INSTITUTO NACIONAL DE ESTADISTICA

**IN e** 

# Household Budget Survey

Methodology

## Index

<u>1</u>	Introduction	4
<u>2</u>	Background	5
3	Objectives	7
	3.1 Priority objectives 3.2 Secondary objectives	7 7
<u>4.</u>	Functional and Geographical Breakdown	8
<u>5</u>	Analysis and Sampling Units	9
	5.1 Analysis units 5.2 Sampling units	9 9
<u>6.</u>	Scope of Research	10
	6.1 Population scope 6.2 Geographical scope 6.3 Time scope	10 10 10
<u>7.</u>	Basic Concepts	11
	A Dwelling B Household C Household member D Main breadwinner E Domestic service F Residing Lodgers, Tenants or Lessees G Student H Guest I Recipient of regular consignments	11 13 14 18 18 18 18 19 19
<u>8</u>	Main Features Under Study	20
	8.1 Household final consumption expenses 8.2 Valuation criterion and moment of registration	20 21
<u>9</u>	Classification Features	25
	A Geographical features B Features related to the household members C Features related to the main breadwinner D Features related to the household E Features related to dwellings	25 28 34 39 45

H Other information     9       10     Survey Scheme     5       11     Reference Periods and Temporary Elevation Factors     5       11.1 Expenditure reference periods     9       11.2 Temporary elevation factors     9       11.3 Other reference periods     9       11.3 Other reference periods     9       12     Sample Design     5       12.1 Sampling type     9       12.2 Framework     9       12.3 Stratification and sub-stratification criteria     9       12.4 Sample size     9       12.5 Allocation     9       12.6 Sample selection     6       12.7 Sample distribution in time     6       12.8 Sample update and renovation. Rotation turns     6       12.9 Estimators     6       12.10 Sampling errors     6       13.1 Collection method     6       13.2 Questionnaire features     6       13.4 Organisation of field work     7	49 51 52 53 53 53 55 56 56 56 56 58 60
10Survey Scheme511Reference Periods and Temporary Elevation Factors511.1 Expenditure reference periods11.2 Temporary elevation factors511.2 Temporary elevation factors511.3 Other reference periods512Sample Design512.1 Sampling type512.2 Framework512.3 Stratification and sub-stratification criteria512.4 Sample size512.5 Allocation612.6 Sample selection612.7 Sample distribution in time612.8 Sample update and renovation. Rotation turns612.9 Estimators613.1 Collection method613.1 Collection method613.4 Organisation of field work5	<b>52</b> <b>53</b> 53 54 55 <b>56</b> 56 56 56 58 58
11     Reference Periods and Temporary Elevation Factors     5       11.1     Expenditure reference periods     5       11.2     Temporary elevation factors     5       11.3     Other reference periods     5       12     Sample Design     5       12.1     Sample Design     5       12.1     Sample type     5       12.2     Framework     5       12.3     Stratification and sub-stratification criteria     5       12.4     Sample size     5       12.5     Allocation     5       12.6     Sample selection     6       12.7     Sample distribution in time     6       12.8     Sample update and renovation. Rotation turns     6       12.9     Estimators     6       12.10     Sampling errors     6       13.1     Collection method     6       13.2     Questionnaire features     6       13.4     Organisation of field work     7	<b>53</b> 53 54 55 <b>56</b> 56 56 58 58
11.1 Expenditure reference periods     9       11.2 Temporary elevation factors     9       11.3 Other reference periods     9       12 Sample Design     5       12.1 Sampling type     9       12.2 Framework     9       12.3 Stratification and sub-stratification criteria     9       12.4 Sample size     9       12.5 Allocation     9       12.6 Sample selection     9       12.7 Sample distribution in time     9       12.8 Sample update and renovation. Rotation turns     9       12.10 Sampling errors     9       13     Information Collection       13.1 Collection method     9       13.2 Questionnaire features     9       13.3 Auxiliary documents     13.4 Organisation of field work	53 54 55 56 56 56 58 58
11.1 Expenditure reference periods     9       11.2 Temporary elevation factors     9       11.3 Other reference periods     9       12 Sample Design     5       12.1 Sampling type     9       12.2 Framework     9       12.3 Stratification and sub-stratification criteria     9       12.4 Sample size     9       12.5 Allocation     9       12.6 Sample selection     9       12.7 Sample distribution in time     9       12.8 Sample update and renovation. Rotation turns     9       12.10 Sampling errors     9       13     Information Collection       13.1 Collection method     9       13.2 Questionnaire features     9       13.3 Auxiliary documents     13.4 Organisation of field work	53 54 55 56 56 56 58 58
11.2 Temporary elevation factors     1       11.3 Other reference periods     1       12 Sample Design     5       12.1 Sampling type     5       12.2 Framework     5       12.3 Stratification and sub-stratification criteria     5       12.4 Sample size     5       12.5 Allocation     5       12.6 Sample selection     6       12.7 Sample distribution in time     6       12.8 Sample update and renovation. Rotation turns     6       12.9 Estimators     6       12.10 Sampling errors     6       13.1 Collection method     6       13.2 Questionnaire features     6       13.3 Auxiliary documents     7       13.4 Organisation of field work     7	54 55 56 56 56 58 58
11.3 Other reference periods512Sample Design512.1 Sampling type512.2 Framework512.3 Stratification and sub-stratification criteria512.4 Sample size512.5 Allocation512.6 Sample selection612.7 Sample distribution in time612.8 Sample update and renovation. Rotation turns612.9 Estimators612.10 Sampling errors613.1 Collection method613.2 Questionnaire features613.3 Auxiliary documents613.4 Organisation of field work7	55 56 56 56 58 58
12Sample Design512.1 Sampling type112.2 Framework112.3 Stratification and sub-stratification criteria112.4 Sample size112.5 Allocation112.6 Sample selection112.7 Sample distribution in time112.8 Sample update and renovation. Rotation turns112.9 Estimators112.10 Sampling errors113.1 Collection method113.2 Questionnaire features113.4 Organisation of field work1	56 56 56 58 58
12.1 Sampling type912.2 Framework912.3 Stratification and sub-stratification criteria912.3 Stratification and sub-stratification criteria912.4 Sample size912.5 Allocation912.6 Sample selection912.7 Sample distribution in time912.8 Sample update and renovation. Rotation turns912.9 Estimators912.10 Sampling errors913 Information Collection913.1 Collection method913.2 Questionnaire features913.3 Auxiliary documents913.4 Organisation of field work9	56 56 56 58 58
12.2 Framework12.3 Stratification and sub-stratification criteria12.3 Stratification and sub-stratification criteria12.4 Sample size12.5 Allocation12.6 Sample selection12.7 Sample distribution in time12.8 Sample update and renovation. Rotation turns12.9 Estimators12.10 Sampling errors13 Information Collection13.1 Collection method13.2 Questionnaire features13.3 Auxiliary documents13.4 Organisation of field work	56 56 58 58
12.3 Stratification and sub-stratification criteria12.4 Sample size12.4 Sample size12.5 Allocation12.5 Allocation12.6 Sample selection12.6 Sample selection12.7 Sample distribution in time12.7 Sample distribution in time12.8 Sample update and renovation. Rotation turns12.9 Estimators12.10 Sampling errors13 Information Collection13.1 Collection method13.1 Collection method13.2 Questionnaire features13.3 Auxiliary documents13.4 Organisation of field work	56 58 58
12.4 Sample size812.5 Allocation912.6 Sample selection912.7 Sample distribution in time912.8 Sample update and renovation. Rotation turns912.9 Estimators912.10 Sampling errors913Information Collection13.1 Collection method913.2 Questionnaire features913.3 Auxiliary documents1313.4 Organisation of field work13	58 58
12.5 Allocation812.6 Sample selection612.7 Sample distribution in time612.8 Sample update and renovation. Rotation turns612.9 Estimators612.10 Sampling errors613.1 Collection method613.2 Questionnaire features613.3 Auxiliary documents713.4 Organisation of field work7	58
12.6 Sample selection612.7 Sample distribution in time612.8 Sample update and renovation. Rotation turns612.9 Estimators612.10 Sampling errors613.1 Collection method613.2 Questionnaire features613.3 Auxiliary documents713.4 Organisation of field work7	
12.7 Sample distribution in time612.8 Sample update and renovation. Rotation turns612.9 Estimators612.10 Sampling errors613 Information Collection613.1 Collection method613.2 Questionnaire features613.3 Auxiliary documents713.4 Organisation of field work7	60
12.8 Sample update and renovation. Rotation turns612.9 Estimators612.10 Sampling errors613Information Collection13.1 Collection method613.2 Questionnaire features613.3 Auxiliary documents713.4 Organisation of field work7	
12.9 Estimators612.10 Sampling errors613Information Collection13.1 Collection method613.2 Questionnaire features613.3 Auxiliary documents713.4 Organisation of field work7	60 61
12.10 Sampling errors613Information Collection613.1 Collection method613.2 Questionnaire features613.3 Auxiliary documents713.4 Organisation of field work7	62
13.1 Collection method613.2 Questionnaire features613.3 Auxiliary documents713.4 Organisation of field work7	66
13.2 Questionnaire features613.3 Auxiliary documents713.4 Organisation of field work7	<u> 86</u>
13.3 Auxiliary documents 13.4 Organisation of field work	68
13.4 Organisation of field work	68
	70
10 Elizated an and the interpretation	71
13.5 Incidences and their processing	73
14Information processing7	7 <u>6</u>
14.1 Recording	76
14.2 Filtering	76
14.3 Imputation processing	77
	81
	82
0	83
14.7 Other processes 8	83
<u>15</u> Dissemination 8	<u>35</u>
	85
15.2 Microdata files	89

## 1 Introduction

The Household Budget Survey (HBS) is one of the oldest surveys carried out by the National Statistics Institute (INE), with the objective of obtaining information about the nature and destination of consumption expenses, as well as information about diverse features related with household living conditions. This survey has evolved in aspects such as the type of population considered, the size of the sample, the level of expenditure breakdown, the collection system or the design of questionnaires, and it has even adopted different forms in terms of regularity.

Since its implementation in 1958, there has been an alteration in the different types of surveys that tried to collect the information needed at each moment. Traditionally, two types of HBSs have been carried out, the structural or basic one every eight or ten years and the short term or quarterly one. The year 1997 was the first time an HBS that intends to bring together all the positive aspects of both types of operations was implemented, so as to respond to all of the user's needs. With the integration of the contents and methodologies of both types of surveys it is possible to save on expenses and take advantage of the scale economies that arise from the use of the same human resources and survey procedures.

In the years between 1997 and 2006 there have been changes in the users' demands and in the needs of the statistics that are encouraged by this survey. Diverse methodological recommendations coming from different international forums have been formulated, especially coming from the Statistical Office of the European Union (EUROSTAT). This, alongside the fact that all permanent surveys need to review the main methodological elements it is characterized by, turns the methodological process into a need whose main guideline has been to assure maximum quality of the information coming from the new survey.

Through a single survey, the reform, which was implemented in the year 2006, maintained the idea of satisfying the main objectives of structural and short-term surveys carried out by INE until 1997. The HBS resulting from the reform is an annual survey which therefore provides information about the annual household expenditure and also allows measuring its evolution.

## 2 Background

INE carries out the first Household Budget Survey in the year 1958, which was later followed by those of the years 1964-65, 1973-74, 1980-81 and 1990-91 as structural surveys. Short-term surveys started in the second quarter of 1977 until the fourth quarter of 1983 with the PERMANENT CONSUMPTION SURVEY (pcs), and from the first quarter of 1985 to the second quarter of 1997 The Continuous Household Budget Survey was carried out. The Continuous Household Budget Survey (CHBS 97), which started in the third quarter of 1977, substituted the two types of statistical operations performed on the household budgets by INE, which were the basic or structural surveys, and short-term surveys.

The first Household Budget Survey (1958) has the special feature of being the first sampling survey carried out by INE. Its objective was finding out the consumption expenses (at a level of 68 headings of goods and services) of the average Spanish household. Therefore, certain groups were excluded from the field of study, such as families whose head of household was unemployed or families who had a standard of living much higher than average. The way of collecting information was mixed, with direct note taking and interview and field work was carried out in the month of March. The following survey was *that* of the year 1964, in which the period of study was one year (from April 1964 to March 1965). Restrictions in the field of population were eliminated, the sample was considerably increased, broken down income was gathered for the first time and the list of goods and services was expanded from 68 headings to 90.

The 1973-74 survey is the first one that can be considered a Household Budget Survey, since it studies in detail the expenses, income and savings of the household members. Besides the increase of the sampling size, it incorporates a better sampling design since it uses the design of The General Population Survey (GPS) for the first time and more detailed classifications. Field work was carried out between July 1973 and June 1974.

The 1980-81 survey already adapts to the international recommendations of the European Economic Community (EEC), the classification of goods and services was increased up to 630 headings and living condition modules such as household equipment, features of the dwelling, educational level of the household members or health care coverage are incorporated.

In 1990-91 the last Structural Household Budget Survey was carried out, which continues with the harmonization process of these surveys at a European level. In this survey the itemisation of goods and services reached 900 headings, the study of other variables such as the physical quantities consumed and the demographic and social characteristics of all the household members were increased, a subjective poverty module was introduced and the study of durable goods was extended, among other progresses.

In terms of short-term surveys, the first one was the quarterly HBS which in started the second quarter of 1977 and ended in the fourth quarter of 1983.

The type of sampling used was by quotas. The survey was designed as a rotating panel of 2.000 households which rotated every four quarters. The period in which information is collected is one week, exclusively by direct note taking. The breakdown was approximately of 130 goods and services.

In 1985 the Continuous Household Budget Survey (CHBS) was implemented, which is a quarterly survey that covers 3200 households per quarter. It has the design of a rotating panel surveying 1/8 per quarter. Regarding HBS, it introduces an increase in the number of headings of goods and services, including approximately 400, as well as new questions about income, dwellings and features of the main breadwinner. Information collection is mixed by means of direct note taking for a week and by means of retrospective interview.

In 1997 the Continuous Household Budget Survey was implemented (CHBS), which intends to bring together the objectives of both types of operations that had been carried out until then. This survey maintains the design of a quarterly rotating panel, surveying 1/8 of the sample per quarter. It provides quarterly estimates of the level and change of the aggregate expenditure of the households and allows obtaining the annual expenditure flow at household level as the sum of quarterly flows.



## 3 Objectives

Due to the great possibilities offered by the information coming from the Household Budget Surveys and to be used by a wide range of users, these surveys are traditionally considered as multi-objective surveys. As is clear, no statistic is capable of responding to a great variety of objectives without being inefficient in any of them. It is therefore necessary to classify them in two big sections according to the priority they have been assigned.

Thus, a first block related to **priority objectives**, which include the uses of the survey considered unavoidable due to the fact that they are its essence and whose compliance is part of its usual estimation process. The other big section refers to the **secondary objectives**, that is, those resulting from other uses that have been made of the survey and for which it initially has not been designed.

## 3.1 PRIORITY OBJECTIVES

This category includes obtaining any variable related to the total or average expenditure, its corresponding variation rates and the consumption structures coming from it, that is:

- Obtaining estimates of the aggregate annual consumption expenditure of households for the national group and the Autonomous Communities, as well as its classification according to several household variables.
- Estimate of the **interannual change** of the aggregate consumption expenditure for the national group and Autonomous Communities.
- Estimate of the consumption in **physical** amounts of specific food products and energy sources for the national group.

Furthermore, within the priority objectives, two others related to the specific needs of the main users of the survey can be highlighted: the expenditure estimate as the means to obtain private consumption in National Accounting and the estimate of the weights structure based on the expenditure that is necessary to calculate the CPI.

## 3.2 SECONDARY OBJECTIVES

The main secondary objective is *that* of making statistical data about different social concerns (equipment, dwellings, nutrition, healthcare, education, tourism) available to researchers and to the overall social indicator system. This statistical data will be introduced by means of annual themed modules.

Furthermore, there is a set of variables that can be obtained from the survey itself without it having to be the objective of the survey, such as, distribution of households or persons according to certain classification variables (sex, age, education, etc.) or average size of the households.

## 4. Functional and Geographical Breakdown

The classification used to collect expenses is COICOP, which is the national adaptation of the international classification used by Eurostat for budget surveys (COICOP/HBS), and which is structured in the following twelve large groups:

- 1. Food and non-alcoholic beverages
- 2. Alcoholic beverages, tobacco and narcotics
- 3. Clothing and footwear
- 4. Housing, water, electricity, gas and other fuels

5. Furniture, household equipment and ordinary expenses for the maintenance of the dwelling

- 6. Health
- 7. Transport
- 8. Communication
- 9. Leisure, performances and culture
- 10. Education
- 11. Restaurants, cafés and hotels
- 12. Miscellaneous goods and services

The functional breakdown level used in the publication of results varies depending on the degree of geographical breakdown the estimates refer to.

