



# **Intermediate Quality Report**

## **Survey on Income and Living Conditions Spain (Spanish ECV 2011)**

**Madrid, December 2012**

# CONTENTS

INTRODUCTION .....	3
1. EUROPEAN UNION COMMON CROSS-SECTIONAL INDICATORS .....	4
1.1. European Union common cross-sectional indicators based on the cross-sectional component of EU-SILC .....	4
1.2. Other indicators .....	5
2. ACCURACY .....	6
2.1. Sample design .....	6
2.2. Sampling errors .....	16
2.3. Non-sampling errors .....	17
2.4. Mode of data collection .....	29
2.5. Interview duration .....	31
3. COMPARABILITY .....	32
3.1. Basic concepts and definitions .....	32
3.2. Components of income .....	40
4. COHERENCE .....	44
4.1 Comparison of income target variables and number of persons who receive income from each ‘income component’, with external sources .....	44
5. ANNEX. ASSESSMENT OF THE MODULE 2011 .....	49

## INTRODUCTION

This Report complies with Article 16 of the Regulation of the European Parliament and of the Council of 16 June 2003 concerning Community statistics on income and living conditions (EU-SILC).

Article 16 requires that by the end of the year N+1, Member States produce an intermediate quality report on the cross-sectional component of the statistical operation. Article 16 further provides that by the end of the year N+2, Member States produce a final quality report covering both cross-sectional and longitudinal components.

To implement Article 16, the Commission made a Regulation on the detailed content of the intermediate and final quality reports. The Commission also drew up a technical document to further specify and clarify the content of quality reports.

This Report sets out the EU common basic indicators drawn from EU-SILC survey 2011 (the Spanish version is called *Encuesta de Condiciones de Vida*), and provides information on accuracy, comparability and coherence with external sources.

The gross and net figures are provided for the 2011 Spanish microdata.

## 1. EUROPEAN UNION COMMON CROSS-SECTIONAL INDICATORS

### 1.1. European Union common cross-sectional indicators based on the cross-sectional component of EU-SILC

#### Common indicators

At-risk-of-poverty rate (after social transfer) by age and gender

Total	0 le age	21.8
	0 le age le 15	26.7
	16 le age le 24	26.4
	25 le age le 49	20.4
	50 le age le 64	18.7
	65 le age	20.8
	16 le age	20.8
	16 le age le 64	20.8
Males	0 le age le 64	21.9
	0 le age	21.1
	0 le age le 15	25.4
	16 le age le 24	25.3
	25 le age le 49	19.7
	50 le age le 64	19.1
	65 le age	19.5
	16 le age	20.2
	16 le age le 64	20.4
Females	0 le age le 64	21.4
	0 le age	22.4
	0 le age le 15	28.0
	16 le age le 24	27.7
	25 le age le 49	21.2
	50 le age le 64	18.3
	65 le age	21.8
	16 le age	21.4
	16 le age le 64	21.3
	0 le age le 64	22.6

At-risk-of-poverty rate by household type

	Total	Males	Females
One person household, under 65 years	24.6	24.2	25.4
One person household, 65 years and over	24.6	15.0	27.5
2 adults, no dependent children, both adults under 65 years	16.2	16.6	15.8
2 adults, no dep. children, at least 1 adult 65 years or more	21.3	21.8	20.9
Other households without dependent children	16.0	15.5	16.5
Single parent household, one or more dependent children	38.9	39.1	38.8
2 adults, one dependent child	16.9	16.4	17.4
2 adults, two dependent children	26.0	25.3	26.7
2 adults, three or more dependent children	41.6	40.1	43.2
Other households with dependent children	24.9	24.3	25.5
One person household, male	21.9	21.9	".."
One person household, female	26.7	".."	26.7
One person household, total	24.6	21.9	26.7
Households without dependent children	18.5	17.9	19.0
Household with dependent children	24.8	24.1	25.6

#### At-risk-of-poverty threshold

	Threshold
For a one person household (euros)	7508.6
For a 2 adults and 2 children household (euros)	15768.0

#### Inequality of income distribution S80/S20 income quintile share ratio

	Ratio
s80s20	6.8

#### Dispersion around the at-risk-of-poverty threshold

	At-risk-of-poverty rate (threshold 40%)	At-risk-of-poverty rate (threshold 50%)	At-risk-of-poverty rate (threshold 70%)
Total	10.1	15.2	28.8
Males	10.0	14.8	27.9
Females	10.3	15.6	29.7

#### Gini coefficient

	Coefficient
Gini	34.0

## 1.2. Other indicators

## 2. ACCURACY

### 2.1. Sample design

The sample design has not changed since the beginning of the survey.

#### 2.1.1. Type of sample design

The Survey on Income and Living Conditions (Spanish “ECV”) is an annual survey with a rotational-group design. The sample comprises four independent sub-samples, each of which is a four-year panel. Each year, the sample is rotated in one of the panels.

The new sub-sample is selected following a two-stage design; the first-stage units are stratified. The first stage is made up of census sections. The second stage comprises main family addresses. There was no sub-sampling within those units; all households usually residing in those addresses were surveyed.

The other sub-samples are formed with the households of the previous wave that have collaborated.

#### 2.1.2. Sampling units

The first-stage units are census sections. Each section is made up of around 400 addresses.

The second-stage units are the principal family addresses selected for the sample in the census section.

#### 2.1.3. Stratification and sub-stratification criteria

In each Autonomous Community [self-ruling region], first-stage units were **stratified** by the size of the municipality to which the census section belonged.

The following strata were considered:

**Stratum 0:** Municipalities of over 500,000 population.

**Stratum 1:** Provincial capitals (other than the above).

**Stratum 2:** Municipalities of over 100,000 population (other than the above).

**Stratum 3:** Municipalities of 50,000 to 100,000 population (other than the above).

**Stratum 4:** Municipalities of 20,000 to 50,000 population (other than the above).

**Stratum 5:** Municipalities of 10,000 to 20,000 population.

**Stratum 6:** Municipalities of under 10,000 population.

An independent sample was designed in each Autonomous Community to represent it, because one of INE’s survey objectives is to provide data at this level of disaggregation.

#### 2.1.4. Sample size and allocation criteria

To achieve the survey objective of producing acceptably reliable estimates at both the national and at the Autonomous Community (regional) level, we selected, in wave 1 (survey 2004), a sample of 16,000 addresses spread over 2000 census sections.

We distributed the sample across Autonomous Communities by allocating one part uniformly and another part in proportion to Autonomous Community size. The uniform part accounted for about 40% of sections.

**Table I. Sample distribution (wave 1) by Autonomous Community**

<b>Autonomous Community</b>	<b>Number of census sections</b>	<b>Number of addresses</b>
Andalusia	240	1,920
Aragon	88	704
Asturias (Principality of)	84	672
Balearic Islands	72	576
Canary Islands	96	768
Cantabria	60	480
Castile-León	132	1,056
Castile-La Mancha	96	768
Catalonia	224	1,792
Valencia	156	1,248
Extremadura	76	608
Galicia	132	1,056
Madrid (Community of)	192	1,536
Murcia (Region of)	76	608
Navarre (Autonomous Community)	60	480
Basque Country	120	960
La Rioja	60	480
Ceuta and Melilla (Autonomous Cities)	36	288
<b>Total</b>	<b>2,000</b>	<b>16,000</b>

In each section, besides the eight addresses selected originally, a further eight were selected as substitutes in case any problem arose with the addresses chosen originally.

The number of sections in each Autonomous Community and stratum group was always a multiple of four, to ensure that all rotations had the same notional-sample distribution across Autonomous Communities and strata. Therefore the number of units considered in the new sub-sample in the current survey is  $\frac{1}{4}$  of the figures included in the table above.

In order to achieve the minimum effective sample size included in the Regulation, the initial sample in the new-subsample is 4.000 dwellings. The response rate within this subsample (including frame invalid addresses – non-residential, unoccupied, etc. -) is about 60%. As substitutions are admitted the final sample in the new-sub-sample is about 4.000 households.

For the other 3 sub-samples (panel component), the sample will consist of the households from the previous wave:  $4.000 + 3.600 + 3.100 = 10.700$  households. Since the estimated response rate is about 85%, the final sample in these three groups will be close to 9.100 households.

