (N=45).

The sample results for the longitudinal component of 2005-2007, the 3-year trajectory are shown in the table below:

⁽¹⁾ Ammochostos Urban is an area not under the effective control of the Government of the Republic of Cyprus.

Table 2.1.4.1 : Sample size, addresses and household interviews (R3-R4)

	2005		2006				2007			
			Follow-up Households		Split Households		Follow-up Households		Split Households	
	n	%	n	%	n	%	n	%	n	%
Addresses in initial sample	2.268	100,0	1.843	100,0	59	100,0	1.805	100,0	45	100,0
Addresses used for the survey	2.054	90,6	1.843	100,0	59	100,0	1.805	100,0	45	100,0
Addresses out of scope	214	9,4	0	0,0	0	0,0	0	0,0	0	0,0
Addresses used	2.054	100,0	1.843	100,0	59	100,0	1.805	100,0	45	100,0
Addresses successfully contacted	2.028	98,7	1.811	98,3	59	100,0	1.771	98,1	45	100,0
Addresses not successfully contacted	26	1,3	32	1,7	0	0,0	34	1,9	0	0,0
Addresses successfully contacted	2.028	100,0	1.811	100,0	59	100,0	1.771	100,0	45	100,0
Household questionnaire completed	1.843	90,9	1.733	95,7	51	86,4	1.666	94,1	38	84,4
Refusal to cooperate	113	5,6	57	3,1	8	13,6	70	4,0	7	15,6
Entire household away for the duration of fieldwork	30	1,5	4	0,2	0	0,0	10	0,6	0	0,0
Household unable to respond	25	1,2	12	0,7	0	0,0	25	1,4	0	0,0
Other reasons for not completing the Household questionnaire	17	0,8	5	0,3	0	0,0	0	0,0	0	0,0
Household questionnaire completed	1.843	100,0	1.733	100,0	51	100,0	1.666	100,0	38	100,0
Interviews accepted for database	1.843	100,0	1.733	100,0	51	100,0	1.666	100,0	38	100,0
Interviews rejected for database	0	0,0	0	0,0	0	0,0	0	0,0	0	0,0

The table below is a breakdown of addresses and persons present in each wave:

Table 2.1.4.2 : Households and persons (R3 - R4)

	2005	2006	2007
Addresses used for the survey	2.054	1.902	1.850
Addresses successfully contacted	2.028	1.870	1.816
Accepted household interviews	1.843	1.784	1.704
Persons	5.651	5.462	5.195
Persons 16+	4.451	4.331	4.142
Personal interviews	4.441	4.331	4.142

2.1.5. Sample selection schemes

The sample was selected from each stratum with simple random sampling.

2.1.6. Sample distribution over time

The survey for the year 2005 was carried out from the 1st of May to the 31st of August 2005. The survey for the year 2006 was carried out from the 13th of March to the 14th of July 2006 and the survey for the year 2007 was carried out from the 19th of March to the 3rd of August 2007.

2.1.7. Renewal of sample: rotational groups

The year 2005 was the initial year of the survey. The sample in the first round was divided in 4 sub-samples as it was based on a rotational design of 4 replications with a rotation of one replication per year. Each sub-sample was separately selected so as to represent the whole population. Every year one sub-sample is dropped and substituted by a new one. For 2006 one specific sub-sample, pre-selected from 2005 (R1) was dropped and substituted by a new one (R1). For 2007 the rotational group 2 (R2), was dropped and substituted by a new one (R2).

The size of each Rotational Group for the 2007 survey (longitudinal component) is shown in Table 2.1.7.1:

Table 2.1.7.1 : Used addresses and accepted interviews (R1 - R3 - R4)

	2005		2006		2007	
	Used addresses	Accepted interviews	Used addresses	Accepted interviews	Used addresses	Accepted interviews
R1	na	na	1.038	940	967	889
R3	1.013	907	937	876	910	837
R4	1.041	936	965	908	940	867
Total	2.054	1.843	2.940	2.724	2.817	2.593

2.1.8. Weightings

2.1.8.1. Design factor

The methodology that was used for the computation of the weights of the survey is the one proposed in Doc. EU-SILC 065/05. For a household the design weight is calculated as the inverse of its inclusion probability that is the probability belonging to the selected sample of households:

$$DB080_i = \frac{1}{\pi_i} = \frac{1}{\frac{n_i}{N_i}} = \frac{N_i}{n_i}, \quad i=1,\dots,9$$

π_i = the probability of a household to be selected from stratum i

n_i = the sample size of stratum i

N_i = the total number of households in the sampling frame of stratum i

The design weights were calculated for all households included in the 2005 sample. For the subsequent years i.e. 2006 onwards, design weights are calculated for each new sub-sample added to the existing sample.

2.1.8.2. Non-response adjustments (first wave)

The aim of non-response adjustments is to reduce the bias due to non-response, i.e. household was contacted (DB120=11) but household questionnaire was not completed (DB130≠11). The empirical response rate within each stratum provides an estimate of the response probability for all the households of the stratum. The weight of a household after correction for the non-response at the household level is:

$$DB080_i * \frac{1}{\hat{p}_i}$$

$DB080_i$ = the design weight of a household in stratum i before non-response adjustment

\hat{p}_i = the estimated response probability of the household in stratum i

2.1.8.3. Adjustments to external data (level, variables used and sources) (first wave)

The next step is to adjust the data to reliable external sources. The aim is to improve the accuracy of the estimated household and personal variables by using external known information. Eurostat recommends the method of “*integrative*” calibration. The idea is to use calibration variables defined at both household and individual level. The individual variables are aggregated at the household level by calculating household totals such as the number of male/female in the

household, the number of persons aged 16 and over etc. After that, calibration is done at the household level using the household variables and the individual variables in their aggregate form. The calibration variables used at household level were the household size (household size=1, household size=2, household size=3, household size \geq 4) and the tenure status (tenure status=1 (i.e. owned or provided free), tenure status =2 (i.e. rented)). At personal level the calibration variables used were the distribution of population by age (age \leq 15, 16 \leq age \leq 19, 20 \leq age \leq 24, ..., 70 \leq age \leq 74, age \geq 75) and gender.

2.1.8.4. Final longitudinal weight (first wave)

The base weights for the first wave of the longitudinal component (RB060) are identical to the calibrated cross-sectional weights RB050 scaled up by a factor so each rotational group corresponds to the total population.

2.1.8.5. Non-response adjustments (second wave onwards)

For the subsequent waves the weights are adjusted for non response due to attrition. Additionally there are persons who enter the panel households for the first time. Newly born to sample mothers take the weight of their mother. Persons entering the panel household from outside the survey population take as their weight the average weight of sample persons in the household. Persons moving into sample households from other non-sample households in the population, the so called “co-residents” are given zero base weight.

2.1.8.6. Adjustments to external data (level, variables used and sources)

Adjustments to external sources on the subsequent waves of the longitudinal data are not applied.

2.1.8.7. Final longitudinal weight (second wave onwards)

For the second and subsequent waves of the longitudinal component we compute the base weights (RB060) using the cross-sectional base weights (RB050) adjusted for panel attrition. A rescaling of weights is carried out so to reflect the total target population.

Additionally the weights for the 2-year and the 3-year longitudinal sets are computed, namely RB062 and RB063 respectively. The longitudinal weight RB062 is computed by dividing RB060 by 3 and the longitudinal weight RB063 is computed by dividing RB060 by 2.

2.1.8.8. Final household cross-sectional weight

The calibration procedures described above were applied on the initial weight that is the weight adjusted for non-response so to compute the cross-sectional weights at the household level (DB090) and at the individual level (RB050).

Calibration procedures were further used for the calculation of cross-sectional weights for household members aged 16 and over (PB040) and for the children aged 0 to 12 years (inclusive) (RL070). For both PB040 and RL070 the personal cross-sectional weight RB050 was used as the initial weight. The calibration variables used for the cross-sectional weight of household members aged 16 and over were the distribution of population aged 16 and over by age (five years age groups) and gender. The respective calibration variable for the children cross-sectional weight for childcare (RL070) was the distribution of population aged 0 to 12 by single years of age. The calibration was carried out using the SAS macro “CALMAR”.

2.1.9. Substitutions

No substitution procedures were applied.