The level of detail in the estimate of annual consumption expense is the following:

- For the **national** group the maximum functional breakdown will be **five digits** of the COICOP.
- For **Autonomous Communities** the maximum level of functional breakdown will be **four digits**.
- There is a three-digit breakdown at provincial level only for the estimate of the weightings structure of CPI.

The breakdown established for the change estimate, that is, for the change in the evolution of expenses throughout time, is lower than the one determined for the estimate of the aggregate, hence at **national level**, interannual variation rates are published with a maximum breakdown of **4 digits** and **3 digits** for each **Autonomous Community**.

The aforementioned is due to the rotation turn scheme, which causes that the entire sample is not maintained from one year to another, but only part of the sample is the same in both periods. Given that for the change estimation between two periods the best is that the total of the sample is the same in both, the breakdown level required for the change estimation has decreased.

## 5 Analysis and sampling units

## 5.1 ANALYSIS UNITS

Taking into account that the objective of the survey is studying household consumption expenses, the basic analysis units are private households residing in main family dwellings.

## 5.2 SAMPLING UNITS

The primary sampling unit is the census section and the last unit is the main family dwellings that belong to the section. The households that reside in the selected main family dwellings are subject to research.

## 6. Scope of research

## 6.1 POPULATION SCOPE

The population subject to be researched or object population, to whom the data and tabulations refer to, is the group of private households as well as the persons who are part of them.

## 6.2 GEOGRAPHICAL SCOPE

The complete Spanish territory constitutes the geographical scope.

## 6.3 TIME SCOPE

The time scope or period of study is one natural year.

Annual results are offered in terms of the total expenditure and the average expenses of private households residing in Spain, as well as the variation of this expenditure compared with the previous year, with the previously specified breakdown levels.

## 7. Basic Concepts

## A Dwelling

It is a structurally separate and independent premises that because of the way in which it were built, rebuilt, changed or adapted, it is intended to be inhabited by persons or to be the regular residence of one or more persons, even if it was not what the premises were initially intended for. As an exception, the premises that are totally dedicated to other purposes (such as those exclusively used as locales) are not considered dwellings, in spite of the fact that they were initially intended to be inhabited by humans.

Premises are considered *separate* if they are surrounded by walls, fences..., they are covered by a ceiling and allow a person or group of persons to isolate from others so as to prepare or consume food, sleep and protect themselves from inclement weather and the environment.

The premises are considered *independent* if they have direct access from the street or from public or private, common or personal grounds, or from any staircase, hallway, corridor..., that is, whenever the occupants of the dwelling can enter or exit it without having to cross any type of premises occupied by other persons.

In all cases, the current state of the premises-dwelling is taken into account and not the primitive state of the construction, therefore in the aggregation or subdivision of dwellings the units resulting from the transformation process are taken into account, providing they comply with the aforementioned conditions and regardless of their initial construction.

There are two types of dwellings: *family dwellings and group dwellings* (also called group establishments). Furthermore, within family dwellings, there is another subgroup called *accommodation*. The following is a detailed description of each one of these concepts.

## A.1 FAMILY DWELLING

Dwelling intended to be inhabited by one or more households which do not constitute a *group household* (see definition of household and group household below).

Not included in this category are the premises built initially as dwellings but that are exclusively used for other purposes (dwellings that have been changed into offices, workshops, warehouses,...).

PARTICULAR CASE: PERMANENT ACCOMMODATION

Despite not strictly complying with the definition, permanent accommodation is also considered a family dwelling. Accommodation is defined as the family dwelling that can be mobile, semi-permanent or improvised or that has not initially been intended for residential purposes but does constitute the residence of one or more persons.

The accommodation that has been taken into account for this survey is only the permanent one, that is:

- Semi permanent dwellings that in spite of being similar to family dwellings in some aspects, are used for a limited time only (usually less than 10 years).

- Specific premises intended to be dwellings, that are built with no pillar and with recycled materials (cans, boxes...): shacks, huts,...

- Other premises that are initially not intended to be a dwelling and that have not been rebuilt or refurbished in order to be used for residential purposes, but in spite of that there are persons living inside; for example, the spaces located in stables, haylofts, mills, garages, warehouses, locales..., as well as caves and other natural shelters that have been enabled to live in them.

Depending on the use made of the family dwelling and its availability, the following classification is established:

#### MAIN FAMILY DWELLING

*Main family dwelling* is any family dwelling that is used as regular residence of one of more households (see definition of regular residence).

#### OTHER DWELLINGS AVAILABLE TO THE HOUSEHOLD

They are non primary family dwellings that are available to the household, whose essential purpose is to be used by the household members for recreational purposes in different seasons, periodically or sporadically (weekends, vacations,). A family dwelling can therefore not be the main dwelling for a household and be available to other households.

#### A.2 GROUP DWELLING

A dwelling intended to be inhabited by a group, that is, a group of persons subjected to an authority or common regime that is not based on family ties or cohabitation. The group dwelling may occupy only part of a building or the total building, the latter being more frequent.

Included in this definition are actual group dwellings (convents, quarters, nursing homes, students' or workers' hall of residence, hospitals, prisons,) and hotels, guesthouses, and analogous establishments.

When in the group establishment there are dwellings of a familiar nature, which are usually intended for management, administrative or service staff members, they will therefore be considered family dwellings.

## **B** Household

The household and its members constitute the basic units of information collection and analysis of the HBS. This makes establishing an appropriate definition of them one of the priorities of the survey, which will guarantee the compliance of its objectives.

In the HBS only the private households and their members are researched.

## B.1 PRIVATE HOUSEHOLD

A private household is the person or group of persons that occupy the same **main family dwelling** or part of it, and consume and/or share food or other goods or services which are charged to one single budget.

In accordance with this definition, it must be taken into account that:

a) A private household may be constituted by a single person (**single-person household**) or by several persons (**multi-person household**).

The persons that form the household **may or may not have family ties**. Indeed, the household can exclusively be constituted by unrelated persons, by a family with unrelated persons or exclusively by a family.

b) A private household is a group of persons that **occupy the same main family dwelling**. Therefore, the group of persons that inhabit a group establishment (hospital, hotel, hall of residence,...)do not constitute a private household. However, it shall be taken into account that within the premises of a group establishment, there can be a household, such as in the case of the warden who lives in the prison.

c) A private household is a group of persons who **share expenses**, that is, persons who have **a common economy or budget**. Budget being the common funds that allows the housewife or person in charge of the household management to defray its common expenses. The persons who have a partially independent economy are not considered to constitute a different household if they share most part of the main expenses-dwelling and/or food-with the rest of the household members.

The persons who are generally considered to have a common economy are those who provide it with resources, helping to defray the common expenses, as well as those who even though they do not provide resources, benefit from the expenses (or depend on) of the common economy.

d) Inside a main family dwelling there can **be more than one household**. This occurs when there is a separation of economies among the households (autonomous regarding all the relevant expenses) and when occupying different and delimited areas of the main dwelling, even if they have a common room, for example, dwellings with sub-lessees or dwellings shared by two or more families that have independent economies. Regarding this, the following shall be taken into account:

When there are **only** people independent from one another living in the same dwelling, using one or several rooms in an exclusive way and not having a common budget, it is considered that each person constitutes a private household providing that the number of persons living in the family dwelling is **five or less than five**. Each person is considered an independent household and interviews will be conducted on each one of them. When there are more than five persons with these features living in the dwelling, it is not considered a family dwelling, but a group establishment, and it would therefore not be included in the scope of study of this survey.

When there are people living in the same dwelling who use one or several rooms in an exclusive way and do not have a common budget (sub-lessees) and in the same dwelling there are other persons who among them do constitute a household and have a common budget, the household will be considered in two different parts. One will be the household formed by the persons who do constitute a household, and the rest of persons living in the same dwelling will be considered independent households if there are five persons or less, in which case each person will be interviewed. On the contrary, if the number of persons is more than five, they will not be researched, but the main household of that dwelling must be taken into account.

In a dwelling in which there are only students living, if these students do not have a common budget but depend economically on another household, and do not consider this dwelling their regular residence, the household members who provide the money so that the students can face the expenses will be considered. In this case the dwelling will not be researched.

## C Household member

The conditions that are established to determine if a person is or is not a household member try to avoid the possibility of one single individual being classified in more than one household, or on the contrary, not being classified in any.

The requirements to be a household member are:

- a) Habitually residing in the dwelling
- b) Sharing the household expenses

Furthermore, if certain criteria are met, the following categories of persons will also be considered household members:

- 1. Residing lodger, tenant or lessee
- 2. Guest
- 3. Live-in housekeeper, au pair

4. Resident who is absent from the dwelling for a short period of time (vacation, work, studies, etc.)

5. Absent children who are receiving an education

6. Person linked to the household who is absent for a long period of time: work far from home

7.Person linked to the household who is temporarily absent: hospital, clinic or other situation

The criteria that must be met are the following:

Categories 1), 2), and 3) are considered household members if they share household expenses and currently do not have another private dwelling which they consider their regular residence.

Categories 4), 5) and 6), regardless of the real or expected duration of absence, are considered household members if they share household expenses and currently do not have another private dwelling they consider their regular residence.

Category 7) is considered a household member if he/she shares household expenses, does not have another private dwelling considered a regular residence, the person keeps an economic dependence with the household and the real or expected duration of the absence is less than six months.

## C.1 REGULAR RESIDENCE

A person is considered to regularly reside in a dwelling if the person spends most of his/her daily resting time at that dwelling, taking into account the last six months. The persons that form new households or join an existing household will usually be considered members of the new dwelling; similarly, the persons who leave their household in order to live elsewhere, will stop being considered members of the original household. The "last six months" criterion previously mentioned will be replaced by the intention to reside in the new place or residence for at least six months.

What can be considered a "permanent" entry or exit from the household must be taken into account. That is, a person who settles in a household for an indefinite period of time or with the intention to reside for at least six months will be considered a member of that household even if the person has still not resided for six months or the person has actually spent most of that time in any other place of residence. Similarly, a person who has left their household so as to go to any other place of residence with the intention to stay at least six months will stop being considered a member of the previous household.

If a person who is temporarily absent, is in a private dwelling, this person will be considered a member of the current or previous household depending on the duration of the absence (see presence/absence). As an exception, specific categories of persons that are closely linked to the household may be considered their members regardless of the duration of their absence, providing they are not considered members of another private household (see "Special cases"). C.2 SHARING EXPENSES AND/OR INCOME / ECONOMIC DEPENDENCE / COMMON BUDGET

A person who meets the aforementioned requirements is considered to regularly reside in a dwelling and a member of the same dwelling as the other persons residing in it, if they have a common budget or economy, that is, if they share the household expenses.

Sharing household expenses means benefiting from the expenses (children, persons with no income, etc.) and/or contributing to the income. If expenses are not shared, the person constitutes a separate household in the same dwelling.

In general, the minimum expenses that shall be shared so as to consider a person a member of the household, are those charged to a common budget, that is, expenses related to a dwelling and/or food.

However, the persons who are absent and during interview period do not incur in this type of expenses in the household are also considered to share expenses and/or income, whether because they depend economically on the household (absent students who do not have economic independence, do not have income) or because in spite of being temporarily absent contribute to the family economy with their income (absent spouse).

A person is considered to be economically dependent on the household when that person participates in its budget, that is, shares expenses and/or income with the rest of the persons that make up the household. Same budget is the common funds that allow the housewife or person in charge of the household management to defray its common expenses.

#### C.3 PRESENCE/ABSENCE

A person is considered to be present if he/she stays overnight at least once during the collaboration period (14 days of the two-week period).

A person who regularly lives in a dwelling is considered absent (temporarily) from it, if he/she does not stay overnight any of the nights during the collaboration period.

Reasons for absence may be:

-Studies: for example students who live in a group household or a student flat during the school period and depend economically on the household.

-Illness: for example, persons admitted to hospital, medical centre, etc. who depend economically on this household and plan on returning to it (in these cases the duration of the absence is used to determine whether the person is a household member or not).

-Temporary work: for example, male head of household temporarily posted to work in another.

-Other causes: for example, persons in prison, nursing home, etc.

#### C.4 SPECIAL CASES

As previously mentioned, the general conditions that must be satisfied in order to determine if a person is a household member or not, are that the person lives regularly in the dwelling and shares household expenses.

The following are the special cases taking into account both criteria:

**1.** - **Students who are absent** from the household of origin, that during the school period live in:

• A group establishment (hall of residence, boarding school etc.) or share a flat with other schoolmates or live by themselves in a dwelling: if they depend economically on the household of origin they are considered members of that household. If they are economically independent and share a flat, each one of them will be considered a household.

When applying the previous criteria, several situations may occur:

-all the students that share the flat are members of their parents' households;

-there are students who are members of their parents' households and other persons who are members of the household in which they are interviewed, and at the same time there may be one or several households (for example, a flat with three students: one can be a member of their parents' household and the other two can make up two independent households that would be taken into account in the survey if that household were selected).

• At a relative's home: if they depend economically on the household of origin (for example receiving periodic remittance from the latter) they will be members of this household. Otherwise, they will belong to the relative's household they live in.

**2. Other non-student temporary absentees** who have a close relationship with the household (for example the spouse or child that has been posted to work in another city): if they depend economically on it (contributing with their income, etc) they are members of the household, since once again in this case the regular residence criteria shall be strictly applied. Otherwise, they are another household.

**3. Domestic service, lodgers and guests:** (see definitions next) they generally share the minimum household expenses, therefore they are household members if they consider that dwelling their regular residence.

4. - The present or absent persons who reside in several family dwellings along the year are considered members of the household in which they or their spouse are subjectively considered members.

**5. Present persons with no regular residence**: a person who resides in a dwelling which is a sample while the survey is taking place and for any circumstance does not have a dwelling to consider their regular residence

according to what has previously been described, is considered to be a resident in that dwelling and will therefore be researched for surveying purposes.

## D Main breadwinner

The *main breadwinner* is the household member who is 16 years old or over whose periodic (not occasional) contribution to the common budget caters to the household expenses in a greater extent than the contributions of the remaining members.

If the person who contributes the most to defray the common household expenses is not a household member, the main breadwinner is considered the household member who, regularly being present in the household, receives the economic contribution intended for defraying the household expenses.

The household member who is considered main breadwinner must be over 16 years old, and under no circumstances can be part of the domestic service, a guest or lodger.

## **E** Domestic service

Domestic *service* is considered to be any person who renders services of a domestic nature to the household, in exchange for previously stipulated payment, in cash or in kind (for example, chauffeurs, maids, gardeners, nannies or home cleaning staff).

## F Residing Lodgers, Tenants or Lessees

*Residing lodgers, tenants or lessees* are considered to be all persons who share food with the household and/or live in the household, providing the household with a previously stipulated monetary compensation with which the household would be pursuing a profit.

## **G** Students

*Students* are considered to be all persons whose only (or main) activity consists in acquiring a systematic instruction of any study level and type, including preparation for public examination.

## **H** Guests

*Guests* are considered to be all persons who share food with the household at least one day every two weeks. This way the household would not be pursuing a profit.

## I Recipient of regular consignments

A recipient of regular consignments is considered the household member who is absent from the household during the two-week period and is the addressee of the cash sent by the household to which he/she belongs to during the two-week period (providing the household is unaware of the goods or services the recipient of this consignment is going to spend the money on).

## 8 Main features under study

## 8.1 HOUSEHOLD FINAL CONSUMPTION EXPENDITURE

The household final consumption expenditure is the expenditure of the households in goods and services that are used to directly satisfy the needs or shortages of the household members.

Hence, the household consumption expenditure is:

-Shopping done in a monetary form.

The estimated value of certain goods and services, such as the value of products coming from the household's own consumption or supply (whether they are consumed by the household or given to other households), payment in kind of the employers to their employees, imputed rent attributed to dwelling owners or to those who enjoy them for free or semi-free, and the free/discounted meals in the workplace or hotel/restaurant establishment property of the household (see definitions of non-monetary consumptions).

#### Within consumption expenditure, the following are considered:

-The expenses on domestic service produced by the households for themselves as employers of employed domestic service personnel.

-The financial services explicitly charged to the households, for example: bank transfer fees, bank account maintenance fees, money order fees, etc.

-Payments made by the households for licences, permits etc. that shall be considered a purchase of services given by the Public Administration.

-The gifts bought by the household to be given to other households.

-Subscriptions, instalments and payments of the households to the NPISH such as social, cultural, recreational or sports clubs.

# On the other hand, the following are not considered consumption expenditure:

-Social transfers in kind, for example: expenses which were first incurred by the household and were later reimbursed by social security, such as what occurs with some medical expenses.

-Gross capital formation expenses incurred by the households, among which the following may be found:

-Purchase of dwellings (gross fixed capital formation).

-The materials and labour for repairs in dwellings when they are large repairs (gross capital formation) or repairs that only the owner of the dwelling can make, in the case of a rented dwelling (intermediate consumption). -Expenses on valuable objects (gross capital formation).

-The items considered purchase of non-produced assets, specially the purchase of land.

-Subscriptions, instalments and payments of the households to the NPISH such as trade unions, professional associations, consumers' associations, churches, etc.