The design effect in relation to the 'risk of poverty rate' variable is about 1,4 (using wave 1 data). Therefore the final effective sample size is approximately  $(4.000 + 9.100) / 1,4 = 9.350$  households. Comparing this figure with the minimum effective sample size included in the Regulation, 6.500, we see that the minimum sample size is achieved by far in Spain.

### 2.1.5. Sample selection schemes

In the new sub-sample, census sections were selected in each stratum by a probability in proportion to size (family dwellings). In each section, addresses were selected with equal probability by systematic sampling initiated at random. This procedure produces self-weighted samples in each stratum.

### 2.1.6. Sample distribution over time

There is no itemised distribution for sample collection in the period February-July 2011. The income reference period is fixed (year 2010).

Sample distribution (collected household questionnaire) over the time

		Number	Percentage
February	1 to 10	18	0.1
	11 to 20	3	0.0
	21 to 31	2	0.0
March	1 to 10	8	0.1
	11 to 20	160	1.2
	21 to 31	1713	13.1
April	1 to 10	1476	11.3
	11 to 20	2010	15.3
	21 to 31	1119	8.5
May	1 to 10	1412	10.8
	11 to 20	1473	11.2
	21 to 31	1537	11.7
June	1 to 10	1216	9.3
	11 to 20	549	4.2
	21 to 31	333	2.5
July	1 to 10	11	0.1
	11 to 20	65	0.5
	21 to 31	4	0.0

### 2.1.7. Renewal of sample: Rotational groups

As indicated earlier, the sample design takes the form of four annual panels: individuals in each panel remain in the sample for four consecutive years. Therefore we divided, in wave 1, the 2000 sections into four groups – called rotational groups – corresponding to the four panels of the sample. Each sub-sample had 500 sections

Every year, we replace all the sample of addresses in the sections belonging to a given rotational group (the sections don't change, new addresses are selected). Hence the year's sample has a three-quarters overlap with the previous year's sample.

The number of sections in each Autonomous Community and stratum group was always a multiple of four, to ensure that all rotations had the same notional sample distribution across Autonomous Communities and strata.

The numbers used in the variable DB075 (rotational group) is 1,2,3 and 4. In the 2011 survey, the rotational group of the new sub-sample is "3".



### 2.1.8. Weightings

The complete weighting procedure is described (it has not changed since the beginning of the survey):

#### 2.1.8.1. Weightings in a NEW rotational group

In the first year for the rotational group t, only cross-sectional factors and estimates need be considered, for t=1, 2, ....

##### Step 1. Design factor

$$\hat{Y}^{(1,t)} = \sum_h \sum_{j,i \in h} \frac{V_h^{(t-1)}}{vt_h^t} y_{hji}^t = \sum_h \sum_{j,i \in h} \frac{V_h^{(t-1)}}{8 \cdot n_h^t} y_{hji}^t$$

Where:

t is the rotational group;

h is the stratum to which section j belongs;

j is the section;

i is a household.

$V_h^{(t-1)}$  is the total addresses in the municipal register file for t-1 in stratum h.

$n_h^t$  is the allocation of sections in stratum h and rotational group t.

$vt_h^t$  is the initial number of addresses in stratum h in rotational group t, which, by design, is  $8 \cdot n_h^t$ .

$y_{hji}^t$  is the value of the study variable in household i, section j, stratum h, rotational group t.

Therefore, for a household i, section j, stratum h, turn t, the design factor is:

$$w_{hji}^t = \frac{V_h^{(t-1)}}{8 \cdot n_h^t}$$

Given that  $n_h^1 = n_h^2 = n_h^3 = n_h^4$ , as indicated regarding rotational groups, the design factor does not depend on the rotational group.

##### Step 2. Non-response adjustments

We adjust for non-response by multiplying the above factor by  $\frac{vt_h^t}{ve_h^t}$ . This provides an estimate of the

inverse probability of response in the stratum, where  $ve_h^t$  is the actual number of addresses in stratum h and rotational group t. We thus have:

$$\hat{Y}^{(2,t)} = \sum_h \hat{Y}_h^{(2,t)} = \sum_h \sum_{j,i \in h} \frac{V_h^{(t-1)}}{ve_h^t} y_{hji}^t$$

##### Step 3. Adjustments to external data (ratio estimator)

Using projected population as at the time of the survey as an auxiliary variable, we obtained a separate ratio estimator the chief purpose of which was to enhance the estimate produced by the previous steps by bringing the population figure at the time of sample selection up to date to the time of survey performance. The population figure used refers to 15 February of the current year.

The expression of the estimator is:

$$\hat{Y}^{(3,t)} = \sum_h \frac{\hat{Y}_h^{(2,t)}}{\hat{P}_h^{(2,t)}} P_h$$

i.e.,

$$\hat{Y}^{(3,t)} = \sum_h \frac{\sum_{j,i \in h} \frac{V_h^{(t-1)}}{ve_h^t} y_{hji}^t}{\sum_{j,i \in h} \frac{V_h^{(t-1)}}{ve_h^t} p_{hji}^t} \cdot P_h = \sum_h \sum_{j,i \in h} \frac{P_h}{\sum_{j,i \in h} p_{hji}^t} y_{hji}^t$$

Which can be written down as:

$$\hat{Y}^{(3,t)} = \sum_k w_k^t \cdot y_k^t$$

Where the subscript k represents sample households, and:

$$w_k^t = \frac{P_h}{\sum_{j,i \in h} p_{hji}^t} = \frac{P_h}{p_h^t} \text{ if household } k \text{ is in stratum } h.$$

$p_h^t$  is the sample population of stratum h, turn t.

$P_h$  is the projected population of stratum h.

$y_k^t$  is the value of the study variable in household k, rotational group t.

#### Step 4. Adjustments to external data (calibration)

The above factor is weighted to adjust estimated distribution to the population distribution by Autonomous Community, age group and gender provided by the Demographic Projections Unit.

We have also adjusted the estimated distribution of households by size to our estimate in the first quarter of the current year for the Labour Force Survey (*Encuesta de Población Activa* - EPA).

For the calibration we used the CALMAR macro designed by the French Institut National de Statistique et Études Economiques (INSEE). We opted for the truncated Logit method with values LO=0.1, UP=10. We considered the following twenty-two groups: Males and females aged 0-15, 16-19, 20-24, 25-34, 35-44, 45-49, 50-54, 55-59, 60-64, 65-74, 75 years and over.

Household distribution by size was: households of 1, 2, 3 or 4 or more members.

In Ceuta and Melilla adjustment groups were fewer because of the small sample size. Specifically, household distribution was not adjusted, and we only considered the following age and gender groups: males and females aged 0-15, 16-24, 25-49, 50-64, 65-74, 75 years and over.

The obtained factor,  $WH_k^t$ , is the household factor. We allocated to all household members their respective household factor  $WP_i^t = WH_k^t$ , if  $i \in k$ .

#### 2.1.8.2. Weightings in a PANEL rotational group

As in the previous step, where weights in a new rotational group were calculated, the construction of the weights in a panel rotational group is done in several steps.

##### **Step 1. Calculation of the basic panel weight**

This weight is calculated in each rotational group independently. It collects the inclusion probabilities and non-response or attrition of the panel sample.

For households in the component panel (rotating groups already investigated in previous waves) the basic panel weight is only calculated for the panel persons of the household.

It is calculated from the final cross-sectional weight obtained for the household in wave t-1 ( $WP_i = WH_k$ , si  $i \in k$ ), adjusting due to the attrition of the sample. The adjustment is the inverse of the response probability inside the rotational group, region, age group and gender.

Non-panel persons have a basic panel weight equal to zero.

##### **Step 2. Calculation of the household weight in each rotational group**

The household weight of household h is:

$$w_h^t = \frac{\sum_{j \in h} d_j}{n_h}$$

where:

$d_j$ : is the basic panel weight of the panel person j of the household h.

$n_h$ : is the number of persons (panel and non-panel) aged 14 or more in wave 1, of the household h.

The sum is only for the panel persons of the household.

#### 2.1.8.3. Common weightings in NEW and PANEL rotational groups

After having applied the corresponding weightings in the new and panel sub-samples, some other steps need be considered.

##### **Common step 1. Final cross-sectional weights**

The four rotational groups are grouped together. Finally, the factors of the four groups are grouped together by weighting them by the actual number of sample households in each group, by Autonomous Community.

Thus:

$$WH_k = \frac{n_{ca}^t}{n_{ca}} WH_k^t$$

This is the household factor and also the factor for each household member.