2.1.9.1. Method of selection of substitutes

Not applicable.

2.1.9.2. Main characteristics of substituted units compared to original units, by region (NUTS 2) if available

Not applicable.

2.1.9.3. Distribution of substituted units by record of contact at address (DB120), household questionnaire result (DB130) and household interview acceptance (DB135) of the original units

Not applicable.

2.2. Sampling errors

2.2.1. Standard error and effective sample size

The tables that follow present the weighted means (based on the households/persons having received an amount on the respective income component), the number of observations (before and after imputation – unweighted) and the standard errors of each income component for each wave of the longitudinal component and the cross-sectional component of the year 2007.

Table 2.2.1.1: Mean (weighted), the total number of observations (before and after imputation) and Standard errors for the income components at household level - longitudinal component R3-R4

Income Components at household level	EU-SILC 2005			
	Mean	Number of observations		Standard error
		Before imputation	After imputation	
Total household gross income (HY010)	18.146,8	1.799	1.842	402,9
Total disposable household income (HY020)	16.270,7	1.842	1.842	336,9
Total disposable household income before social transfers other than old-age and survivors' benefits (HY022)	15.359,8	1.826	1.826	309,5
Total disposable household income before social transfers including old-age and survivors' benefits (HY023)	14.514,4	1.655	1.655	339,3
Gross income from rental of a property or land (HY040G)	4.796,8	158	158	586,0
Family/children related allowances (HY050G)	644,0	1.013	1.013	25,3
Social exclusion not elsewhere classified (HY060G)	2.514,3	50	50	300,2
Housing allowances (HY070G)	2.656,0	55	55	417,0
Regular inter-household cash transfer received (HY080G)	2.343,2	125	125	316,6
Interest, dividends, profit from capital investment in unincorporated business (HY090G)	3.505,8	130	130	847,3
Income received by people aged under 16 (HY110G)	1.516,1	3	3	1.159,1
Regular taxes on wealth (HY120G)	50,4	1.123	1.123	4,0
Regular inter household cash transfer paid (HY130G)	2191,9	186	186	184,6
Tax on income and social insurance contributions (HY140G)	1.637,7	1.319	1.362	72,8

Table 2.2.1.1 (ctd.): Mean (weighted), the total number of observations (before and after imputation) and Standard errors for the income components at personal level - longitudinal component R3-R4

Income Components at personal level	EU-SILC 2005			
	Mean	Number of observations		Standard error
		Before imputation	After imputation	
Employee cash or near cash income (PY010G)	9.812,3	2.153	2.201	239,0
Company car (PY021G)	1.749,2	37	37	224,8
Contributions to individual private pension plans (PY035G)	710,1	88	88	70,1
Cash benefits or losses from self-employment (PY050G)	9.757,5	416	421	336,3
Pension from individual private plans (PY080G)	3.510,2	12	12	490,1
Unemployment benefits (PY090G)	2.632,2	165	165	1.191,7
Old-age benefits (PY100G)	4.955,1	858	858	182,8
Survivor benefits (PY110G)	4.330,0	43	43	406,4
Sickness benefits (PY120G)	970,0	46	46	156,1
Disability benefits (PY130G)	3.122,0	70	70	198,3
Education-related allowances (PY140G)	1.430,0	226	226	37,7

Table 2.2.1.2 : Mean (weighted), the total number of observations (before and after imputation) and Standard errors for the Equivalised disposable income - longitudinal component R3-R4

Equivalised disposable income	EU-SILC 2005			
	Mean	Number of observations		Standard error
		Before imputation	After imputation	
Subclasses by household size				
1 household member	6.868,8	258	258	385,8
2 household members	8.792,3	1.132	1.132	400,7
3 household members	9.058,3	894	894	157,9
4 and more	8.783,4	3.361	3.361	97,5
Population by age group				
< 25	8.463,9	2.001	2.001	110,4
25 to 34	10.181,6	709	709	511,2
35 to 44	8.731,3	794	794	165,4
45 to 54	9.625,6	787	787	269,9
55 to 64	9.560,0	635	635	290,9
65+	6.006,3	719	719	166,8
Population by sex				
Male	8.743,6	2.796	2.796	142,7
Female	8.729,9	2.849	2.849	150,6

Table 2.2.1.3: Mean (weighted), the total number of observations (before and after imputation) and Standard errors for the income components at household level - longitudinal component R3-R4

Income Components at household level	EU-SILC 2006			
	Mean	Number of observations		
		Before imputation	After imputation	
Total household gross income (HY010)	19.893,7	1.750	1.783	445,5
Total disposable household income (HY020)	17.852,0	1.775	1.783	375,4
Total disposable household income before social transfers other than old-age and survivors' benefits (HY022)	16.799,6	1.763	1.771	365,5
Total disposable household income before social transfers including old-age and survivors' benefits (HY023)	15.729,8	1.607	1.615	400,6
Gross income from rental of a property or land (HY040G)	4.837,6	163	163	607,6
Family/children related allowances (HY050G)	556,6	1.266	1.266	23,7
Social exclusion not elsewhere classified (HY060G)	2.474,6	22	22	220,5
Housing allowances (HY070G)	2.981,8	50	50	491,7
Regular inter-household cash transfer received (HY080G)	2.681,7	141	141	283,1
Interest, dividends, profit from capital investment in unincorporated business (HY090G)	4.095,8	195	195	1.234,7
Income received by people aged under 16 (HY110G)	2.000	1	1	0,0
Regular taxes on wealth (HY120G)	51,6	1.056	1.056	3,8
Regular inter household cash transfer paid (HY130G)	2.086,3	225	225	143,3
Tax on income and social insurance contributions (HY140G)	1.764,2	1.316	1.349	77,6

Table 2.2.1.3 (ctd.): Mean (weighted), the total number of observations (before and after imputation) and Standard errors for the income components at personal level - longitudinal component R3-R4

Income Components at personal level	EU-SILC 2006			
	Mean	Number of observations		Standard error
		Before imputation	After imputation	
Employee cash or near cash income (PY010G)	10.445,0	2.135	2.171	273,3
Company car (PY021G)	1.425,5	48	48	173,0
Contributions to individual private pension plans (PY035G)	747,7	19	19	52,3
Cash benefits or losses from self-employment (PY050G)	8.672,0	483	483	358,9
Pension from individual private plans (PY080G)	4.345,6	13	14	591,7
Unemployment benefits (PY090G)	2.925,6	168	168	830,7
Old-age benefits (PY100G)	5.411,1	850	850	193,4
Survivor benefits (PY110G)	4.135,5	40	40	426,5
Sickness benefits (PY120G)	667,4	45	46	121,2
Disability benefits (PY130G)	3.548,5	94	94	178,9
Education-related allowances (PY140G)	1.567,5	223	223	69,3

Table 2.2.1.4 : Mean (weighted), the total number of observations (before and after imputation) and Standard errors for the Equivalised disposable income - longitudinal component R3-R4

Equivalised disposable income	EU-SILC 2006			
	Mean	Number of observations		Standard error
		Before imputation	After imputation	
Subclasses by household size				
1 household member	8.284,6	349	354	471,2
2 household members	9.122,6	1.076	1.078	378,8
3 household members	10.116,9	827	842	190,4
4 and more	9.619,4	3.179	3.187	105,5
Population by age group				
< 25	9.323,9	1.916	1.928	128,7
25 to 34	10.935,1	661	667	481,7
35 to 44	9.786,0	740	742	246,9
45 to 54	10.407,7	735	738	297,7
55 to 64	10.510,0	619	622	281,4
65+	6.477,1	760	764	157,7
Population by sex				
Male	9.699,4	2.668	2.687	156,0
Female	9.328,5	2.763	2.774	142,1

Table 2.2.1.5: Mean (weighted), the total number of observations (before and after imputation) and Standard errors for the income components at household level - longitudinal component R3-R4

