INe

INSTITUTO NACIONAL DE ESTADISTICA

Intermediate Quality Report

Survey on Income and Living Conditions Spain (Spanish ECV 2007)

Madrid, December 2008

CONTENTS

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 2007 (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 2007 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

<u>Common indicators</u>

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


 Total                  0 le age                  19.7
                        0 le age le 15            23.4
                        16 le age le 24           19.5
                        25 le age le 49           16.1
                        50 le age le 64           16.8
                        65 le age                 28.5
                        16 le age                 19.1
                        16 le age le 64           16.8
                        0 le age le 64            18.0
 Males                  0 le age                  18.6
                        0 le age le 15            23.5
                        16 le age le 24           16.9
                        25 le age le 49           15.6
                        50 le age le 64           15.8
                        65 le age                 26.1
                        16 le age                 17.6
                        16 le age le 64           15.9
                        0 le age le 64            17.3
 Females                0 le age                  20.9
                        0 le age le 15            23.2
                        16 le age le 24           22.2
                        25 le age le 49           16.7
                        50 le age le 64           17.7
                        65 le age                 30.2
                        16 le age                 20.5
                        16 le age le 64           17.8
                        0 le age le 64            18.8



At-risk-of-poverty rate by most frequent activity status and gender


 Total                  Employed                  10.6
                        Unemployed                36.3
                        Retired                   22.2
                        Other inactive            29.9
                        Not at work               28.2
 Males                  Employed                  11.9
                        Unemployed                44.0
                        Retired                   24.6
                        Other inactive            25.6
                        Not at work               27.5
 Females                Employed                   8.7
                        Unemployed                31.8
                        Retired                   17.8
                        Other inactive            30.9
                        Not at work               28.7
```

At-risk-of-poverty rate by household type

	Total	Males	Females
One person household, under 65 years	20.7	18.0	25.4
One person household, 65 years and over	48.8	41.0	51.0
2 adults, no dependent children, both adults under 65 years	11.4	11.5	11.2
2 adults, no dep. children, at least 1 adult 65 years or more	27.2	27.9	26.6
Other households without dependent children	12.4	11.8	13.0
Single parent household, one or more dependent children	31.7	23.9	35.5
2 adults, one dependent child	16.2	15.1	17.1
2 adults, two dependent children	22.2	23.0	21.4
2 adults, three or more dependent children	36.3	35.1	37.6
Other households with dependent children	21.0	19.9	22.1
One person household, male	23.9	23.9	".."
One person household, female	42.7	".."	42.7
One person household, total	34.6	23.9	42.7
Households without dependent children	17.9	16.1	19.7
Household with dependent children	21.5	20.9	22.0

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

	Total	Males	Females
Owner or rent free	18.4	17.3	19.4
Tenant	31.6	29.3	33.8

At-risk-of-poverty rate by work intensity of the household

WI=0 (household without dependent children)	38.0
0<WI<1 (household without dependent children)	13.0
WI=1 (household without dependent children)	6.0
WI=0 (household with dependent children)	69.4
0<WI<0.5 (household with dependent children)	48.3
0.5<=WI<1 (household with dependent children)	26.2
WI=1 (household with dependent children)	8.2

At-risk-of-poverty threshold

	Threshold
For a one person household (euros)	7203.3
For a one person household (PPS)	7806.6
For a 2 adults and 2 children household (euros)	15126.9
For a 2 adults and 2 children household (PPS)	16393.8

Inequality of income distribution S80/S20 income quintile share ratio

	Ratio
s80s20	5.3

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

```
 Total                  Total                   24.0
                        0 le age le 15          24.1
                        16 le age le 64         27.1
                        65 le age               20.9
                        16 le age               23.9
 Males                  Total                   24.3
                        0 le age le 15          23.3
                        16 le age le 64         27.1
                        65 le age               21.5
                        16 le age               24.8
 Females                Total                   23.8
                        0 le age le 15          25.7
                        16 le age le 64         27.1
                        65 le age               19.9
                        16 le age               23.5
```

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	7.3	12.9	27.6
Males	7.0	12.2	26.1
Females	7.6	13.6	29.1

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

```
 Total                  0 le age                38.8
                        0  le age le 15         29.9
                        16 le age le 64         30.0
                        65 le age               83.6
                        16 le age               40.4
 Males                  0 le age                36.4
                        0  le age le 15         29.6
                        16 le age le 64         28.4
                        65 le age               83.5
                        16 le age               37.7
 Females                0 le age                41.1
                        0  le age le 15         30.3
                        16 le age le 64         31.7
                        65 le age               83.7
                        16 le age               43.1
```

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

```
 Total                  0 le age                23.9
                        0  le age le 15         27.9
                        16 le age le 64         21.2
```

```
                        65 le age                   31.0
                        16 le age                   23.1
Males                   0 le age                    22.6
                        0  le age le 15             27.4
                        16 le age le 64             20.3
                        65 le age                   28.7
                        16 le age                   21.7
Females                 0 le age                    25.1
                        0  le age le 15             28.5
                        16 le age le 64             22.2
                        65 le age                   32.8
                        16 le age                   24.5
```

Gini coefficient

```
                                            Coefficient

Gini                                            31.3
```

Equivalised disposable income (mean)

```
Equivalised disposable income                   13613
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1.2.   Other indicators

2. ACCURACY

2.1. Sample design

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

Autonomous Community	Number of census sections	Number of addresses
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
Total	2,000	16,000

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 ¼ 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 substituions are admited 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 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, since the effective sample size included in the Regulation represents 70% out of the effective sample size used 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 March-July 2007. The income reference period is fixed (year 2006).