Where  $n_{ca}^t$  represents the number of sample households in the Autonomous Community  $ca$  and rotational group  $t$ , and  $n_{ca}$  represents the household sample size in the Autonomous Community  $ca$

$$(n_{ca} = \sum_{t=1}^4 n_{ca}^t).$$

From 2005 onwards  $\frac{n_{ca}^t}{n_{ca}}$  will be  $\frac{1}{4}$  and calibration will be carried out at this stage.

## Common step 2. Factor for persons aged 16 and over

The factor is calculated on the basis of the factor for all household persons, in two steps:

1. Correction of non-response in Individual Questionnaires. Using the factor  $WP_i^t$ , we construct the **factor for persons aged 16 and over completing the Individual Questionnaire**, correcting non-response in Individual Questionnaires:

$$WCI_i^t = \frac{\sum_{j \in G_i} WP_j^t}{\sum_{j \in G_i} WP_j^t \cdot R_j} \cdot WP_i^t$$

Where:

- Variable  $R$  takes the value 1 for individual  $j$  if he/she has completed the questionnaire, and 0 if not.
- $G_j$  is the set of individuals in the same Autonomous Community and age and gender group as questionnaire  $i$ . The age and gender groups considered are the 22 groups mentioned for the general case outlined in step 4<sup>1</sup>.

2. Grouping of the four rotational groups. Finally, the factors of the four rotational groups are grouped together by weighting them by the number of Individual Questionnaires in each group, by Autonomous Community.

The factor for persons aged 16 or over completing the Individual Questionnaire is:

$$WCI_i = \frac{ci_{ca}^t}{ci_{ca}} WCI_i^t \text{ for } t = 2004 \text{ and } WCI_i = \frac{\sum_{j \in G_{ti}} WP_j}{\sum_{j \in G_{ti}} WP_j \cdot R_j} \cdot WP_i \text{ for } t > 2004$$

<sup>1</sup> Except in Cantabria and the Autonomous Community of Madrid, where groups have been brought together owing to the small sample size.

Where  $ci_{ca}^t$  represents the number of sample Individual Questionnaires in the Autonomous Community ca and rotational group t, and  $ci_{ca}$  represents the actual number of sample Individual Questionnaires in the Autonomous Community ca  $\left( ci_{ca} = \sum_{t=1}^4 ci_{ca}^t \right)$ .

## 2.1.9. Substitutions

### 2.1.9.1. Method of selection of substitutions

As in previous years, in the new sub-sample, in each section, besides the eight addresses selected originally, a further eight were selected in the section as substitutes in case any problem arose with the addresses chosen originally.

Hence the common variable of an address selected originally and its prospective substitute is the census section. There is not other common variable.

There has been multiple substitutions in the sense that further substitutions (until the list of eight substitutes is completely used) have been made for failed substitutions.

The total number of households in D-file in the new sub-sample is 6667 (4017 are original households and 2650 are substituted households). This number includes the substituted households not accepted for database (failed substituted units).

Number of original dwellings and original households in the new sub-sample

	Original units
	Number
Dwellings	4000
Households in same dwellings	17
Total households	4017

Number of original households in the new sub-sample

	Original units
	Number
Households accepted for database	2439
Households failed	1578
Total households	4017

Number of original households in the new sub-sample not accepted in database by collaboration of the substituted unit

	Original units
	Number
Failed original households successfully substituted	1307
Failed original households not successfully substituted	271
Total failed original households	1578

Number of substituted households in the new sub-sample

	Substituted units
	Number
Substituted dwelling accepted in DB	1305
Households in same dwellings	2
Other substituted household accepted in DB	41
Failed substituted household	1302
Total substituted households	2650

There are "Other substituted household accepted in database" because some households initially rejected (and carried out the process of substitutions) were finally recovered.

In the tables related to substitutions the original household is linked only to the final substituted household (there can be some intermediate substituted failed households in between).

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

In this point the information is very limited. There are some variables that have been collected using a short questionnaire in field when an original unit has not been accepted, but the non-response rate has been very high.

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

Distribution of substituted units by record of contact at address, household questionnaire result and household interview acceptance of the original units

	Original units		Substituted units	
	Number	Percentage	Number	Percentage
DB120 = 21	95	6.0	68	5.2
DB120 = 22	14	0.9	1	0.1
DB120 = 23	358	22.7	309	23.6
DB130 = 21	643	40.7	559	42.8
DB130 = 22	418	26.5	326	24.9
DB130 = 23	25	1.6	21	1.6
DB130 = 24	25	1.6	23	1.8
Total	1578	100.0	1307	100.0

## 2.2. Sampling errors

### 2.2.1. Standard errors and effective sample size

The following results have been calculated by Eurostat::

AROPE		Percent	StdErr	LowerCL	UpperCL
ES		27,0	0,60	25,8	28,1
ES	0-17	30,6	1,07	28,5	32,7
ES	18-64	27,2	0,65	25,9	28,4
ES	65+	22,3	0,82	20,7	23,9



## 2.3. Non-sampling errors

### 2.3.1. Sampling frame and coverage errors

The sampling frame is the Municipal Register.

The sample selection frame was area-based and consisted of the list of census sections used in the Municipal Register (population register).

The new sample for SILC-2011 was obtained with the Register dated 23.02.2010.

The **Municipal Register** [*Padrón*] is an administrative record of the residents in a municipality. The Municipal Register is formed, maintained, reviewed and kept by each municipality. It is continually updated.

All persons residing in Spain must appear in the Municipal Register of the municipality where they usually live. A person living in more than one municipality must register only in the one where he/she lives longest in the year.

Municipal Register entries contain only the following mandatory details on each resident:

- a) Name
- b) Sex
- c) Usual address
- d) Nationality
- e) Place and date of birth
- f) Identity Card Number or, if foreign, an equivalent identifying document

The percentage of addresses does not exist or is non-residential address or is unoccupied is:

Percentage of address does not exist or is non-residential or is unoccupied or not principal residence (DB120 = 23) over the total original address (household) selected

Percentage

8.9

### 2.3.2. Measurement and processing errors

#### 2.3.2.1. Measurement errors

We constructed the questionnaire so as to elicit sufficient information to determine the target variables set forth in the Commission Regulation. We did not include additional questions to cover other areas at the national level.

We applied the experience of previous operations to improve the questionnaire. Apart from previous questionnaires, the experience of the European Community Household Panel and, more particularly, the

experience of the Pilot Survey on Living Conditions (2002) has helped to the configuration of the current questionnaire.

The questionnaire design was worked on by experts of the originating unit and of the IT and Fieldwork departments. It was then reviewed by experts working on other surveys. The questionnaire was later tested by various people.

Training followed a cascade pattern. We first ran a course in Madrid. At their Provincial Offices Area Heads then taught a course to their staff using a range of training manuals.

A section was assigned to each interviewer and fieldwork began. Inspectors revisited some households on the basis of any difficulties found.

#### 2.3.2.2. Processing errors

Questionnaires have been completed by CAPI (Compute Aided Personal Interviewing). This procedure has been implemented since 2005 (in 2004 questionnaires were completed by PAPI).

As in previous years, after data collection, we then apply a range of checks developed at INE to ensure data consistency. The phases of these checks are:

- 1) Households coverage
- 2) Persons coverage
- 3) Inconsistencies among tables
- 4) Control of duplicates
- 5) Household identification check
- 6) Person identification check
- 7) Monitoring of flows, valid values and out-of-range values
- 8) Intra-year inconsistencies check
  - 8.1 Intra-questionnaire inconsistencies check
  - 8.2 Inter-questionnaire inconsistencies check
- 9) Follow-up of households and persons

We convert the data to the format required by Eurostat and apply the set of checks developed by Eurostat.

Due to the mode of collection (CAPI), some of the traditional sources of errors have disappeared or have been reduced.

The main source of error was flow path.

