Official statistics for measuring well-being at national and regional level in EU: some comments from users

Abstract

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Introduction

Measuring well-being is by no means an easy task. Well-being is a multidimensional concept including many different areas of human life, behaviour and perception. Any consistent analysis of this concept should include a number of variables, most of them non-monetary, and some of them of a subjective character. Reliable information on these variables at micro data level is necessary in order to measure the degree of well-being and to monitor the results of the policies implemented for its improvement...

The Survey on Income and Living Conditions has been designed as an instrument for the measure of well-being, and is in fact one of the most effective sources for this purpose. The fact that it is harmonised all over the EU is a great advantage, and makes it the optimal instrument for comparisons among EU countries. But it also has some drawbacks. For the analysis of well-being within one particular country, other alternative sources of information can eventually be an interesting choice.

During the last years, there has been a significant growth in the number of new statistics that can be used for monitoring the effects of welfare policies. But non response problems are also increasing in most EU countries. As a consequence, the tendency in new surveys is to reduce the length of the questionnaires. On the other hand, alternative sources of information, based on registers, are increasingly been considered.

In this paper we intend to review and to compare the sources of information available for the measure of well-being in the EU, according to our experience as researchers. Comparisons will be mostly centred on three aspects: a) the characteristics of the statistical source (coverage, periodicity, dissemination practices, possible use in longitudinal analysis), b) the coverage of the variables that are considered as indicators of well-being, as well as the adequacy of their definitions and ranks and c) the quality of the information, basically analysed in terms of the sample size, the rate of non-response and the effects of the imputation techniques.

Special attention will be given to the ability of the different sources to produce information at regional level.

The concept of well-being

Well-being is a broad concept, currently applied to a variety of different situations and purposes, but that is not always clearly and uniquely defined. It has been, during the last years, the subject of frequent discussions, and extensive literature has been published with the goal of purpose of seeking some clarification on the notions underlying it and of identifying its basic components.

There seems to be a general agreement in that well-being is something experienced by individuals, but within a particular social and cultural context that varies from one individual to another. As Manderson (2005) asserts “well-being is not the state of individual bodies, but of bodies in society”. The analysis of individual well-being within the framework of the increasing cultural and social diversity that identifies a typical feature of current societies is connected with a broad spectrum of scientific fields, such as economics, sociology, psychology, anthropology or political science.

Two different approaches have been followed in the definition of the concept of well-being. One of them is the so-called hedonic approach. According to it, well-being would derive from the satisfaction of individual desires or preferences, and is associated with subjective happiness and the experience of pleasure. A second approach connects well-being with the location and functioning of individuals in society, that is to say, with the engagement of individuals in certain activities in which they choose to get involved, according with their values and preferences, and with the availability of the necessary material and social resources to carry out these activities. The traditional approach introduced by Sen (1993), of capabilities being effectively employed in the achievement of well-being, fits well within this second group of interpretations.

A system of indicators is the appropriate tool when it comes to measuring well-being. The hedonic approach implies the use of subjective measures, while other definitions of the concept will lead to the conclusion that objective indicators will more adequately represent the actual fulfilment, (or alternatively, the capability of fulfilling) the preferred individual and social activities.

As well-being results from the connection of individuals to their social context taken in a broad sense, a considerable number of objective indicators appear as potentially good descriptors of the concept. Among them, economic indicators are obviously a first choice. When it comes to generic indicators of the well-being of a social group, per capita GDP, per capita income, inflation rates and inequality and income distribution are frequently considered. If individual well-being is to be analysed, wealth, disposable income and consumption are the usual options. This brings researchers to shift, to a certain extent, the observation unit from individuals to households.

But the successful relation with the social environment that is at the core of well-being entails the consideration of a number of aspects not necessarily connected with monetary indicators. For this reason, well-being has been defined as a multidimensional concept, to be measured with the help of a wide number of indicators.