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Sample distribution (collected household questionnaire) over the time
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		Number	Percentage
March	21 to 31	1170	9.5
April	1 to 10	1034	8.4
	11 to 20	1864	15.1
	21 to 31	1388	11.3
May	1 to 10	1700	13.8
	11 to 20	1171	9.5
	21 to 31	1952	15.8
June	1 to 10	966	7.8
	11 to 20	767	6.2
	21 to 31	242	2.0
July	1 to 10	73	0.6
	11 to 20	2	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.

2.1.8. Weightings

The complete weighting procedure is described:

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.,

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

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:

$$w_k^t = \frac{P_h}{\displaystyle\sum_{ji\in h} p_{hji}^t} = \frac{P_h}{p_h^t} \quad \text{if household k is in stratum h.}$$

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 weigths 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 ($WP_i = WH_k, \text{si } i \in k$), 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 ¼ 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[1].

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:

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

---

[1] 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

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 6745 (4006 are original households and 2739 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 dwelllings	6
Total households	4006

```
Number of original households in the new sub-sample
```

	Original units
	Number
Households accepted for database	2405
Households failed	1601
Total households	4006

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

	Original units
	Number
Failed original households successfully subsistuted	1408
Failed original households not successfully subsistuted	193
Total failed original households	1601

```
Number of substituted households in the new sub-sample


                                           Substituted
                                             units

                                            Number

Substituted dwelling accepted in DB            1408
Households in same dwelllings                     1
Other substituted household accepted in DB       19
Failed substituted household                   1311
Total substituted households                   2739
```

There are "Other substituted household accepted in database" because some households initially rejected (and carried out the process of substitutions) were finally recovered. At the end the maximum number of units accepted for database must not exceed 8 (the number of original units selected).

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    Original   Substituted Substituted
               units       units        units       units