#### 2.3.3. Non-response errors

##### 2.3.3.1. Achieved sample size

Number of households for which an interview is accepted for the database (DB135 = 1).  
Rotational group breakdown

Number	
Group 1	3102
Group 2	3247

Group 3	3785
Group 4	2975
Total	13109

Number of persons 16 years or older who are members of the households for which the interview is accepted for the database (DB135 = 1), and who completed a personal interview (RB250 = 11 to 13). Rotational group

	Number
Group 1	6934
Group 2	7089
Group 3	8142
Group 4	6785
Total	28950

### 2.3.3.2. Unit non-response

Unit non-response. Rotational group and total

		Group 3
All	Ra	0.97
households	Rh	0.65
	NRh	37.24
	Rp	0.98
	NRp	1.50
	NRp2	38.18
Original	Ra	0.97
households	Rh	0.69
	NRh	33.34
	Rp	0.98
	NRp	1.58
	NRp2	34.40

Ra-Proportion of address contact

Rh-Proportion of complete household interv. accepted for the database

NRh-Household non-response rate

Rp-Proportion of complete personal interv. within the households accepted for the database

NRp-Individual non-response rate

NRp2-Overall individual non-response rate

Unit non-response. Rotational group and total

### 2.3.3.3. Distribution of households by 'record of contact at address' (DB120), by 'household questionnaire result' (DB130) and by 'household interview acceptance' (DB135), for each rotational group and for the total

Distribution of original units by record of contact at address. Rotational group and total

		Number	Percentage
Group 1	Total	3671	100.0
	Contacted	3530	96.2
	Non contacted	141	3.8
	Non contacted	141	100.0

		Can not be located	105	74.5
		Unable to access	1	0.7
		Not exists or non-res.	35	24.8
Group 2	Total		3955	100.0
	Contacted		3796	96.0
	Non contacted		159	4.0
	Non contacted		159	100.0
		Can not be located	108	67.9
		Unable to access	6	3.8
		Not exists or non-res.	45	28.3
Group 3	Total		4017	100.0
	Contacted		3550	88.4
	Non contacted		467	11.6
	Non contacted		467	100.0
		Can not be located	95	20.3
		Unable to access	14	3.0
		Not exists or non-res.	358	76.7
Group 4	Total		3347	100.0
	Contacted		3265	97.6
	Non contacted		82	2.4
	Non contacted		82	100.0
		Can not be located	58	70.7
		Unable to access	2	2.4
		Not exists or non-res.	22	26.8
Total	Total		14990	100.0
	Contacted		14141	94.3
	Non contacted		849	5.7
	Non contacted		849	100.0
		Can not be located	366	43.1
		Unable to access	23	2.7
		Not exists or non-res.	460	54.2

Distribution of original address contacted by household questionnaire result and by household interview acceptance. Rotational group and total

			Number	Percentage
Group 1	Total		3530	100.0
	Household q. completed		3105	88.0
	Interv. not completed		425	12.0
	Interv. not completed		425	100.0
		Refusal to cooperate	244	57.4
		Temporaly away	157	36.9
		Unable to respond	17	4.0
		Other reasons	7	1.6
	Household q. completed	Interview accepted	3102	99.9
		Interview rejected	3	0.1
Group 2	Total		3796	100.0
	Household q. completed		3248	85.6
	Interv. not completed		548	14.4
	Interv. not completed		548	100.0
		Refusal to cooperate	342	62.4
		Temporaly away	181	33.0
		Unable to respond	19	3.5
		Other reasons	6	1.1
	Household q. completed	Interview accepted	3247	100.0
		Interview rejected	1	0.0
Group 3	Total		3550	100.0
	Household q. completed		2439	68.7
	Interv. not completed		1111	31.3
	Interv. not completed		1111	100.0
		Refusal to cooperate	643	57.9
		Temporaly away	418	37.6
		Unable to respond	25	2.3
		Other reasons	25	2.3
	Household q. completed	Interview accepted	2439	100.0
Group 4	Total		3265	100.0

	Household q. completed	2977	91.2
	Interv. not completed	288	8.8
	Interv. not completed	288	100.0
	Refusal to cooperate	155	53.8
	Temporaly away	111	38.5
	Unable to respond	19	6.6
	Other reasons	3	1.0
	Household q. completed	2975	99.9
	Interview accepted	2	0.1
	Interview rejected	2	0.1
Total	Total	14141	100.0
	Household q. completed	11769	83.2
	Interv. not completed	2372	16.8
	Interv. not completed	2372	100.0
	Refusal to cooperate	1384	58.3
	Temporaly away	867	36.6
	Unable to respond	80	3.4
	Other reasons	41	1.7
	Household q. completed	11763	99.9
	Interview accepted	6	0.1
	Interview rejected	6	0.1

#### 2.3.3.4. Distribution of substituted units by 'record of contact at address' (DB120), by 'household questionnaire result' (DB130) and by 'household interview acceptance' (DB135), for each rotational group and for the total

Distribution of substituted units by record of contact at address. Rotational group and total

		Number	Percentage
Group 3	Total	2650	100.0
	Contacted	2276	85.9
	Non contacted	374	14.1
	Non contacted	374	100.0
	Can not be located	78	20.9
	Unable to access	18	4.8
	Not exists or non-res.	278	74.3
Total	Total	2650	100.0
	Contacted	2276	85.9
	Non contacted	374	14.1
	Non contacted	374	100.0
	Can not be located	78	20.9
	Unable to access	18	4.8
	Not exists or non-res.	278	74.3

Distribution of substituted address contacted by household questionnaire result and by household interview acceptance. Rotational group and total

		Number	Percentage
Group 3	Total	2276	100.0
	Household q. completed	1346	59.1
	Interv. not completed	930	40.9
	Interv. not completed	930	100.0
	Refusal to cooperate	486	52.3
	Temporaly away	399	42.9
	Unable to respond	23	2.5
	Other reasons	22	2.4
Total	Total	2276	100.0
	Household q. completed	1346	59.1
	Interv. not completed	930	40.9
	Interv. not completed	930	100.0
	Refusal to cooperate	486	52.3

Temporaly away	399	42.9
Unable to respond	23	2.5
Other reasons	22	2.4

### 2.3.3.5. Item non-response

Distribution of item non-response. Net amounts.

	% households having received an amount	% households with missing values (before imputation)	% households with partial information (before imputation)	% households with total information (before imputation)
Total disposable household income	99.3	2.3	24.3	73.4
T. d. h. income before s. tr. other than old_age and surv. ben.	97.0	3.0	24.0	73.0
T. d. h. income before s. tr. including old_age and surv. ben.	83.7	5.3	25.2	69.6
Net income from rental of a property or land	5.4	2.0	7.0	91.0
Family/children-related allowances	3.2	2.1	0.7	97.2
Social exclusion not elsewhere classified	3.7	0.4	0.0	99.6
Housing allowances	1.6	2.9	0.0	97.1
Regular inter-household cash transfer received	2.4	8.2	0.6	91.2
Net interest, div., profit from capital invest. in uninc. business	19.9	24.5	35.2	40.4
Net income received by people aged under 16	1.5	1.0	0.0	99.0
Regular taxes on wealth	0.0	.	.	.
Regular inter-household cash transfer paid	4.5	2.4	0.0	97.6
Repayments/receipts for tax adjustments	67.0	4.7	1.7	93.5
	% persons 16+ having received an amount	% persons with missing values (before imputation)	% persons with partial information (before imputation)	% persons with total information (before imputation)
Net cash or near cash employee income	41.3	6.8	0.0	93.2
Net non-cash employee income	3.8	17.0	2.0	81.0
Net cash profits or losses from self-employment	6.3	20.1	51.5	28.4
Net pension from individual private plans	0.6	9.9	0.0	90.1
Net unemployment benefits	9.7	1.4	0.0	98.6
Net old-age benefits	18.1	2.7	0.1	97.2
Net survivors benefits	5.5	2.4	0.0	97.6
Net sickness benefits	0.9	2.8	0.0	97.2
Net disability benefits	2.2	1.9	0.0	98.1
Education-related allowances	1.9	3.5	0.0	96.5
Gross monthly earnings for employees	30.9	4.1	29.7	66.6

Distribution of item non-response. Gross amounts.