The complete list of indicators that should be considered for the measurement of individual well-being is still a matter of discussion, new suggestions coming up regularly in the scientific literature. Still, there seems to be a consensus on a core of basic indicators, which could be clustered into four groups

a) Monetary access to goods and services: wealth, disposable income, consumption.
b) Basic life conditions: education, labour status and working conditions, household and living conditions, health, mobility, environment and sustainability.
c) Social life conditions: leisure, friends, neighbours, cultural and sport life, social and political participation and contribution, victimisation rate.
d) Subjective perceptions on the physical, economic and social aspects of well-being.

Main statistical sources available

The wide range of topics that are included in the concept of well-being can hardly be expected to be covered by a single source. Still, this concept being considered of growing relevance, an increasing number of sources are being implemented that can contribute to provide the right indicators. The most important of these sources come from surveys, although administrative data are increasingly being used.

The availability of statistical data dealing with well-.being has increased considerably in the E.U. –and consequently, in Spain- during the last decades, partly due to an improvement of the statistical systems and partly due to the rising concern on this topic all over the world. This has significantly stimulated the implementation of social studies and surveys on living conditions: among them, the new Survey on Income and Living Conditions, SILC. This survey can be considered as a basic reference, but by no means as the only possible source.

As concerns Spain, information on individual well-being can be obtained from a number of sources, most of them coming from surveys, but some others based on administrative data. As we shall see, for the time being the weight of the information is very much centred in the first group, although an increasing use of data from administrative sources can be foreseen in the near future.

Three main surveys can be mentioned in relation with well-being, the Household Budget Survey, the Survey of Income and Living Conditions and the Household Financial Survey. This last one is of recent implementation and has a comparatively short story, while the other two have been designed on the basis of previous statistical operations, more or less similar.

Household Budget Surveys, produced by the Statistical Office, INE, have a long story in Spain, extending already for more than forty years. Still, the first one for which data can be obtained in electronic support comes from 1973. Other Household Budget surveys were implemented in 1980 and 1990. Although they were carried out in order to update the basket for the CPI, so that expenditure was the key variable, they also included information on income, education, household equipment, and the last of them, a very complete module on subjective information. Sample size approached the 30.000 households in all of them, so that information could be provided at regional level.

In 1997 a continuous Household Budget Survey was started, providing quarterly information on the basis of a rotation panel of roughly 8000 households, each of them remaining in the sample for eight quarters, -as one eight of the sample was rotated every quarter-. Yearly added data have been calculated and published by INE from 1998 to 2005, and they did contain just enough amount of information to allow for regional analysis. As compared with the 1990 HBS, the questionnaire of this panel, and in particular, the subjective module, has been considerably reduced.

In 2007 a new Household Budget Survey has been introduced, providing only yearly information but on a sample of around 24.000 households, each of them remaining in the sample for two years – that is, half of the sample is rotated every year-. Although it still provides good information on education and household equipment, the questionnaire has been considerably simplified, particularly in relation to information on income, and subjective issues. Still, specific modules on different topics are going to be added every year, and this could contribute, although only partially, to complete the information lost by the reduction of the questionnaire.

The current Survey on Income and Living Conditions (SILC), run by EUROSTAT with the cooperation of the statistical offices of the countries, has a most interesting precedent in the European Community Household Panel (ECHP). This yearly statistical operation, collected in Spain on a survey of slightly more than 7.000 households, -although this size was practically duplicated for year 2000- was a very interesting attempt to provide a comparable basis allowing for the analysis of poverty and living conditions in EU.

The questionnaire of ECHP was very extensive and complete, with individual, as well as household information. It included a number of questions aiming towards the calculation of physical indicators of poverty. Another group pf questions would allow for the estimation of the use of non-monetary social benefits by each household. The fact that the same households remained in the sample year after year, and that their members were followed to their new households when such change had taken place, made this survey the optimal instrument for measuring long term poverty, while giving rise, in the other hand, to high rates of attrition. In Spain, yearly data for ECPH are available from 1994 to 2001.

The SILC is probably the better harmonized statistical operation run by EUROSTAT in cooperation with the countries. The sample is collected annually on the basis of a rotation panel, with a quarter of the sample rotating every year. Data from the first three waves, 2004, 2005 and 2006 are already available in Spain, with sample sizes of 15.355, 12.996 and 12.205 households respectively, big enough for regional analysis. The questionnaire is prepared to provide ample information on individuals and households, and contains a number of significant subjective questions. Still, some interesting modules contained in ECPH have not been included in SILC.