              Number     Percentage   Number     Percentage

DB120 = 21        65          4.1          57          4.0
DB120 = 22         6          0.4           6          0.4
DB120 = 23       346         21.6         307         21.8
DB130 = 21       706         44.1         622         44.2
DB130 = 22       404         25.2         353         25.1
DB130 = 23        31          1.9          28          2.0
DB130 = 24        43          2.7          35          2.5
Total           1601        100.0        1408        100.0
```

2.2. Sampling errors

2.2.1. Standard errors and effective sample size

The following results are obtained using the Bootstrap method:

EU-SILC 2007 Indicators	ESTIMATE			COEFFICIENT OF VARIATION (%)			EFFECTIVE SAMPLE SIZE	DEFF
	VAR	VAR1	VAR2	CV_VAR	CV_VAR1	CV_VAR2		
At-risk-of-poverty rate (after social transfer) by age and gender								
Total	19,7			3,63			8.259	1,49
0 le age le 15	23,4			7,62			5.125	2,41
16 le age le 24	19,5			7,15			9.552	1,29
25 le age le 49	16,1			4,63			8.734	1,41
50 le age le 64	16,8			6,56			7.767	1,59
65 le age	28,5			5,45			9.168	1,34
16 le age	19,1			3,50			9.351	1,32
16 le age le 64	16,8			4,04			8.646	1,43
0 le age le 64	18			4,33			7.346	1,68
Males	18,6			4,08			7.688	1,60
0 le age le 15	23,5			8,07			6.633	1,86
16 le age le 24	16,9			10,14			8.348	1,48
25 le age le 49	15,6			5,48			7.773	1,59
50 le age le 64	15,8			8,21			7.824	1,58
65 le age	26,1			6,84			7.393	1,67
16 le age	17,6			3,98			8.211	1,50
16 le age le 64	15,9			4,63			8.101	1,52
0 le age le 64	17,3			4,76			7.477	1,65
Females	20,9			3,74			9.135	1,35
0 le age le 15	23,2			9,28			5.275	2,34
16 le age le 24	22,2			9,14			9.185	1,34
25 le age le 49	16,7			4,90			9.890	1,25
50 le age le 64	17,7			6,98			8.259	1,49

65 le age	30,2	5,48	10.843	1,14
16 le age	20,5	3,64	10.264	1,20
16 le age le 64	17,8	4,29	9.004	1,37
0 le age le 64	18,8	4,57	7.692	1,60

At-risk-of-poverty rate by most frequent activity status and gender

Total	Employed	10,6	5,08	8.917	1,38
Unemployed		36,3	6,73	8.036	1,53
Retired		22,2	6,38	7.491	1,65
Other inactive		29,9	4,27	9.871	1,25
Not at work		28,2	3,94	8.815	1,40
Males	Employed	11,9	5,44	8.996	1,37
Unemployed		44	8,95	7.894	1,56
Retired		24,6	6,68	6.331	1,95
Other inactive		25,6	9,90	8.905	1,38
Not at work		27,5	5,30	6.592	1,87
Females	Employed	8,7	7,78	8.119	1,52
Unemployed		31,8	8,06	8.822	1,40
Retired		17,8	10,20	10.662	1,16
Other inactive		30,9	4,28	9.990	1,23
Not at work		28,7	3,93	11.012	1,12

At-risk-of-poverty rate by household type

One person household, under 65 years	20,7	12,35	7.329	1,68
One person household, 65 years and over	48,8	5,66	18.739	0,66
2 adults, no dependent children, both adults under 65 years	11,4	12,32	10.184	1,21
2 adults, no dep. children, at least 1 adult 65 years or more	27,2	8,23	7.220	1,71
Other households without dependent children	12,4	9,94	8.665	1,42
Single parent household, one or more dependent children	31,7	21,26	10.925	1,13
2 adults, one dependent child	16,2	11,28	8.703	1,42
2 adults, two dependent children	22,2	8,57	8.775	1,41
2 adults, three or more dependent children	36,3	22,31	3.515	3,51

Other households with dependent children	21	9,67	9.215	1,34
One person household, male	23,9	12,62	8.175	1,51
One person household, female	42,7	6,05	14.855	0,83
One person household, total	34,6	5,70	15.021	0,82
Households without dependent children	17,9	4,77	9.442	1,31
Household with dependent children	21,5	5,65	7.145	1,73

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

Owner or rent free	18,4	3,79	9.453	1,30
Tenant	31,6	11,64	4.284	2,88

At-risk-of-poverty rate by work intensity of the household

WI=0 (household without dependent children)	38	8,56	7.782	1,58
0<WI<1 (household without dependent children)	13	10,33	7.762	1,59
WI=1 (household without dependent children)	6	14,75	9.784	1,26
WI=0 (household with dependent children)	69,4	12,32	7.946	1,55
0<WI<0.5 (household with dependent children)	48,3	10,79	8.334	1,48
0.5<=WI<1 (household with dependent children)	26,2	7,89	6.626	1,86
WI=1 (household with dependent children)	8,2	13,94	8.781	1,40

At-risk-of-poverty threshold

Threshold

For a one person household (euros)	7203,3	1,22	10.565	1,17
For a 2 adults and 2 children household (euros)	15127	1,22	10.565	1,17

Inequality of income distribution S80/S20 income quintile share ratio

Ratio

s80s20		5,3	3,01	7.338	1,68

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

Todos	Total	24	4,65	20.171	0,61
Menos de 16		24,1	13,55	7.995	1,54
De 16 a 64		27,1	6,32	9.294	1,33
65 y más años		20,9	5,75	5.074	2,43
16 y más años		23,9	3,96	19.612	0,63
Males	Total	24,3	5,92	16.290	0,76
De 16 a 64		27,1	8,43	6.202	1,99
65 y más años		21,5	6,11	8.342	1,48
16 y más años		24,8	5,84	14.547	0,85
Females	Total	23,8	4,32	20.937	0,59
De 16 a 64		27,1	5,94	12.713	0,97
65 y más años		19,9	6,79	3.517	3,51
16 y más años		23,5	3,51	20.014	0,62

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%)									
All	7,3	12,9	27,6	7,79	4,93	2,48	6.585	7.092	7.863	1,87	1,74	1,57
Males	7	12,2	26,1	8,39	5,52	2,93	6.177	7.204	7.621	2,00	1,71	1,62
Females	7,6	13,6	29,1	7,98	5,04	2,59	7.504	7.181	8.017	1,64	1,72	1,54

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

Total	0 le age	38,8	1,93	8.396	1,47
0 le age le 15		29,9	5,75	6.169	2,00
16 le age le 64		30	2,55	9.463	1,30
65 le age		83,6	1,18	8.969	1,37
16 le age		40,4	1,87	8.375	1,47
Males	0 le age	36,4	2,29	8.382	1,47
0 le age le 15		29,6	6,52	7.554	1,63
16 le age le 64		28,4	3,10	8.588	1,44
65 le age		83,5	1,58	8.238	1,50
16 le age		37,7	2,27	7.953	1,55
Females	0 le age	41,1	1,99	8.215	1,50
0 le age le 15		30,3	7,42	5.373	2,29
16 le age le 64		31,7	2,65	9.554	1,29
65 le age		83,7	1,30	9.067	1,36
16 le age		43,1	1,88	8.449	1,46

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

Total	0 le age	23,9	2,91	8.444	1,46
0 le age le 15		27,9	6,20	5.636	2,19
16 le age le 64		21,2	3,28	8.969	1,37
65 le age		31	4,94	8.269	1,49
16 le age		23,1	2,87	9.022	1,37
Males	0 le age	22,6	3,36	7.993	1,54
0 le age le 15		27,4	7,06	6.899	1,79
16 le age le 64		20,3	3,77	8.590	1,44
65 le age		28,7	6,17	7.124	1,73
16 le age		21,7	3,29	8.431	1,46
Females	0 le age	25,1	3,05	9.003	1,37
0 le age le 15		28,5	7,76	5.200	2,37
16 le age le 64		22,2	3,52	9.059	1,36
65 le age		32,8	5,04	9.657	1,28
16 le age		24,5	3,04	9.604	1,28

Gini coefficient

Coefficient				
Gini	31,3	1,56	6.664	1,85
Equivalised disposable income (mean)				
Equivalised disposable income	13613	1,17	6.147	2,01

2.3. Non-sampling errors

2.3.1. Sampling frame and coverage errors

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-2007 was obtained with the Register dated 09.09.2006.

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

            8.6
```

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 questionnaire, 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.