	% households having received an amount	% households with missing values (before imputation)	% households with partial information (before imputation)	% households with total information (before imputation)
Total household gross income	98.9	2.6	41.4	56.0
Gross income from rental of a property or land	5.4	2.0	20.2	77.8
Gross family/children-related allowances	3.2	2.1	4.5	93.4
Gross social exclusion not elsewhere classified	3.7	0.4	0.0	99.6
Gross housing allowances	1.6	2.9	0.0	97.1
Gross regular inter-household cash transfer received	2.4	8.2	0.6	91.2
Gross interest, div., profit from capital invest. in uninc. business	19.9	24.5	36.3	39.2
Gross income received by people aged under 16	1.5	1.0	0.0	99.0
Gross regular taxes on wealth	0.0	.	.	.
Gross regular inter-household cash transfer paid	4.5	2.4	0.0	97.6
	% persons 16+ having received an amount	% persons with missing values (before imputation)	% persons with partial information (before imputation)	% persons with total information (before imputation)
Gross cash or near cash employee income	41.3	6.8	32.7	60.5
Gross non-cash employee income	3.8	17.0	2.0	81.0
Gross cash profits or losses from self-employment	6.3	16.5	38.3	45.1
Gross pension from individual private plans	0.6	9.9	2.9	87.1
Gross unemployment benefits	9.7	1.4	6.1	92.5
Gross old-age benefits	18.1	2.7	7.8	89.5
Gross survivors benefits	5.5	2.4	2.9	94.7
Gross sickness benefits	0.9	2.8	10.4	86.9
Gross disability benefits	2.2	1.9	0.0	98.1
Gross education-related allowances	1.9	3.5	0.0	96.5



2.3.3.6. Total item non-response and number of observations in the sample at unit level of the common cross-sectional European Union indicators based on the cross-sectional component of EU-SILC, for equivalised disposable income and for the unadjusted gender pay gap

At-risk-of-poverty rate (after social transfer) by age and gender

		Number of sample observations no taken into account due to the non-response for an item (classif. variable)	Number of sample observations no taken into account due to the non-response for an item (income variable)	Non-response at household level (dbl35 = 2 or dbl20 in (21, 22))
Total	0 le age	7888	0	491
	0 le age le 15	1618	0	491
	16 le age le 24	952	0	491
	25 le age le 49	2609	0	491
	50 le age le 64	1323	0	491
	65 le age	1386	0	491
	16 le age	6270	0	491
	16 le age le 64	4884	0	491
	0 le age le 64	6502	0	491
Males	0 le age	3723	0	491
	0 le age le 15	808	0	491
	16 le age le 24	473	0	491
	25 le age le 49	1228	0	491
	50 le age le 64	647	0	491
	65 le age	567	0	491
	16 le age	2915	0	491
	16 le age le 64	2348	0	491
	0 le age le 64	3156	0	491
Females	0 le age	4165	0	491
	0 le age le 15	810	0	491
	16 le age le 24	479	0	491
	25 le age le 49	1381	0	491
	50 le age le 64	676	0	491
	65 le age	819	0	491
	16 le age	3355	0	491
	16 le age le 64	2536	0	491
	0 le age le 64	3346	0	491

At-risk-of-poverty rate by household type

	Num. sample obs. no taken into account due to non-resp. for item or at indiv. level (classif. var.)	Number of sample observations no taken into account due to the non-response for an item (income variable)	Non-response at household level (dbl35 = 2 or dbl20 in (21, 22)) ( )
One person household, under 65 years	356	26	491
One person household, 65 years and over	318	26	491
2 ad., no dep. children, both ad. under 65 years	578	26	491
2 ad., no dep. ch., at least 1 ad. 65 y. or more	872	26	491
Other households without dependent children	936	26	491
Single parent household, 1 or more dep. children	390	26	491
2 adults, one dependent child	735	26	491
2 adults, two dependent children	1672	26	491
2 adults, three or more dependent children	721	26	491
Other households with dependent children	1306	26	491
One person household, male	221	26	491
One person household, female	453	26	491
One person household, total	674	26	491

Households without dependent children	3060	26	0	491
Household with dependent children	4824	26	0	491

At-risk-of-poverty rate by accommodation tenure status

	Number of sample observations no taken into account due to the non-response for an item (classif. variable) poverty line)	Number of sample observations no taken into account due to the non-response for an item (income variable)	Non-response at household level (db135 = 2 or db120 in (21, 22))
Owner or rent free	6386	0	491
Tenant	1502	0	491

At-risk-of-poverty threshold

	Number of sample observations no taken into account due to the non-response for an item (income variable)	Non-response at household level (db135 = 2 or db120 in (21, 22))
Threshold	34756	491

Inequality of income distribution S80/S20 income quintile share ratio

	Number of sample observations no taken into account due to the non-response for an item (income variable)	Non-response at household level (db135 = 2 or db120 in (21, 22))
Ratio	34756	491

Relative median at-risk-of-poverty gap by age and gender

	Number of sample observations no taken into account due to the non-response for an item (classif. variable) poverty line)	Number of sample observations no taken into account due to the non-response for an item (income variable)	Non-response at household level (db135 = 2 or db120 in (21, 22))
Total			
0 le age	7888	0	491
16 le age le 64	4884	0	491
65 le age	1386	0	491
0 le age le 15	1618	0	491
16 le age	6270	0	491
Males			
0 le age	3723	0	491
16 le age le 64	2348	0	491
65 le age	567	0	491
16 le age	2915	0	491
Females			
0 le age	4165	0	491
16 le age le 64	2536	0	491

65 le age	819	0	0	491
16 le age	3355	0	0	491

Dispersion around the at-risk-of-poverty threshold (At-risk-of-poverty-rate (threshold 40%))

	Number of sample observations no taken	Number of sample observations (below poverty line)	into account due to the non-response for an item (income variable)	Non-response at household level (db135 = 2 or db120 in (21, 22))
All		3753	0	491
Males		1805	0	491
Females		1948	0	491

Dispersion around the at-risk-of-poverty threshold (At-risk-of-poverty-rate (threshold 70%))

	Number of sample observations no taken	Number of sample observations (below poverty line)	into account due to the non-response for an item (income variable)	Non-response at household level (db135 = 2 or db120 in (21, 22))
All		10467	0	491
Males		4902	0	491
Females		5565	0	491

Dispersion around the at-risk-of-poverty threshold (At-risk-of-poverty-rate (threshold 50%))

	Number of sample observations no taken	Number of sample observations no taken	into account due to the non-response for an item (classif. variable)	into account due to the non-response for an item (income variable)	Non-response at household level (db135 = 2 or db120 in (21, 22))
All			5535	0	491
Males			2631	0	491
Females			2904	0	491

At-risk-of-poverty rate before social transfers (including pensions) by age and gender

	Number of sample observations no taken	Number of sample observations no taken	into account due to the non-response for an item (classif. variable)	into account due to the non-response for an item (income variable)	Non-response at household level (db135 = 2 or db120 in (21, 22))
Total					
0 le age			16763	0	491
0 le age le 15			2128	0	491
16 le age le 64			8880	0	491
65 le age			5755	0	491
16 le age			14635	0	491
Males					
0 le age			7860	0	491

	0 le age le 15	1057	0	0	491
	16 le age le 64	4276	0	0	491
	65 le age	2527	0	0	491
	16 le age	6803	0	0	491
Females	0 le age	8903	0	0	491
	0 le age le 15	1071	0	0	491
	16 le age le 64	4604	0	0	491
	65 le age	3228	0	0	491
	16 le age	7832	0	0	491

At-risk-of-poverty rate before social transfers (excluding pensions) by age and gender

		Number of sample observations no taken into account due to the sample observations (below poverty line)	Number of sample observations no taken into account due to the non-response for an item (classif. variable)	Number of sample observations no taken into account due to the non-response for an item (income variable)	Non-response at household level (db135 = 2 or db120 in (21, 22))
Total	0 le age	10516	0	0	491
	0 le age le 15	1984	0	0	491
	16 le age le 64	6847	0	0	491
	65 le age	1685	0	0	491
	16 le age	8532	0	0	491
Males	0 le age	5041	0	0	491
	0 le age le 15	993	0	0	491
	16 le age le 64	3361	0	0	491
	65 le age	687	0	0	491
	16 le age	4048	0	0	491
Females	0 le age	5475	0	0	491
	0 le age le 15	991	0	0	491
	16 le age le 64	3486	0	0	491
	65 le age	998	0	0	491
	16 le age	4484	0	0	491

Gini coefficient

	Number of sample observations no taken into account due to the non-response for an item (income variable)	Non-response at household level (db135 = 2 or db120 in (21, 22))
Gini	34756	0

Equivalised disposable income (mean)

	Number of sample observations no taken into account due to the non-response for an item (income variable)	Non-response at household level (db135 = 2 or db120 in (21, 22))
Equivalised disposable income	34756	0

## 2.4. Mode of data collection

Questionnaires are completed by CAPI (Compute Aided Personal Interviewing). This procedure has been implemented since 2005 (in 2004 questionnaires were completed by PAPI).