Income Components at household level	EU-SILC 2007			
	Mean	Number of observations		
		Before imputation	After imputation	
Total household gross income (HY010)	22.309,2	1.659	1.704	554,9
Total disposable household income (HY020)	19.996,6	1.697	1.704	476,2
Total disposable household income before social transfers other than old-age and survivors' benefits (HY022)	18.743,5	1.684	1.691	445,6
Total disposable household income before social transfers including old-age and survivors' benefits (HY023)	17.269,2	1.531	1.538	433,7
Imputed rent (HY030G) *	3.551,2	NA	NA	31,5
Gross income from rental of a property or land (HY040G)	5.608,6	157	157	744,4
Family/children related allowances (HY050G)	727,4	915	915	32,1
Social exclusion not elsewhere classified (HY060G)	2.432,8	14	14	250,8
Housing allowances (HY070G)	2.010,9	54	54	329,5
Regular inter-household cash transfer received (HY080G)	2.302,6	137	137	198,0
Interest, dividends, profit from capital investment in unincorporated business (HY090G)	4.417,9	219	219	1.115,5
Interest repayments on mortgage (HY100G) *	1.716,1	262	262	97,0
Income received by people aged under 16 (HY110G)	400,0	2	2	198,0
Regular taxes on wealth (HY120G)	52,0	949	949	4,1
Regular inter household cash transfer paid (HY130G)	2.238,5	211	211	200,0
Tax on income and social insurance contributions (HY140G)	2.021,2	1.265	1.310	90,8

* Mandatory from 2007 onwards

Table 2.2.1.5 (ctd.): Mean (weighted), the total number of observations (before and after imputation) and Standard errors for the income components at personal level - longitudinal component R3-R4

Income Components at personal level	EU-SILC 2007			
	Mean	Number of observations		Standard error
		Before imputation	After imputation	
Employee cash or near cash income (PY010G)	11.251,6	2.107	2.152	292,0
Non-cash employee income (PY020G)	619,5	331	331	50,8
Company car (PY021G)	1.222,3	66	66	99,4
Employer's social insurance contributions (PY030G) *	1.575,5	1.915	1.915	25,9
Optional employer's social insurance contributions (PY031G) *	863,0	830	830	24,8
Contributions to individual private pension plans (PY035G) *	687,6	24	24	94,3
Cash benefits or losses from self-employment (PY050G)	8.660,4	482	487	373,9
Value of goods produced for own consumption (PY070G) *	526,3	48	48	88,3
Pension from individual private plans (PY080G)	5.262,8	14	14	1.385,7
Unemployment benefits (PY090G)	4.674,6	176	176	1.481,2
Old-age benefits (PY100G)	6.723,1	820	820	462,3
Survivor benefits (PY110G)	4.505,0	40	40	454,5
Sickness benefits (PY120G)	1.095,3	35	35	180,5
Disability benefits (PY130G)	3.656,0	113	113	181,7
Education-related allowances (PY140G)	1.443,4	254	254	51,3

* Mandatory from 2007 onwards

Table 2.2.1.6 : Mean (weighted), the total number of observations (before and after imputation) and Standard errors for the Equivalised disposable income – longitudinal component R3-R4

Equivalised disposable income	EU-SILC 2007			
	Mean	Number of observations		Standard error
		Before imputation	After imputation	
Subclasses by household size				
1 household member	9.329,6	386	386	439,3
2 household members	9.728,2	1.003	1.005	419,2
3 household members	12.196,9	808	815	408,0
4 and more	10.742,2	2.966	2.989	135,7
Population by age group				
< 25	10.351,6	1.807	1.822	171,7
25 to 34	12.319,7	643	649	566,3
35 to 44	10.793,4	669	671	276,7
45 to 54	11.642,2	700	705	358,4
55 to 64	12.322,5	628	629	498,2
65+	7.261,9	716	719	193,4
Population by sex				
Male	10.828,8	2.555	2.571	186,5
Female	10.553,1	2.608	2.624	194,7

Table 2.2.1.7: Mean (weighted), the total number of observations (before and after imputation) and Standard errors for the income components at household level – cross sectional component 2007

Income Components at household level	EU-SILC 2007			
	Mean	Number of observations		Standard error
		Before imputation	After imputation	
Total household gross income (HY010)	22.165,8	3.409	3.505	388,8
Total disposable household income (HY020)	19.907,3	3,490	3.505	338,3
Total disposable household income before social transfers other than old-age and survivors´ benefits (HY022)	18.831,6	3.462	3.477	329,6
Total disposable household income before social transfers including old-age and survivors´ benefits (HY023)	17.464,1	3.140	3.155	303,3
Imputed rent (HY030G) *	3.601,8	NA	NA	23,4
Gross income from rental of a property or land (HY040G)	5.247,0	335	335	479,1
Family/children related allowances (HY050G)	676,0	1.815	1.815	20,9
Social exclusion not elsewhere classified (HY060G)	2.834,9	32	32	375,4
Housing allowances (HY070G)	2.266,9	95	95	288,3
Regular inter-household cash transfer received (HY080G)	2.262,4	284	284	147,0
Interest, dividends, profit from capital investment in unincorporated business (HY090G)	3.835,6	441	441	626,3
Interest repayments on mortgage (HY100G) *	1.793,5	516	516	70,4
Income received by people aged under 16 (HY110G)	417,7	5	5	61,7
Regular taxes on wealth (HY120G)	50,6	1.961	1.961	2,6
Regular inter household cash transfer paid (HY130G)	2.182,5	416	416	130,0
Tax on income and social insurance contributions (HY140G)	1.999,5	2.551	2.645	63,2

* Mandatory from 2007 onwards

Table 2.2.1.7 (ctd.): Mean (weighted), the total number of observations (before and after imputation) and Standard errors for the income components at personal level – cross sectional component 2007

Income Components at personal level	EU-SILC 2007			
	Mean	Number of observations		Standard error
		Before imputation	After imputation	
Employee cash or near cash income (PY010G)	11.082,5	4.237	4.340	203,5
Non-cash employee income (PY020G)	394,9	599	599	29,3
Company car (PY021G)	1.216,3	135	135	68,4
Employer's social insurance contribution (PY030G)	1.541,9	3.878	3.878	18,5
Optional employer's social insurance contributions (PY031G) *	840,0	1.688	1.688	17,6
Contributions to individual private pension plans (PY035G) *	769,9	47	47	86,3
Cash benefits or losses from self-employment (PY050G)	8.942,0	951	960	243,5
Value of goods produced by own consumption (PY070G)	528,8	86	86	73,7
Pension from individual private plans (PY080G)	7.352,2	46	46	1.568,8
Unemployment benefits (PY090G)	3.554,8	311	311	774,6
Old-age benefits (PY100G)	6.891,0	1.705	1.706	416,8
Survivor benefits (PY110G)	4.236,6	78	78	280,5
Sickness benefits (PY120G)	1.169,0	70	70	147,9
Disability benefits (PY130G)	3.680,7	210	210	136,3
Education-related allowances (PY140G)	1.494,6	524	524	46,7

* Mandatory from 2007 onwards

Table 2.2.1.8 : Mean (weighted), the total number of observations (before and after imputation) and Standard errors for the Equivalised disposable income – cross sectional component 2007

Equivalised disposable income	EU-SILC 2007			
	Mean	Number of observations		Standard error
		Before imputation	After imputation	
Subclasses by household size				
1 household member	8.678,9	525	525	413,8
2 household members	9.789,9	2.098	2.102	310,9
3 household members	11.830,3	1.743	1.758	247,0
4 and more	10.756,1	6.204	6.245	95,4
Population by age group				
< 25	10.291,6	3.677	3.694	104,4
25 to 34	11.878,2	1.299	1.316	384,4
35 to 44	10.718,1	1.405	1.412	186,0
45 to 54	11.484,1	1.485	1.494	204,3
55 to 64	12.558,4	1.224	1.229	409,9
65+	7.316,8	1.480	1.485	149,0
Population by sex				
Male	10.814,5	5.122	5.153	133,0
Female	10.494,3	5.448	5.477	132,8

2.3. Non-sampling errors

2.3.1. Sampling frame and coverage errors

The list of households from the 2001 Census of Population was used as sampling frame with a supplementary list of newly constructed houses (built after 2001 up to 2006). The Statistical Service of Cyprus was provided by the Electricity Authority of Cyprus (E.A.C.) with a list of domestic electricity consumers, which contained all the new connections of electricity between 2001 and 2006. The E.A.C. distinguishes domestic consumers from other consumers (e.g. industrial etc). It has been established that each domestic electricity consumer registered by the E.A.C. corresponds to the statistical definition of a housing unit. Each of these new electricity meter connections represented one new household.

