

SILC_ESQRS_A_ES_2014_0000

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**Eurostat metadata**

Reference metadata

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For any question on data and metadata, please contact: [EUROPEAN STATISTICAL DATA SUPPORT](#)

1. Contact[Top](#)

1.1. Contact organisation	National Statistics Institute (INE-Spain).
1.2. Contact organisation unit	Directorate of Social and Demographic Statistics.
1.5. Contact mail address	Paseo de la Castellana 183. Madrid. Spain

2. Introduction[Top](#)

The production of quality reports is part of the implementation of the EU-SILC instrument. In order to assess the quality of data at national level and to make a comparison among countries, the National Statistics Institutes are asked to report detailed information mainly on: the entire statistical process, sampling and non-sampling errors, and potential deviations from standard definition and concepts.

This document follows the ESS standard for quality reports structure (ESQRS), which is the main report structure for reference metadata related to data quality in the European Statistical System. It is a metadata template, based on 13 main concepts, which can be used across several statistical domains with the purpose of a better harmonisation of the quality reporting requirements in the ESS.

For that reason the template of this document differs from that one stated in the Commission Reg. 28/2004.

Finally it is the combination of the previous intermediate and final quality reports therefore it is worth mentioning that it refers to both the cross sectional and the longitudinal data.

3. Quality management - assessment[Top](#)

Not requested by Reg. 28/2004.

4. Relevance[Top](#)**4.1. Relevance - User Needs**

Not requested by Reg. 28/2004.

4.2. Relevance - User Satisfaction

Not requested by Reg. 28/2004.

4.3. Completeness

Not requested by Reg. 28/2004.

4.3.1. Data completeness - rate

Not requested by Reg. 28/2004.

5. Accuracy and reliability[Top](#)

The concept of accuracy refers to the precision of estimates computed from a sample rather than from the entire population. Accuracy depends on sample size, sampling design effects and structure of the population under study. In addition to that, sampling errors and non sampling errors need to be taken into account. Sampling error refers to the variability that occurs at random because of the use of a sample rather than a census and non-sampling errors are errors that occur in all phases of the data collection and production process.

5.1. Accuracy - overall

In terms of precision requirements, the EU-SILC framework regulation as well the Commission Regulation on sampling and tracing rules refers respectively, to the effective sample size to be achieved and to representativeness of the sample. The effective sample size combines sample size and sampling design effect which depends on sampling design, population structure and non-response rate.

5.2. Sampling error

EU-SILC is a complex survey involving different sampling design in different countries. In order to harmonize and make sampling errors comparable among countries, Eurostat (with the substantial methodological support of Net-SILC2) has chosen to apply the "linearization" technique coupled with the "ultimate cluster" approach for variance estimation. Linearization is a technique based on the use of linear approximation to reduce non-linear statistics to a linear form, justified by asymptotic properties of the estimator. This technique can encompass a wide variety of indicators, including EU-SILC indicators. The "ultimate cluster" approach is a simplification consisting in calculating the variance

taking into account only variation among Primary Sampling Unit (PSU) totals. This method requires first stage sampling fractions to be small which is nearly always the case. This method allows a great flexibility and simplifies the calculations of variances. It can also be generalized to calculate variance of the differences of one year to another. The main hypothesis on which the calculations are based is that the "at risk of poverty" threshold is fixed. According to the characteristics and availability of data for different countries we have used different variables to specify strata and cluster information. In particular, countries have been split into four groups:

- 1) BE, BG, CZ, IE, EL, ES, FR, IT, LV, HU, NL, PL, PT, RO, SI, UK and HR whose sampling design could be assimilated to a two stage stratified type we used DB050 (primary strata) for strata specification and DB060 (Primary Sampling Unit) for cluster specification;
- 2) DE, EE, CY, LT, LU, AT, SK, FI, CH whose sampling design could be assimilated to a one stage stratified type we used DB050 for strata specification and DB030 (household ID) for cluster specification;
- 3) DK, MT, SE, IS, NO, whose sampling design could be assimilated to a simple random sampling, we used DB030 for cluster specification and no strata;