The Household Financial Survey is the first intent to estimate the wealth of households in Spain. This statistical operation is conducted by the Central Bank of Spain. The survey provides interesting information on household income, real state, financial assets and debts, which allows for an estimation of the effect that a change in interest rates will have in the financial position of households. It has been conducted in 2002 and 2005, unfortunately on a limited sample of around 5.000 households, too small to provide good estimation at regional level..

Something should be added for a good understanding of the modifications in the surveys that have been described. During this long period, a great change has taken place in the Spanish economy, which is no longer an agriculture-oriented economy, but is based mainly in the services sector. The changes in society have also been dramatic, one of its main features being the massive incorporation of women to the labour market. All these changes are having a strong negative incidence in the rates of response to surveys, particularly to the longest and more complex ones. The result is that the trend of the Spanish Statistical Office has moved towards a simplification of the questionnaires. A higher use of administrative data for complementing the information from surveys can be foreseen in the very near future.

For the time being, the use of administrative data for the analysis of well-being is very limited in Spain, the reason being not so much the lack of highly informative registers, but the difficulties of the researchers in getting access to them.

Remarkable exceptions are the anonymised Survey and Panel on Income Tax Records designed expressly by the Research Centre for Fiscal Studies- an organisation reporting to the Ministry of Economy and Finance- for general use of researchers. The survey, collected on a sample of about one million units (tax payers) and carefully selected on a double stratification device taking into account both geographic location and income levels, is highly representative for most of the Spanish territory, namely for seventeen out of the nineteen Spanish regions. Unfortunately, it does not cover the two regions that have an autonomous fiscal system, different from the rest: the Basque Country and Navarra.

This statistical operation provides the researchers with all the information contained in the income tax declarations: very detailed information on income, classified by different sources, economic activities, and wealth gains and losses. Microdata are available for 2002, 2003 and 2004. A panel following about 300.000 declarations from 1999 to 2004 and collecting the same information is also available on demand. This information is completed by a sample on the units that are under no obligation to fill the income tax form because their income is below the established threshold.

In addition to that, it has to be said that a number of the statistical units in the ministries are producing information on their specific branch that could very valuable for the analysis of well-being. Such is the case, for example, of the Ministry of Education. But this information is meant for internal studies within the unit, and is available to the general public only in aggregated format.

Possibilities and limitations of the available sources

Although SILC is an instrument specifically designed for the analysis of well-being, and possibly the best to this end, it has also a number of drawbacks, to the point that some other sources could eventually be better suited for some particular purposes. In any case, a comparative study of the described sources could come up useful for the design of future statistical operations.

The choice of the source will obviously depend on the established goals or priorities, as these priorities will determine the preferences and the selection criteria. For comparison among sources, five possible criteria are been considered here:

a) the choice of the main monetary variable
b) the feasibility of comparisons and analysis at regional level
c) the suitability of data for longitudinal studies
d) the coverage of the main indicators usually linked to the concept of well-being, and
e) the quality of the data obtained

The choice of the main monetary variable has been a subject of discussion for many years. It is generally accepted that, as far as money availability can contribute to increase well-being, the economic concept of permanent income is a good indicator of this availability. But there is no agreement on whether disposable income is a good proxy for permanent income, or whether this concept is better approached by information on expenditure,-even considering that expenditure is very much related to the life-cycle-. And this is a crucial point in comparison among sources, as each of the sources considered provides reasonably good information on one of the variables, but rather poor on the other.

If expenditure is the preferred variable, the Household Budget Survey is a very good option, as the main objective of this survey is to collect good and detailed information on this variable. But if the chosen indicator is income the Household Budget Survey is not a good choice. The first HBS conducted in Spain contained very specific questions on income, -although the results always showed a clear underestimation of this variable- .But the trend towards a more simplified and easy questionnaire has lead to a progressive reduction of the accuracy in this information. In the current HBS, informers can choose either to indicate a figure for the household income or to fix the corresponding income bracket.. About 80% of the households have favoured the second choice, and then their income is imputed, within the boundaries of the bracket, on the basis of their reported expenditures.

