

DIFFICULTIES IN THE IMPLEMENTATION OF HOUSEHOLD  
PANEL STUDIES: THE CASE OF SPAIN

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In Spain, the implementation of household panels faces a number of both technical and methodological difficulties that in our opinion do not occur or at least are less frequent in the Northern and Central European countries. We are particularly referring to some lack of experience in the implementation of these techniques, whose practice is still quite new, but above all to the persistent problems in the Spanish statistical system, not able yet to reliably supply an information as basic as, for instance the total population or the number of unemployed, let alone other data such as the household income, the black economy,... which nowadays it still seems very far from providing with a minimum level of realibility.

1. Little experience in Household Panels

In Spain, it can be stated that prior to 1992 no household panel had been carried out. It was precisely in that year when a private institution (the "Gabinet d'Estudis Socials") applied the first panel survey to a representative household sample of a Spanish region (Galicia). Nevertheless, it must be said that that panel had been designed with practically an only aim: to study the poverty in that region. Besides, it was not a panel meant to run many years or "for ever": in fact, in 1993 its second and last wave was undertaken. The outcomes were published in Galician in 1995.

The second example of an early household panel was that carried out by the main Spanish Statistical Agency, the "Instituto Nacional de Estadística" (INE).

On October 1994, this organisation set in motion the first household panel on a representative sample consisting of 8.000 households on national scale. That panel was implemented in the framework of an European Union project trying to obtain homogeneous data and information from the families and the individuals in the EU countries and was planned to comprise three waves (1994/1996). With regard to Spain, it is to be said that there has been no information about its progress and outcomes yet.

## 2. The data problems

In order to carry out household panels or any other studies laying upon data obtained from representative household and/or population samples in a given territory, it is obviously basic to have reliable recent complete population statistics. This is the only way to be able to draw up the samples and later on to contrast them with the above mentioned reference statistics and proceeding to make the necessary arrangements to obtain quality data.

However, in general terms it should be said that population statistics in Spain are rather scarce, that they are very sparsely published and that their reliability is at the very least arguable. Amongst them it is worth mentioning the population censuses, which are carried out every five years. In those years whose last number is a 1, they are under the responsibility of the "Instituto Nacional de Estadística", while in those years whose last number is a 6, the municipalities are those to collect all the information related to population.

Once the data obtained they are transferred to the INE for their exploitation and publication on a national

scale. One of the most serious problems concerning this source of information is the fact that the data are published with a lot of delay: even the most basic information may be delayed two or three years. It has sometimes happened that a new census was about to start when some data from the previous one were not exploited yet.

Another of the problems, as it has already been commented, is the level of data reliability. A number of population studies have shown important mistakes in those data. An example of this could be the population of the province of Orense (North-West of Spain), which the 1986 census showed to be 400.000 inhabitants and the 1991 one 350.000, while during those five years the migratory balance had been almost zero and the natural increase in population negative but not to such an extent. It is known that many municipalities have their censuses inflated so as to continue receiving certain subsidies from the State (in Spain the municipalities are subsidized according to their number of inhabitants).

Another of the important Spanish statistical sources, the Active Population Survey (EPA), also under the INE's responsibility, has problems as well. According to this source, the Catalan active population in 1991 was 2.512.000 individuals while according to the same year's census it was 2.630.000 individuals. If the EPA data concerning the Spanish active population (12 million of individuals) are compared with those obtained from other sources the differences exceed 1 milion individuals.

Taking into account all these facts, that is, the delay in the publication of the censuses data and also

the mistakes detected in the most important statistical sources, it is easy to realize the difficulties encountered when trying to obtain a quality household sample.

It has also to be emphasized that in Spain, in contrast with most of the EU countries, there is not any regular survey on the population income. The lack of such an important statistical source makes it impossible to compare the sample used with that in the poverty panel.

### 3. The black economy and other problems

In Spain, the black economy also represents a difficulty when trying to implement a poverty panel. Although there is no fully reliable information about the extent and the importance of this phenomenon, some research studies have pointed out that the black economy might represent between 10% and 15% of the Gross Domestic Product. The poverty study carried out by the "Gabinet d'Estudis Socials" in 1989 within the framework of the II European Programme to Combat Poverty on a sample of 3.000 households showed that 12% of the Catalan households interviewed somewhat resorted to black economy.

It is clear that black economy represents a disturbing element when contrasting the social and economic situations in the sample with the official statistics and/or the macroeconomic indicators of National Accounting Needs. In addition to this, families that to some extent depend on black economy are often afraid of answering questions about their source of income and even when they do, they do not probably tell all the truth.

The fact of black economy forces a specific design of the questionnaire and a careful training of the interviewers so as to obtain reliable information of this phenomenon. Although in the research studies on poverty in Catalonia and Galicia (1992/1993), black economy was taken into account both when drawing up the questionnaire and when training the interviewers, it is very difficult to assess the truthfulness of the data obtained, since there are not any other independent sources with which to compare them.

Another fact somewhat related with black economy is the income concealment and the tax fraud done by a number of self-employed and employers. In the last years, for instance, the average income declared by both those professionals has been paradoxically under that of the salaried population. It seems obvious that when asked about their incomes the figures they give are under the real ones.

#### 4. Farming activities as a problem to measure income

Another important problem in the implementation of poverty panels in Spain concerns the population whose main activity lays in the agricultural sector. Farming activities, which in Spain employ 10% of the working population, are very unequally distributed in the different regions. In the case of Galicia, for instance, more than 20% of the employed people are farm workers. In most cases they are small family farms that produce very little money as most of their output is destined to home consumption.

An economic assessment of both this production and home consumption, as well as of the time spent in this kind of activity, is not easy. First of all, most of the heads of the household or the individuals with small farms of their own do not know how to calculate their net income. In general, farmers know quite well the gross income they obtain from selling their products, but are less aware of labour costs, let alone the value to assign to home consumption. Besides, in contrast with salaried workers, farmers do not receive monthly wages. In agriculture, besides, both the income that results from the production sold in markets and what is home consumed depend on the kind of the products, which experience a lot seasonal differences .

This fact complicates even more the design of the questionnaire to apply to this type of activities. In the case of the poverty panel that the GES carried out in Galicia in 1992/1993, it was necessary to apply a specific questionnaire for the households or individuals employed in their own farms. In this questionnaire, farm owners were asked about the kind and the yearly amounts of the products they grew, their monetary value and the part of the production devoted to home consumption. They were also questioned about the total annual farm expenditures -purchase of seeds and medicines for the livestock, veterinary expenses, wages, amortizations, machinery repairs, etc.-. In order to calculate their net incomes, all those amounts had to be deducted from the sum of the sales value plus home consumption.

Even so, the experience in the application of such a questionnaire to the farm population in Galicia showed that the information obtained through this methodology is of lower quality than in the case of other populations. In addition to the tiredness that the

people interviewed experienced as a result of an unavoidably long questionnaire, often they did not accurately remember their sales incomes or their consumptions throughout a whole year. That explains why the outputs tend to be approximate.

In order to reduce these difficulties, it would be necessary to be able to interview these self-employed populations more than once per year. This was not the case of this sample, which was monitored only once by year, that is, with the same periodicity than in the case of not farm populations. Intervals of 3 months (4 times a year) would perhaps be sufficient to get more reliable data with regard to farmers income.