5.2.1. Sampling error - indicators

The following results have been calculated by Eurostat (Spanish SILC 2013 survey):

	AROPE		At risk of poverty (60%)				Severe Material Deprivation				Very low work intensity			
	Ind. value	Stand. errors	Half Ind. value	Stand. errors	Half Ind. value	Stand. errors	Half Ind. value	Stand. errors	Half Ind. value	Stand. errors	Half Ind. value	Stand. errors	Half Ind. value	Stand. errors
Total	27.3	0.64	1.26	20.4	0.60	1.17	6.2	0.43	0.84	15.7	0.54	1.06		
Male	27.9	0.71	1.38	20.9	0.66	1.30	6.3	0.47	0.92	15.9	0.59	1.17		
Female	26.7	0.68	1.33	19.9	0.62	1.22	6.1	0.44	0.87	15.4	0.59	1.15		
Age0-17	32.6	1.21	2.37	27.5	1.17	2.29	8.3	0.90	1.76	13.8	0.85	1.67		
Age18-64	29.2	0.70	1.37	20.4	0.63	1.24	6.5	0.45	0.89	16.3	0.53	1.03		
Age 65+	14.5	0.69	1.35	12.7	0.64	1.26	2.7	0.30	0.59					

See attached document "ES-Annex Sampling errors L_data_V2.doc"

5.3. Non-sampling error

Non-sampling errors are basically of 4 types:

- Coverage errors: errors due to divergences existing between the target population and the sampling frame.
- Measurement errors: errors that occur at the time of data collection. There are a number of sources for these errors such as the survey instrument, the information system, the interviewer and the mode of collection
- Processing errors: errors in post-data-collection processes such as data entry, keying, editing and weighting
- Non-response errors: errors due to an unsuccessful attempt to obtain the desired information from an eligible unit. Two main types of non-response errors are considered:
 1. – Unit non-response: refers to absence of information of the whole units (households and/or persons) selected into the sample
 1. – Item non-response: refers to the situation where a sample unit has been successfully enumerated, but not all required information has been obtained

5.3.1. Coverage error

Coverage errors include over-coverage, under-coverage and misclassification:

- Over-coverage: relates either to wrongly classified units that are in fact out of scope, or to units that do not exist in practice
- Under-coverage: refers to units not included in the sampling frame
- Misclassification: refers to incorrect classification of units that belong to the target population

5.3.1.1. Over-coverage - rate

	Main problems	Size of error
Cross sectional data	<ul style="list-style-type: none"> • Over-coverage • Under-coverage • Misclassification 	<ul style="list-style-type: none"> - Over-coverage: Addresses do not exist or non-residential or are unoccupied or not principal residence (DB120 = 23) over the total original address (household) selected: 12.9% - Under-coverage and Misclassification: information not available.

5.3.2. Measurement error

Cross sectional data

Source of measurement errors	Building process of questionnaire	Interview training	Quality control
Information not available.	<p>The questionnaire was constructed 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.</p> <p>We applied the experience of previous operations to improve the questionnaire.</p> <p>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.</p> <p>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.</p>	<p>Training followed a cascade pattern. First, Area Heads received a distance-learning course using manuals and recorded videos. At their Provincial Offices, Area Heads then taught a course to their staff using a range of training manuals.</p>	Information not available

Since the 2103 survey Spain uses administrative data in the production of the **income variables**. Access to administrative registers has given the opportunity to improve the quality of income data and reduce respondent burden.

5.3.3. Non response error

Non-response errors are errors due to an unsuccessful attempt to obtain the desired information from an eligible unit. Two main types of non-response errors are considered:

1) **Unit non-response** which refers to the absence of information of the whole units (households and/or persons) selected into the sample. According to the Commission Regulation 28/2004:

- **Household non-response rates (NRh)** is computed as follows:

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

Where Ra is the address contact rate defined as:

Ra= Number of address successfully contacted/Number of valid addresses selected

and Rh is the proportion of complete household interviews accepted for the database

Rh=Number of household interviews completed and accepted for database/Number of eligible households at contacted addresses

- **Individual non-response rates (NRp)** will be computed as follows:

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

Where Rp is the proportion of complete personal interviews within the households accepted for the database

Rp= Number of personal interview completed/Number of eligible individuals in the households whose interviews were completed and accepted for the database

- **Overall individual non-response rates (*NRp)** will be computed as follows:

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

For those Members States where a sample of persons rather than a sample of households (addresses) was selected, the individual non-response rates will be calculated for 'the selected respondent', for all individuals aged 16 years or older and for the non-selected respondent.