-Voluntary transfers in cash or in kind made by the households to charities or aid organisations.

-Fines and surcharges

-Monetary transfers to other households or institutions.

-Valuation of the gifts received by the households.

-Life insurance.

-Some taxes and fees paid to Public Administrations (see Fee and Tax Attachment)

-The resident household final consumption expenditure may apply to the economic territory or the rest of the world.

Consumption expenditure are the expenses of the household as an economic consumption unit; therefore they do not include the expenses of the family company or holding. This requires delimiting the part of the expenditure from the consumption unit and the production in cases in which the family company has common expenses with the household itself (telephone, electrical energy, gas, etc.).

As previously mentioned, the different goods and services that make up the consumption are classified according to the international classification COICOP/HBS, adapted to the needs of the Household Budget Survey and therefore compatible with the similar classifications used in National Surveys and the Consumer Price Index.

8.2 VALUATION CRITERION AND MOMENT OF REGISTRATION

#### 1. Valuation criterion

Household final consumption expenditure is registered by **purchase price**, that is, the price paid in cash by the buyer for the products in the moment of purchase. The real amount of the goods and services expenses are collected as well as all the added expenses caused by their purchase (for example tips, transport, etc.).

#### 2. Moment of recording

Good and services shall generally be recorded when payment obligations are contracted, in other words, when the buyer incurs an obligation with the seller. This means that the expenditure on a good shall be recorded in the moment the change of property takes place and the expenditure on a service, in general, when its rendering is complete.

## 3. Criterion to determine the moment of recording in certain notes

In spite of the general criterion about the moment of recording followed in the survey, in the following specific cases the expenses in the moment the supply of the service is acquired shall be written down, that is, when the purchase is agreed.

# • Trip paid in advance, train or plane tickets, etc. Tickets for theatres, shows, etc. that are purchased in advance:

If the general criterion were followed, it may lead to forgetfulness. Furthermore, in the improbable case that the household could later not travel (or attend the show, etc.) that purchase would not be collected even if the household has made the payment.

These cases shall be written down in the moment the right to the service is acquired, that is, when the purchase of the trip, tickets etc. takes place. (which generally does not necessarily have to coincide with the moment of payment).

## • Education Payments (schools, academies, etc.) rent expenses, etc.:

They are collected by means of the last invoice and shall therefore be written down when the service has been paid even if the service has not been completely rendered or in some cases before it starts.

## • Hotel discount coupons, etc.:

Whether the coupons are bought individually or in a book, all the hotel coupons shall be written down when bought, regardless of when they are used.

# • Certain dental services (orthodontia, etc.)that are paid along with the braces and not at once, but on the contrary paid at each visit to the dentist which may take place during several years:

In this case, the general regulation of considering the cost a cash payment is not applied, since the total cost may be unknown and if the payment were written down at once it may correspond to more than one year. Therefore the work in progress criterion is applied, which means considering each visit as the rendering of an independent service.

## 4. Other considerations

-The goods acquired by hire purchase will be valued according to their price in cash.

-The acquisition of goods and services whose payments have been made with a credit or debit card shall be recorded in the moment the purchase is made.

-The purchases made by means of special payment methods (periodic payments that allow the households to take the products from the establishment when needed, payments by means of tickets with a value equivalent to the disbursed amount, which are handed in each time the product is taken from the establishment) are recorded the moment the change of property takes place.

#### 5. Non-monetary consumption

The aforementioned recording and valuation criteria are not the most appropriate to measure the consumption of goods and services coming from own consumption, own supply, salary in kind, free meals in the workplace or hotel/restaurant establishment property of the household and imputed rent, since these five consumption methods generally do not produce a change of property and no payments are made for their acquisition. It is therefore necessary to specify when and how their valuation is carried out.

## Own consumption, own supply and salary in kind

*Own consumption* is understood as the goods (mainly food) produced in the family farm, factory or workshop, by one or more members of the household, which are consumed or given by the household during the reference period.

*Own supply* comprises the goods taken (without being paid) from the shop by one or more members of the owner household, which are consumed or given by the household during the reference period.

Salary in kind comprises the part of the goods and services supplied for free or at a reduced price to one or several household members as payment in kind.

When the goods and services are acquired at a reduced price, their value in the market as well as the price paid by the household shall be written down, so as to calculate the difference in value of the salary received.

Valuation of own consumption, own supply and the salary in kind is carried out when they are taken (regardless of when they are consumed) in the case of goods, and when the supply is complete in the case of services.

Own consumption, own supply and salary in kind shall be valued at the prices sellers have to pay so as to replace them, that is, considering zero margins. In practice it is difficult for households to have this information available, therefore valuation can be carried out with market prices.

## Free or discounted meals taken by the household members

The meals taken in the workplace by household members who are employed are considered payments in kind. Those taken by household members in the hotel/restaurant establishment property of the household shall be considered own consumption (providing the person is not employed in that establishment).

The price of meals corresponds to the real current price in the establishment in which the meal is taken (in case the meal is taken in the establishment property of the household or in a hotel/restaurant establishment where one of the household members is employed) or an establishment with the same features (in case the meal is taken in the workplace). Furthermore, in this last case, if the meals have a discount, the price of the discount applied to the household in terms of these meals is calculated by difference between their market value (estimate) and the price actually paid.

#### Imputed rent

Imputed rent is the rent paid by the household that owns a dwelling like the one it occupies, if the household were its inhabitant.

This imputed valuation of the consumption of the household affects the family dwelling inhabited by the owner household, as well as the use of the dwelling given for free or semi-free to the household.

Currently the name COICOP/HBS only includes the imputed rent of the main dwellings, whether they are owned or freely given. However, so as to not modify the habits or the acquired results, all the imputed rents of family dwellings (main or other dwellings available to the household) are requested.

In order to calculate the estimate of the imputed rent, the household is requested a **subjective** valuation. Nevertheless, as opposed to the previous budget surveys, first an **objective** value is obtained (see "Information processing"), therefore the final estimate is a combination of both estimates.

## 9 Classification Features

## A Geographical Features

A.1 PROVINCE OF RESIDENCE

The 50 provinces of the Spanish territory as well as the Autonomous Communities of Ceuta and Melilla are considered.

A.2 AUTONOMOUS COMMUNITY OF RESIDENCE

The 17 Autonomous Communities of the national territory and the Autonomous Cities of Ceuta and Melilla, which from 2011 are disseminated separately:

01. ANDALUCÍA: Almería, Cádiz, Córdoba, Granada, Huelva, Jaén, Málaga and Sevilla.

02. ARAGÓN: Huesca, Teruel and Zaragoza.

03. ASTURIAS, PRINCIPADO DE: Asturias.

04. BALEARS, ILLES: Illes Balears.

05. CANARIAS: Las Palmas and Santa Cruz de Tenerife.

06. CANTABRIA: Cantabria.

07. CASTILLA Y LEÓN: Ávila, Burgos, León, Palencia, Salamanca, Segovia, Soria, Valladolid and Zamora.

08. CASTILLA-LA MANCHA: Albacete, Ciudad Real, Cuenca, Guadalajara and Toledo.

09. CATALUÑA: Barcelona, Girona, Lleida and Tarragona.

10. COMUNITAT VALENCIANA: Alicante/Alacant, Castellón/Castelló and Valencia/València.

11. EXTREMADURA: Badajoz and Cáceres.

12. GALICIA: A Coruña, Lugo, Ourense and Pontevedra

13. MADRID, COMUNIDAD DE: Madrid.

14. MURCIA, REGIÓN DE: Murcia.

15. NAVARRA, COMUNIDAD FORAL DE: Navarra.

16. PAÍS VASCO: Araba/Álava, Guipúzkoa and Bizkaia.

17. RIOJA, LA: La Rioja.

18. CEUTA

19. MELILLA

## A.3 REGION

The Autonomous Communities are grouped according to the first level of Nomenclature of Territorial Units for Statistics (NUTS):

- 1. Northwest: Galicia, Asturias and Cantabria.
- 2. Northeast: País Vasco, Comunidad Foral de Navarra, La Rioja and Aragón
- 3. Comunidad de Madrid.
- 4. Central: Castilla y León, Castilla La Mancha and Extremadura.
- 5. East: Cataluña, Comunitat Valenciana and Illes Balears.
- 6. South: Andalucía, Región de Murcia, Ceuta and Melilla.
- 7. Canarias.

## A.4 SIZE OF MUNICIPALITY OF RESIDENCE

The following classification is considered:

Capital of province municipality.

Non-capital municipality with 100.000 inhabitants or more

Non-capital municipality with 50.000 inhabitants or more and less than 100.000

Non-capital municipality with 20.000 inhabitants or more and less than 50.000

Non-capital municipality with 10.000 inhabitants or more and less than 20.000

Municipality with less than 10.000 inhabitants

## A.5 POPULATION DENSITY

The following classification is considered:

Densely populated areas

Intermediate area

Disseminated area

Note: This variable is under revision by Eurostat.

## A.6 AREA OF RESIDENCE

## 1. Urban area

The urban area includes dwellings located in big municipalities (generally with 10.000 inhabitants or more) and in areas in which the majority of buildings are in contact with paved streets, provide water supply to households, have a sewerage network and permanent electrical energy.

## 1.1. Luxury urban area

Residential neighbourhoods with no industry and scarce trade, exclusive to traditional and well-off families.

## 1.2. High urban area

Middle-high class neighbourhoods (civil servants, executives, self-employed workers,...) with cared housing estates and comfortable dwellings. Good trade.

## 1.3. Middle urban area

Working-class neighbourhoods, inhabited by middle class workers (shop assistants, qualified workers,...) generally with old-constructed dwellings. Working-class trade.

## 1.4. Low urban area

Scarcely urbanised depressed areas with shacks or cheap buildings inhabited mainly by unqualified workers.

## 2. Rural area

This area includes the households located in small municipalities (generally with less than 10.000 inhabitants) or in non-developed areas.

## 2.1. Industrial rural area

Rural areas whose population is mainly dedicated to an industrial activity (a typical case are towns of mining areas).

## 2.2. Fishing rural area

Rural areas whose inhabitants are mainly dedicated to fishing.

## 2.3. Agricultural rural area

Rural areas whose inhabitants are mainly dedicated to agriculture, stockbreeding or forestry.

This answer responds to the opinion that interviewers have about the area of residence the selected dwelling belongs to.

## **B** Features related to the household members

## B.1 AGE

The age of the household members are calculated in reference to the date of the interview in the *Household record*.

## B.2 SEX

B.3 SITUATION OF BELONGING TO THE HOUSEHOLD IN THE MOMENT OF THE INTERVIEW

The persons who reside in the sample households are considered to belong to the household in the moment of the interview according to the following classification:

- 1. Household member (not domestic service, lodger or guest).
- 2. Domestic Service.
- 3. Lodger.
- 4. Guest.
- **B.4 SITUATION OF RESIDENCE**

The following situations are considered:

- 1. Present.
- 2. Temporarily absent.

**B.5 COUNTRY OF BIRTH** 

The different countries of birth of the different household members will be considered. In the user files the following classification is used:

- 1. Spain
- 2. Rest of European Union
- 3. Rest of Europe
- 4. Rest of world

In the tabulation only the categories "Born in Spain" and "Born abroad" are distinguished.

*Country of birth* is defined as the country in which a person is born, specifically the regular country of residence of the mother in the moment of birth, specified in the date the data is collected.

**Note**: This variable is collected since the year 2011.

#### B.6 COUNTRY OF BIRTH OF THE PARENTS

The country of birth of the father and mother of the different household members are considered, according to the previous classifications.

**B.7 NATIONALITY** 

The nationality of the different household members according to the following classification:

- 1. Only Spanish.
- 2. Only foreign, specifying the country or countries.
- 3. Spanish and foreign, specifying country.

Once again, for the country of nationality the classifications mentioned in the variable *Country of birth* are kept.

#### **B.8 MARITAL STATUS**

The legal marital status of the different household members is considered, according to the following classification:

- 1. Single.
- 2. Married.
- 3. Widow.
- 4. Separated.
- 5. Divorced.

Note: This variable was modified in the year 2011, previously de facto partnership was included.

#### **B.9 RELATIONSHIP AMONG HOUSEHOLD MEMBERS**

For each of the household members, the following relationships are considered:

- 1. Spouse or partner
- 2. Father.

3. Mother.

Considering:

• *Spouse or partner* is the legal spouse by religious or civil matrimony as well as the de facto or non-legalised partner.

• Father or mother, the biological and adoptive parents.

**B.10 RELATIONSHIP WITH THE MAIN BREADWINNER** 

With the previous information, this variable is constructed with the following categories:

- 1. Main breadwinner.
- 2. Spouse or partner.
- 3. Child of main breadwinner and/or partner.
- 4. Father or mother of main breadwinner.

5. Father or mother of spouse or partner.

6. Other (with a different relationship from the aforementioned or no relationship.)

## B.11 TYPE OF UNION WITH SPOUSE OR PARTNER

The following classification is considered for the household members who live with their partner:

- 1. Married.
- 2. Registered de facto partnership.
- 3. Unregistered de facto partnership.

**Note:** This variable is collected since the year 2011.

**B.12 EDUCATIONAL LEVEL** 

This feature refers to the highest educational level completed by the household members. It are classified with the following codes.

1. Cannot read or write.

2. Can read and write but did not go to school the complete period of compulsory education.

3. First cycle secondary education with or without title (OSE Graduate, Primary School title or equivalent, Elementary Secondary Education, Schooling certificate)

4. Secondary Education, former Secondary Education certificate, Upper Secondary Education, former Pre-University Course)

5. Intermediate VT, VT I, Industrial official or equivalent, other intermediate studies.

6. Advanced VT, VT II, Industrial mastering or equivalent.

7. Diploma, Technical Engineering or equivalent.

8. University degree.

9. University graduate qualification, Engineering or equivalent.

10. Official University Master's Degree, Professional specialties (medical interns, pharmacy interns, etc.).

11. Doctorate.

Note: This variable was modified in the year 2011.

B.13 RELATIONSHIP OF THE HOUSEHOLD MEMBERS WITH THE ECONOMIC ACTIVITY DURING THE WEEK PRIOR TO THE INTERVIEW (FROM MONDAY TO SUNDAY)

All household members who are 16 years of age or over are classified according to their economic activity during the natural week prior to the interview in only one of the following headings:

## I. Working:

1. Working at least one hour (employee, apprentice, worker receiving training from a remunerated public program, employer, entrepreneur with no employees, independent worker or family assistance).

2. Has a job from which he/she is absent (due to illness, accident, work-related conflict, vacation, maternity, weather-related reasons, etc.)and expects to return to.

## II. Not Working:

- 3. Unemployed.
- 4. Retired person or early-retired person.
- 5. Student.
- 6. Dedicated to household chores.
- 7. Having permanent work-related disability.
- 8. Other type of economic inactivity.

## Definitions

## 1. Working

Persons considered to be working are those who during the week prior to the interview have developed a paid activity for at least one hour, in exchange of a wage, salary or other form of payment such as a family profit or benefit in cash or in kind.

Also considered as working are the family assistance, paid apprentices and workers receiving training from a remunerated public program, providing they have worked at least one hour during the reference week.

## 2. Working, but temporarily absent

The persons considered to be in this situation are those who having regularly worked, have not worked during the week prior to the interview, due to illness or accident, a work-related conflict, disciplinary suspension of work and salary, holidays, study leave, maternity leave and other leaves, voluntary absence, temporary disorganisation of work for reasons such as bad weather, mechanical faults or other similar reasons, providing they are formally linked to their job.

In the case of employees, for this link to exist at least one of the following conditions shall take place:

- Continuous earning of salary or wage.

- Guarantee of returning to work once the eventuality or agreement related to the return date has finalised.

- That the absence from work has a duration which, given the case, allows the workers to receive compensatory benefits with no obligation from their part to accept other jobs.

In the case of autonomous economical activities, a person is considered temporarily absent from work, with a job but not working, if the following three criteria are met:

- Absence due to a specific reason.

- The company or business keeps on running during the absence, that is, the company has not closed for a long period of time in a formal or informal way, like in the case of off-peak season.

- Duration of absence is limited.

Paid apprentices and workers receiving training from a remunerated public program are classified as working or with a job but not working on the same basis as the rest of employed persons.

## 3. Unemployed

Unemployed persons are those who during the week prior to the interview did not have a job, have looked for a job (have taken specific measures so as to become employed or to become self-employed during the following month) and are available to work in the maximum period or two weeks.

## 4. Retired person or early-retired person

Retired persons are persons who do not work and receive a lifelong retirement pension obtained from their previous economic activity before stopping work due to age.

Persons who due to staff reductions, take an early retirement (with a reduction in the amount of the normal pension,) without meeting the general requirements established by law so as to receive a retirement pension, but following the requirements established by the regulation are classified as retired, providing they are in this situation the week prior to the interview.

## 5. Student

Students are the persons who receive an education in any degree of training.