We have updated the questionnaire on an ongoing basis in response to the final reports of the 38 Area Heads in charge of fieldwork.

Training followed a cascade pattern. We first ran a course in Madrid for the 38 Area Heads, divided into 2 groups. At their Provincial Offices Area Heads then taught a one-week 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).

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. Errors in direct questions on income were few.

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               2851
Group 2               3052
Group 3               3833
Group 4               2593
Total                12329
```

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 grou

```
              Number

Group 1               6619
Group 2               7069
Group 3               8823
Group 4               6145
Total                28656
```

2.3.3.2. Unit non-response

Unit non-response. Rotational group and total

```
                        Group 3

All         Ra                0.98
households  Rh                0.63
            NRh              37.96
            Rp                0.99
            NRp               0.69
            NRp2             38.38
Original    Ra                0.98
households  Rh                0.67
            NRh              34.29
            Rp                0.99
            NRp               0.68
            NRp2             34.73
```

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

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	3368	100.0
	Contacted	3288	97.6
	Non contacted	80	2.4

			Number	Percentage
	Non contacted		80	100.0
		Can not be located	46	57.5
		Not exists or non-res.	34	42.5
Group 2	Total		3729	100.0
	Contacted		3644	97.7
	Non contacted		85	2.3
	Contacted		3644	100.0
		Can not be located	60	70.6
		Unable to access	1	1.2
		Not exists or non-res.	24	28.2
Group 3	Total		4006	100.0
	Contacted		3589	89.6
	Non contacted		417	10.4
	Contacted		3589	100.0
		Can not be located	65	15.6
		Unable to access	6	1.4
		Not exists or non-res.	346	83.0
Group 4	Total		3006	100.0
	Contacted		2934	97.6
	Non contacted		72	2.4
	Contacted		2934	100.0
		Can not be located	57	79.2
		Not exists or non-res.	15	20.8
Total	Total		14109	100.0
	Contacted		13455	95.4
	Non contacted		654	4.6
	Contacted		13455	100.0
		Can not be located	228	34.9
		Unable to access	7	1.1
		Not exists or non-res.	419	64.1

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

			Number	Percentage
Group 1	Total		3288	100.0
	Household q. completed		2851	86.7
	Interv. not completed		437	13.3
	Interv. not completed		437	100.0
		Refusal to cooperate	281	64.3
		Temporaly away	124	28.4
		Unable to respond	20	4.6
		Other reasons	12	2.7
	Household q. completed	Interview accepted	2851	100.0
Group 2	Total		3644	100.0
	Household q. completed		3056	83.9
	Interv. not completed		588	16.1
	Interv. not completed		588	100.0
		Refusal to cooperate	383	65.1
		Temporaly away	153	26.0
		Unable to respond	26	4.4
		Other reasons	26	4.4
	Household q. completed	Interview accepted	3052	99.9
		Interview rejected	4	0.1
Group 3	Total		3589	100.0
	Household q. completed		2405	67.0
	Interv. not completed		1184	33.0
	Interv. not completed		1184	100.0
		Refusal to cooperate	706	59.6
		Temporaly away	404	34.1
		Unable to respond	31	2.6
		Other reasons	43	3.6
	Household q. completed	Interview accepted	2405	100.0
Group 4	Total		2934	100.0
	Household q. completed		2598	88.5
	Interv. not completed		336	11.5

```
                        Interv. not completed                              336      100.0
                                             Refusal to cooperate          189       56.3
                                             Temporaly away                107       31.8
                                             Unable to respond              16        4.8
                                             Other reasons                  24        7.1
                        Household q. completed Interview accepted          2593       99.8
                                             Interview rejected              5        0.2
Total                   Total                                            13455      100.0
                        Household q. completed                           10910       81.1
                        Interv. not completed                            2545       18.9
                        Interv. not completed                            2545      100.0
                                             Refusal to cooperate         1559       61.3
                                             Temporaly away                788       31.0
                                             Unable to respond              93        3.7
                                             Other reasons                 105        4.1
                        Household q. completed Interview accepted         10901       99.9
                                             Interview rejected              9        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		2739	100.0
	Contacted		2456	89.7
	Non contacted		283	10.3
	Non contacted		283	100.0
		Can not be located	61	21.6
		Unable to access	1	0.4
		Not exists or non-res.	221	78.1
Total	Total		2739	100.0
	Contacted		2456	89.7
	Non contacted		283	10.3
	Non contacted		283	100.0
		Can not be located	61	21.6
		Unable to access	1	0.4
		Not exists or non-res.	221	78.1