In the 2011 survey the data collection has been externalised although all the implementation tools have been provided by the National Statistical Institute (INE). The data collection has been exhaustively supervised by INE.

The main mode of data collection was personal interview with all household members who were aged 16 and above as at 31 December of the year before the year of interview.

If personal interview was impracticable because the subject was temporarily absent or was unable to respond, we would conduct a telephone interview or interview another household member and later corroborate the information with the subject.

The percentage of proxy interviews is very high in the Spanish SILC. It is related to the individual non-response.

One of the major concerns is the individual non-response after the bad results in 2004 survey (15.63 %). Since the 2005 survey an effort in fieldwork has been made to reduce this individual non-response. Once the individual non-response has been reduced, there is from 2005 a high rate of proxy interviews that we are trying to reduce.

Distribution of household members aged 16 and over by RB250. Rotational group and total

		Number	Percentage
Group 1	Total	6982	100.0
	RB250=11	6934	99.3
	RB250=14	48	0.7
Group 2	Total	7142	100.0
	RB250=11	7089	99.3
	RB250=14	53	0.7
Group 3	Total	8266	100.0
	RB250=11	8142	98.5
	RB250=14	124	1.5
Group 4	Total	6821	100.0
	RB250=11	6785	99.5
	RB250=14	36	0.5
Total	Total	29211	100.0
	RB250=11	28950	99.1
	RB250=14	261	0.9

Distribution of household members aged 16 and over by RB260. Rotational group and total

		Number	Percentage
Group 1	Total	6934	100.0
	RB260=2	5353	77.2
	RB260=3	986	14.2
	RB260=5	595	8.6
Group 2	Total	7089	100.0
	RB260=2	5540	78.1
	RB260=3	1036	14.6
	RB260=5	513	7.2
Group 3	Total	8142	100.0
	RB260=2	6588	80.9
	RB260=3	830	10.2
	RB260=5	724	8.9
Group 4	Total	6785	100.0
	RB260=2	5390	79.4
	RB260=3	787	11.6
	RB260=5	608	9.0
Total	Total	28950	100.0
	RB260=2	22871	79.0
	RB260=3	3639	12.6
	RB260=5	2440	8.4

## **2.5. Interview duration**

The mean interview duration per household is calculated as the sum of the duration of all household interviews plus the sum of the duration of all personal interviews, divided by the number of household questionnaires completed and accepted for the database. The duration of the household and personal register is not included.

The extra time to establish the contact, to explain the content, to arrange additional contacts, is not included.

In this wave CAPI has been used, as in the previous one (only in 2004 PAPI was used). The duration has been automatically calculated from the first question to the last one. The extra time is not included in the results.

It has been informed by the interviewers the excessive duration of the interview having an impact on the quality of the information collected.

Interview duration

Mean

**27**

### 3. COMPARABILITY

#### 3.1. Basic concepts and definitions

- Reference population. (No differences between national and EU-SILC concept.)

The target population was members of private households residing at main family addresses, and the households themselves.

Although all persons formed part of the target population, not all were surveyed exhaustively: only those who were aged 16 or over as at 31 December of the year before the year of interview.

- Private household definition. (No differences between national and EU-SILC concept.)

An individual or a group of people occupying in common a main family address or a part of it, and consuming and/or sharing food or other goods paid for out of a common budget.

- Household membership.

We have tried to implement in the field the definition of 'household member' given in the Commission Regulation. But, owing to the large number of possible special cases, and so as to reduce the number of related items on the questionnaire, there may be differences in some marginal cases.

To identify those differences, we provide a table below in which the left column itemises groups of people deemed household members under the definition given in the Regulation. On the right of the table we indicate whether such persons are household members under the definition used for the Spanish questionnaire.

Next we provide a reciprocal table in which the left column itemises groups of people deemed household members under the definition used for the Spanish questionnaire, while the right column indicates whether they are household members under the definition given in the Regulation.



**STANDARD DEFINITION OF HOUSEHOLD MEMBER  
ACCORDING TO EU-SILC (under Regulation)**

**DIFFERENCES FROM NATIONAL DEFINITION**

Present: <ul style="list-style-type: none"> <li>- Usually resident at the address</li> <li>- Related to other household members</li> <li>- Share expenses</li> </ul>	(No differences between national and EU-SILC concept.)
Present: <ul style="list-style-type: none"> <li>- Usually resident at the address</li> <li>- Not related to household members</li> <li>- Share expenses</li> </ul>	(No differences between national and EU-SILC concept.)
Present: <ul style="list-style-type: none"> <li>- Resident boarders, lodgers, tenants</li> <li>- Have no private address elsewhere</li> <li>- Share expenses</li> </ul>	(No differences between national and EU-SILC concept.)
Present: <ul style="list-style-type: none"> <li>- Resident boarders, lodgers, tenants</li> <li>- Actual or intended length of stay is 6 months or more</li> <li>- Share expenses</li> </ul>	<ul style="list-style-type: none"> <li>• <i>Have other address they treat as their usual residence.</i> <b><i>Not a member of the interviewed household.</i></b></li> <li>• Otherwise: No differences between national and EU-SILC concept.</li> </ul>
Present: <ul style="list-style-type: none"> <li>- Visitors</li> <li>- Have no private address elsewhere</li> <li>- Share expenses</li> </ul>	No differences between national and EU-SILC concept.

Present: <ul style="list-style-type: none"> <li>- Visitors</li> <li>- Actual or intended length of stay is 6 months or more</li> <li>- Share expenses</li> </ul>	<ul style="list-style-type: none"> <li>• <i>Have other address they treat as their usual residence.</i> <b><i>Not a member of the interviewed household.</i></b></li> <li>• Otherwise: No differences between national and EU-SILC concept.</li> </ul>
Present: <ul style="list-style-type: none"> <li>- Live-in domestic employees, au pairs</li> <li>- Have no private address elsewhere</li> <li>- Share expenses</li> </ul>	No differences between national and EU-SILC concept.
Present: <ul style="list-style-type: none"> <li>- Live-in domestic employees, au pairs</li> <li>- Actual or intended length of stay is 6 months or more</li> <li>- Share expenses</li> </ul>	<ul style="list-style-type: none"> <li>• <i>Have other address they treat as their usual residence.</i> <b><i>Not a household member.</i></b></li> <li>• Otherwise: No differences between national and EU-SILC concept.</li> </ul>
Absent: <ul style="list-style-type: none"> <li>- Temporarily absent owing to holiday leave, work reasons, studies and similar</li> <li>- Have no private address elsewhere</li> <li>- Actual or intended length of stay is less than 6 months</li> <li>- Share expenses</li> </ul>	No differences between national and EU-SILC concept.
Absent: <ul style="list-style-type: none"> <li>- Temporarily absent owing to holiday leave, work reasons, studies and similar</li> <li>- Have no private address elsewhere</li> <li>- Actual or intended length of stay is more than 6 months</li> <li>- Very close ties to household</li> <li>- Share expenses</li> </ul>	No differences between national and EU-SILC concept.

<p>Absent:</p> <ul style="list-style-type: none"> <li>- Children of the household</li> <li>- Receiving education away from home</li> <li>- Have no private address elsewhere</li> <li>- Treat this address as their main residence</li> <li>- Share expenses</li> </ul>	<p>No differences between national and EU-SILC concept.</p>
<p>Absent:</p> <ul style="list-style-type: none"> <li>- Persons with ties to the household away for extended periods for work reasons</li> <li>- Have no private address elsewhere</li> <li>- Must be a household member's partner or child</li> <li>- Treat this address as their main residence</li> <li>- Share expenses</li> </ul>	<p>No differences between national and EU-SILC concept.</p>
<p>Absent:</p> <ul style="list-style-type: none"> <li>- Temporarily absent persons with ties to the household</li> <li>- In hospital, clinic or other institution</li> <li>- Have financial ties to the household</li> <li>- Actual or intended length of absence must be less than 6</li> <li>- Share expenses (financial ties)</li> </ul>	<p>No differences between national and EU-SILC concept.</p>

**Conclusion:**

If a person is a household member according to the definition in the Regulation, he/she is also a household member under the national definition, except in the following group:

- Resident boarders, lodgers, tenants, visitors or domestic servants present at the place of interview
- Actual or intended length of stay is 6 months or more
- Have other address they treat as their usual residence and do not have close ties to household
- Share expenses

Under the Regulation, persons meeting the above conditions are treated as members of the household in which they are present. But they are not considered household members in the Spanish survey because priority is given to the fact that they have another address they regard as their usual residence. Due to the lack of sources is difficult to assess the impact of this difference, but we think it is marginal.