Coverage problems encountered were:

1. The frame of the 2001 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.
2. Some houses included in the E.A.C. list were used as secondary residence, so they were out of scope of the survey.

3. Some houses listed by the E.A.C. were impossible to be located due to incomplete information regarding their addresses.
4. Housing units built during 2007 were not included in our sampling frame.

2.3.2. Measurement and processing errors

2.3.2.1. Measurement errors

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

The questionnaire for EU-SILC was developed on the basis of the EU-SILC Doc. 065 and Doc. 055. It was further developed after the pilot survey which was carried out during the period 14/06/2004 to 23/07/2004. Even though, the questionnaire was well tested and despite the fact that this was the 3rd wave of the survey, some questions were still difficult to be answered with precision. Difficulties due to memory lapses were encountered in questions regarding income from interests, dividends and shares (HY090). Furthermore, difficulties were also encountered in distinguishing the various benefits and pensions.

As the method of data collection was Computer Assisted Personal Interviewing (CAPI) many validation and consistency checks were implemented during the interview. This had a positive impact on the quality of the data collected. Additionally, problems usually accounted to the routing of the questionnaire were fully avoided because of CAPI.

In order to reduce interviewer effects a two week training session for all the interviewers and an extra week training for newly recruited interviewers (i.e. those working for the first time in EU-SILC), was organised at the head offices of the Statistical Service. The training was conducted by permanent staff, Statistics Officers responsible for the EU-SILC survey. The aim of the training was to ensure that all interviewers were uniformly trained both in regard to the content of the questionnaire, as well as regards their behaviour during the interview. The extra week training for the newcomers focused mainly on the terminology of the survey giving as well general information on the previous round of the survey. In this way the newcomers were able to follow the other

interviewers who worked the year before in the survey. In the second week where all interviewers were together, the training mainly focused on refreshing the terminology used in the questionnaire and on the understanding of new terminology used for the first time in the questionnaire. Main emphasis was given on difficult definitions and on explaining the various public benefits as well as the importance of the accuracy of the information collected. On the third week the interviewers had intensive sessions on working with their laptops and the electronic questionnaires in the environment of BLAISE. An interviewer manual was prepared explaining each and every single question of the questionnaire as well as their respective possible answers.

Apart from the 20 interviewers the training sessions were also attended by 5 supervisors. Each one of them was responsible for a group of 4 interviewers. During the fieldwork period the supervisor had meetings with each one of the interviewers in his/her group at least 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 either by telephone or by personally visiting the household in question, especially in the case of unusual answers or missing data.

2.3.2.2. Processing errors

Processing errors were reduced because of CAPI and the implementation of validation and consistency checks during the data collection phase (BLAISE software). The processing errors were further reduced as the questionnaires were edited and coded by the supervisors prior to finalising the data files for processing. The coding requested was minimal, i.e. occupation (2 digits ISCO), economic activity (2 digits NACE) and country of birth; and was carried out using drop down lists.

The finalised data files prepared by supervisors were then processed using SAS programs with various other logical and consistency checks. The main errors found were connected to self-

employment income and the recording of the various benefits and pensions under the correct income variable according to EU-SILC Doc. 065.

Before sending the final D-, R-, H- and P- files, data files were further checked using EUROSTAT's SAS programs.

2.3.3. Non-response errors

2.3.3.1. Achieved sample size

The table below presents analytically the accepted personal interviews, as well as the accepted household interviews, within each rotational group.

Table 2.3.3.1.1 : Sample Size and Accepted Interviews, longitudinal component (R3-R4)

	2005			2006			2007		
	Total	R3	R4	Total	R3	R4	Total	R3	R4
Persons 16 years and over	4.451	2.188	2.263	4.331	2.124	2.207	4.142	2.032	2.110
Sample persons	4.451	2.188	2.263	4.210	2.064	2.146	3.978	1.955	2.023
Co-residents	0	0	0	121	60	61	164	77	87
Number of accepted personal questionnaires	4.441	2.182	2.259	4.331	2.124	2.207	4.142	2.032	2.110
Accepted household interviews	1.843	907	936	1.784	876	908	1.704	837	867

2.3.3.2. Unit non-response

The following non-response rate calculations, refer to the 2005 wave of the EU-SILC longitudinal component.

- *Household non-response rates (NRh)*

DB120 is the record of contact at the address

DB130 is the household questionnaire result

DB135 is the household interview acceptance result

Address contact rate:

$$Ra = \frac{\sum [DB120 = 11]}{\sum [DB120 = all] - \sum [DB120 = 23]}$$

Proportion of complete household interviews accepted for the database:

$$Rh = \frac{\sum [DB135 = 1]}{\sum [DB130 = all]}$$

Household non-response rate:

$$NRh = (1 - (Ra * Rh)) * 100$$

- **Individual non-response rates (NRp)**

RB245 is the respondent status

RB250 is the data status

Proportion of complete personal interviews within the households accepted for the database:

$$Rp = \frac{\sum [RB250 = 11 + 12 + 13 + 14^{(1)}]}{\sum [RB245 = 1 + 2 + 3]}$$

Individual non-response rate:

$$NRp = (1 - Rp) * 100$$

- **Overall individual non-response rates (* NRp)**

$$* NRp = (1 - (Ra * Rh * Rp)) * 100$$

⁽¹⁾These are individuals for whom the information was completed from full record imputation.

First wave of longitudinal component (Year 2005)

	Total (R3, R4)	R3	R4
Ra	0,9873	0,9891	0,9856
Rh	0,9088	0,9052	0,9123
NRh (%)	10,2726	10,4640	10,0865
Rp	0,9978	0,9973	0,9982
NRp (%)	0,2247	0,2742	0,1768
* NRp (%)	10,4742	10,7095	10,2454

The tables that follow present the household and person response rates for the longitudinal components of wave 2 (2005 – 2006) and wave 3 (2006 – 2007).

Household response rate: Comparison of result codes between EU-SILC 2005 and EU-SILC 2006 (R3 - R4)

Sample outcome in EU-SILC 2005			Sample outcome in EU-SILC 2006										Total		
			DB130 = 11		DB110 = 3, 4, 5, 6, 7	DB110 = 10	DB120 = 21	DB120 = 22	DB120 = 23	DB130 = 21	DB130 = 22	DB130 = 23		DB130 = 24	
DB135 = 1	DB135 = 2														
2005	DB130 = 11	DB135 = 1	1.733	0	29	0	3	0	0	57	4	12	5	1.843	
		DB135 = 2	0	0	0	0	0	0	0	0	0	0	0	0	
	DB120 = 21														0
	DB120 = 22														0
	DB120 = 23														0
	DB120 = 24														0
Total			1.733	0	29	0	3	0	0	57	4	12	5	1.843	
New Households in EU-SILC 2006															
2006	DB110 = 8		51	0	0	0	0	0	0	8	0	0	0	59	
	DB110 = 9		0	0	0	0	0	0	0	0	0	0	0	0	
Total			1.784	0	29	0	3	0	0	65	4	12	5	1.902	

Response rate for households

Wave response rate = 0,93796

Longitudinal follow-up rate = 0,95171

Follow-up ratio = 0,97938

Achieved sample size ratio = 0,96799

Household response rate: Comparison of result codes between EU-SILC 2006 and EU-SILC 2007 (R3 - R4)

Sample outcome in EU-SILC 2006			Sample outcome in EU-SILC 2007										Total	
			DB130 = 11		DB110 = 3, 4, 5, 6, 7	DB110 = 10	DB120 = 21	DB120 = 22	DB120 = 23	DB130 = 21	DB130 = 22	DB130 = 23		DB130 = 24
DB135 = 1	DB135 = 2	DB135 = 1	DB135 = 2											
2006	DB130 = 11	DB135 = 1	1.666	0	25	3	5	0	0	60	6	19	0	1.784
		DB135 = 2	0	0	0	0	0	0	0	0	0	0	0	0
	DB120 = 21		0	0	0	0	0	0	0	0	0	0	0	0
	DB120 = 22		0	0	0	0	0	0	0	0	3	1	0	4
	DB120 = 23		0	0	1	0	0	0	0	7	1	3	0	12
	DB120 = 24		0	0	0	0	0	0	0	3	0	2	0	5
	Total		1.666	0	26	3	5	0	0	70	10	25	0	1.805
New Households in EU-SILC 2007														
2007	DB110 = 8		38	0	0	0	0	0	0	7	0	0	0	45
	DB110 = 9		0	0	0	0	0	0	0	0	0	0	0	0
Total		1.704	0	26	3	5	0	0	77	10	25	0	1.850	