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

			Number	Percentage
Group 3	Total		2456	100.0
	Household q. completed		1428	58.1
	Interv. not completed		1028	41.9
	Interv. not completed		1028	100.0
		Refusal to cooperate	522	50.8
		Temporaly away	442	43.0
		Unable to respond	21	2.0
		Other reasons	43	4.2
	Household q. completed Interview accepted		1428	100.0
Total	Total		2456	100.0
	Household q. completed		1428	58.1
	Interv. not completed		1028	41.9
	Interv. not completed		1028	100.0
		Refusal to cooperate	522	50.8
		Temporaly away	442	43.0

28

	Unable to respond	21	2.0
	Other reasons	43	4.2
Household q. completed	Interview accepted	1428	100.0

2.3.3.5. Item non-response

Distribution of item non-response

	% 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	99.5	3.7	38.7	57.6
T. d. h. income before s. tr. other than old_age and surv. ben.	98.8	4.2	37.8	58.0
T. d. h. income before s. tr. including old_age and surv. ben.	89.4	7.9	37.0	55.1
Net income from rental of a property or land	6.4	4.8	12.0	83.2
Family/children-related allowances	3.5	3.7	0.7	95.7
Social exclusion not elsewhere classified	0.8	4.0	0.0	96.0
Housing allowances	1.2	8.1	0.0	91.9
Regular inter-household cash transfer received	3.3	5.6	0.0	94.4
Net interest, div., profit from capital invest. in uninc. business	35.0	39.1	37.2	23.7
Net income received by people aged under 16	3.2	1.0	0.0	99.0
Regular taxes on wealth	4.1	35.1	12.5	52.4
Regular inter-household cash transfer paid	6.1	4.6	0.1	95.2
Repayments/receipts for tax adjustments	70.1	6.2	2.6	91.2

	% 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	45.9	9.5	0.0	90.5
Net non-cash employee income	6.4	17.9	1.6	80.5
Net cash profits or losses from self-employment	7.4	29.0	38.9	32.1
Net pension from individual private plans	0.6	9.4	0.0	90.6
Net unemployment benefits	5.0	6.1	0.0	93.9
Net old-age benefits	20.0	4.0	0.2	95.8
Net survivors benefits	1.7	1.7	0.0	98.3
Net sickness benefits	1.7	7.2	0.0	92.8
Net disability benefits	2.1	3.6	0.0	96.4
Education-related allowances	2.0	4.4	0.0	95.6
Gross monthly earnings for employees	39.1	6.0	35.9	58.7

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 (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	7692	0	49	306
	0 le age le 15	1549	0	4	306
	16 le age le 24	845	0	7	306
	25 le age le 49	2320	0	20	306
	50 le age le 64	1201	0	11	306
	65 le age	1777	0	7	306
	16 le age	6143	0	45	306
	16 le age le 64	4366	0	38	306
	0 le age le 64	5915	0	42	306
Males	0 le age	3487	0	25	306
	0 le age le 15	795	0	2	306
	16 le age le 24	390	0	3	306
	25 le age le 49	1073	0	11	306
	50 le age le 64	545	0	5	306
	65 le age	684	0	4	306
	16 le age	2692	0	23	306
	16 le age le 64	2008	0	19	306
	0 le age le 64	2803	0	21	306
Females	0 le age	4205	0	24	306
	0 le age le 15	754	0	2	306
	16 le age le 24	455	0	4	306
	25 le age le 49	1247	0	9	306
	50 le age le 64	656	0	6	306
	65 le age	1093	0	3	306
	16 le age	3451	0	22	306
	16 le age le 64	2358	0	19	306
	0 le age le 64	3112	0	21	306

```
At-risk-of-poverty rate by most frequent activity status and gender
```

		Number of 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 individual level	Non-response at household level (db135 = 2 or db120 in (21, 22))
Total	Employed	1698	5	2	189	306
	Unemployed	734	5	6	189	306
	Retired	1031	5	0	189	306
	Other inactive	2594	5	9	189	306
	Not at work	4359	5	15	189	306
Males	Employed	1127	5	1	189	306
	Unemployed	315	5	1	189	306
	Retired	741	5	0	189	306
	Other inactive	470	5	2	189	306
	Not at work	1526	5	3	189	306
Females	Employed	571	5	1	189	306
	Unemployed	419	5	5	189	306
	Retired	290	5	0	189	306

Other inactive	2124	5	7	189	306
Not at work	2833	5	12	189	306

At-risk-of-poverty rate by household type

	Number of sample observations (below poverty line)	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 (db135 = 2 or db120 in (21, 22)) ()
One person household, under 65 years	227	77	0	306
One person household, 65 years and over	555	77	0	306
2 ad., no dep. children, both ad. under 65 years	462	77	2	306
2 ad., no dep. ch.,at least 1 ad. 65 y. or more	1044	77	4	306
Other households without dependent children	922	77	19	306
Single parent household, 1 or more dep. children	234	77	0	306
2 adults, one dependent child	738	77	9	306
2 adults, two dependent children	1528	77	4	306
2 adults, three or more dependent children	626	77	0	306
Other households with dependent children	1346	77	7	306
One person household, male	179	77	0	306
One person household, female	603	77	0	306
One person household, total	782	77	0	306
Households without dependent children	3210	77	25	306
Household with dependent children	4472	77	20	306