## 6. Dedicated to household chores

The persons considered to be in this situation are those who do not perform an economic activity and care for their home with no economic compensation.

## 7. Having permanent work-related disability

The persons considered to be in this situation are those who are indefinitely disabled, whether they have previously worked or not and regardless of whether they receive a disability pension.

The disabilities considered are those from birth as well as the ones acquired indefinitely, but not temporary incapacities due to illness or accident while receiving medical assistance or being on medical leave.

## 8. Persons in another situation (without performing any economic activity)

The persons included in this category are those not included in any of the previous categories, specifically in the following: rentiers (persons who are not employees or freelance workers but receive income from renting properties and/or other investments), persons temporarily deprived from freedom and persons who without performing an economic activity receive public or private financial aid.

If during the previous week a person has been in more than one of these situations, he/she will be classified among the possible situations in which he/she is associated the lowest code.

**Note**: This variable was modified in the year 2011 so as to separate permanent work incapacity from the last category.

## B.14 TYPE OF WORKDAY

The type of workday carried out by the household members whose situation in the activity is working or with a job from which they are absent is considered according to the following classification:

- 1. Full-Time.
- 2. Part-Time.

The informants are the persons in charge of classifying themselves in one type of workday or another, since there is no accepted common definition for each one of them.

If the person has several jobs, this question will refer to the main job.

**Note:** This variable is collected since the year 2011.

## **B.15 INDIVIDUAL INCOME**

Besides requesting the income of the household as a whole, there are also questions asked about the specific income received from each household member. Hence, if the specific income is not given there will be a request for the interval in which the individual income is comprised (see variable *Household income*).

## **C** Features related to the main breadwinner

Besides the variables researched for all of the household members, the following variables are only collected for the main breadwinner.

C.1 RELATIONSHIP OF THE MAIN BREADWIINER WITH THE ECONOMIC ACTIVITY

There is research done over the main breadwinner of the household so as to find out if he/she has ever performed any type of economic activity.

A person is considered to have carried out an economic activity in the past if he/she has ever worked before.

C.2 OCCUPATION OR PROFESSION THAT IS OR WAS CARRIED OUT IN THE LAST JOB

If the main breadwinner of the household has ever worked, the occupation or profession that is or was carried out in the last job is registered at a level of two digits of CNO-94 (from 2012 the classification used is CNO 2011).

Occupation is defined as the type of work carried out, specifying the job.

If a person has had more than one job, the occupation refers to the last job performed; if the person has several jobs at the same time, the profession refers to the main job, which is the one the interviewee points out.

## C.3 ECONOMIC ACTIVITY OF THE ESTABLISHMENT

If the main breadwinner of the household has ever worked before, the economic activity of the establishment in which this person works or has worked is requested, at a breakdown level of two digits of the CNAE 93 (from 2010 the classification used is CNAE 2009).

*Economic activity* is defined as the creation of the added value by means of production of goods and services.

When in the workplace services are rendered exclusively for the company itself, for example storage of the produced goods, this storage activity is not considered the activity of the workplace but as an auxiliary activity. Therefore the main activity shall be written down.

*Establishment* is considered all units producing goods or services (such as factories, workshops, hotels) located in defined physical places which are under the supervision and control of a single company. Satellite elements located in its vicinity that carry out certain stages of its production process are considered part of the same establishment.

The **main** economic activity of an establishment is the activity that contributes the most to the gross value added at factor cost of the statistical unit.

The economic activities of an establishment that are not its main or auxiliary activities constitute **secondary** activities.

If an establishment carries out more than one economic activity, its classification is made according to its main activity, which is the one that contributes the most to the factor cost. If there are no available figures of the added value, other criteria are used such as employment, payrolls, assets and liabilities.

Economic activity always refers to the **activity of the establishment** and not to the activity of the **company**, since one single company may have several establishments with different economic activities.

If a person works in more than one place or at home, establishment is understood as the place where the instructions come from or *that* in which the work is organised.

In cases in which the workplace of the household members is not fixed, for example construction workers or travelling salespersons, the economic activity of the establishment the worker depends on shall be written down.

If a person has had more than one job, the activity of the establishment in or for which the person has worked last will be registered. If a person has several jobs at the same time, the activity refers to the establishment the person considers their main job.

## C.4 PROFESSIONAL STATUS OF THE OCCUPATION

The professional status of the occupation classifies the main breadwinner of the household providing he/she has previously had a job, in one of the following headings:

- 1. Employee
- 2. Employer
- 3. Entrepreneur with no employees or independent workers
- 4. Other situations (family assistance).

## Definitions

## 1. Employee

An *employee is a* person who works for a public or private entrepreneur and receives a salary, commission, premium, payment according to results or any other form of regulated payment in money or in kind. The associates or workers of public limited companies that are legal employees are included. The persons who meet the requirements to be employees do not lose their condition of such even if they pay taxes for personal work performance and/or contributions directly to Social Security. Managers, directors and other workers who do not own the company they work for are classified as employees, even when exercising the same functions as the entrepreneurs, for example hiring or dismissing other workers on behalf of the company.

Furthermore, paid apprentices are included in this category. *Paid apprentice* is a person who receives paid learning or training. Paid learning refers to persons who work with a private or public entrepreneur and have a learning agreement. This contract or agreement usually entails working and receiving training in the company and may involve complementary instruction in a school or training centre. Persons who receive payments for their work in money or in kind and those who produce goods and services for companies, are included in learning or training under special work-related schemes.

Home workers are also included when having an explicit or implicit contract or work agreement, and their payment basically depends on the time worked or quantity produced.

## 2. Employer

An *Employer is* a person who runs his/her own company, industry or trade or performs self-employed work, and therefore hires one or more employees or workers who are paid a salary, wage, commission,...

## 3. Entrepreneur with no employees or independent workers

An *entreprenuer with no employees or an independent worker* is a person who is self-employed in hos/her own company, industry, trade, farm or a self-
employed person with no employees. Included in this category are the persons who work in their own company helped exclusively by family members who do not receive a regulated pay, as well working members of associated work cooperatives or community land exploitation cooperatives.

Included in this heading are home workers who do not have a contract or work agreement and decisions regarding markets and functioning and financing scales are made by the worker who also owns or rents the capital goods used in the production process, or when the person is paid depending on the income or profit coming from the sale of his/her goods or services.

#### 4. Other situations (family assistance)

A person is considered to be in *another situation* when the person is not included in any of the previous headings, such as workers being trained under a paid public employment scheme, family assistance, etc. *Family assistance* is a person who works with no regulated pay in the company or business property of a family member with whom he/she lives.

If a person has had more than one job, it refers to the professional status in the last job carried out. If the person has had several jobs at the same time it refers to the professional status of the job considered to be the main job.

### C.5 SECTOR OF THE ECONOMIC ACTIVITY

If the main breadwinner of the household has ever been an employee, the classification is made according to the sector of economic activity under one of the following headings:

### 1. Private sector

Included in the *private sector* are all types of for-profit companies or bodies, as well as non-profit fundraising or volunteer institutions and organisations if they are private property and privately financed, even when a big part of its income comes from contracts with Public Administrations.

### 2. Public sector

Included in the *public sector* are all the bodies of the central, autonomous and local Public Administrations, as well as Social Security Administrations. The companies, institutions or entities subjected to the unit control of the Public Administrations are also included in this category.

In this regard, control is considered the capacity so as to determine the general politics of a corporation by appointing the appropriate administrators. Public Administrations may control a corporation if they have more than half of the shares with right to vote, or if they have other type of control over more than half of the shareholder's right to vote.

Furthermore, Public Administrations may control a corporation as a consequence of a legal disposition, decree or special regulation, which authorises it to determine the politics of the society or appoint its directors.

If a person has had more than one job, it refers to the sector of the economic activity of the last job that was carried out and if the person has had more than one job at the same time, it shall refer to the one considered the main job.

## C.6 TYPE OF CONTRACT IN THE MAIN JOB

If the main breadwinner of the household has ever been an employee, the person is classified according to the following types of contract:

### **1. Contracts of Indefinite Duration**

This category includes indefinite term contracts, regardless of whether the job is performed in a continuous or discontinuous manner. These contracts do not terminate providing there is no dismissal that interrupts it. Included in this category are civil servants, who do not have a work contract, but whose work relationship may be understood as contracts of indefinite duration.

Permanent contracts involve workers who have a continuous job which is only interrupted due to vacation, temporary leaves, licence or other extraordinary causes.

Seasonal permanent contracts involve workers who have a permanent job (and will continue having it with no need of new contracts), but do not carry it out continuously because there is only work to be done during specific seasons or discontinuous periods.

### 2. Temporary or Casual Contracts

This category includes contracts which are drawn up for a specific period of time, that is, when the end of the contract is determined by objective conditions, such as the expiry of a given period of time, the performance of a specific task, the return of an employee who had been temporarily substituted, the performance of an internship or training period or the substitution of the part of work not carried out by those who are partially retired. The conditions for the termination of a limited duration contract are generally mentioned on the contract.

Under this heading are seasonal contracts, training or internship type work, contract for works & services, casual contracts, probationary periods, temporary workers, persons who are hired by an employment agency but work for a third party, unless they have an unlimited contract with that agency.

#### 3. No contract

This refers to the lack of a formally signed contract, even when the workers are not occasional and even if they are regular or long term workers.

# **D** Features related to the household

### D.1 TYPE OF HOUSEHOLD

There are several classifications considering the number of persons living in the household, their ages and their family relationship, as well as classifications based on the main breadwinner or considering criteria of economical dependency. Mentioned next are the most relevant ones. The rest can be consulted with further detail in the documents attached to the microdata files of the survey.

## D.1.1 Developed Classification

- 1. Person aged 65 or over living alone.
- 2. Person under 65 living alone.
- 3. Couple with no children.
- 4. Couple with one child.
- 5. Couple with two children.
- 6. Couple with three or more children.
- 7. An adult with children.
- 8. Other type of households.

Adults are all persons aged 16 or over.

Categories 3 to 7 only include the household formed by a father and/or mother with children, regardless of their age, including adopted children and children of only one of the members of the couple. If there is another person in the household, he/she will be classified in Other.

D.1.2 Reduced Classification

- 1. Person or couple aged 65 or over.
- 2. Other households with a person or couple with no children.
- 3. Couple with children under 16 years of age or an adult with children under 16 years or age.
- 4. Other households.

The difference between *minors* and *children* is that for the latter at least one of the parents is member of the household.

D.1.3 Another classification of the households (according to features of the main breadwinner)

This classification starts with the main breadwinner and his/her features. The variables for classification follow this order: existence of a partner or not (always referring to the main breadwinner), the previous unit lives alone or with others; if the person lives with others, he/she is asked for the existence of children. Finally the age of the youngest child, if any, is taken as last variable.

### No partner

1. Lives alone.

Lives with children (and perhaps others):

With children:

- 2. Age of youngest child: under 23 years old.
- 3. Age of youngest child: 23 years old or over.

No children:

4. Lives with others but has no children.

## With partner

5. Only the couple.

Couple with children (and perhaps others):

- 6. Age of youngest child: up to 2 years old.
- 7. Age of youngest child: from 3 to 15 years old.
- 8. Age of youngest child: from 16 to 22 years old.
- 9. Age of youngest child: 23 years old or over.

Couple with no children:

10. Couple with others, no children.

## D.1.4 Other household classifications (dependent minors/children)

Several classifications are used considering the number of adults and economically dependent children or minors.

A minor is economically dependent if he/she is under 16 years old, or is over 16 but under 25 years old and is economically inactive. If at least one of the parents is a member of the household, the child can be considered an economically dependent child. Consequently, in these classifications in which the economically dependent criteria is taken into account, adults are all persons aged 16 or over but under 25 who are economically active and any person 25 years old or over. D.2 COMPOSITION OF THE HOUSEHOLD

The following classification is used:

One-member households

Two-member households

Three-member households

Four-member households

Five-member households

Households with six or more members

Note: Since 2011 the last category in the tabulation is "Households with five or more members".

## D.3 NUMBER OF CONSUMPTION UNITS

According to the OECD scale, the number of consumption units of the household is calculated by adding the members of the household weighted according to the following coefficients:

1 for the main breadwinner (first adult of the household)

0.7 for the following adults (over 13 years old).

0.5 for minors (13 years old and under).

Given the previous scale gives too much importance to the rest of adults of the household (not main breadwinner), an OECD scale with the following weightings is proposed:

First adult of the household 1

Following adults (over 13 years old) 0.5

Minors (13 years old or under) 0.3

*Employed* persons are household members who are 16 years old or over whose economic activity situation the week prior to the interview is working.

### D.5 ECONOMICALLY ACTIVE HOUSEHOLD MEMBERS

*Economically active* are the household members who are 16 years old or over whose economic activity situtation the week prior to the interview is working or unemployed.

D.4 NUMBER OF EMPLOYED HOUSEHOLD MEMBERS

### D.6 ECONOMIC SITUATION OF THE HOUSEHOLD (EMPLOYED PERSONS)

This variable is built from the economic activity situation of the household members the week prior to the interview. Taking this variable into account, the following classification is considered:

1. The main breadwinner and spouse are employed, at least one more member is employed.

2. The main breadwinner and spouse are employed, no other members are employed.

3. The main breadwinner or spouse are employed, another member is also employed.

4. The main breadwinner or spouse are employed, at least two more members are employed.

5. The main breadwinner or spouse are employed, no other members are employed.

6. Neither the main breadwinner nor the spouse are employed, another member is employed.

7. Neither the main breadwinner nor the spouse are employed, at least two other members are employed.

8. No employed persons in the household.

Categories 2 and 5 consider the households only formed by the main breadwinner and his/her spouse as well as households in which the couple lives with more members and neither of the latter are employed.

### D.7 ECONOMIC SITUATION OF THE HOUSEHOLD (ECONOMICALLY ACTIVE PERSONS)

This variable is built from the economic activity situation of the household members the week prior to the interview. The classification is the same as the previous one except for the fact that not only the employed persons are taken into account, but also the unemployed persons, that is, all the economically active persons.

1. The main breadwinner and spouse are economically active, at least one more member is also economically active.

2. The main breadwinner and spouse are economically active, no other members are economically active.

3. The main breadwinner or spouse are economically active, another member is also economically active.

4. The main breadwinner or spouse are economically active, at least two more members are economically active.

5. The main breadwinner or spouse are economically active, no other members are economically active.

6. Neither the main breadwinner nor the spouse are economically active, another member is economically active.

7. Neither the main breadwinner nor the spouse are economically active, at least two other members are economically active.

8. No economically active persons in the household.

Categories 2 and 5 consider the households only formed by the main breadwinner and his/her spouse as well as households in which the couple lives with more members and neither of the latter are economically active.

### D.8 INCOME OF THE HOUSEHOLD

The monetary income received regularly by the household members, regardless of its origin.

The household members are considered to receive income when they are working or have a job for which they are paid, or receive a pension, subsidies, capital income or transfers.

Current monthly income refers to the regular income received on the last calendar day, taking into account the apportionment of extra income and other income received regularly but not monthly.

The following types of income sources are distinguished:

1. Income received as a self-employed person (net income, that is, gross income except the deductible expenses, withholdings and fractional payments.)

2. Income received as a person employed by other(s) (salaries, wages and seniority, overtime, on call time, bonuses, performance-related pay, extra and specific allowances and premiums).

3. Contributory and non-contributory income (old age, retirement, disability, widowhood, orphanage or in favour of family members).

4. Subsidies and unemployment benefits, vocational or work promoting training.

5. Other regular social benefits and subsidies (illness, wage maintenance, assistance for families due to birth of child, maternity, family protection, grants).

6. Property and capital income (rents, dividends, interests, performances).

7. Other regular income (donations to institutions, transfers of other households, consignments of emigrants and other regular income different from social benefits.

D.8.1 Main sources of income of the household

The main *source of income* is the greatest source after including the income of the different household members per type.

D.8.2 Amount of the net monthly income received regularly by the household

Information is collected about the taxes that have been paid as well as the net monthly income of the household, that is, about the set of incomes received regularly by the household and the individual income received by its members, regardless of its origin. This is done once the contributions to Social Security and other similar payments are completed (Welfare Entity, Obligatory Mutuals and Passive Rights). In the case of employees, only income tax withholdings will be taken into consideration, whereas in the case of persons who are self-employed both tax withholdings and fractional payments of income tax will be taken into account.

When calculating the net monthly income the following will be taken into account:

a) In the case of work income received by an **employed person**, the extra payments and other extra incomes that are received regularly are apportioned.

b) In the case of the income of a **self-employed person** the deductible expenses are deducted from the amount of monthly income.

**Deductible expenses** are the following: raw materials, wages and salaries, contributions to Social Security, compensations and other personnel expenses, contributions to pension funds for workers, purchases, rents, insurance premiums, financial expenses, repair and maintenance expenses, taxes (Real Estate Tax, Business Activity Tax,...);independent professional services and other ordinary expenses.

c) In the case of **capital and property income** the deductible expenses are deducted from the monthly income in an apportioned way.