Response rate for households

Wave response rate = 0,92108

Longitudinal follow-up rate = 0,94238

Follow-up ratio = 0,96343

Achieved sample size ratio = 0,95516

Personal interview outcome in EU-SILC 2006 (R3 - R4)

		Not completed because of								
		RB250 = 11, 12, 13	RB250 = 14	RB250 = 21	RB250 = 22	RB250 = 23	RB250 = 31	RB250 = 32	RB250 = 33	Total
Row	Sample persons forwarded from last wave									
1	RB110 = 1 - 2	4.124	8	0	0	0	0	0	0	4.132
2	RB110 = 6									17
3	RB110 = -1									0
4	RB120 = 2									6
5	RB120 = 3									33
6	RB120 = 4									9
7	DB135 = 2 or -1, or DB110 = 7, or DB120 = 21-23 or -1, or DB130 = 21-24 or -1									0
8	DB110 = 3-6									0
New Sample Persons										
9	Reached age 16	78	0	0	0	0	0	0	0	78
10	Sample additions	0	0	0	0	0	0	0	0	0
Non-Sample persons 16+										
	From EU-SILC 2005	0	0	0	0	0	0	0	0	0
11	Not from EU-SILC 2005	118	3	0	0	0	0	0	0	121
Sample persons not forwarded from last wave (excluded died or not eligible according to tracing rules)										
13	From EU-SILC 2006									263
Sum of Rows										
1+3+6+7+9+10		4.202	8	0	0	0	0	0	0	4.219
1+3+6+7+9+10+13		4.202	8	0	0	0	0	0	0	4.482
1+3+6+7+9+10+11		4.320	11	0	0	0	0	0	0	4.340

Response rate for persons in EU-SILC 2006 (R3 - R4)

wave response rate of sample persons =0,99597

wave response rate of co-residents =0,00000

longitudinal follow-up ratio =0,93753

R(RB250 = 14) =0,00178

achieved sample size ratio for sample persons =0,94618

achieved sample size ratio for sample persons and co-residents =0,97275

achieved sample size ratio for co-residents in first wave =0,00000

response rate for non-sample persons =0,97521

Personal interview outcome in EU-SILC 2007 (R3 - R4)

		Not completed because of								
		RB250 = 11, 12, 13	RB250 = 14	RB250 = 21	RB250 = 22	RB250 = 23	RB250 = 31	RB250 = 32	RB250 = 33	Total
Row	Sample persons forwarded from last wave									
1	RB110 = 1 - 2	3.896	5	0	0	0	0	0	0	3.901
2	RB110 = 6									15
3	RB110 = -1									0
4	RB120 = 2									1
5	RB120 = 3									17
6	RB120 = 4									14
7	DB135 = 2 or -1, or DB110 = 7, or DB120 = 21-23 or -1, or DB130 = 21-24 or -1									0
8	DB110 = 3-6									0
New Sample Persons										
9	Reached age 16	76	0	0	0	0	0	0	0	76
10	Sample additions									
Non-Sample persons 16+										
	From EU-SILC 2005	0	0	0	0	0	0	0	0	0
11	Not from EU-SILC 2005	80	0	0	0	0	0	0	0	80
Sample persons not forwarded from last wave (excluded died or not eligible according to tracing rules)										
13	From EU-SILC 2006									276
Sum of Rows										
	1+3+6+7+9+10	3.972	5	0	0	0	0	0	0	3.991
	1+3+6+7+9+10+13	3.972	5	0	0	0	0	0	0	4.267
	1+3+6+7+9+10+11	4.052	5	0	0	0	0	0	0	4.071

Response rate for persons in EU-SILC 2007 (R3 - R4)

wave response rate of sample persons =0,99524

wave response rate of co-residents =0,00000

longitudinal follow-up ratio =0,93086

R(RB250 = 14) =0,00117

achieved sample size ratio for sample persons =0,94526

achieved sample size ratio for sample persons and co-residents =0,96430

achieved sample size ratio for co-residents in first wave =0,00000

response rate for non-sample persons =1,00000

2.3.3.3. Distribution of households ‘by household status’ (DB110), by ‘record of contact at address’ (DB120), by ‘household questionnaire result’ (DB130) and by ‘household interview acceptance’ (DB135)

Table 2.3.3.1 : Distribution of households by household status - DB110 (R3 - R4)

DB110 - Household Status	2005		2006		2007	
	Total	%	Total	%	Total	%
At the same address as last interview (1)	0	0,0	1.758	92,4	1.696	91,7
Entire household moved to a private household within the country (2)	0	0,0	56	2,9	80	4,3
Entire household moved to a collective household or institution within the country (3)	0	0,0	5	0,3	5	0,3
Household moved outside the country (4)	0	0,0	17	0,9	11	0,6
Entire household died (5)	0	0,0	5	0,3	5	0,3
Household does not contain sample person (6)	0	0,0	2	0,1	5	0,3
Address not contacted (unable to access or lost, i.e. no record of what happened to the household) (7)	0	0,0	0	0,0	0	0,0
Split-off household (8)	0	0,0	59	3,1	45	2,4
New address added to the sample this wave or first wave (9)	2.268	100,0	0	0,0	0	0,0
Fusion (10)	0	0,0	0	0,0	3	0,2
Total	2.268	100,0	1.902	100,0	1.850	100,0

Table 2.3.3.3.2 : Distribution of households by record of contact at address - DB120 (R3 - R4)

DB120 - Contact at address	2005		2006		2007	
	Total	%	Total	%	Total	%
Address contacted (11)	2.028	89,4	112	5,9	120	6,5
Address cannot be located (21)	26	1,1	3	0,2	5	0,3
Address unable to access (22)	0	0,0	0	0,0	0	0,0
Address does not exist or empty etc. (23)	214	9,4	0	0,0	0	0,0
Missing	0	0,0	1.787	94,0	1.725	93,2
Total	2.268	100,0	1.902	100,0	1.850	100,0

Table 2.3.3.3.3 : Distribution of households by household questionnaire result - DB130 (R3 - R4)

DB130 – Household questionnaire result	2005		2006		2007	
	Total	%	Total	%	Total	%
Household questionnaire completed (11)	1.843	90,9	1.784	95,4	1.704	93,8
Refusal to co-operate (21)	113	5,6	65	3,5	77	4,2
Entire household temporarily away (22)	30	1,5	4	0,2	10	0,6
Household unable to respond (23)	25	1,2	12	0,6	25	1,4
Other reasons (24)	17	0,8	5	0,3	0	0,0
Total	2.028	100,0	1.870	100,0	1.816	100,0

Table 2.3.3.3.4 : Distribution of households by household interview acceptance - DB135 (R3 - R4)

DB135 – Household interview acceptance	2005		2006		2007	
	Total	%	Total	%	Total	%
Interview accepted for database (1)	1.843	100,0	1.784	100,0	1.704	100,0
Interview rejected (2)	0	0,0	0	0,0	0	0,0
Total	1.843	100,0	1.784	100,0	1.704	100,0

2.3.3.4. Distribution of persons by membership status

Table 2.3.3.4.1 : Distribution of persons by membership status - RB110 (R3 - R4)

RB110 - Membership Status	2006		2007	
	Total	%	Total	%
<i>For current household members</i>				
Was in this household in previous waves or current household member (1)	5.202	92,4	5.012	94,0
Moved into this household from another sample household since previous wave (2)	83	1,5	60	1,1
Moved into this household from outside sample since previous wave (3)	130	2,3	84	1,6
Newly born into this household since last wave (4)	47	0,8	39	0,7
<i>Not current household members</i>				
Moved out since previous wave or last interview if not contacted in previous wave (5)	139	2,5	119	2,2
Died (6)	17	0,3	15	0,3
Lived in the household at least three months during the income reference period but was not recorded in the register of this household (7)	14	0,2	2	0,0
Total	5.632	100,0	5.331	100,0

Table 2.3.3.4.2 : Distribution of persons by 'moved to' - RB120 (R3 - R4)

RB120 - Moved to		2006		2007	
		Total	%	Total	%
RB110=5	To a private household in the country - current household member this wave (1)	83	59,7	60	50,4
	To a private household in the country - not current household member this wave (1)	7	5,0	19	16,0
	To a collective household or institution in the country (2)	6	4,3	1	0,8
	Abroad (3)	34	24,5	25	21,0
	Lost (4)	9	6,5	14	11,8
	Total	139	100,0	119	100,0

2.3.3.5. Item non-response

The tables that follow provide an overview of non-response for all household income variables.