2) **Item non-response** which refers to the situation where a sample unit has been successfully enumerated, but not all the required information has been obtained.

5.3.3.1. Unit non-response - rate

Address contact rate	Complete household interviews	Complete personal interviews	Household Non-response rate	Individual non- response rate	Overall individual non- response rate
(Ra)*	(Rh)*	(Rp)*	(NRh)*	(NRp)*	(NRp)*
A*B*C*	A*B*C*	A*B*C*	A* B* C*	A* B* C*	A* B* C*
98 99 9779	70 65 99	99 98 21.8	30.8 37.24		22.2931.29 38.19

* All the formulas are defined in the Commission Regulation 28/2004, Annex II

A* = Total sample; B* = New sub-sample; C* = Longitudinal 1 wave – year

Period 2011-2014. Rotational group = 3:

Response rate for household	Wave 2- YEAR	Wave 3- YEAR	Wave 4- YEAR
Wave response rate	83.37	80.22	85.11
L follow-up rate	88.55	86.71	90.93
Follow-up ratio	0.90	0.88	0.93
Achieved sample size ratio	0.84	0.87	0.93
Response rate for persons	Wave 2- YEAR	Wave 3- YEAR	Wave 4- YEAR
Wave response rate	99.28	98.72	99.63
L follow-up rate	99.28	98.72	99.63
Achieved sample size ratio	83.76	82.65	89.73
Response rate for non-sample persons	98.20	96.13	97.50

5.3.3.2. Item non-response - rate

The computation of item non-response is essential to fulfil the precision requirements concerning publication as stated in the Commission Regulation No 1982/2003. Item non-response rate is provided for the main income variables both at household and personal level.

5.3.3.2.1. Item non-response rate by indicator

See attached document "ES-Annex-Item non response_V2.doc".

5.3.4. Processing error

Data entry and coding

Editing controls

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

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.

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

5.3.4.1. Imputation - rate

Not requested by Reg. 28/2004.

5.3.4.2. Common units - proportion

Not requested by Reg. 28/2004.
5.3.5. Model assumption error
Not requested by Reg. 28/2004.
5.3.6. Data revision
Not requested by Reg. 28/2004.
5.3.6.1. Data revision - policy
Not requested by Reg. 28/2004.
5.3.6.2. Data revision - practice
Not requested by Reg. 28/2004.
5.3.6.3. Data revision - average size
Not requested by Reg. 28/2004.
5.3.7. Seasonal adjustment
Not requested by Reg. 28/2004.

6. Timeliness and punctuality		Top
Not requested by Reg. 28/2004.		
6.1. Timeliness		
Not requested by Reg. 28/2004.		
6.1.1. Time lag - first result		
Not requested by Reg. 28/2004.		
6.1.2. Time lag - final result		
Not requested by Reg. 28/2004.		
6.2. Punctuality		
Not requested by Reg. 28/2004.		
6.2.1. Punctuality - delivery and publication		
Not requested by Reg. 28/2004.		

7. Accessibility and clarity	Top
Not requested by Reg. 28/2004.	
7.1. Dissemination format - News release	
Not requested by Reg. 28/2004.	
7.2. Dissemination format - Publications	
Not requested by Reg. 28/2004	
7.3. Dissemination format - online database	
Not requested by Reg. 28/2004.	
7.3.1. Data tables - consultations	
Not requested by Reg. 28/2004.	
7.4. Dissemination format - microdata access	
Not requested by Reg. 28/2004.	
7.5. Documentation on methodology	
Not requested by Reg. 28/2004.	
7.5.1. Metadata completeness - rate	
Not requested by Reg. 28/2004.	
7.5.2. Metadata - consultations	
Not requested by Reg. 28/2004.	
7.6. Quality management - documentation	
Not requested by Reg. 28/2004.	
7.7. Dissemination format - other	
Not requested by Reg. 28/2004.	