**Deductible expenses** are the following: for **property income** it is the Real Estate Tax (IBI), repair and maintenance expenses of the dwelling and community expenses; for **income from movable assets** it is the assets under administration and custody and other expenses (interest paid to the bank for overdraft loans,...).

D.8.3 Income Interval

The following regular monthly income intervals of the household are considered:

<sup>1.</sup> Less than 500 euros

- 2. From 500 to less than 1.000 euros
- 3. From 1.000 to less than 1.500 euros
- 4. From 1.500 to less than 2.000 euros
- 5. From 2.000 to less than 2.500 euros
- 6. From 2.500 to less than 3.000 euros
- 7. From 3.000 to less than 5.000 euros
- 8. From 5.000 to less than 7.000 euros
- 9. From 7.000 to less than 9.000 euros
- 10. 9.000 euros or more

In the tabulation the higher category is "5.000 euros or more".

## **E** Features related to dwellings

All the features on this epigraph refer to the main dwelling.

## E.1 TYPE OF DWELLING, ACCORDING TO THE BUILDING IN WHICH IT IS LOCATED

The following types are considered:

- 1. Detached single-family dwelling.
- 2. Semi-detached or terraced single-family dwelling.

Building with more than one dwelling:

- 3. With less than 10 dwellings.
- 4. With more than 10 dwellings.

5. Dwelling in a building intended for other purposes (school, office, workshop,...) or permanent accommodation (shack, hut, cabin, cave,...).

A *single-family* dwelling is *detached* when it does not share any walls with another dwelling.

A *single-family* dwelling is *semi-detached or terraced* when it shares at least one wall with another dwelling.

Single-family houses in towns or villages that are part of the homes on a street, road, etc., are obviously attached to one another and are therefore classified as semi-detached or terraced dwellings.

A family dwelling is considered to be located in a *building intended for other purposes* when it is physically included on the premises of an establishment that is mainly not dedicated to be a family dwelling, such as for example the

dwelling of a school, office or prison executive or employee. *Fixed accommodation* is the premises that do not completely correspond with the definition of family dwelling because it is semi-permanent (shacks or cabins), or it is not initially intended nor remodelled for residential purposes (stables, haylofts, mills, garages, warehouses, caves, natural shelters) but do however constitute the main and regular residence of one or several households.

### E.2 TYPE OF HOME

The following classification is used:

### 1. House or big home

Households located in houses or big flats in good condition.

### 2. Average house

Households located in houses in regular condition or average or small flats in good condition.

#### 3. Low-cost homes or accommodation

Households located in houses in bad condition or modest looking average or small flats (low-cost home) or in shacks, small flats that are in bad condition or sublet.

This answer corresponds to the opinion the interviewers have about the type of home to which the selected dwelling belongs. Not only shall its size be considered but also its habitability features.

### E.3 AGE OF THE DWELLING

What is considered is whether the building in which the dwelling is located was built or substantially refurbished less than 25 years ago, or 25 years ago or more.

1. Less than 25 years ago.

2. 25 years ago or more.

The building is considered to have been *substantially refurbished* when the modifications that have been carried out are such that a new building has practically been built, even if the previous facade or part of a previous wall has been used.

### E.4 NUMBER OF ROOMS IN THE DWELLING

The number of rooms in the dwelling is recorded.

If none of the dwelling or accommodation parts meet the conditions to be considered a room according to the definitions given, zero rooms will be registered.

A *room* is a space enclosed by walls that rise from the floor to the ceiling, or at least at a minimum height of two metres from the floor. A room shall have a minimum surface area of four square metres and a height of two square metres above its surface area and it shall be suitable for or used as a room for humans.

Included in the total of rooms are: bedrooms, dining rooms, living rooms, studies, play rooms, domestic service rooms,...as well as rooms used for professional, commercial or domestic purposes, providing they adjust to the criteria given in reference to isolation and dimensions.

Also included are box rooms, basements and attics that meet the basic requirements to be considered so, have access from inside of the dwelling and are used for residential purposes. Kitchens are also considered rooms providing they have at least a four square metre surface area and a minimum height of two metres above the majority of its surface area.

Excluded are kitchens with a surface area under four square metres, bathrooms, terraces, clothes drying areas, corridors, halls, dressing rooms, pantries,...as well as rooms used exclusively for professional purposes, even if they meet the requirements to be considered rooms.

In dwellings in which there is more than one household, the owner household or the one that appears on the leasing contract is assigned all the rooms, except those which are to be used exclusively by other households, and therefore have these rooms assigned to them.

### E.5 DWELLING SURFACE AREA

The usable surface area of the dwelling is registered in square metres.

*Usable surface area* is the plant surface between the outer walls of a dwelling, not including uninhabitable basements or attics.

Included in this surface area are the fifty percent surface area of covered but not closed terraces and the hundred percent surface area of closed terraces.

In dwellings in which there is more than one household, the owner household or the one that appears on the leasing contract is assigned all of the square metres, and therefore none to the other household (or households).

#### E.6 DWELLING TENANCY REGIME

The following classification is used:

- 1. Property with no loans or mortgages.
- 2. Property with loans or mortgages.
- 3. Rent.
- 4. Reduced Rent (Rent control).

5. Semi-free transfer.

6. Free transfer.

A dwelling is *owned* when:

- It is bought by a member of the household, regardless of whether it is totally paid for or has pending payments (for example, mortgage loans or other type of loans associated with the purchase of a dwelling).

- Is inherited or received as a donation by a household member regardless of whether the dwelling has a lien or mortgage.

- Is transmitted to or inherited by a household member, even though he/she still does not have the legal ownership of the dwelling.

If the household is provided by a relative (parent to children, etc.) that is not a household member, the tenancy regime is considered rent (normal or reduced) or transfer (free or semi-free) depending on whether the household pays a rent or not.

A household is *rented* when a household member pays in cash or in kind for its complete or partial use, regardless of whether there is a written contract or not.

*Reduced rent* is rent that due to legal reasons differs from the market's current rent price for a similar dwelling (rent control).

*Semi-free transfer* is when a household pays for the use of a dwelling in terms of rent or community expenses. Transfer is carried out voluntarily by other households, public or private institutions, or for work-related reasons.

*Free transfer* is when the household does not pay for the use of the dwelling, as it is provided by the company or organisation one of the household members works for, or it is voluntarily provided by other households or institutions.

E.7 ENERGY SOURCE USED FOR HOT WATER AND HEATING

The energy source used by dwellings that have hot water and/or heating is recorded.

If more than one energy source is used for the same installation or service, the main one is recorded.

The following energy sources are considered:

1. Electricity.

2. Natural gas.

3. Liquid gas (propane, butane, etc.)

- 4. Other liquid fuels (diesel, fuel oil, etc.)
- 5. Solid fuels (coal, firewood, etc.)

6. Solar energy.

# F Other dwellings available to the household

The household is requested information about the availability during the last twelve months of a dwelling other than the main one: amount, location (Autonomous Community or foreign country), tenancy regime, availability of certain facilities or services and time it has been available to the house during that time.

# G Other features collected on site

G.1 NUMBER OF MEALS EATEN AT THE HOUSEHOLD DURING THE 14 DAYS OF NOTE TAKING

During the 14 days, this information is collected from the *Household account notebook* distinguishing the meals eaten by:

-Household members (not including domestic service, lodgers or guests).

-Domestic service (members of the household or not).

-Guests (members of the household or not).

-Lodgers (members of the household or not).

It includes the meals eaten in the household as well as the meals cooked at home but eaten out.

It does not include meals made with food prepared for immediate consumption with no need to transform them in the household.

### G.2 PRICE OF GOOD OR SERVICE

The cash price of the goods and services purchased within the reference period of the survey is recorded.

If the good or service has not been purchased because it comes from own consumption, own supply or salary in kind, the price that the sellers shall pay to replace them is considered, that is, considering zero margins. In practice it is difficult for households to have this information available, therefore valuation can also be carried out with retail local market prices.

For goods and services coming from salary in kind, besides the market value, the *price paid* (if any) is also registered by the household when it is purchased at a discount price due to work-related reasons.

### G.3 AMOUNTS

For certain food goods (see goods and services classification) the physical amount of the acquired good is required.

If the good comes from own consumption, own supply or salary in kind the removed amount is written down.

Amounts are expressed in:

*Kilos* for solids.

*Litres* for liquids.

Units for eggs and cigarettes.

The amounts used from the sources of energy for water and electricity consumption are also requested.

Amounts are expressed in:

 $m^3$  for water, town gas and natural gas.

Kilos for liquid gas and solid fuels.

Litres for liquid fuels.

Kwh for electricity.

### G.4 ORIGIN OF GOOD OR SERVICE

For goods and services coming from own consumption, own supply or salary in kind its origin is recorded according to the following classification:

- 1. Own consumption.
- 2. Own supply.
- 3. Salary in kind.

G.5 NUMBER OF MONTHS INCLUDED IN THE BILL

For regular payments or periodic instalments collected by means of the last paid bill, the number of months the bill covers is recorded (one month for monthly bills, two for bimonthly bill, etc.)

C.6 NUMBER OF TIMES INCLUDED IN THE BILL

For regular payments or periodic instalments collected by means of the last paid bill, the number of bills paid a year for the service or good is recorded.

### G.7 MONTH AND YEAR OF PURCHASE

For goods and services collected out of the two-week sample period, the month and year in which the purchase is made is recorded.

## G.8 BIG PURCHASE

The fact that the household has made a big purchase within the monthly reference period is considered. A **big purchase** is defined as the purchase of food, beverages and cleaning products bought more than every two weeks and including a variety of products.

G.9 NUMBER OF INDIVIDUAL ACCOUNT NOTEBOOKS

The following information is registered:

-Number of individual theoretical account notebooks (number of household members 14 years old or over, except the person who completes the household account notebook and the absent persons who receive consignments).

-Number of individual account notebooks collected from members who are 14 years old or over.

# H Other information

The set out sample scheme allows introducing different modules in the survey, which allow studying household conditions of life. According to the demand of internal or external users, different modules of social interest are introduced.

## 10 Survey scheme

Once periodicity is determined, the most appropriate survey scheme so as to meet the fixed objectives is established.

A survey like this shall be based on the rotation of informants, that is, on the stay of households in the sample during a specific period of time and their substitution by other households once their participation has concluded. The stay of households allows estimating the change, whereas rotation on the one hand avoids tiredness of informants and on the other hand gives other households the possibility of being selected. The rotation turn scheme points out the frequency with which each household appears in the sample and the duration of their stay in the survey.

In the HBS each household remains in the sample for two consecutive years, each year collaborating for a period of **14 days** during which the household writes down its expenses and provides information through several interviews.

Even though the rotation turn scheme of HBS base 1997 is maintained, in this survey the number of collaborations is reduced to two. Therefore each year half of the households are renewed.

With this scheme the dwelling sample is distributed evenly throughout the year, so the annual sample is divided in 26 groups of dwellings that would start and finish their annual collaboration at the same time within each group.

The set out scheme allows including annual modules about several matters related to housing, education, health, poverty, etc.

# **11** Reference periods and temporary elevation factors

In this survey, the study period or time interval the data refers to is a year. However, when collecting information there are variables that must refer to a specific moment, since they do not remain the same all of the period. Furthermore, researching variables as the expenditure during a long period of time is very costly in terms of quality. For these reasons the reference periods are introduced.

## 11.1 EXPENDITURE REFERENCE PERIODS

Due to tiredness and forgetfulness, this type of surveys have associated reference periods which generally allow not having to ask the households about their expenses during all of the study period but during a shorter time. Therefore, when applying a temporary elevation factor it is possible to obtain an expenditure estimate of the household throughout all of the study period.

The reference period of each good or service is therefore the length of time the observation of the expenditure on that good or service corresponds to.

A reference period is allocated to each expenditure code by taking into consideration the experience in previous surveys and paying attention to the following aspects:

-frequency of purchase of the goods and/or services

-the recorded notes on the average cost of each expenditure

-the importance or representation of each expenditure division (capacity of remembering each expenditure)

Thus, each 5-digit COICOP code has been assigned one of the following reference periods:

**Biweekly**: goods of a higher frequency or low prices. Practically all of the European Union countries collect the most frequent expenses during two weeks, therefore the intense note taking period is longer regarding the previous two-week survey.

Monthly: medium frequency or moderate priced goods.

**Quarterly:** low frequency goods or goods priced too high so as to consider them biweekly or monthly.

Annual: limited frequency or very high priced goods.

Last bill: it allows collecting the goods and services paid regularly, generally by means of periodic bills (rent, community expenses, water, schools, etc.)

By requesting from the household the amount of the bill and the amount of bills paid a year, an annual estimate of the household expenditure on the specific good or service can be obtained by multiplying both amounts.

There are also some codes with a **double reference period** due to the fact that they encompass expenses that may differ significantly in terms of frequency and in the way they are written down. For example, if one has a mobile phone with a pre-paid card, the expenditure is considered biweekly and it will be written down during the 14 weeks of the two-week period, if on the contrary it is a contract mobile phone it will be paid by means of regular bills. Thus, the expenditure on the mobile phone is a code with double reference period: biweekly and last bill.

Code distribution regarding the reference period that has been assigned to each one of them is the following:

Biweekly	124 codes
Monthly	33 codes
Last bill	27 codes
Quarterly	21 codes
Annual	31 codes
Double period	19 codes
Total	255 codes

Annual, quarterly, and monthly expenses are collected by means of retrospective questions referring to the corresponding period prior to the 14 days of note taking and by direct note taking during the two-week period.

For example, the **monthly expenses** will be gathered my means of an **interview** conducted in the two-week period, for the 16 days prior to the start of the two-week period and by **direct note taking** throughout the two-week period (16 days + 14 days = 1 month).

**Periodic or regular payments** shall be gathered by means of an **interview** conducted in the two-week period, by means of the **last paid bill**.

Therefore, the annual collaboration of each household consists in a two-week period in which all of the expenses are requested by direct note taking. The rest of information is requested in several interviews along the week.

### **11.2 TEMPORARY ELEVATION FACTORS**

Temporary elevation factors are applied to the observed expenditure according to its reference period, so as to obtain an estimate of the incurred expenditure during study period.

Temporary elevation factors (TEF) can be encompassed in a single factor, having the following formulation: TEF = T/t T being the duration of the study period and t the respective reference period, both measures in number of days. Hence, in this survey:

### TEF = 365/t

t being = no. of days of the reference period.

Therefore, the approximate temporary elevation factors for each reference period are:

Reference period	t	TEF				
Biweekly	14	26				
Monthly	30	12				
Quarterly	90	4				
Annual	365	1				
Last bill	-	No. of times the bill has been paid in the last twelve months				

Obviously, the temporary factor of expenditure with double reference period will belong to that expenditure so, for example, the expenditure of a pre-paid mobile phone card will have an approximate TEF equal to 26, whereas the expenditure of a monthly contract mobile phone bill will have a TEF close to 12.

### **11.3 OTHER REFERENCE PERIODS**

The reference periods used for other variables not related to the expenditure are:

- To determine the belonging to the household (regular residence) the **last six months** are used.

- Presence/absence: The **two-week** collaboration period is taken as reference.

- Situation in the economic activity: questions are asked in reference to the **week prior** to the interview.

- Occupation, economic activity sector and other features related to the main breadwinner: refer to his/her last job, which will be the current one if working.

- Monthly household income: questions are asked in reference to the current time, this being understood as the income received during the last calendar month (see income definition).

# 12 Sample design

The most important features of the sample design are the following:

12.1 SAMPLING TYPE

A two-stage sampling has been used with stratification of the first-stage units, selecting an independent sample within the Autonomous Community.

First-stage units are the census sections in which the national territory is divided into when the survey is carried out.

Second-stage units are the main family dwellings. In them no sub-sampling is carried out, but all of the households that live in them are researched.

12.2 FRAMEWORK

The moment in which the survey started, the framework used for selecting first-stage unit samples was an area framework formed by the existing census sections with a reference of 1 April 2005.

For second-stage units, the family dwellings provided for that same framework in each one of the selected sections for the sample were used.

In order to keep the sample updated, the selected section is periodically checked. Do to so the most up to date area framework available in that moment is used (see "Sample Update and Renovation").

## 12.3 STRATIFICATION AND SUB-STRATIFICATION CRITERIA

In each Autonomous Community, the first-stage units are stratified following a geographical criterion, which assigns the **stratum** according to size, measured in terms of population of the municipality to which the section belongs to.

In accordance with this criterion the following strata is established:

- Strata 0: Municipalities with 500.000 inhabitants or more
- Strata 1: Capital of province municipality with less than 500.000 inhabitants Strata 2: Municipalities with more than 100.000 inhabitants, except the previous ones
- Strata 3: Municipalities with 500.000 inhabitants

Strata 4: Municipalities with 20.000 to 50.000 inhabitants, except the previous ones

Strata 5: Municipalities with 10.000 to 20.000 inhabitants

Strata 6: Municipalities with less than 10.000 inhabitants

In some Autonomous Communities it has been necessary to join contiguous strata, whether because there are no municipalities in one of them or because the population is too small and therefore the sample would not correspond to it in the proportional distribution among strata.