Note:

⁽¹⁾ percentages are based on the total number of households

⁽²⁾ percentages are based on households having received an amount on the specific income variable

Table 2.3.3.5.1: Information on item non-response, household level income variables (R3 - R4)

Item non-response	2005		
	% ⁽¹⁾ of households having received an amount	% ⁽²⁾ of households with missing values (before imputation)	% ⁽²⁾ of households with partial information (before imputation)
Total household gross income HY010	99,9	0,0	2,3
Total disposable household income HY020	99,9	0,0	0,0
Total disposable household income before social transfers other than old-age and survivor's benefits HY022	99,1	0,0	0,0
Total disposable household income before social transfers including old-age and survivor's benefits HY023	89,8	0,0	0,0
Imputed rent HY030G	na	na	na
Income from rental of a property or land HY040G	8,6	0,0	0,0
Family/children related allowances HY050G	55,0	0,0	0,0
Social exclusion not elsewhere classified HY060G	2,7	0,0	0,0
Housing allowances HY070G	3,0	0,0	0,0
Regular inter-household cash transfer received HY080G	6,8	0,0	0,0
Interest, dividends, profit from capital investment in unincorporated business HY090G	7,1	0,0	0,0
Interest repayments on mortgage HY100G	na	na	na
Income received by people aged under 16 HY110G	0,2	0,0	0,0
Regular taxes on wealth HY120G	60,9	0,0	0,0
Regular inter household cash transfer paid HY130G	10,1	0,0	0,0

Tax on income and social insurance contributions HY140G	73,9	1,4	1,8
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Table 2.3.3.5.2: Information on item non-response, household level income variables (R3 - R4)

Item non-response	2006		
	% ⁽¹⁾ of households having received an amount	% ⁽²⁾ of households with missing values (before imputation)	% ⁽²⁾ of households with partial information (before imputation)
Total household gross income HY010	99,9	0,0	1,9
Total disposable household income HY020	99,9	0,0	0,4
Total disposable household income before social transfers other than old-age and survivor's benefits HY022	99,3	0,1	0,4
Total disposable household income before social transfers including old-age and survivor's benefits HY023	90,5	0,1	0,4
Imputed rent HY030G	na	na	na
Income from rental of a property or land HY040G	9,1	0,0	0,0
Family/children related allowances HY050G	71,0	0,0	0,0
Social exclusion not elsewhere classified HY060G	1,2	0,0	0,0
Housing allowances HY070G	2,8	0,0	0,0
Regular inter-household cash transfer received HY080G	7,9	0,0	0,0
Interest, dividends, profit from capital investment in unincorporated business HY090G	10,9	0,0	0,0
Interest repayments on mortgage HY100G	na	na	na
Income received by people aged under 16 HY110G	0,1	0,0	0,0
Regular taxes on wealth HY120G	59,2	0,0	0,0
Regular inter household cash transfer paid HY130G	12,6	0,0	0,0
Tax on income and social insurance contributions HY140G	75,6	0,7	1,7

Table 2.3.3.5.3: Information on item non-response, household level income variables (R3 - R4)

Item non-response	2007		
	% ⁽¹⁾ of households having received an amount	% ⁽²⁾ of households with missing values (before imputation)	% ⁽²⁾ of households with partial information (before imputation)
Total household gross income HY010	100,0	0,0	2,6
Total disposable household income HY020	100,0	0,0	0,4
Total disposable household income before social transfers other than old-age and survivor's benefits HY022	99,2	0,0	0,4
Total disposable household income before social transfers including old-age and survivor's benefits HY023	90,3	0,0	0,5
Imputed rent HY030G	91,9	na	na
Income from rental of a property or land HY040G	9,2	0,0	0,0
Family/children related allowances HY050G	53,7	0,0	0,0
Social exclusion not elsewhere classified HY060G	0,8	0,0	0,0
Housing allowances HY070G	3,2	0,0	0,0
Regular inter-household cash transfer received HY080G	8,0	0,0	0,0
Interest, dividends, profit from capital investment in unincorporated business HY090G	12,9	0,0	0,0
Interest repayments on mortgage HY100G	15,4	0,0	0,0
Income received by people aged under 16 HY110G	0,1	0,0	0,0
Regular taxes on wealth HY120G	55,7	0,0	0,0
Regular inter household cash transfer paid HY130G	12,4	0,0	0,0
Tax on income and social insurance contributions HY140G	76,9	0,9	2,5

The tables that follow provide an overview of non-response for all personal income variables.

Note:

⁽¹⁾ percentages are based on the total number of persons aged 16 and over

⁽²⁾ percentages are based on persons aged 16 and over having received an amount on the specific income variable

Table 2.3.3.5.4: Information on item non-response, personal level income variables (R3 - R4)

Item non-response	2005		
	% ⁽¹⁾ of persons 16+ having received an amount	% ⁽²⁾ of persons with missing values (before imputation)	% ⁽²⁾ of persons with partial information (before imputation)
Employee cash or near cash income PY010G	49,6	0,0	2,2
Non-cash employee income PY020G	na	na	na
Company car PY021G	0,8	0,0	0,0
Employer's social insurance contribution PY030G	na	na	na
Contributions to individual private pension plans PY035G	2,0	0,0	0,0
Cash benefits or losses from self-employment PY050G	9,5	0,0	1,2
Value of goods produced by own consumption PY070G	na	na	na
Pension from individual private plans PY080G	0,3	0,0	0,0
Unemployment benefits PY090G	3,7	0,0	0,0
Old-age benefits PY100G	19,3	0,0	0,0
Survivor benefits PY110G	1,0	0,0	0,0
Sickness benefits PY120G	1,0	0,0	0,0
Disability benefits PY130G	1,6	0,0	0,0
Education-related allowances PY140G	5,1	0,0	0,0

Table 2.3.3.5.5: Information on item non-response, personal level income variables (R3 - R4)

Item non-response	2006		
	% ⁽¹⁾ of persons 16+ having received an amount	% ⁽²⁾ of persons with missing values (before imputation)	% ⁽²⁾ of persons with partial information (before imputation)
Employee cash or near cash income PY010G	51,0	0,4	1,2
Non-cash employee income PY020G	na	na	na
Company car PY021G	1,1	0,0	0,0
Employer's social insurance contribution PY030G	na	na	na
Contributions to individual private pension plans PY035G	0,5	0,0	0,0
Cash benefits or losses from self-employment PY050G	11,2	0,0	0,0
Value of goods produced by own consumption PY070G	na	na	na
Pension from individual private plans PY080G	0,3	7,1	0,0
Unemployment benefits PY090G	3,9	0,0	0,0
Old-age benefits PY100G	19,6	0,0	0,0
Survivor benefits PY110G	0,9	0,0	0,0
Sickness benefits PY120G	1,1	2,2	0,0
Disability benefits PY130G	2,2	0,0	0,0
Education-related allowances PY140G	5,1	0,0	0,0

Table 2.3.3.5.6: Information on item non-response, personal level income variables (R3 - R4)

Item non-response	2007		
	% ⁽¹⁾ of persons 16+ having received an amount	% ⁽²⁾ of persons with missing values (before imputation)	% ⁽²⁾ of persons with partial information (before imputation)
Employee cash or near cash income PY010G	52,0	0,3	1,8
Non-cash employee income PY020G	8,0	0,0	0,0
Company car PY021G	1,6	0,0	0,0
Employer's social insurance contribution PY030G	46,2	0,0	0,0
Contributions to individual private pension plans PY035G	0,6	0,0	0,0
Cash benefits or losses from self-employment PY050G	11,8	0,0	0,8
Value of goods produced by own consumption PY070G	1,2	0,0	0,0
Pension from individual private plans PY080G	0,3	0,0	0,0
Unemployment benefits PY090G	4,2	0,0	0,0
Old-age benefits PY100G	19,8	0,0	0,0
Survivor benefits PY110G	1,0	0,0	0,0
Sickness benefits PY120G	0,8	0,0	0,0
Disability benefits PY130G	2,7	0,0	0,0
Education-related allowances PY140G	6,1	0,0	0,0

2.4. Mode of data collection

The mode of data collection for EU-SILC survey was CAPI. PAPI was only used in the extreme case of a technical problem with the interviewer's laptop. Proxy interviews occurred mainly for persons serving as national guards or for students fully supported by their parents and temporarily away; both of these categories were considered to be members of their parents' households. The following tables present the distribution of individuals aged 16 or over by data status and type of interview.