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

	Number of 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))
Owner or rent free	6373	0	45	306
Tenant	1319	0	4	306

At-risk-of-poverty rate by work intensity of the household

	Number of sample observations (below poverty line)	Num. sample obs. no taken into account due to non-response for item or at individual 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 (db135 = 2 or db120 in (21, 22))
WI=0 (household without dependent children)	753	77	14	306
0<WI<1 (household without dependent children)	866	77	4	306
WI=1 (household without dependent children)	292	77	3	306
WI=0 (household with dependent children)	521	77	10	306
0<WI<0.5 (household with dependent children)	849	77	0	306
0.5<=WI<1 (household with dependent children)	2416	77	0	306
WI=1 (household with dependent children)	671	77	0	306

At-risk-of-poverty threshold

	Number of sample observations	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	34586	49	306

Inequality of income distribution S80/S20 income quintile share ratio

	Number of sample observations	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	34586	49	306

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

		Number of 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	7692	0	49	306
	16 le age le 64	4366	0	38	306
	65 le age	1777	0	7	306
	0 le age le 15	1549	0	4	306
	16 le age	6143	0	45	306
Males	0 le age	3487	0	25	306
	16 le age le 64	2008	0	19	306
	65 le age	684	0	4	306
	16 le age	2692	0	23	306
Females	0 le age	4205	0	24	306
	16 le age le 64	2358	0	19	306
	65 le age	1093	0	3	306
	16 le age	3451	0	22	306

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

	Number of sample observations (below 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))
All	3031	49	306
Males	1399	25	306
Females	1632	24	306

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

	Number of sample observations (below 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))
All	10447	49	306
Males	4775	25	306
Females	5672	24	306

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

	Number of 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))
All	5171	0	49	306
Males	2360	0	25	306
Females	2811	0	24	306

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

		Number of 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	14607	0	49	306
	0 le age le 15	1968	0	4	306
	16 le age le 64	7608	0	38	306
	65 le age	5031	0	7	306
	16 le age	12639	0	45	306
Males	0 le age	6676	0	25	306
	0 le age le 15	1006	0	2	306
	16 le age le 64	3486	0	19	306
	65 le age	2184	0	4	306
	16 le age	5670	0	23	306
Females	0 le age	7931	0	24	306
	0 le age le 15	962	0	2	306
	16 le age le 64	4122	0	19	306
	65 le age	2847	0	3	306
	16 le age	6969	0	22	306

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

| | Number of sample observations (below | Number of sample observations no taken into account due to the non-response for an item | Number of sample observations no taken into account due to the non-response for an item | Non-response at household level (db135 |

		poverty line)	(classif. variable)	(income variable)	= 2 or db120 in (21, 22))
Total	0 le age	9126	0	49	306
	0 le age le 15	1809	0	4	306
	16 le age le 64	5389	0	38	306
	65 le age	1928	0	7	306
	16 le age	7317	0	45	306
Males	0 le age	4176	0	25	306
	0 le age le 15	915	0	2	306
	16 le age le 64	2511	0	19	306
	65 le age	750	0	4	306
	16 le age	3261	0	23	306
Females	0 le age	4950	0	24	306
	0 le age le 15	894	0	2	306
	16 le age le 64	2878	0	19	306
	65 le age	1178	0	3	306
	16 le age	4056	0	22	306

Gini coefficient

	Number of sample observations	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	34586	49	306

Equivalised disposable income (mean)

	Number of sample observations	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	34586	49	306

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).

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.

```
Distribution of household members aged 16 and over by RB245. Rotational group and total


                        Number      Percentage

Group 1   Total           6663         100.0
          RB250=11        6619          99.3
          RB250=21           3           0.0
          RB250=23          16           0.2
          RB250=31           9           0.1
          RB250=32           3           0.0
          RB250=33          13           0.2
Group 2   Total           7118         100.0
          RB250=11        7069          99.3
          RB250=21           3           0.0
          RB250=23          22           0.3
          RB250=31           6           0.1
          RB250=32           8           0.1
          RB250=33          10           0.1
Group 3   Total           8884         100.0
          RB250=11        8823          99.3
          RB250=21           3           0.0
          RB250=23          23           0.3
          RB250=31          11           0.1
          RB250=32           8           0.1
          RB250=33          16           0.2
Group 4   Total           6180         100.0
          RB250=11        6145          99.4
          RB250=21           4           0.1
          RB250=23          12           0.2
          RB250=31           6           0.1
          RB250=32           4           0.1
          RB250=33           9           0.1
Total     Total          28845         100.0
          RB250=11       28656          99.3
          RB250=21          13           0.0
          RB250=23          73           0.3
          RB250=31          32           0.1
          RB250=32          23           0.1
          RB250=33          48           0.2
```

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

```
                      Number    Percentage

Group 1  Total          6618       100.0
         RB260=2        3549        53.6
         RB260=3         301         4.5
         RB260=5        2768        41.8
Group 2  Total          7069       100.0
         RB260=2        3868        54.7
         RB260=3         322         4.6
         RB260=5        2879        40.7
Group 3  Total          8822       100.0
         RB260=2        4899        55.5
         RB260=3         306         3.5
         RB260=5        3617        41.0
Group 4  Total          6145       100.0
         RB260=2        3213        52.3
         RB260=3         250         4.1
         RB260=5        2682        43.6
Total    Total         28654       100.0
         RB260=2       15529        54.2
         RB260=3        1179         4.1
         RB260=5       11946        41.7
```