**NATIONAL DEFINITION OF HOUSEHOLD MEMBER**  
**(Cases contemplated in the Spanish version**  
**of the questionnaire)**

**DIFFERENCES FROM STANDARD DEFINITION OF HOUSEHOLD**  
**MEMBERS ACCORDING TO EU-SILC (under Regulation)**

Present: <ul style="list-style-type: none"> <li>- Has no other address he/she treats as usual residence</li> <li>- Shares income or expenditures with the household</li> </ul>	No differences between national and EU-SILC concept.
Absent: <ul style="list-style-type: none"> <li>- In hospital, clinic or other institution, such as nursing home, prison, etc.</li> <li>- Total length of stay to be less than 6 months</li> <li>- Considers this his/her usual residence</li> <li>- Shares income or expenditures with the household</li> </ul>	No differences between national and EU-SILC concept.
Absent: <ul style="list-style-type: none"> <li>- Work reasons</li> <li>- Considers this his/her usual residence</li> <li>- Shares income or expenditures with the household</li> </ul>	No differences between national and EU-SILC concept.
Absent: <ul style="list-style-type: none"> <li>- Study reasons</li> <li>- Considers this his/her usual residence</li> <li>- Shares income or expenditures with the household</li> </ul>	No differences between national and EU-SILC concept.

<p>Absent:</p> <ul style="list-style-type: none"> <li>- Travel</li> <li>- Considers this his/her usual residence</li> <li>- Shares income or expenditures with the household</li> </ul>	<p>No differences between national and EU-SILC concept.</p>
---	---

#### Conclusion:

If a person is a household member according to the national definition, he/she is also a household member under the Regulation definition.

- Income reference period.

The income reference period is the previous calendar year.

- Period for taxes on income and social insurance contributions.

We considered taxes received/paid during the income reference period. In the case of tax adjustments, these taxes usually refer to income received in previous years of the income reference period.

- Reference period for taxes on wealth.

Taxes on wealth has been suppressed for the income reference period.

- Lag between income reference period and current variables.

From 31 December of the year prior to the survey to the time of data collection (March-June). The lag thus ranged from 2 to 6 months.

- Total duration of the data collection of the sample.

March to June of the survey year.

- Basic information on activity status during the income reference period.

We used the definition given in the document SILC065.

- Definition of “number of rooms” (HH030)

In 2004 and 2005 survey we tried to follow the definition given in Doc 65. From the 2006 survey to the 2010 survey, kitchens of at least 4 square meters are included.

From the 2011 survey there has been a change in the construction of the variable HH030 following the recommendations included in the methodological document SILC065 in relation to the treatment of the kitchen.

### 3.2. Components of income

3.2.1. Differences between the national definitions and standard EU-SILC definitions, and an assessment, if available, of the consequences of the differences mentioned, for the following target variables:

- Total household gross income.

(No differences between national and EU-SILC concept.).

- Total disposable household income.

(No differences between national and EU-SILC concept.).

Negative values are permitted.

- Total disposable household income, before social transfers other than old-age and survivors' benefits.

(No differences between national and EU-SILC concept.).

Negative values are permitted.

- Total disposable household income, before social transfers.

(No differences between national and EU-SILC concept.).

Negative values are permitted.

- Imputed rent.

(No differences between national and EU-SILC concept.).

Provided for this survey.

- Income from rental of property or land.

(No differences between national and EU-SILC concept.).

- Family/children-related allowances.

(No differences between national and EU-SILC concept.).

- Social exclusion payments not elsewhere classified.

(No differences between national and EU-SILC concept.).

- Housing allowances.

(No differences between national and EU-SILC concept.).

- Regular inter-household cash transfers received.

(No differences between national and EU-SILC concept.).

- Interest, dividends, profit from capital investments in unincorporated businesses.

(No differences between national and EU-SILC concept.).



- Interest paid on mortgages.

Provided for this survey.

(No differences between national and EU-SILC concept.).

- Income received by people aged under 16.

(No differences between national and EU-SILC concept.)

- Regular taxes on wealth.

Taxes on wealth has been suppressed for the income reference period.

(No differences between national and EU-SILC concept.)

- Regular inter-household transfers paid.

(No differences between national and EU-SILC concept.)

- Tax on income and social insurance contributions.

Provided for this survey.

- Refunds/receipts for tax adjustments (personal income tax – IRPF).

(No differences between national and EU-SILC concept.)

- Cash or near-cash employee income.

(No differences between national and EU-SILC concept.)

- Non-cash employee income.

(No differences between national and EU-SILC concept.)

- Employers' social insurance contributions.

Provided for this survey.

Only the compulsory social contributions are included. The voluntary social contributions are excluded. According to the Labour Cost Survey (2008) the employers contributions to private plans are a 3% of the compulsory contributions.

(No differences between national and EU-SILC concept.).

- Cash profits or losses from self-employment (including royalties).

(No differences between national and EU-SILC concept.)

- Value of goods produced for own consumption.

Provided for this survey.

(No differences between national and EU-SILC concept.).

- Unemployment benefits.

(No differences between national and EU-SILC concept.)

- Old-age benefits.

From the 2011 survey there has been a change in the construction of this variable. The recommendations included in the methodological document SILC065 are followed and the survivor's benefits paid after the standard retirement age are excluded in this variable.

(No differences between national and EU-SILC concept.)

- Survivors' benefits.

From the 2011 survey there has been a change in the construction of this variable. The recommendations included in the methodological document SILC065 are followed and the survivor's benefits paid after the standard retirement age are included in this variable.

(No differences between national and EU-SILC concept.)

- Sickness benefits.

(No differences between national and EU-SILC concept.)

- Disability benefits.

(No differences between national and EU-SILC concept.)

- Education-related allowances.

(No differences between national and EU-SILC concept.)

- Contributions to individual private pension plans.

(No differences between national and EU-SILC concept.)

- Pension from individual private plans (other than those covered under ESSPROSS).

(No differences between national and EU-SILC concept.)

- Gross monthly earnings for employees.

(No differences between national and EU-SILC concept.)

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

As in previous years, we used personal interview as the method to collect income variables.

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

As in previous years, we gave respondents the option of reporting income gross and/or net (of tax on income at source and, if applicable, of social contributions) at component level. The interviewee normally states income net at source although in some cases gives too gross. The form in which the net amounts are recorded in database are net of tax on income at source and, if applicable, of social contributions.

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

As in previous years:

Net amounts. Target income variables were reported net of tax on income at source and, where applicable, net of social contributions.

Gross amounts. Target gross income variables have also been obtained, reported directly by the respondent or using a net-to-gross conversion model.

This model is based on social security contributions and tax retentions. There are four possible conversion types to be applied to each of the income components:

Type I includes components having social security contributions and tax withholding at source, type II includes components having tax withholding at source, type III includes a flat rate tax retention, and type IV makes gross equal to net.

Social security contributions are calculated from gross income, employment, activity and education level. In turn, the tax withholding at source is obtained applying the taxation rules at source.

Current monthly earnings for employees are reported gross. Interviewees were asked to report figures both net (of income tax at source and social security contributions) and gross (the latter generated many 'not available' entries).

## 4. COHERENCE

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

Comparison with external sources is difficult because the definitions used do not match. The difficulty stems from the definition of the income component itself, which affects comparison of the number of people receiving a given income component, and affects comparison of the amount.

A very large proportion of social transfers, for instance, depends on Autonomous Communities (self-ruling region), and so it is very hard to bring all the available information together.

Nevertheless, we provide a range of tables to offer a guide to the structure of income distribution using other sources and some information about the activity status.

The available results from external sources come from:

- EU-SILC 2010
- Labour Force Survey (LFS)
- INE National Accounts
- The *Boletín de Estadísticas Laborales* (labour statistics journal) of the Ministry of Labour and Social Security (social benefits)
- Tax Authorities sources

Starting with the current Survey on Income and Living Conditions (SILC) results, the following table itemises number of recipients, average income, average monthly income (taking account of 14 annual pay packets) and total income by component. Figures are given net (net of income tax at source and, where applicable, net of social contributions) and gross.

To make it easier to compare social transfers, we have removed the constraint that disability benefits for persons aged 65 and above are treated as old-age benefits.