Table 2.4.1 : Distribution of all household members by data status - RB250 (R3 - R4)

RB250 - Data status	2005		2006		2007	
	Total	%	Total	%	Total	%
information completed only from interview (11)	4.441	99,8	4.320	99,7	4.134	99,8
information completed from full record imputation (14)	0	0,0	11	0,3	8	0,2
individual unable to respond and no proxy possible (21)	0	0,0	0	0,0	0	0,0
refusal to co-operate (23)	9	0,2	0	0,0	0	0,0
person temporarily away and no proxy possible (31)	1	0,0	0	0,0	0	0,0
no contact for other reasons (32)	0	0,0	0	0,0	0	0,0
information not completed: reason unknown (33)	0	0,0	0	0,0	0	0,0
Total	4.451	100,0	4.331	100,0	4.142	100,0

Table 2.4.2 : Distribution of sample persons by data status - RB250 (R3 - R4)

RB250 - Data status	2005		2006		2007	
	Total	%	Total	%	Total	%
information completed only from interview (11)	4.441	99,8	4.202	99,8	3.973	99,9
information completed from full record imputation (14)	0	0,0	8	0,2	5	0,1
individual unable to respond and no proxy possible (21)	0	0,0	0	0,0	0	0,0
refusal to co-operate (23)	9	0,2	0	0,0	0	0,0
person temporarily away and no proxy possible (31)	1	0,0	0	0,0	0	0,0
no contact for other reasons (32)	0	0,0	0	0,0	0	0,0
information not completed: reason unknown (33)	0	0,0	0	0,0	0	0,0
Total	4.451	100,0	4.210	100,0	3.978	100,0

Table 2.4.3 : Distribution of co-residents by data status - RB250 (R3 - R4)

RB250 - Data status	2006		2007	
	Total	%	Total	%
information completed only from interview (11)	118	97,5	161	98,2
information completed from full record imputation (14)	3	2,5	3	1,8
individual unable to respond and no proxy possible (21)	0	0,0	0	0,0
refusal to co-operate (23)	0	0,0	0	0,0
person temporarily away and no proxy possible (31)	0	0,0	0	0,0
no contact for other reasons (32)	0	0,0	0	0,0
information not completed: reason unknown (33)	0	0,0	0	0,0
Total	121	100,0	164	100,0

Table 2.4.4 : Distribution of all household members by type of interview - RB260 (R3 - R4)

RB260 - Type of interview	2005		2006		2007	
	Total	%	Total	%	Total	%
face to face interview - PAPI (1)	16	0,4	1	0,0	1	0,0
face to face interview - CAPI (2)	3.823	86,1	3.740	86,6	3.388	82,0
CATI, telephone interview (3)	0	0,0	0	0,0	0	0,0
self administered by respondent (4)	0	0,0	0	0,0	0	0,0
proxy (5)	602	13,6	579	13,4	745	18,0
Total	4.441	100,0	4.320	100,0	4.134	100,0

Table 2.4.5 : Distribution of sample persons by type of interview - RB260 (R3 - R4)

RB260 - Type of interview	2005		2006		2007	
	Total	%	Total	%	Total	%
face to face interview - PAPI (1)	16	0,4	1	0,0	1	0,0
face to face interview - CAPI (2)	3.823	86,1	3.637	86,6	3.274	82,4
CATI, telephone interview (3)	0	0,0	0	0,0	0	0,0
self administered by respondent (4)	0	0,0	0	0,0	0	0,0
proxy (5)	602	13,6	564	13,4	698	17,6
Total	4.441	100,0	4.202	100,0	3.973	100,0

Table 2.4.6 : Distribution of co-residents by type of interview - RB260 (R3 - R4)

RB260 - Type of interview	2006		2007	
	Total	%	Total	%
face to face interview - PAPI (1)	0	0,0	0	0,0
face to face interview - CAPI (2)	103	87,3	114	70,8
CATI, telephone interview (3)	0	0,0	0	0,0
self administered by respondent (4)	0	0,0	0	0,0
proxy (5)	15	12,7	47	29,2
Total	118	100,0	161	100,0

2.5. Imputation procedure

In the very few cases where imputation required, the method used was deductive imputation. Imputation was necessary in the cases where only net income was collected and in the cases of personal refusals. Net income was converted to gross by applying the existing tax system and social insurance contributions rules. Personal refusals were imputed using existing data from previous waves as the starting point.

2.6. Imputed rent

Imputed rent was calculated using Heckman Method as one of the methods proposed by Eurostat. The following variables were taken into account for the calculation: type of dwelling, number of rooms, area in square meters, year of construction, heating, air-conditioning and income brackets. Despite the fact that efforts were made to make correct estimates using the Heckman method, however we still have our reservations as regards to the accuracy of these estimates, due to the fact that the rental market in Cyprus is considered quite small.

2.7. Company cars

To value the benefit of private use of company car the approach of 'Valuation on the basis of accrued saving' according to Doc. EU-SILC 065 was followed. In order to value the amount the recipient would have to pay over the reference period to enjoy the same benefit from the use of own vehicle the sum of (i) & (ii) below were computed:

(i) Depreciation over the reference period in the capital value of the car,

(ii) Coverage by the employer of other costs, which would normally fall on the user of his/her own car. The latter may cover car insurance and possibly maintenance and major repair costs, but would normally exclude fuel and other running costs.

External sources had to be used to construct suitable average schedules for (i) and (ii), rather than to collect (i) and (ii) from individual respondents.

The main requirement was to construct a ‘depreciation model’:

$$\text{Depreciation} = \frac{\text{Purchase prices} - \text{Selling prices at } X}{X},$$

where X = ‘the average age of a company car’

To calculate the ‘Purchase price’ and the ‘Selling price’, the make, the model, the registration year and other characteristics of the car were used. A list of prices and manufacturer’s recommended retail prices (RRP) were also used for a wide range of new cars. If the RRP was not available, then it was estimated based on the price of a similar car or the price relative to other cars with a similar pricing structure. The list price included VAT and vehicle registration tax. For calculating ‘the average age of a company car’, an average of 5 was considered.

3. COMPARABILITY

3.1. Basic concepts and definitions

Reference population

There is no difference to the standard EU-SILC definition, hence the reference population is defined as all the households and their members living in the areas under the effective control of the Government of the Republic of Cyprus. Population in collective households and institutions is excluded.

Private household definition

No deviation from the standard EU-SILC definition. A private household is a person living alone or a group of persons living together in the same dwelling sharing expenses, including the joint provision of the essentials of living.

Household membership

The definition of household membership is the one recommended by EUROSTAT. Students (either in Cyprus or abroad) are considered to be members of their parents' household given they are fully financially supported by them.

Income reference period(s) used

For EU-SILC 2007 the income reference period was 2006.

The period for taxes on income and social insurance contributions

The period for taxes payments/refunds and social insurance contributions was 2006. Tax refunds received during 2006 referred to income received in previous years.

Reference period for taxes on wealth

The reference period for taxes on wealth was 2006.

The lag between the income reference period and current variables

Since EU-SILC 2007 was carried out during the middle of March and the beginning of August 2007 the time lag between the income reference period and current variables varied between 3 to 7 months.

Total duration of the data collection of the sample

The data collection phase of the survey lasted 5 months.

Basic information on activity status during the income reference period

The information on activity status was collected using an activity calendar covering each month of the income reference period.