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

34

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: - Usually resident at the address - Related to other household members - Share expenses	(No differences between national and EU-SILC concept.)
Present: - Usually resident at the address - Not related to household members - Share expenses	(No differences between national and EU-SILC concept.)
Present: - Resident boarders, lodgers, tenants - Have no private address elsewhere - Share expenses	(No differences between national and EU-SILC concept.)
Present: - Resident boarders, lodgers, tenants - Actual or intended length of stay is 6 months or more - Share expenses	• *Have other address they treat as their usual residence.* **Not a member of the interviewed household.** • Otherwise: No differences between national and EU-SILC concept.
Present: - Visitors - Have no private address elsewhere - Share expenses	No differences between national and EU-SILC concept.

Present: - Visitors - Actual or intended length of stay is 6 months or more - Share expenses	• *Have other address they treat as their usual residence.* ***Not a member of the interviewed household.*** • Otherwise: No differences between national and EU-SILC concept.
Present: - Live-in domestic employees, au pairs - Have no private address elsewhere - Share expenses	No differences between national and EU-SILC concept.
Present: - Live-in domestic employees, au pairs - Actual or intended length of stay is 6 months or more - Share expenses	• *Have other address they treat as their usual residence.* ***Not a household member.*** • Otherwise: No differences between national and EU-SILC concept.
Absent: - Temporarily absent owing to holiday leave, work reasons, studies and similar - Have no private address elsewhere - Actual or intended length of stay is less than 6 months - Share expenses	No differences between national and EU-SILC concept.
Absent: - Temporarily absent owing to holiday leave, work reasons, studies and similar - Have no private address elsewhere - Actual or intended length of stay is more than 6 months - Very close ties to household - Share expenses	No differences between national and EU-SILC concept.

Absent: - Children of the household - Receiving education away from home - Have no private address elsewhere - Treat this address as their main residence - Share expenses	No differences between national and EU-SILC concept.
Absent: - Persons with ties to the household away for extended periods for work reasons - Have no private address elsewhere - Must be a household member's partner or child - Treat this address as their main residence - Share expenses	No differences between national and EU-SILC concept.
Absent: - Temporarily absent persons with ties to the household - In hospital, clinic or other institution - Have financial ties to the household - Actual or intended length of absence must be less than 6 - Share expenses (financial ties)	No differences between national and EU-SILC concept.

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: - Has no other address he/she treats as usual residence - Shares income or expenditures with the household	No differences between national and EU-SILC concept.
Absent: - In hospital, clinic or other institution, such as nursing home, prison, etc. - Total length of stay to be less than 6 months - Considers this his/her usual residence - Shares income or expenditures with the household	No differences between national and EU-SILC concept.
Absent: - Work reasons - Considers this his/her usual residence - Shares income or expenditures with the household	No differences between national and EU-SILC concept.
Absent: - Study reasons - Considers this his/her usual residence - Shares income or expenditures with the household	No differences between national and EU-SILC concept.

Absent:
   -    Travel
   -    Considers this his/her usual residence
   -    Shares income or expenditures with the household
	No differences between national and EU-SILC concept.

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.

We considered the tax received/paid during 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 EU-SILC 065/04.

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.

Provided for this survey.

- 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.

Provided for this survey.
(No differences between national and EU-SILC concept.).

- 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.

(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 (2007) 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.

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

- Survivors' benefits.

(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.)

- 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

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

We gave respondents the option of reporting income gross 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

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 2006
- Labour Force Survey (LFS)
- INE National Accounts
- The *Boletín de Estadísticas Laborales* (labour statistics journal) of the Ministry of Labour and Social Affairs (social benefits)
- Fiscal 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 all survivors' and disability benefits for persons aged 65 and above are treated as old-age benefits.

Source: Spanish Living Conditions Survey (SILC 2007). Adult recipients by income type (net figures)

	Recipients (thousands)	Average income 2006 (euros)	Average monthly income 2006 (euros)	Total income 2006 (millions of euros)
Cash employee income	18.524	14.135	1.010	261.829
Non-cash employee income	2.812	1.546	110	4.347
Cash profits or losses from self-employment	2.705	10.946	782	29.603
Unemployment benefits	1.986	3.582	256	7.112
Old-age benefits	5.617	10.545	753	59.232
Survivors benefits	1.611	7.028	502	11.322
Disability benefits	890	7.461	533	6.643

Source: Spanish Living Conditions Survey (SILC 2007). Adult recipients by income type (gross figures)

	Recipients (thousands)	Average income 2006 (euros)	Average monthly income 2006 (euros)	Total income 2006 (millions of euros)
Cash employee income	18.524	17.311	1.236	320.662
Non-cash employee income	2.812	1.546	110	4.347
Cash profits or losses from self-employment	2.705	14.120	1.009	38.188
Unemployment benefits	1.986	3.668	262	7.283
Old-age benefits	5.617	11.216	801	63.002