8. Comparability			Top
According to the Regulation (EC) No 1177/2003 of the European Parliament and of the Council concerning EU-SILC: "Comparability of data between Member States shall be a fundamental objective and shall be pursued through the development of methodological studies from the outset of EU-SILC data collection, carried out in close collaboration between the Member States and Eurostat".			
Although the best way for keeping the comparability of data is to apply the same methods and definitions of variables, small departures of the definitions given by Eurostat are allowed in EU-SILC. In this way, the mentioned Regulation in its article 16th says: "Small departures from common definitions, such as those relating to private household definition and income reference period, shall be allowed, provided they affect comparability only marginally. The impact of comparability shall be reported in the quality reports."			
8.1. Comparability - geographical			
Not requested by Reg. 28/2004.			
8.1.1. Asymmetry for mirror flow statistics - coefficient			
Not requested by Reg. 28/2004.			
8.1.2. Reference population			
Reference population	Private household definition	Household membership	
The target population was members of private households residing at main family addresses, and the households themselves.(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. No differences between national and EU-SILC concept)	The reference in the definition of ‘household member’ is to apply the definition 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.	

Reference population	Private household definition					Household membership						
<p>After an analysis we have reached this 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:</p> <ul style="list-style-type: none">- 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 <p>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.</p>												
8.1.3. Reference Period												
Period for taxes on income and social insurance contributions			Income reference periods used			Reference period for taxes on wealth		Lag between the income ref period and current variables				
Taxes received/paid during the income reference period are considered. In the case of tax adjustments, these taxes usually refer to income received during the income reference period. (No differences between national and EU-SILC concept)			The income reference period is the previous calendar year. (No differences between national and EU-SILC concept)			We considered the tax received/paid during the income reference period.		From 31 December of the year prior to the survey to the time of data collection (March-July). The lag thus ranged from 2 to 7 months.				
8.1.4. Statistical concepts and definitions												
Total hh gross income (HY010) F		Total disposable hh income (HY020) F		Total disposable hh income before social transfers other than old-age and survivors' benefits (HY022) F				Total disposable hh income before all social transfers (HY023) F				
Imputed rent (HY030) F	Income from rental of property or land (HY040) F	Family/Children related allowances (HY050) F	Social exclusion payments not elsewhere classified (HY060) F	Housing allowances (HY070) F	Regular inter-hh cash transfers received (HY080) F	Interest, dividends, profit from capital investments in incorporated businesses (HY090) F	Interest paid on mortgage (HY100) F	Income received by people aged under 16 (HY110) F	Regular taxes on wealth (HY120) F	Regular inter-hh transfers paid (HY130) F		
Cash or near-cash employee income (PY010) F	Other non-cash employee income (PY020) F	Income from private use of company car (PY021) F	Employers social insurance contributions (PY030) F (Only the compulsory social contributions are included)	Cash profits or losses from self-employment (PY050) F	Value of goods produced for own consumption (PY070) F	Unemployment benefits (PY090) F	Old-age benefits (PY100) F	Survivors benefits (PY110) F	Sickness benefits (PY120) F	Disability benefits (PY130) F	Education-related allowances (PY140) F	Gross monthly earnings for employees (PY200) Not available.
The source or procedure used for the collection of income variables			The form in which income variables at component level have been obtained				The method used for obtaining target variables in the required form					
Since the 2013 survey a new methodology has been adopted in the production of data related to household income, combining the data of administrative files with the information provided by the informant.			Since the 2013 survey income data registers are used. In these cases amounts are normally available gross and net. In some income components the amount is collected from the questionnaire. The respondents have 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.				Net amounts. Target net income variables were reported (or obtained from administrative files) net of tax on income at source and, where applicable, net of social contributions. Gross amounts. Target gross income variables have been obtained using administrative files or reported directly by the respondent (in some cases a net-to-gross conversion model has been used).					
8.2. Comparability - over time												
EU-SILC is implemented in Spain since 2004. Since the 2013 survey Spain has used administrative data in the production of the income variables . The implementation of the use of administrative records in the survey breaks the time series for the income-based indicators from the 2008 data (revised microdata from 2008 to 2012 survey have been produced with the new methodology comparable with the 2013 data).												
8.2.1. Length of comparable time series												
EU-SILC is implemented in Spain since 2004. The implementation of the use of administrative records in the survey in 2013 breaks the time series for the income-based indicators. There are comparable data from the 2008 survey .												
8.3. Comparability - domain												
Not requested by Reg. 28/2004.												
9. Coherence												
The coherence of two or more statistical outputs refers to the degree to which the statistical processes, by which they were generated, used the same concepts and harmonised methods. A comparison with external sources for all income target variables and the number of persons who receive income from each ‘income component’ will be provided, where the Member States concerned consider such external data to be sufficiently reliable.												