3.2. Components of income

3.2.1. Differences between the national definitions and standard EU-SILC definitions

The total household gross income and its components were calculated based on the definitions of income provided in the Commission Regulation (EC) 1980/2003 and the guidelines given in DOC.065. The definitions were fully applied and an effort was made to collect data as accurately as possible.

The following income components are calculated for the first time, since they are compulsory from the year 2007 onwards.

Imputed rent was calculated using Heckman Method as one of the methods proposed by Eurostat. The following variables were taken into account for the calculation: type of dwelling, number of rooms, area in square meters, year of construction, heating, air-conditioning and income brackets. Despite the fact that efforts were made to make correct estimates using the Heckman method, however we still have our reservations as regards to the accuracy of these estimates, due to the fact that the rental market in Cyprus is considered quite small.

Interest paid on mortgages is collected asking directly the amount. Over and above, a double check is carried out with an estimation of the amount, which is calculated on the basis of the following questions: year the housing loan was taken, the initial amount borrowed, years of repayment of the initial loan, the monthly payment, the outstanding amount at the end of the previous year, the actual total amount paid on the previous year.

Non-cash employee income (except company car), value of goods produced for own consumption and employers' social insurance contributions were collected according to the guidelines provided by Eurostat.

Gross monthly earnings for employees were not collected as the gender pay gap is calculated from other sources than EU-SILC.

3.2.2. The source or procedure used for the collection of income variables

Data on income variables were collected by Computer Assisted Personal Interviewing. Each and every income component was separately collected.

3.2.3. The form in which income variables at component level have been obtained

The instructions to the interviewers were to collect each income component as gross and to record separately taxes on income at source and social insurance contributions. In the very few cases where gross income was impossible to collect, net income was recorded.

3.2.4. The method used for obtaining income target variables in the required form

In the cases where gross income or taxes on income at source or social insurance contributions were impossible to collect, at least net value was collected for the specific income component. It was then converted to gross by applying the existing tax system and social insurance contributions rules.

3.3. Tracing rules

There were no differences between the national tracing rules and the standard EU-SILC tracing rules.

4. COHERENCE

4.1. Comparison of income target variables and number of persons who receive income from each 'income component', with external sources

In the tables that follow, we compare the results on income components between EU-SILC 2005, EU-SILC 2006 and EU-SILC 2007 at both household and personal level. More specifically in the two tables that follow the percentages of households and persons having received an amount on specific income target variables, as well as their mean value per household are presented.

The results show that the percentages of either households or persons receiving an amount between the three surveys are very close and hence consistent. The only big difference corresponds to the "family children related allowance" (HY050G). This is due to the fact that in 2005 (EU-SILC 2006) an ad-hoc benefit was paid after a special government decision to households independently of family or child allowances.

Another difference that occurred between the first survey and the other two surveys at household level, corresponded to "social exclusion not elsewhere classified" (HY060G). This is mainly due to the fact that during 2005 interviewers did not record benefits as detailed as during 2006.

In EU-SILC 2007, PY020G corresponds to the variable Non-cash employee income, whereas in EU-SILC 2006 and 2005 it corresponded to the variable Company car. In EU-SILC 2007 Company car corresponds to PY021G.

In general the survey results reflect the improvement in the economy of Cyprus between 2006 (EU-SILC 2007), 2005 (EU-SILC 2006) and 2004 (EU-SILC 2005). Compensation of employees and imputed wages and salaries of self-employed increased by 5,6% from 2004 to 2005 and by 6,1% from 2005 to 2006 (National Accounts). Furthermore, earnings of the employees increase every six months (July and December) automatically based on the cost of leaving allowance.

Table 4.1.1: Comparison between EU-SILC 2005, 2006 and 2007 for all income target variables at household level

Income target variable	EU-SILC					
	2005		2006		2007	
	% of households having received an amount	Mean (weighted) income per household (CY £)	% of households having received an amount	Mean (weighted) income per household (CY £)	% of households having received an amount	Mean (weighted) income per household (CY £)
Total household gross income HY010	100,0	18.239	100,0	19.981	100,0	22.166
Total disposable household income HY020	100,0	16.338	100,0	17.907	100,0	19.907
Total disposable household income before social transfers other than old-age and survivor's benefits HY022	98,9	15.342	99,4	16.773	99,2	18.673
Total disposable household income before social transfers including old-age and survivor's benefits HY023	89,5	13.273	90,7	14.521	90,0	15.888
Imputed rent HY030G	-	-	-	-	91,8	3.393
Income from rental of a property or land HY040G	8,3	341	8,9	392	9,6	462
Family/children related allowances HY050G	54,9	350	70,4	370	51,8	351
Social exclusion not elsewhere classified HY060G	3,0	68	1,1	28	0,9	22
Housing allowances HY070G	2,9	84	2,8	92	2,7	84
Regular inter-household cash transfer received HY080G	7,1	172	8,5	209	8,1	175
Interest, dividends, profit from capital investment in unincorporated business HY090G	7,1	219	11,1	333	12,6	448
Interest repayments on mortgage HY100G	-	-	-	-	14,7	299
Regular taxes on wealth HY120G	60,4	28	58,6	27	56,0	27

Regular inter household cash transfer paid HY130G	10,7	223	13,2	264	11,9	27
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Table 4.1.2: Comparison between EU-SILC 2005, 2006 and 2007 for all income target variables at individual level

Income target variable	EU-SILC					
	2005		2006		2007	
	% of persons 16+ having received an amount	Mean (weighted) income per household (CY £)	% of persons 16+ having received an amount	Mean (weighted) income per household (CY £)	% of persons 16+ having received an amount	Mean (weighted) income per household (CY £)
Employee cash or near cash income PY010G	51,1	12.091	51,8	13.269	51,2	14.344
Non-cash employee income PY020G	-	-	-	-	7,1	120
Company car PY021G	1,0	41	1,8	45	1,6	49
Employer's social insurance contribution PY030G	-	-	-	-	45,8	1.792
Cash benefits or losses from self-employment PY050G	9,5	2.263	10,3	2.290	11,3	2.473
Value of goods produced by own consumption PY070G	-	-	-	-	1,0	11
Unemployment benefits PY090G	3,6	169	3,8	249	3,7	314
Old-age benefits PY100G	18,4	2.021	19,6	2.233	20,1	2.807
Survivor benefits PY110G	1,0	94	0,9	76	0,9	87
Sickness benefits PY120G	1,1	23	1,0	19	0,8	24
Disability benefits PY130G	1,6	120	1,9	164	2,5	208
Education-related allowances PY140G	5,1	182	5,0	211	6,2	232

The next table presents the labour force participation rates as they were recorded by Labour Force Survey 2007 and EU-SILC 2007. There is one main methodological difference between the two surveys, for LFS students studying abroad or national guards (compulsory army service) are not considered to be part of the population, where as they are part of the EU-SILC population. Thus, the totals as well as the rates of the ages 16-24 are not comparable. The rest of the results up to the age of 59 fit very well. EU-SILC seems to underestimate the rates for persons aged 60 years and over, but this is understandable since LFS is the core survey with main objective to collect information on employment.

Table 4.1.3: Comparison between Labour Force Survey 2007 and EU-SILC 2007 for the labour force participation rates

Age Groups	Total		Males		Females	
	LFS	EU-SILC	LFS	EU-SILC	LFS	EU-SILC
16 - 19	12,6	8,1	14,0	8,8	11,3	7,3
20 - 24	70,1	46,6	73,8	44,8	67,0	48,4
25 - 29	87,8	83,4	91,8	85,7	83,8	81,2
30 - 34	90,4	90,2	96,9	98,3	84,1	82,3
35 - 39	88,2	88,5	94,7	96,6	82,0	80,9
40 - 44	87,4	85,7	96,5	96,7	78,8	75,2
45 - 49	85,1	85,4	96,2	95,6	74,2	75,5
50 - 54	80,6	79,9	94,3	92,3	67,3	67,8
55 - 59	67,4	68,6	82,9	88,0	52,8	50,2
60 - 64	45,6	37,9	64,7	53,3	27,7	23,4
65+	10,9	6,6	18,4	11,9	4,5	2,1
Total	64,4	60,2	73,6	68,2	55,8	52,6