SILC will be preferred in this case, although not without some misgivings. The rate of non response for individual questionnaires data has been very high in Spain, particularly for the first wave. As disposable income of the household is estimated by adding the information of the individual questionnaires, a high rate of imputations has taken place. Still, this problem has been significantly reduced in the following waves. In the sample collected in 2004 one individual questionnaire was missing in 15,38% of the observation units, two were missing in the 6,52% of them, and three in the 3,82%. Also, this percentage was very unevenly distributed among the regions, the proportion of units with one individual questionnaire missing ranking from 31,81% in Madrid to 1,94% in Navarra. National percentages of units with one, two and three individual questionnaires missing were reduced to 2,30 %, 1,06% and 0,64% respectively in 2005 and to 2,43%, 0,87 % and 0,52% in 2006.

Wealth is, to a certain extent, associated with permanent income. Households being in possession of some wealth will normally find possible to sell some of it in difficult times in order to keep to their usual living standards. From this point of view, the Household Financial Survey could be a good choice, as it provides reasonably good information on income and on wealth. Unfortunately, this survey has two significant drawbacks: a) it contains very little information on the social characteristics of households and individuals and b) the small size of the sample does not allow for estimations at regional level.

If regional comparisons all over the EU are the main objective SILC is a good option, because it is one of the best harmonised statistical operations within EU, and the sample size is big enough to produce stable estimators at regional level. The questionnaire, however, is not as complete and extensive as was the questionnaire of the former ECHP. A number of interesting subjective indicators can be calculated from SILC, but the possibility to get physical indicators of deprivation has been reduced. Also, the use that each household effectively makes of some public services (medical services), and consequently, the imputed rent associated with these indirect non-monetary subsidies and the incidence of it in the household economy and well-being is now more difficult to estimate with SILC..

Also the new Household Budget Survey is rather more limited than the previous HBS as far as the coverage of the variables connected with well-being is concerned. The questionnaire of the HBS conducted in 1990 contained a very rich module on subjective indicators that allowed for detailed analysis on perceptions of poverty and for comparisons with objective measures. This module was substantially reduced in the continuous HBS run from 1998 to 2005, and has disappeared in the current HBS.

For the analysis of long-term deprivation, SILC can be foreseen as an excellent instrument when several waves have been published, (and so was the ECHP), much more suitable for this kind of studies than the Household Budget Survey, which only allows the following of households for two years.

Some conclusions

A few conclusions for discussion are included by way of summary.

There is no such think as the optimal source for the analysis of well-being, each of the available statistical operations having advantages and disadvantages. Different approaches will favour different sources, and the final choice will depend very much on the ultimate goals of the study. Still, the panels implemented by EUROSTAT are the best choice in most of the cases. For one thing, they are harmonized for all EU countries, so that they are particularly suitable for international comparisons within EU. On the other hand, they are the only instrument to analyse long-term poverty persistence.

It is most important in panel studies to guarantee a good quality from the very first wave. But the experience of Spain shows that a new survey needs some time and running to stabilize good results. In any case, the transparency policy that is currently followed by INE, the Statistical Office of Spain, and that includes open dissemination of the imputation rates on demand, has been of great help to researchers, because it allows them to evaluate the real significance of variables and account for results that would be difficult to explain otherwise.

The concept of well-being is an extensive one, and consequently associated with a considerable number of indicators, all of which cannot be included in a unique statistical operation. On the other hand, increasing rates of non-response to surveys are detected now in most European countries. A reduction of the load on the informers is advisable, and simplification of the questionnaires is now the general trend. Consequently, information from different sources will have to be increasingly used, and further development of matching methods will be extremely useful in this field

Statistical information coming from administrative registers is now of growing relevance for studies on well-being. In the countries with a decentralised statistical system, most of this information is collected and produced by government units that do not report to the Statistical Office. It would be advisable that these statistical units share the dissemination and transparency policies that are now the usual practice in statistical offices.

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