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9.1. Coherence - cross domain
The external sources come from: - EU-SILC 2013 (previous survey) - Labour Force Survey (LFS) - The <i>Boletín de Estadísticas Laborales</i> (labour statistics journal) of the Ministry of Labour and Social Security (social benefits) - Tax Authorities sources See attached document "ES-Annex - Coherence_V2.doc".
9.1.1. Coherence - sub annual and annual statistics
Not requested by Reg. 28/2004.
9.1.2. Coherence - National Accounts
See attached document "ES-Annex - Coherence_V2.doc".
9.2. Coherence - internal
Not requested by Reg. 28/2004.

10. Cost and Burden	Top
<p>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.</p> <p>The extra time to establish the contact, to explain the content, to arrange additional contacts, is not included.</p> <p>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.</p> <p>It has been informed by the interviewers the excessive duration of the interview having an impact on the quality of the information collected.</p>	
Interview duration	
Mean	
29	

11. Confidentiality Top
Not requested by Reg. 28/2004.
11.1. Confidentiality - policy
Not requested by Reg. 28/2004.
11.2. Confidentiality - data treatment
Not requested by Reg. 28/2004.

12. Statistical processing Top
Detailed information concerning sampling frame, sampling design, sampling units, sampling size, weightings and mode of data collection can be found in this section. Such information is mainly used for the computation of the accuracy measures.
12.1. Source data
<p>The sampling frame is the Municipal Register.</p> <p>The sample selection frame was area-based and consisted of the list of census sections used in the Municipal Register (population register).</p> <p>The new sample for SILC-2014 was obtained with the Register dated 25.01.2013.</p> <p>The Municipal Register [<i>Padrón</i>] 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.</p> <p>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.</p> <p>Municipal Register entries contain only the following mandatory details on each resident:</p> <ol style="list-style-type: none"> Name Sex Usual address Nationality Place and date of birth Identity Card Number or, if foreign, an equivalent identifying document
12.1.1. Sampling design and procedure
<p>Type of sampling design</p> <p>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.</p> <p>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.</p> <p>The other sub-samples are formed with the households of the previous wave that have collaborated.</p> <p>Renewal of sample: Rotational groups</p> <p>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.</p> <p>The values used in the variable DB075 (rotational group) are 1,2,3 and 4. In the 2014 survey, the rotational group of the new sub-sample is "2".</p> <p>Stratification and sub stratification criteria</p> <p>In each Autonomous Community [self-ruling region], first-stage units were stratified by the size of the municipality to which the census section belonged.</p> <p>The following strata were considered:</p> <p>Stratum 0: Municipalities of over 500,000 population.</p> <p>Stratum 1: Provincial capitals (other than the above).</p> <p>Stratum 2: Municipalities of over 100,000 population (other than the above).</p>

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.

Sample selection schemes

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.

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 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.

Since the 2014 survey substitutions are eliminated. In each section twelve sections are selected instead of eight.

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.