Survivors benefits	1.611	7.166	512	11.544
Disability benefits	890	7.560	540	6.731

Source: Spanish Living Conditions Survey (SILC 2007). Recipient households by income type (net figures)

	Recipient households (thousands	Average income 2006 (euros)	Total income 2006 (millions of euros)
Income from rental of a property or land	937	6.222	5.832
Interest, div., profit from capital invest.	4.969	788	3.914

Source: Spanish Living Conditions Survey (SILC 2007). Recipient households by income type (gross figures)

	Recipient households (thousands	Average income 2006 (euros)	Total income 2006 (millions of euros)
Income from rental of a property or land	937	7.037	6.595
Interest, div., profit from capital invest.	4.969	909	4.515

The results for the activity are:

Source: Spanish Living Conditions Survey (SILC 2007). Adults by activity status (thousands)

	Persons (thousands)	Adults (percentages)
Total	37.428,8	100.0
Employment	18.772,5	50.2
Unemployment	1.754,7	4.7
Inactive population	16.839,8	45.0
Missing	61,9	0.2

SILC 2006

These results for the previous year are:

Source: Spanish Living Conditions Survey (SILC 2006). Adult recipients by income type (net figures)

	Recipients (thousands)	Average income 2005 (euros)	Average monthly income 2005 (euros)	Total income 2005 (millions of euros)
Cash employee income	17.668	13.698	978	242.012
Non-cash employee income	309	3.481	249	1.074
Cash profits or losses from self-employment	2.755	11.329	809	31.206
Unemployment benefits	1.819	3.541	253	6.442
Old-age benefits	5.457	9.986	713	54.496
Survivors benefits	1.675	6.440	460	10.786
Disability benefits	793	7.291	521	5.780

```
Source: Spanish Living Conditions Survey (SILC 2006). Adult recipients by income type (gross figures)
```

	Recipients (thousands)	Average income 2005 (euros)	Average monthly income 2005 (euros)	Total income 2005 (millions of euros)
Cash employee income	17.668	16.659	1.190	294.321
Non-cash employee income	309	3.481	249	1.074
Cash profits or losses from self-employment	2.755	14.159	1.011	39.000
Unemployment benefits	1.819	3.610	258	6.568
Old-age benefits	5.457	10.291	735	56.160
Survivors benefits	1.675	6.525	466	10.929
Disability benefits	793	7.361	526	5.836

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

	Recipient households (thousands	Average income 2005 (euros)	Total income 2005 (millions of euros)
Income from rental of a property or land	782	5.140	4.020
Interest, div., profit from capital invest.	3.983	655	2.608

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

	Recipient households (thousands	Average income 2005 (euros)	Total income 2005 (millions of euros)
Income from rental of a property or land	782	5.663	4.429
Interest, div., profit from capital invest.	3.983	751	2.992

In general we observe an increase in the average values. It must be taken into account that "non-cash employee income" includes only the company car in SILC 2006.

LFS

The number of persons by activity status according to the LFS (first quarter of 2007) is:

	Persons (thousands)	Adults (percentages)
Total	37.428,8	100.0
Employment	20.069,2	53.6
Unemployment	1.856,1	5.0
Inactive population	15.503,5	41.4

INE National Accounts

To compare with the results for other components of income we can use the interim National Accounts 2006. 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	351,906
B.3b.1	Gross mixed income	170,287

D.621	Social security benefits in cash	98,061
D.41	Interest	155,242
D.42	Income distributed by corporations	57,454
D.45	Income from land	1,187

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.

Comparing the results obtained from SILC survey to National Accounts, one can see that the amounts are pretty similar: 320.662 + 4.347 = 325.009 (year 2006) on cash employee income for SILC and 351.906 (year 2006) for NA.

'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.

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 Affairs.

Social Security pension contributions 2006

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

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

	2006	
	Number	**Average figure**
TOTAL		
Total	8.165,34	641,86
Permanent disability	859,78	731,55
Retirement	4.809,3	722,71
Widowhood	2.196,93	476,7
Orphanhood	260,2	285,87

Benefits not tied to contributions 2006

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

Units: Number of beneficiaries (annual average)

	2006
SOCIAL SECURITY PENSIONS NOT TIED TO CONTRIBUTIONS (1)	481.764
Disability	204.844
Retirement	276.920

Comparing the number of benefits payees by type, we find the largest differences relate to survivors' benefits, 1.611 as against 2.196,93+260,2 (= 2.457,13). 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 (1.330.432 in 2006); other benefits and the turnover of unemployed workers in the year are not reflected, therefore.

Fiscal sources

In relation to Fiscal sources the Tax Agency produces yearly the publication *Mercado de Trabajo y Pensiones en Las Fuentes Tributarias 2006* (Labour market and Pensions in Tax Sources). The reference period is the year 2005 and the amounts in the fiscal sources are gross.

Number of persons with employee income and amount annual average

	Employees	Income (annual average) euros
Total	19.070.349	16.849,0

There are not important differences between the two sources (SILC and Fiscal sources). It must be taken into account that the amounts in the fiscal sources are gross.

Number of persons with pensions income and amount annual average

	Pensioners	Pension (annual average) euros
Total	8.263.076	10.215

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
Total	3.352.806	3.003

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.