Within each geographical stratum, census sections are grouped in **substrata**.

In the formation process of substrata, the following groups have been considered:

1) The sections of stratum 0, 1, 2, 3, 4 and 5: have been grouped by applying conglomerate analysis techniques.

This process uses variables that verify as best as possible the availability, reliability and high degree of correlation with the main variables which are objective of the survey. The sources that provide this auxiliary information are the following:

 The 2001 Population Census, which provides detailed and reliable auxiliary information about first-stage units. In spite of the time elapsed since the census, its information is used because it is considered valuable and it maintains a certain stability in time in terms of census section territorial aggregation.

The following variables are used:

Inactive population Employed population Unemployed population Foreign population Population under 15 years old Population from 15 to 24 years old Population over 65 years old Achieved educational level Average number of persons per dwelling Socioeconomic condition

• The Spanish Tax Administration Agency (AEAT) provides the census section with aggregated information which is updated and correlated to the objectives of the survey. The variables coming from AEAT are:

Total income of dwelling with recipients Property income and income coming from movable assets Agricultural income

2) Sections of Stratum 6: they have been allocated the region (ULL) they belong to as a substratum. This allocation not only intends the internal uniformity of the substratum but also intends to guarantee the presence of the proportional sample in each region. This way, future estimation processes that may be applied in small areas will provide estimates that are as accurate as possible due to the presence of sample information in the area to be researched.

#### 12.4 SAMPLE SIZE

In the work carried out so as to establish the sample size, what have firstly been taken into account are the objectives of the survey in terms of estimation breakdown. In this sense the first objective is to estimate the annual expenditure of the households at a five-digit level of the COICOP. In terms of territory breakdown, it is to provide estimates with enough reliability to be accepted at national and Autonomous Community level. Lastly, the survey shall allow calculating provincial weightings used in the CPI.

Temporary reference changes regarding the previous household budget surveys have also been taken into account. In this sense the most significant changes are the annual survey period and the completion of the household diary during two consecutive weeks (two-week period) (see "Reference periods").

These modifications on the time reference have their effect on the establishment of the sample size due to the fact that in this type of surveys the household-week are observed. This means information is collected about the expenses of a household sample in a week sample within the year.

Taking into account everything that has been mentioned; a sample size of **2.275 census sections** (primary units) has been established. There are 10 dwellings (secondary units) selected in each census section, in which the information of all the households that reside there is collected.

#### 12.5 ALLOCATION

The sections sample is distributed among Autonomous Communities assigning one part evenly and another part proportionally to the size of the Community. This guarantees a minimum sampling size in each Autonomous Community at the same time the different sizes among Communities is respected.

Moreover, the size of the sample initially selected for País Vasco has been doubled in collaboration with the Statistics Institute of this Autonomous Community. With this sample the intention is to reach a higher breakdown level on the estimations. In this specific case the objective is breakdown at provincial level. As a consequence of an agreement with the Statistics Institute of Navarra, between 2007 and 2011 the sample increased in this Autonomous Community.

Allocation between strata and substrata is strictly proportional.

The distribution of the sample among Autonomous Communities and provinces is displayed in table I.

Table ISections sample by Autonomous	Communities and provinces*
--------------------------------------	----------------------------

Community	No. of section	Province	No. o section
	S		
01. Andalucía	260	04. Almería	19
		11.Cádiz	39
		14. Córdoba	26
		18. Granada	26
		21. Huelva	13
		23. Jaén	20
		29. Málaga	52
		41. Sevilla	65
02. Aragón	104	22. Huesca	19
		44. Teruel	13
		50. Zaragoza	72
03. Asturias, Principado de	91	33. Asturias	91
04 Balears, Illes	91	07. Balears, Illes	91
05. Canarias	117	35. Palmas, Las	60
		38. Santa Cruz de	57
		Tenerife	
06. Cantabria	78	39. Cantabria	78
07. Castilla y León	156	05. Ávila	13
	100	09. Burgos	19
		24. León	26
		34. Palencia	13
		37. Salamanca	20
		40. Segovia	13
		42. Soria	13
		47. Valladolid	26
		49. Zamora	13
08. Castilla-La Mancha	130	02. Albacete	26
06. Castilla-La Malicita	130	13. Ciudad Real	20 39
		16. Cuenca	13
		19. Guadalajara	13
		-	39
00. Cataluãa		45. Toledo	
09. Cataluña	234	08. Barcelona	169
		17. Girona	26
		25. Lleida	13
		43. Tarragona	26
10.Comunitat Valenciana	182	03. Alicante/Alacant	65
		12.Castellón/Castelló	21
		46. Valencia/València	96
11.Extremadura	104	06. Badajoz	65
		Cáceres	39
12.Galicia	143	15. Coruña, A	58
		27. Lugo	19
		32. Ourense	18
		36. Pontevedra	48
13. Madrid, Comunidad de	182	28. Madrid	182
14. Murcia, Región de	104	30. Murcia	104
15.Navarra, Comunidad	78	31. Navarra	78
Foral de	-		
16. País Vasco	117	01. Araba/Álava	13
		20. Guipuzkoa	39
		48. Bizkaia	65
17 Rioja, La	78	26. Rioja, La	78
18. Ceuta y Melilla	26	51. Ceuta	13
io. Ceuta y Mellila	20	51. Ceuta 52. Melilla	13
TOTAL	2275	JZ. IVIEIIIId	13

<sup>&</sup>lt;sup>\*</sup>The table does not reflect the sample extensions as a result of the collaboration with Autonomous Statistics Institutes.

#### **12.6 SAMPLE SELECTION**

Sections are selected within each stratum with a probability that is proportional to its population size. Within each section the dwellings are selected with the same probability by means of a systematic sampling which starts randomly.

This procedure leads to self-weighted samples in each stratum.

### **12.7 SAMPLE DISTRIBUTION IN TIME**

The sample has been distributed evenly among the four quarters that make up the time range of the survey. Furthermore, in each quarter it has been tried to distribute the sample by Autonomous Community, province, two-week period, stratum and rotation turn (see "Sample Update and Renovation") as homogeneous as possible.

As an example of the latter, the following tables display the distribution of the section sample during the first semester of the year in the Autonomous Community of Extremadura:

			TWO-WEEK PERIOD											
		1	2	3	4	5	6	7	8	9	10	11	12	13
Community	Stratum	_												
11	1	1	1		1		1	1	1	1	1	1	1	1
	3	1	1		1	1	1		1	1		1		1
	5			1		1		1			1			
	6	2	2	3	2	2	2	2	2	2	2	2	3	2
	Total	4	4	4	4	4	4	4	4	4	4	4	4	4
	-													
Province		1	2	3	4	5	6	7	8	9	10	11	12	13
06		2	3	2	3	2	3	2	3	2	3	2	3	2
10		2	1	2	1	2	1	2	1	2	1	2	1	2
Total		4	4	4	4	4	4	4	4	4	4	4	4	4

#### 12.8 SAMPLE UPDATE AND RENOVATION. ROTATION TURNS

The sections sample remains fixed except if the selectable dwellings deplete in one of the sections, variations occur (partition, fusion, etc.) or the selection probabilities are updated.

This update is performed every two years. The Kish controlled selection method is applied, which keeps selection probability of sections updated by introducing the smallest amount of changes in the sample.

The necessary information is obtained from the Municipal Register which is available on the date nearest to carrying out the study.

Given the complexity of the survey, in order to avoid the collaborating families from getting tired and giving new households of the section the possibility to be selected, the *rotation turn* scheme is introduced, which facilitates the partial renovation of the sample.

Two rotation turns have been considered, so half of the sampling sections belong to turn "1" and the other half to turn "2".

The dwellings sample of one of the rotation turn sections is renewed each year. This way, each household of the sample collaborates in it two times throughout two years, and there is a fifty percent overlap between two consecutive periods.

Following the previous example, the table below shows the distribution of sections by rotation turn and stratum in the Autonomous Community of Extremadura:

	_		_			
		1	2	3	4	Total
Rotation Turn	Stratum					
1	1	2	4	3	2	11
	3	4	1	2	2	9
	5	1	2	1	1	5
	6	6	7	7	7	27
	Total	13	14	13	12	52
2	Stratum					
	1	2	3	4	3	12
	3	1	3	2	3	9
	5	1		2	1	4
	6	7	8	7	5	27
	Total	11	14	15	12	52

#### **12.9 ESTIMATORS**

To estimate the household features, an estimator is used. This estimator is obtained through the following steps:

- 6. Expansion estimator based on the design factor, which is equivalent to multiplying the feature observed in the sample by the inverse of the selection probability.
- 7. Non-response correction in each AC, at a two-week period and stratum level. The objective of this factor is to recover the theoretical dwelling sample at this level. Two-week period groups and two stratum groups (0.1 and 2 and rest of strata) are considered.
- 8. Separate ratio estimator to adjust the population projection in each h stratum.
- 9. Applying calibration techniques.

When expressing estimators, the following subscripts are used:

A = Geographical area the estimate refers to.

h = Stratum

- g = Non-response correction group.
- i = Selected section
- j = Household

#### 12.9.1. TOTAL EXPENDITURE OF HOUSEHOLDS

When applying the aforementioned three first steps, the estimator of the total annual household expenditure on a good or service X, is obtained through expressions:

$$\hat{X}_{A} = \sum_{h \in A} \frac{P_{h}T}{\sum_{g \in h} R_{g} \sum_{i \in g} \left[ c_{hi} \sum_{j \in i} p_{hij} \right]} \sum_{g \in h} R_{g} \sum_{i \in g} \left[ c_{hi} \sum_{j \in i} x_{hij} \right]$$

being:

 $\hat{X}_{A}$  = Estimate of the total annual household expenditure on a good or service X in geographical area A.

 $P_h =$  Population projection of stratum h, referring to half of the surveying year.

T = Temporary elevation factor. This factor depends on the reference period of the good or service X and takes the following approximate values (see "Temporary elevation factors"):

T=26 for goods or services with a biweekly reference.

T=12 for goods or services with a monthly reference.

- T=4 for goods or services with a quarterly reference.
- T=1 for goods or services with an annual reference.

 $C_{hi}$  = Update coefficient. It is a value that depends on the selection and represents its growth from the moment of sample selection until the year of the data in the survey. For the year 2006 this coefficient is equal to 1.

 $p_{hij}$  = Population formed by the household members in household j of the sample, section i, stratum h.

 $x_{hij} =$  Value of the expenditure on the good or service X in household j of the sample, section i, stratum h.

 $R_g =$  The non-response correction factor in group g is obtained as the quotient between the total number of households of the theoretical sample of this group and the household of the effective sample.

$$\mathsf{R}_{g} = \frac{\sum_{i \in g} \mathsf{c}_{hi} \mathsf{t}_{hi}}{\sum_{i \in g} \mathsf{c}_{hi} \mathsf{m}_{hi}}$$

<sup>t</sup>hi = Theoretical dwellings in the sample in section i of stratum h.

 $m_{hi}$  = Effective dwellings in the sample in section i of stratum h.

#### Step 4. Applying calibration techniques.

The previous estimate  $X_A$  can be expressed in the following way:

$$\boldsymbol{\hat{X}}_{A} = \sum_{h \in A} \sum_{i} \sum_{j \in i} \boldsymbol{w}_{hij} \, \boldsymbol{x}_{hij} = \sum_{k \in A} \boldsymbol{w}_{k} \boldsymbol{x}_{k}$$

where  $\begin{bmatrix} \sum \\ k \end{bmatrix}$  expands to all of the effective sample units in geographical area A.

The final estimator is obtained finding a new weight  $d_k$  in such a way that it is verified that:

- a) The estimate, based on the sample, of a specific feature matches the value of this feature on the population. This value is obtained through an external source. The feature may refer to dwellings or persons depending on the object of the estimation.
- b) The distance between <sup>d</sup><sub>k</sub> and <sup>W</sup><sub>k</sub> is minimum, based on a previously determined distance function.

A truncated linear distance function is used by applying CALMAR software developed by the French National Institute of Statistics and Economic Studies (INSEE).

The auxiliary variables used for calibration are:

- 1. Population by Autonomous Community, age (five-year groups) and sex (28 groups).
- 2. Total population per province.
- Total households per Autonomous Community according to composition (5 groups).

$$\hat{\overline{X}}_{A} = \frac{\hat{X}_{A}}{\hat{N}_{A}}$$

<sup>12.9.2.</sup> AVERAGE HOUSEHOLD EXPENDITURE.

It is obtained as a quotient between the total expenditure estimates and the number of households.

being:

 $\hat{X}_A =$  Total expenditure estimate on the good or service X in geographical area A.

 $\hat{N}_{A}$  = Number of household estimate in geographical area A, obtained by means of expression:

$$\hat{N}_A = \sum_{h \in A} \sum_i \sum_{j \in i} d_{hij} = \sum_{k \in A} d_k$$

where  $\frac{\sum}{k}$  expands to all of the households of the geographical area A sample.

12.9.3. AVERAGE EXPENDITURE PER PERSON.

It is obtained as a quotient between the estimation of the total expenditure and the number of household members.

$$\hat{\overline{X}}_{A} = \frac{\hat{X}_{A}}{\hat{M}_{A}}$$

Similar to the previous case

$$\hat{M}_A = \sum_{h \in A} \sum_i \sum_{j \in i} d_{hij} p_{hij} = \sum_{k \in A} d_k p_k$$

It can be seen that  $\hat{M}_A$  has the same expression as  $\hat{N}_A$  only adding to the number of household members,  $p_{hij}$ , existing in each of the effective sample households.

$$\hat{\overline{X}}_{A} = \frac{\hat{X}_{A}}{\hat{U}_{A}}$$

<sup>12.9.4</sup> AVERAGE EXPEDITURE PERO CONSUMPTION UNIT

It is estimated by means of the quotient between the total expenditure and the number of consumption units

being:

$$\hat{\boldsymbol{U}}_{A} = \sum_{h \in A} \sum_{i} \sum_{j \in i} \boldsymbol{d}_{hij} \, \boldsymbol{u}_{hij} = \sum_{k \in A} \boldsymbol{d}_{k} \boldsymbol{u}_{k}$$

 $u_{hij} =$  Number of consumption units in the household j. This value is calculated as:

$$u_{hij} = u_{hij}^{(1)} + 0.5 \, u_{hij}^{(2)} + 0.3 \, u_{hij}^{(3)}$$

being:

 $u_{hij}^{(1)} = 1$  represents the first adult of the household.

 $u_{hij}^{(2)}$  = Rest of adults, household members who are 14 years old or more.

 $u_{hij}^{(3)}$  = number of household members who are minors, 13 years old or under.

#### 12.9.5. OTHER FEATURES

The estimators of other survey features are obtained from the total expenditure estimator with no further considerations T=1 and  $x_{hii}$  the feature object of study.

#### 12.10 SAMPLING ERRORS

For the sampling error estimate the **Jackknife method** is used, which allows obtaining the estimate of the estimator variances of feature X by means of expression:

$$\hat{V}\left(\hat{X}\right) = \sum_{h} \frac{N_{h} - 1}{N_{h}} \sum_{i \in h} (\hat{X}_{(ih)} - \hat{X}_{-})^{2}$$

 $\hat{X}_{(ih)}$  the estimate of feature X obtained by removing section i of stratum h, and  $N_{_h}$  are the number of sections in stratum h.

The tables display the sampling error in percentage, coefficient variation, whose expression is:

$$C\hat{V}(\hat{X}) = \frac{\sqrt{\hat{V}(\hat{X})}}{\hat{X}}$$

Sampling error allows obtaining the reliability interval, in which the real value of the estimate feature can be found with a specific probability.

Sampling theory determines that in the interval between

$$\left(\hat{X}-1.96\sqrt{\hat{V}\left(\hat{X}
ight)}
ight)$$
,  $\hat{X}+1.96\sqrt{\hat{V}\left(\hat{X}
ight)}
ight)$ 

there is 95 percent reliability of finding the real value of parameter X.

# 13 Information collection

#### **13.1 COLLECTION METHOD**

Information collection in the HBS is carried out by mixing personal interviews and direct note taking by the household. As explained in the "Survey scheme", the annual collaboration of each household takes place along a two-week period.

During this two-week period the households take notes in the *Household account notebook*, and also give an **interview** so as to provide information about bill payments and the monthly, quarterly and annual payments made. By means of interview there is also information collected about the features of the household, its members and the dwelling.

Furthermore, all the members of the household who are 14 years old or more are given an individual notebook so they write down their expenses during the first week of the two-week collaboration period.

In the year 2007 there was a significant improvement in the way information was collected for the Household Budget Survey: the implementation of a premium system by giving the collaborating household a gift card. In this type of surveys, this practice has become widespread internationally because of the load it involves for the households.