Since the 2014 survey substitutions are eliminated. In each section twelve sections are selected instead of eight.

Sample distribution over time

There is no itemised distributon for sample collection in the period March-July 2014.

12.1.2. Sampling unit

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.

12.1.3. Sampling rate and sampling size

Concerning the SILC instrument, three different sample size definitions can be applied:

- the actual sample size which is the number of sampling units selected in the sample
- the achieved sample size which is the number of observed sampling units (household or individual) with an accepted interview
- the effective sample size which is defined as the achieved sample size divided by the design effect with regards to the at-risk-of poverty rate indicator

Given that the effective sample size has been already treated in the section dealing with sampling errors, in this section the attention focuses mainly on the achieved sample size.

Actual and achieved sample size

Obs	country_order	DB020	Actual_SSise	Achieved_SSise
1	9ES		16200	11965

Achieved sample size

Obs	persons_16_over
1	26531

Longitudinal component. Achieved sample size

SILC 2011. Number of households for which an interview is accepted for the database (DB135 = 1). Rotational group breakdown

Number	
Group 3	3785
Total	3785

SILC 2011. 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).

Number	
Group 3	8142
Total	8142

SILC 2012. Number of households for which an interview is accepted for the database (DB135 = 1). Rotational group breakdown

Number	
Group 3	3103
Group 4	3782
Total	6885

SILC 2012. 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).

Number	
Group 3	6820
Group 4	8245
Total	15065

SILC 2013. Number of households for which an interview is accepted for the database (DB135 = 1). Rotational group breakdown

Number	
Group 1	3830
Group 3	2653
Group 4	3023
Total	9506

SILC 2013. 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).

Number	
Group 1	8132
Group 3	5822
Group 4	6674
Total	20628

SILC 2014. Number of households for which an interview is accepted for the database (DB135 = 1). Rotational group breakdown

Number	
Group 1	3052
Group 3	2452
Group 4	2839
Total	8343

SILC 2014. 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).

Number	
Group 1	6762
Group 3	5423
Group 4	6346
Total	18531

12.2. Frequency of data collection

There is no itemised distribution for sample collection in the period March-July 2014.

Sample distribution (collected household questionnaire) over the time

	Number	Percentage
March	11 to 20	42 0.4
	21 to 31	319 2.7
April	1 to 10	1165 9.9
	11 to 20	544 4.6
	21 to 31	1309 11.1
May	1 to 10	1041 8.8
	11 to 20	1242 10.5
	21 to 31	1313 11.1
June	1 to 10	1192 10.1
	11 to 20	1159 9.8
	21 to 31	729 6.2
July	1 to 10	856 7.2
	11 to 20	516 4.4
	21 to 31	397 3.4

12.3. Data collection

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.

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.

1-PAPI (% of total)	2-CAPI (% of total)	3-CATI (% of total)	4-Self administrated (% of total)	5-Proxy interview (% of total)
61.5		13.0		25.5

Spain uses administrative data in the production of the **income variables** since the 2013 survey. The strategy is to use a mixed methodology taking mainly income data from the registers and also from questionnaires when the register information is insufficient.

The mean 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. Only households accepted for the database have to be considered.

Average interview duration = 29

See attached document "ES-Annex - Data collection_V2.doc".

12.4. Data validation

Not requested by Reg. 28/2004.

12.5. Data compilation

Not requested by Reg. 28/2004.

12.5.1. Weighting procedure

See attached document "ES-Annex - Weighting_V2.doc".

12.5.2. Estimation and imputation

See attached document "ES-Annex - Imputation and Estimation_V2.doc".

12.6. Adjustment

Not requested by Reg. 28/2004.

13. Comment

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The following annexes are attached:

- 2014 Questionnaire ES.pdf
- ES-Annex Sampling errors L_data_V2.doc
- ES-Annex-Item non response_V2.doc
- ES-Annex - Coherence_V2.doc
- ES-Annex - Data collection_V2.doc
- ES-Annex - Weighting_V2.doc
- ES-Annex - Imputation and Estimation_V2.doc

Related metadata

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Annexes

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