SILC 2011. Source: Spanish Living Conditions Survey (SILC 2011). Adult recipients by income type (net figures)

	Recipients (thousands)	Average income 2010 (euros)	Average monthly income 2010 (euros)	Total income 2010 (millions of euros)
Cash employee income	17.127	15.579	1.113	266.826
Non-cash employee income	1.851	1.602	114	2.964
Cash profits or losses from self-employment	2.535	10.509	751	26.638
Unemployment benefits	4.095	4.779	341	19.568
Old-age benefits	5.953	12.174	870	72.472
Survivors benefits	1.939	7.953	568	15.418
Disability benefits	916	10.179	727	9.328

SILC 2011. Source: Spanish Living Conditions Survey (SILC 2011). Adult recipients by income type (gross figures)

	Recipients (thousands)	Average income 2010 (euros)	Average monthly income 2010 (euros)	Total income 2010 (millions of euros)
Cash employee income	17.127	18.916	1.351	323.987

Non-cash employee income	1.851	1.602	114	2.964
Cash profits or losses from self-employment	2.535	13.938	996	35.329
Unemployment benefits	4.095	4.858	347	19.894
Old-age benefits	5.953	12.806	915	76.234
Survivors benefits	1.939	8.069	576	15.644
Disability benefits	916	10.288	735	9.428

SILC 2011. Source: Spanish Living Conditions Survey (SILC 2011). Recipient households by income type (net figures)

	Recipient households (thousands)	Average income 2010 (euros)	Total income 2010 (millions of euros)
Income from rental of a property or land	852	6.293	5.363
Interest, div., profit from capital invest.	3.104	1.000	3.103

SILC 2011. Source: Spanish Living Conditions Survey (SILC 2011). Recipient households by income type (gross figures)

	Recipient households (thousands)	Average income 2010 (euros)	Total income 2010 (millions of euros)
Income from rental of a property or land	852	6.977	5.945
Interest, div., profit from capital invest.	3.104	1.153	3.580

The results for the activity (self-defined current economic status) are:

SILC 2011. Source: Spanish Living Conditions Survey (SILC 2011). Adults by activity status (thousands)

	Persons (thousands)	Adults (percentages)
Total	38.512,0	100.0
Employment	17.526,2	45.5
Unemployment	4.992,8	13.0
Inactive population	15.987,9	41.5
Missing	5,2	0.0

## SILC 2010

These results for the previous year are:

SILC 2010. Source: Spanish Living Conditions Survey (SILC 2010). Adult recipients by income type (net figures)

	Recipients (thousands)	Average income 2009 (euros)	Average monthly income 2009 (euros)	Total income 2009 (millions of euros)
Cash employee income	18.427	15.353	1.097	282.908
Non-cash employee income	2.663	1.624	116	4.325
Cash profits or losses from self-employment	2.689	8.387	599	22.554
Unemployment benefits	3.963	4.631	331	18.351
Old-age benefits	5.744	12.133	867	69.691
Survivors benefits	1.722	8.153	582	14.044
Disability benefits	1.083	9.068	648	9.819

SILC 2010. Source: Spanish Living Conditions Survey (SILC 2010). Adult recipients by income type (gross figures)

	Recipients (thousands)	Average income 2009 (euros)	Average monthly income 2009 (euros)	Total income 2009 (millions of euros)
Cash employee income	18.427	18.626	1.330	343.235
Non-cash employee income	2.663	1.624	116	4.325
Cash profits or losses from self-employment	2.689	11.765	840	31.638
Unemployment benefits	3.963	4.761	340	18.870
Old-age benefits	5.744	12.815	915	73.610
Survivors benefits	1.722	8.319	594	14.330
Disability benefits	1.083	9.150	654	9.907

SILC 2010. Source: Spanish Living Conditions Survey (SILC 2010). Recipient households by income type (net figures)

	Recipient households (thousands)	Average income 2009 (euros)	Total income 2009 (millions of euros)
Income from rental of a property or land	1.081	6.641	7.178
Interest, div., profit from capital invest.	4.308	950	4.091

SILC 2010. Source: Spanish Living Conditions Survey (SILC 2010). Recipient households by income type (gross figures)

	Recipient households (thousands)	Average income 2009 (euros)	Total income 2009 (millions of euros)
Income from rental of a property or land	1.081	7.418	8.018
Interest, div., profit from capital invest.	4.308	1.106	4.765

We can observe a reduction in the number of recipients of employee income. We also observe an increase of the number of recipients of unemployment benefits.

## LFS

The number of persons by activity status according to the LFS (first quarter of 2011) is:

	Persons (thousands)	Adults (percentages)
Total	38.512,0	100.0
Employment	18.151,7	47,1
Unemployment	4.910,2	12,7
Inactive population	15.450,2	40,1

In the Spanish SILC there is some underreporting of the number of persons in employment.

## INE National Accounts

To compare with the results for other components of income we can use the interim National Accounts 2010. The following table presents data on “Accounts for the total economy and institutional sectors” (“Table of current accounts and accumulated accounts”) of the household sector (millions of euros).

D.11.	Wages and salaries	394.396
B.3b	Gross mixed income	158.959
D.621	Social security benefits in cash	140.236
D.41	Interest	18.022
D.42	Income distributed by corporations	23.166
D.45	Income from land	763

To compare National Accounts and SILC data, account must be taken of the fact that the definition of income components and amount values (net/gross) are not always the same.

Concerning the employee income the amount for SILC is:  $323.987 + 2.964 = 326.951$  (survey 2011). For NA the employee income is 394.396 (year 2010).

‘Net cash profits or losses from self-employment’, ‘income from rental of a property or land’ and ‘net interest, dividends, profit from capital investment in unincorporated business’ are very poorly picked up by interview, so comparison is not possible. ‘Income from rental of a property or land’ under SILC is treated as mixed income in NA.

The differences between National Accounts and SILC are less with regard to figures on social benefits.

#### Labour statistics journal (social benefits)

For social transfers we have the following data from the *Boletín de Estadísticas Laborales* (labour statistics journal) of the Ministry of Labour and Social Security.

### Social Security pension contributions 2010

#### Pensions by scheme, class, years, number and average figure

Units: Number: thousands of pensions. Average figure: euros per month

	2010	
	Number	Average figure
<b>TOTAL</b>		
Total	8.671,02	779,49
Permanent disability	933,73	849,86
Retirement	5.140,55	884,07
Widowhood	2.290,09	571,73
Orphanhood	268,97	350,29

### Benefits not tied to contributions 2010

#### Beneficiaries of benefits not tied to contributions by mode, class and year

Units: Number of beneficiaries (annual average)

2010

<b>SOCIAL SECURITY PENSIONS NOT TIED TO CONTRIBUTIONS (1)</b>	453.295
<b>Disability</b>	196.159
<b>Retirement</b>	257.136

Comparing the number of benefits payees by type, we find the largest differences relate to survivors' benefits, 1.939 as against 2.290+269 (= 2.589). The largest differences in average amount are found in disability pensions (but it should be borne in mind that the average amount of pensions not tied to contributions is unknown).

The available statistics on unemployment refer only to the average annual number of beneficiaries of unemployment benefits and subsidies (3.042.734 in 2010). Other benefits and the turnover of unemployed workers in the year are not reflected, therefore.

### Tax Authorities sources

In relation to Fiscal sources the Tax Agency produces yearly the publication *Mercado de Trabajo y Pensiones en Las Fuentes Tributarias 2010* (Labour market and Pensions in Tax Sources). The reference period is the year 2010 and the amounts in the fiscal sources are gross.

### Number of persons with employee income and amount annual average

	Employees	Income (annual average) euros
<b>Total</b>	18.024.554	19.113

There are not important differences between the two sources (SILC and Fiscal sources).

### Number of persons with pensions income and amount annual average

	Pensioners	Pension (annual average) euros
<b>Total</b>	9.093.879	11.750

There are not important differences between the two sources (SILC and Fiscal sources) if we consider in EU-SILC together old-age, survivors and disability benefits.

### Number of persons with unemployment benefits and amount annual average

	Unemployed	Benefits (annual average) euros
<b>Total</b>	5.909.530	3.952

The difference between the two sources (SILC and Fiscal sources) can be explained if EU-SILC, perhaps, is not able of collecting cases of very short periods of unemployment.



## **5. ANNEX. ASSESSMENT OF THE MODULE 2011**

We don't report any particular problem in the data collection of the module of the 2011 survey.