It is an unnamed electronic purse with an approximate value of thirty euros, that can used in a wide range of establishments spread across the national territory. When the household is contacted, it is communicated that the card will be received upon completion of collaboration in the survey.

This system was implemented in the second semester of 2007.From this moment on the collaboration of households improved, which was confirmed in an increase of the response rate and a higher quality of the collected information. In terms of the effective sample structure at income level, no biases due to the introduction of the card were observed.

The effect of the new method made it necessary to check the results prior to its implementation. Therefore, the results of the year 2006 were checked so as to guarantee data comparability.

Due to the fact that in the HBS five reference periods are considered, it has been considered that the household visit scheme that provides a higher data quality

**<sup>13.2</sup> QUESTIONNAIRE FEATURES** 

<sup>13.2.1</sup> NUMBER OF QUESTIONNAIRES.

The number of questionnaires used in the survey derives from the expounded methodology and from other aspects related to the visit and information collection scheme.

consists in collecting each type of expenditure with different questionnaires. Thus, a different questionnaire, which is completed by the household, has been designed for each one of the reference periods different from the biweekly one.

Consequently, all household collaboration is reflected in the HBS with the following questionnaire types:

Household record Household account notebooks Individual account notebooks Monthly expenses Quarterly expenses Annual expenses Features of the dwelling and payment of bills and periodic instalments

#### 13.2.2 CONTENTS OF THE QUESTIONNAIRES

 Household record (HR): it is a document designed to identify the household members and its main breadwinner as well as to obtain information about their demographic, work and social features. It also obtains information about certain basic aspects related to the surveyed household (composition, size, income level, etc).

In the year 2011 the variables initially included in the questionnaire were checked, and some new ones were added so as to adjust the survey to the national and European harmonization demands.

The *Household record* is the first questionnaire the interviewer completes upon arrival to the household on which the survey is going to be performed. Once the possible households that reside in the dwelling are identified, the interviewer must open a *Household record* for each one of them (see definition of household).

 Household account notebook (PF1):its purpose is to obtain information about all the purchases of goods and services intended to fulfil the needs of the household and those of the person in charge of administering it. The Household account notebook also obtains information about the goods and services purchased during the two week note-taking period, that were intended to be given to other households. All of this information is obtained by means of direct note taking by the households. The household shall also write down the consumption of goods and services coming from own consumption, own supply or salary in kind.

It includes a summary of all the meals taken in the household by its members, residing or non-residing domestic service, lodgers and guests.

The person in charge of administering the household is given the notebook once the Household record interview has been conducted, and the interviewer checks its completion in the following visits to the household.

• Individual account notebooks (PF2):they are given to the household members who are 14 years old or over so that they take notes of all goods

and services purchased during the first week of the two-week note taking period.

• Questionnaire of monthly expenses (M), Quarterly expenses (Q) and Annual expenses (A): By means of retrospective interview, this questionnaires collect the purchases of goods and services and the consumption in kind carried out by all of the household members during the time corresponding with each time period (16 days before the start of the two-week period for the monthly questionnaire, 74 for the quarterly and 12 months minus 14 days for the annual).

Expense classification codes assigned to each time period appear pre-printed on each one of the questionnaires. Therefore they are formed by questions that are more close -ended than in previous surveys, so as to minimize codification errors and forgetfulness and therefore try to improve the estimates of these types of expenses.

• Features of the dwelling and payment of bills and periodic instalments (UR): by means of interview, this questionnaire collects the payment of bills or periodic instalments during the twelve years before the interview is conducted. Furthermore, certain features of the dwelling and other dwellings available to the household during those twelve months are researched.

Interviews about *monthly expenses, annual expenses* and *Features of the dwelling and payment of bills and periodic instalments* are carried out in the intermediate visits during the two-week period, whereas the questionnaire of *quarterly expenses* is collected along with the notebooks in the last visit to the household.

**Tracking Record:** its objective is to reduce as much as possible the inconsistencies in what was declared by the households in their previous collaboration.

**Household Record Attachment:** it is used for the households that were collaborators the previous year and its objective is to collect information about the household members that have left or joined the household between collaborations.

**Questionnaire on the Assessment of Non-Response:** it is a document whose purpose is to obtain information about some basic features of the main breadwinner of incumbent dwellings that have not collaborated in the survey, so as to analyze the possible biases due to non-collaboration in the sample.

**<sup>13.3</sup> AUXILIARY DOCUMENTS** 

**Work Note**: it is a document that collects the works done by the interviewer in each one of the sections he/she has assigned, as well as the incidences that occur during information collection. The work note includes the households that are selected as incumbent and reserved. The latter are used if an incidence occurs and the incumbent dwelling has to be substituted. It also contains the notebook.

#### **13.4 ORGANISATION OF FIELD WORK**

The establishment of a two-week collection period has been an essential factor in the organisation of field work, influencing on the designation of the workload, number of visits to the household and tasks to be carried out during each visit, incidence processing, etc.

#### 13.4.1. WORKLOAD

Taking into account that the annual collaboration of each household in the survey is carried out along a two-week period, the section sample has been distributed in such a way that the 26 two-week periods are represented.

Information is collected at provincial level. In each provincial delegation, collection is directed by an inspector who is a Statistics degree holder. Moreover, in provinces with a larger number of interviewers there is an intermediate figure, who is the interviewer inspector. In total there are about 174 interviewers and 58 interviewer inspectors.

When designating the workload of each interviewer, several factors were taken into account such as information collection tasks in the theoretical note-taking period, collection tasks during the extended period, and the set of remaining tasks to prepare field work and the aforementioned tasks prior to information collection.

As previously explained, for methodological reasons the annual collaboration period of households is extended a theoretical two-week period, which will be designated as ab (week a and week b).In order to get as many incumbent dwellings as possible to collaborate, the time to collect information of those that are absent has been extended, making it possible for them to collaborate one week after the one that theoretically corresponds. This causes the so called extended period or extended two-week period bc (week b and week c).

Taking into account this extension in collection tasks and considering the remaining tasks described, the workload of each interviewer is one section every four weeks, that is, 13 sections a year.

During these four weeks each interviewer shall collect, code, filter and record the documents.

<sup>13.2.4</sup> WORK SCHEME TO BE CARRIED OUT IN THE SECTION

The four-week period to collect a two-week period is divided into four natural weeks: a, b, c, d.

Information is collected during two two-week periods: specifically from Tuesday of week (a) to Monday of week (b) and from Tuesday of week (b) to Monday of week (c).The households that are visited on the first period belong to collaboration period **ab**, whereas the households that are visited on the second period belong to collaboration period **bc**.

The works to be carried out during all of the process may be structured according to the following scheme.

	Day	Visit	Tasks period ab				
			FH, annex FH and distribution of				
а	L	¥1	notebooks for note-taking in ab				
	M	¥1	1st note-taiding day in ab				
	X						
			M If contacted in V1. For those not				
		¥1	contacted in V1, V1 and V2 tasks,				
	J	¥2	with retrospective notes.				
	V						
	S						
	D			Tasks period bc	Visit	Ūav	
				For those not contacted in V1 or V2			
				FH, annex FH and distribution of			
b	L	¥3	UR and A if contacted in V1 or V2.	notebooks for note-taking in bc	V'1	L	b
	M	73	UR and A if contacted in V1 or V2.	1st note-taking day in bc	V'1	M	
	X					X	
				M If contacted in V' 1.For those not			
				contacted in V'1, V'1 and V'2 tasks,			
				with retrospective notes.			
				Last gathering day (from here on,	V'1		
	J			sample loss).	¥'2	J	
						V	
	S					S	
	D					D	
C	L		Last note-taiding day in ab			L	C
			T, income of FH and collection of				
	M	¥4	notebooks for ab.	UR and A if contacted in V'1 or V'2.	A.3	M	
	X	¥4			A.3	Х	
	J					J	
	V					V	
	S					S	
	D					D	
				Last note-taking day in bc		L	d
				T, income of FH and collection of			
				notebooks for bc.	V'4	M	
					¥'4	X	
						J	
						V	

## Task scheme of each work day in the section
#### 13.5 INCIDENCES AND THEIR PROCESSING

Incidences are defined as the different situations in which interviewers can find themselves while working in the section.

#### 13.5.1 INCIDENCE IN DWELLING

The selected dwellings are classified according to the situation in which they are in the moment the interview is going to be conducted. The classification is:

**Surveyable** dwellings (E): dwellings used as regular residence all or most part of the year. In this case the households that reside in it are researched.

Non-surveyable dwellings that can also be:

**Empty (V)**: dwellings that are unoccupied all or most part of the year because they are vacant, in ruins or holiday dwellings.

**Untraceable (IL)**: dwellings that cannot be located with the address that appears on the Work Note.

**Dedicated to other purposes (OF)**: premises completely intended for purposes other than family residence (for example: commercial locale, warehouse, offices, etc.)

**Inaccessible (IN)**: dwellings that cannot be accessed to conduct the interview, generally due to adverse weather conditions (snowfalls, floods, etc).

**Selected previously (SA):** These are dwellings that have been selected previously (less than five years ago) in the HBS sample or that of any other survey, and have been selected again. This incidence only makes sense in the dwellings of the sections in the first interview.

**Non-surveyable dwellings are not substituted** and inaccessible dwellings are treated the same as absent dwellings.

Dwellings that have been **selected previously** will be substituted by the first reserve, whether they have been detected before going on site or not.

The following situations may occur in households which are the residence of a surveyable dwelling:

#### • Collaborating household.

Two categories have been established for collaborating household: total collaboration and partial collaboration.

<sup>13.5.2</sup> INCIDENCES IN DWELLNGS

### **\*Total collaboration (E)**

The collaboration of a household is considered **total** if information has been provided about the following questionnaires:

*Household record*, which shall be fully competed, except the part related to the household income.

Household account notebook, and the monthly, quarterly and annual expenses questionnaires and last bill.

Regarding the *Individual account notebooks*, no conditions are imposed, so a household that meets the previous requirements collaborates totally, regardless of the individual questionnaires that have been collected. The households missing one of these questionnaires undergo a subsequent treatment (see "Information Treatment")

#### **\*Partial collaboration (EPAR)**

The collaboration of a household is considered **partial** with the collection scheme set out until now, if at least the following information has been collected:

*Household record*: must contain at least the following data:

. Household composition table

. Year of birth of the household members

. Identification of the main breadwinner, his/her studies level and economic activity situation.

*Household account notebook*: expenses of at least seven days of the two-week period.

Annual and monthly expenses questionnaires and last bill: must be completed.

Regarding the quarterly expenses questionnaire, no conditions are imposed, so a household can collaborate partially without having answered the quarterly expenses questionnaire. In that case, the elevation factor of the quarterly expenses is adjusted.

*Individual account notebooks* are applied the same criterion as total collaboration.

#### • Non-collaborating household.

Households that do not collaborate totally or partially will be considered **non-collaborating**.

#### \*Refusal and Subsequent refusal

These incidences occur when the household refuses to collaborate at any time along the collaborating period.

#### \*Absence

This incidence occurs when there are no household members present when the interviewer visits the dwelling. Before considering this incidence as definitive,

the interviewer must visit the house as many times as possible until the deadline, which is Thursday of week b.

#### \*Unable to answer

It is presented when all of the household members are unable to answer due to illness, disability, age or any other circumstance.

# 14 Information processing

#### 14.1 RECORDING

Questionnaire recording and an initial filtering of information is carried out in the INE provincial delegation by means of assisted recording. This data recording system is called CADI (Computer Assisted Data Input).

Questionnaires are recorded with a computer application developed in Visual Basic, which displays on screen very similar images to the ones in the questionnaires. This application has incorporated some control over validation of information, basically to control the valid values and the flow of the questionnaire questions and control the identification numbers of the household members.

The units responsible for the survey in the central services have access to the recorded information in real time, since it is saved in an Oracle database hosted in a central server, which allows carrying out a thorough tracking of the works done.

In the future it is expected to use laptops for conducting interviews. They will allow collecting better filtered information since consistency can be controlled the moment it is collected. Geographical and timing proximity of the interview period to the filtering process facilitates troubleshooting inconsistencies among data based on direct contact with the household.

#### 14.2 FILTERING

Data filtering is done at two levels. In the first phase the information at household level is filtered, seeking coherence of the information given in the different questionnaires and if necessary in the previous collaboration.

Afterwards, the data added quarterly is filtered. This filtering consists in analysing the notes on expenses with greater or lesser effect on each expense code as well as the households with greater or lesser effect in each Autonomous Community. The total and average expenditure according to different functional and geographical breakdown levels is also analysed.

In this stage, recording and coding errors are detected, irregular expenditure is confirmed and if inconsistent data is detected and there is no additional information that allows correcting it, it is deleted for a subsequent imputation.

Once data filtering is carried out, a set of treatments are performed until obtaining the final file.

#### 14.3 IMPUTATION PROCESSING

When non-response affects a qualitative variable, HBS does not act the same as when it affects a quantitative variable. In the first case the variable in question is assigned value -9 ="no data recorded", which constitutes one more category among the possible values the variable takes. Generally, these type of variables present low non-response percentages.

When non-response affects a quantitative variable, techniques for imputation of missing values are used. the following is an explanation of the different types of imputation used in the survey.

Once the collected information is filtered, there may be expense notes that have a blank variable (price, physical amount, number of time bill was paid, etc.)due to the fact that the household has not provided the item of data or because the variable is detected to be wrong in the filtering and it has been decided to leave it blank for its subsequent imputation.

For imputation of the price variable or variables related to it, expense notes similar to the ones to be imputed are used, that is, they take the same values regarding a series of variables called *stratification criteria*, which are considered to be valid. Depending on the case imputations are carried out through hot-deck or through average values, taking into account the stratification criteria defined for each case.

In hot-deck imputation the missing value is replaced by a value chosen randomly among the values taken by the variable in the remaining elements of the sample. It is divided into even groups according to the stratification criteria (using variables such as the Autonomous Communities, stratum, expense code, etc.) and the value is chosen within the group that corresponds. This is implemented by organising the registers randomly and assigning the missing value the register value that comes immediately before in this organisation.

In some variables such as the date of purchase, whose value is determined by the rest of available information, this value is imputed directly, or the most probable is assigned if there are several possible.

<sup>14.3.1</sup> IMPUTATION OF MISSING VALUES

<sup>14.3.2</sup> IMPUTATION OF UNCOLLECTED INDIVIDUAL NOTEBOOKS

A part of the information about expenditure given by the household is collected in *Individual Notebooks*. In these notebooks the expenses incurred by each of the household members over 14 years of age during the first week of the two-week collaboration period of the household are noted (except the person in charge of administering the household, who takes notes of his/her expenditure in the *Household Notebook* and the absent persons that receive consignments during the two-week period, since their expenses are gathered through these consignments).

Given a household can be a collaborator but not necessarily all of its members who are 14 years old or more, there may be non-response in this type of questionnaires, that is, there may be collaborating households in which all of the *Individual Notebooks* that should have been completed are not. It is therefore necessary to impute the expenses of the uncollected individual questionnaires, so the complete household expenditure can be reconstructed, since on the contrary it would be underestimated.

The designed procedure consists in imputing a questionnaire for each one of the *Individual Notebooks* that have not been collected in the household and take the information into account, in terms of expenditure level and its structure, coming from the collected *Individual Notebooks*.

The imputation procedure is carried out in two stages. First, the average expenditure level of each Individual Notebook is determined, taking as stratification variables the economic activity situation and studies level of each household member, since these are the variables that influence the most so as to discriminate the expenditure level among the different notebooks. That is, for each value combination of these variables, the average expenditure of the collected Individual Notebooks is calculated, and that is the expenditure level imputed to those uncollected. Once fixed the expenditure level for each of the uncollected Individual Notebooks, this expenditure is broken down among the different items taking into account sex and age of the household members as stratification variables, since in this case these are the variables that determine the different of types of expenditure among the notebooks. For example, the expenditure of an uncollected Individual Notebook which belongs to a woman within a specific age range is broken down according to the average expenditure structure of the collected Individual Notebooks belonging to women that are in her same age range.

The following is a detailed description of the two stages. For readability purposes, *Individual Notebooks* are called PF2.

#### Stage I. Expenditure level.

Generally, the variables in each Autonomous Community that best explain **the expenditure level variability** collected in each PF2 are the following:

- Autonomous Community
- Quarter
- Relation with the economic activity (employed, rest)
- Studies level (including medium level, rest).

Each uncollected PF2, is assigned as total expenditure the average expenditure of the PF2 collected (including zero expenditure) in the imputation group the missing PF2 belongs to.

The average expenditure in the R1 imputation group is calculated by means of the following expression:

$$\overline{y}_{R1} = \frac{\sum_{z \in R1} \sum_{k} y_{zk}}{t_{R1}}$$

being:

 $y_{zk}$  = Expense collected in the PF2 spent on good or service k, by individual z that belongs to group R1.

 $t_{R1} = PF2$  number collected in group R1.

#### Stage II. Expenditure structure

In this second stage, other R2 imputation groups are defined for each Autonomous Community and quarter. The groups are defined by the variables that best explain the **functional structure variability** of the total expenditure per person in the PF2. These variables are sex and age (14 to 30 years old, 31 to 60 years old and over 60 years old).

On the one hand, the average expenditure structure is calculated at level group and the expenditure level fixed in the first stage is applied. This way, the imputed expenditure of the questionnaire in each expenditure groups is obtained.

On the second hand, the expenditure at 5-digit code level is calculated as the percentage this code implies on the total expenditure in the corresponding group. This percentage is applied to the amounts calculated in stage I.

lf:

 $t_{R2} =$  Number of PF2 collected in group R2.

C = Expenditure groups C

it is calculated:

$$w_z^C = \frac{\sum_{k \in C} y_{zk}}{\sum_{C} \sum_{k \in C} y_{zk}}$$

 $C \in C$  : Weight of expenditure group C in the total expenditure of PF2 of individual z.

$$\overline{w}_{R2}^{C} = \frac{\sum_{z \in R2} w_{z}^{C}}{t}$$

 $t_{R2}$ : Average weight of expenditure group C, in the expenditure of PF2, in imputation group R2.

$$b_{R2,k}^{C} = \frac{\sum_{z \in R2} y_{zk}}{\sum_{k \in C} \sum_{z \in R2} y_{zk}}$$

 $k \in C \ z \in R^2$  : Weight of good or service k in expenditure group C of the PF2 collected in imputation group R2.

For an individual z, who belongs to imputation groups R1 and R2, in the first and second stage respectively, the imputed expenditure on good or service k belonging to expenditure group C is:

$$y_{zk}^{C} = \overline{y}_{R1} \cdot \overline{w}_{R2}^{C} \cdot b_{R2,k}^{C}$$

The corrected expenditure of the household on good or service k collected in PF2 will be:

$$\mathbf{y}'_{\mathsf{hijk}} = \mathbf{y}_{\mathsf{hijk}} + \sum_{\mathsf{z} \in \mathsf{j}} \mathbf{y}_{\mathsf{zk}}$$

where  $y_{hijk}$  represents the expenditure on a good or service k collected in the  $\sum_{z \in j} y_{zk}$  complete PF2 and  $z_{ej}$  represents the imputed expenditure of good or service k, where the summation is extended to individuals z of household j that has not completed the corresponding PF2.

If feature X that is to be estimated is the household expenditure on good or service k, the value  $x_{hij}$  that appears in the expression of the estimator  $\hat{X}_{A}$  is obtained in the following way:

$$\mathbf{x}_{hijk} = \mathbf{x}'_{hijk} + \mathbf{y}'_{hijk}$$

being:

 $x'_{hijk}$  the household expenditure on good or service k collected in any other questionnaire completed by the household except PF2.

In the questionnaire, the regular net monthly income of the household as a whole is requested. If the household does not provide the punctual value, the interval of its income is requested. In this last case and when the household indicates it receives income from another source but due to non-response neither its value nor interval is known, a punctual value is imputed. If the household has provided the income interval, the imputation is contingent on the fact that this value is within the interval provided by the household.

This imputation has been carried out by adjusting a regression model to the available information. To do so, the imputation model of the IVE program (Imputation and Variance Estimator) has been used, which is developed by the University of Michigan Institute for Social Research and may be downloaded free in their website.

Regarding individual income, it is only used as auxiliary information for the previous imputation but no imputation is carried out on them, so in some cases there is non-response in some microdata files. That is, a household member may appear as an income recipient but may have not provided neither punctual value nor interval of income, or it may occur that a recipient has provided interval but not punctual value. In this case a punctual value has not been imputed either. It may also occur that the household does not even indicate which if its members receive income.

Furthermore, in user microdata files derivative variables are incorporated. They indicate whether the punctual value (or interval) come from an imputation

The same SEC-95 establishes that *this production is measured by the estimated rent value a lessee would pay for the same accommodation, taking into consideration elements such as location, facilities of the area, etc. as well as the size and quality of the dwelling.* 

Until now, in Household Budget Surveys this valuation has been done by the household itself, when being asked in the questionnaire what rent would have to be paid for a dwelling like the one being occupied. There are other ways of valuating this concept without involving the subjectivity of this auto evaluation method. One of them is the stratification method, which is recommended by Eurostat and the one **used in HBS Base 2006**.

The stratification method based on real rents combines information of owned or transferred dwellings, that are grouped in strata following certain relevant features, with the sampling information of the real rent in each stratum. Once the relevant variables are selected, their crossings are determined so as to form the

<sup>14.3.3</sup> IMPUTATION OF HOUSEHOLD INCOME

<sup>14.4</sup> OBJECTIVE ESTIMATE OF IMPUTED RENT

SEC-95 includes own production rental services of households occupied by their owners within the production boundary. These services are part of the household final consumption expenditure, which is to be researched in the Household Budget Survey.

strata and the rented dwellings of the sample are classified in the corresponding stratum. The average rent price per square metre is calculated next.

The **imputed rent estimate** of dwellings occupied by their owners or by persons who have had them transferred, is obtained by assigning them the average rent price per square metre in the stratum they belong to, and multiplying this average value by the surface area of the dwelling in question. Since the subjective valuation of the household is also collected, the final value is obtained as a combination of both estimates: the result in applying the stratification method and the subjective estimate.

The stratification used in the HBS incorporates external information to the household, which allows including a more detailed geographical component. This way, the designation of strata is carried out based on the area surface of the dwellings (three groups) and variable that indicates the "quality" of the area in which the dwelling is located at postal code level (6 groups). This indicator is built by means of conglomerate analysis techniques based on census variables (socioeconomic condition, problem level) and the average price for purchasing a dwelling in the area that INE obtains from collaboration with The General Council of Notaries, through summaries of the Notaries' activity in the national territory.

The imputed rent is also calculated for other dwellings different from the main one that are occupied by their owners or free or semi-free transfers. The area surface of these dwellings is not available, so average values are imputed in the corresponding stratum, which in this case is designated by the Autonomous Community and by service availability such as heating.

#### 14.5 ITEMISATION OF CERTAIN EXPENSES

For example, it is relatively frequent that a household has expenditure at a greengrocer but cannot provide more broken down information regarding the type of fruit purchased, when in the survey classification there are several codes for different types of fruit. In this case, the expenditure would be written down in a common fruit code which in subsequent treatments would be itemised into the different types of fruit, to do so using information about the distribution of expenditure on fruit among the different types obtained from the survey itself.

Itemisation consists in spreading the original price, multiplying it by as many coefficients as codes in which it ought to be itemised. This leads to the new notes of these codes, whose sum will be that of the original note taken. However, the way to obtain the itemisation coefficients is not always the same, since it depends on the type of concept being worked with, the way they are collected and the how frequently each one is annotated.

On certain occasions, the collaborating household cannot specify the exact nature of the expenditure incurred according to the classification established in the survey. To make information collection easier, there are expenditure codes called field codes, which are not included in the final expenditure classification since the amount of these notes is itemised in each case between the codes it covers.

This is also frequent with rent and community payments, which many times include services such as cold water, hot water or heating that the household does not know how to separate from the total amount. In these cases, the household shall detail the concepts included in the total payment and once again the expenditure among the different items is reassigned.

14.6 PROCESSING OF MEALS IN THE HOUSEHOLD

This treatment is traditionally applied in Household Budget Surveys.

The survey collects the number of meals taken by the household members (not domestic service, lodgers or quests) and the domestic service (whether they are household members or not), lodgers (whether they are household members or not) and guests (whether they are household members or not).

The main reason why this information is collected is to adjust the expenditure on food and non-alcoholic beverages consumed in the household and assign it to the items that correspond in the cases in which there are meals taken by domestic service or lodgers.

This must be this way since when meals are consumed by the domestic service, the part corresponding with food expenditure incurred in by the household during the two-week period shall not be considered food consumption, but payment in kind of the household to the domestic service. Therefore it shall be assigned to the domestic service expenditure code of the household.

Moreover, the meals taken by lodgers shall not be considered household expenditure, since it is an intermediate consumption (as the household receives an economic compensation from the fact that the lodger takes his/her meals at the household). The part corresponding with the expenditure of food and nonalcoholic beverages consumed at the household shall be eliminated as household consumption expenditure.

14.7 OTHER PROCESSES

In the analysis of the first results of this survey special attention was paid to the possible consequences of this fact, and it was checked that the quality of household's collaboration decreases throughout the fourteen days due to tiredness. This is reflected in a smaller amount of food expenditure notes during the second week, once the possible influence of the calendar is eliminated. To correct the decrease during the second week in food notes due to the household's tiredness, the notes are applied a correcting coefficient which is

<sup>14.7.1</sup> CORRECTION OF THE SECOND NOTE-TAKING WEEK

One of the big changes in the HBS Base 2006 regarding previous budget surveys has been the extension of the direct note taking period of the household onto the Account Notebook. Following the international trend, the time has gone from one week to two weeks in order to smooth the effect that an atypical week can have on the expenditure of the household in question.

calculated based on the expenditure distribution of each 4-digit code of group 01*Food and non-alcoholic beverages* between the first and second week.

# **15 Dissemination**

The dissemination plan includes electronic publications about:

a) detailed result tables: are summarised in the following section

b) microdata files appropriately treated so as to avoid the identification of households

Furthermore, usage requests are responded as received from the users.

#### 15.1 TABULATION PLAN

The INE website offers the following information for each year.

#### A. EXPENDITURE

A.1 TOTAL EXPENDITURE, AVERAGE EXPENSES AND PERCENTAGE DISTRIBUTION OF THE TOTAL EXPENDITURE ACCORDING TO DIFFERENT FUNCTIONAL BREAKDOWN LEVELS

A 5-digit breakdown of COICOP is reached. Tables with the current prices and constant prices in 2006 are included. There is also a table related with the monetary expenditure per expenditure group.

A.2 TOTAL EXPENDITURE, AVERAGE EXPENSES, INDEX OVER THE AVERAGE OF THE AVERAGE EXPENDITURE PER PERSON AND PERCENTAGE DISTRIBUTION OF THE TOTAL EXPENDITURE PER EXPENDITURE GROUP AND SUBGROUP (3 DIGITS) ACCORDING TO DIFFERENT VARIABLES.

Size of municipality of residence Population density Sex and age of the main breadwinner Educational level of the main breadwinner Economic activity situation of the main breadwinner Professional status of the main breadwinner Occupation of the main breadwinner Nationality of the main breadwinner Country of birth of the main breadwinner (since 2011) Country of birth of the main breadwinner's parents (since 2011) Household composition Type of household Main income source of household Monetary income level of household A.3 TOTAL EXPENDITURE, AVERAGE EXPENSES AND PERCENTAGE DISTRIBUTION OF THE TOTAL EXPENDITURE PERO AUTONOMOUS COMMUNITY ACCORDING TO DIFFERENT FUNCTIONAL BREAKDOWN LEVELS

A 4-digit breakdown of COICOP per Autonomous Community is reached.

A.4 TOTAL EXPENDITURE, AVERAGE EXPENSES, INDEX OVER THE AVERAGE OF THE AVERAGE EXPENDITURE PER PERSON AND PERCENTAGE DISTRIBUTION OF THE TOTAL EXPENDITURE PER AUTONOMOUS COMMUNITY ACCORRDING TO DIFFERENT VARIABLES (REDUCED):

Age of main the breadwinner Educational level of the main breadwinner Economic activity situation of the main breadwinner Professional status of the main breadwinner Occupation of the main breadwinner Household composition Type of household Main income source of household Monetary income level of household

- B. EXPENDITURE VARIATION RATES REGARDING THE PREVIOUS YEAR.
- B.1 EXPENDITURE AND AVERAGE EXPENSES VARIATION RATES ACCORDING TO DIFFERENT FUNCTIONAL BREAKDOWN LEVELS

A 4-digit breakdown of COICOP is reached. Expenditure variation rates at constant prices and current prices in 2006 are included. There is also a table related with the monetary expenditure per expenditure group.

B.2 EXPENDITURE AND AVERAGE EXPENSES VARIATION RATES ACCORDING TO DIFFERENT CLASSIFICATION VARIABLES.

Size of municipality of residence Population density Sex and age of the main breadwinner Educational level of the main breadwinner Economic activity situation of the main breadwinner Professional status of the main breadwinner Occupation of the main breadwinner Nationality of the main breadwinner Country of birth of the main breadwinner (since 2012) Country of birth of the main breadwinner's parents (since 2012) Household composition Type of household Main income source of household Monetary income level of household

B.3 EXPENDITURE AND AVERAGE EXPENSES VARIATION RATES PER AUTONOMOUS COMMUNITY

A 3-digit breakdown of COICOP is reached.

- C. EXPENDITURE VARIATION RATES REGARDING THE YEAR BASE (2006)
- C.1 EXPENDITURE AND AVERAGE EXPENSES VARIATION RATES ACCORDING TO DIFFERENT FUNCTIONAL BREAKDOWN LEVELS

A 4-digit breakdown of COICOP is reached. Expenditure variation rates at constant prices and current prices in 2006 are included. There is also a table related with the monetary expenditure per expenditure group.

C.2 EXPENDITURE AND AVERAGE EXPENSES VARIATION RATES ACCORDING TO DIFFERENT CLASSIFICATION VARIABLES

Size of municipality of residence Population density Sex and age of the main breadwinner Nationality of the main breadwinner Educational level of the main breadwinner Economic activity situation of the main breadwinner Professional status of the main breadwinner Occupation of the main breadwinner Household composition Type of household Main income source of household Monetary income level of household

C.3 EXPENDITURE AND AVERAGE EXPENSES VARIATION RATES PER AUTONOMOUS COMMUNITY

A 3-digit breakdown of COICOP is reached.

D. PHYSICAL AMOUNTS

Total and average quantities of consumed food, drinks, tobacco, fuels and other sources of energy.

Total expenditure and unit price of food, drinks, tobacco, fuels and other sources of energy.

#### TOTAL EXPENDITURE SAMPLING ERRORS OF THE MAIN TABLES E.

Variation coefficients per expenditure groups. Variation coefficients per expenditure subgroups (3 digits). Variation coefficients per expenditure subgroups (4 digits). Variation coefficients per expenditure subgroups (5 digits). Variation coefficients according to Autonomous Community of residence. Variation coefficients according to Autonomous Community of residence and expenditure groups.(2 digits) Variation coefficients according to Autonomous Community of residence and expenditure subgroups.(3 digits) Variation coefficients according to size of municipality of residence. Variation coefficients according to population density. Variation coefficients according to sex and age of the main breadwinner. Variation coefficients according to educational level of the main breadwinner Variation coefficients according to the economic activity situation of the main breadwinner. Variation coefficients according to professional status of the main breadwinner. Variation coefficients according to occupation of the main breadwinner. Variation coefficients according to household composition. Variation coefficients according to type of household. Variation coefficients according to main income source of household. Variation coefficients according to level of regular net monthly income of the household. Variation coefficients according to nationality of the main breadwinner.

Variation coefficients according to country of birth of the main breadwinner (since 2011).

Variation coefficients according to country of birth of the main breadwinner's parents (since 2011).

F. DISTRIBUTION OF HOUSEHOLDS AND PERSONS ACCORDING TO DIFFERENT **CLASSIFICATION VARIABLES:** 

Size of municipality of residence Population density Sex and age of the main breadwinner Educational level of the main breadwinner Economic activity situation of the main breadwinner Professional status of the main breadwinner Occupation of the main breadwinner Nationality of the main breadwinner Country of birth of the main breadwinner (since 2011) Country of birth of the main breadwinner's parents (since 2011) Household composition Type of household Main income source of household Monetary income level of household Autonomous Community of residence

#### **15.2 MICRODATA FILES**

INE thorough its website provides the users with anonymous microdata files so the user can analyse aspects regarding living conditions of the households of interest.

Along with the variables collected directly in the questionnaires, the files have derivative variables built from the latter, which will contribute to enrich file usage. Furthermore, each register has the necessary elevation factors for the calculation of population estimates like the ones that appear in the tabulation plan. Its content is described in detail in the manual that it comes with.

# Attachment. Fees and taxes

# Fees and taxes

A set of fees and taxes that are part of the final household consumption are related next, differing them from those that are not consumption.

### The following are considered consumption:

Waste collection tax Sewage tax Radio and television licences Firearm licence (not hunting) Driving and pilot licence Examination fees to obtain driving licence Issue of duplicates Payment for licence validation Purchase of Parking Organisation and Regulation card, Resident parking card or payment in parking meters. Payment for street repairs Payment for cemeteries and funeral services Identification card issue fees Identification card duplicate fees Passport issue fees Title issue fee Payment for certified copies Death and marriage certificates **Birth certificates** Court fees

# The following are not considered consumption:

Real Estate tax (production tax) Vehicle registration certificate Hunting and fishing licences Payment to recover the motor vehicle taken by the tow truck Vehicle registration tax City council building works licence. Payment to the city council for cleaning facades, street lighting, boardwalks and platforms Restricted driveway licence