



**A REVIEW OF THE LITERATURE ON
SUBJECTIVE POVERTY IN EUROPE: A
FOCUS ON DATA SOURCES**

Elisabetta Santarelli

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ABSTRACT

The debate on the measurement of income, poverty and social exclusion in Europe has increased significantly in recent years. Poverty is a complex and multidimensional phenomenon and, according to the definition used, various measures to assess poverty are calculated and different poverty sizes are obtained.

The aim of this work is to make a review of the literature on the most used approaches to measure poverty, with a special focus on the subjective perception of poverty. Then, a set of comparable data sources suitable for self-perceived poverty analysis at EU level are illustrated with some reflections on their potentials and pitfalls.

Classification JEL: D31, I32

Keywords: *subjective poverty, household and individual surveys, socioeconomic data sources.*

1. INTRODUCTION

The debate on the measurement of income, poverty and social exclusion has increased significantly in recent years, as these subjects have risen up the political agenda with the introduction of the social chapter into the Amsterdam Treaty in 1997 (articles 136 and 137). Then, the European Council of Lisbon in 2000 placed social policies at the centre of the EU strategy to make Europe the most competitive and dynamic knowledge-based economy in the world. As a consequence, a social policy agenda has been developed to prevent and eradicate poverty and exclusion (Eurostat, 2002). In 2000 common objectives were adopted in the fight against social exclusion and poverty to facilitate extended participation in employment and access to resources, rights, goods and services, to prevent the risk of exclusion, to help the most vulnerable (Eurostat, 2002). Reliable, timely and comparable indicators are needed to better understand the mechanisms underlying poverty risks and, then, implement effective policies.

The measurement of income poverty is well established in the EU since 2001, when the European Commission and Member States adopted the first indicators in this field: *the at-risk-of-poverty rate* as well as the *median at-risk-of poverty gap*, the *persistent*

¹ PhD in Demography. esantarelli@inwind.it

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at-risk-of-poverty rate and the *at-risk-of-poverty rate* anchored at a point in time. In each country the indicator of at-risk-of poverty rate is calculated with a threshold set at 60% of the national household equivalised median income. An individual is considered income poor (or at risk of poverty) if the equivalised income of his/her household is below this threshold (Fusco et al., 2010).

Some poverty indicators can be computed on a cross-sectional basis, others on a longitudinal basis. For instance, the share of poor people in a given time can be computed with cross-sectional data, while the persistence in poverty can be evaluated over time in a dynamic perspective. In this respect, results of past empirical studies show that the risk of poverty over a time period affects a larger proportion of the population than the cross-sectional measure would suggest (Fusco et al., 2010). This calls for a large availability of longitudinal cross-country data that allow to evaluate the risk of entering or exiting from the state of poor and the persistence of poverty both at individual and household level. The collection of data for robust cross-country comparisons, possibly in a longitudinal perspective, is a major challenge for the European Statistical System.

The aim of this work is to make a review of the literature on the most used approaches to measure poverty, with a special focus on the subjective perception of poverty². Then, a set of data sources suitable for subjective poverty analysis at EU level will be reviewed with considerations on their potentials and pitfalls.

The work is organized as follows: in the next section we make a review of the main approaches used in the evaluation of poverty. In section 3 we give the definition of subjective poverty and present some of the most common measures used in the literature to assess it. In section 4 we describe features of the most suitable data sources currently available in Europe to analyze subjective poverty at micro level, discussing their potentials and drawbacks. Section 5 provide some reflections on future research prospects.

2. DIFFERENT APPROACHES TO STUDY POVERTY

In advancing towards the eradication of poverty among the world population, achieving a better definition of the concept and devising an internationally comparable approach for its measurement are very important elements (Townsend 1979 and 1988). Poverty is a complex and multidimensional phenomenon. According to the definition used, different measures to assess poverty are calculated and different perspectives of poverty size and evolution are obtained (Boarini and Mira d'Ercole, 2006).

The *income or monetary approach* takes into account the money needed to acquire the goods and services that satisfy given standards of living (that could be absolute or relative to the society where individuals live) (Rowntree, 2000; Rio Group, 2006). However, dividing the population into a simple dichotomy of "poor" and "non-poor" is clearly an oversimplification, because it seems more realistic that households

² In this work the terms *subjective poverty* and *self-perceived poverty* are synonymous and are used interchangeably.



experience degrees of poverty. Income measures do not take into account individuals' ability to borrow, to draw from accumulated savings and to benefit from help provided by family members or friends, as well as consumption of public services such as education, health and housing. Furthermore, income measures are subject to unreliable recall, they could be out of date and equivalence scales are contestable (Ebert, 2010). Hence, together with monetary measures, non monetary indicators are used to assess the different dimensions of poverty (Boarini and Mira d'Ercole, 2006). On the one hand, income and access to employment, public services, etc., constitute input means used to reach a given standard of living; on the other hand, the *non monetary approach* focuses on outcomes that represent the final conditions of individuals, rather than the means required to achieve those conditions. Outcomes are usually defined in terms of wellbeing or living standard (Townsend, 1979).

Among the approach used to measure poverty there have been measuring income (or the cost of buying a baskets of essential items) and then comparing it with a budget standard that allows people to meet the *absolute thresholds* of satisfying certain basic needs (Bradshaw and Finch, 2003; Rio Group, 2006). This approach is usually practised in developing countries and it is based on a food basket that provides proper nutrition³.

However, basic needs could change in different societies, so that the concept of *relative poverty* was introduced in particular by Townsend (1979), according to whom an individual is poor when he/she lacks the resources to obtain the living conditions which are encouraged and approved in the societies where he/she lives.

Another approach to study poverty distinguishes between a *static* and a *dynamic* perspective to analyze the phenomenon. Research in both developed and developing countries has found substantial movement of individuals and households into and out of poverty. For instance, families may move into or out of poverty for demographic reasons, as their ratio of economically active members to dependent members changes over time (Tsakoglou and Papadopoulos, 2002). Furthermore, poverty is transmitted from one generation to the next in a family, through education or other opportunities for children (Jenkins and Siedler, 2007). A longitudinal perspective allows to take into account these dynamics over time (McNicoll, 1997).

A different approach makes the distinction between the perspectives through which poverty is measured: objective or subjective. On the one hand, the *objective approach* evaluates poverty using quantitative objective measures, like income or expenditure. On the other hand, the *subjective approach* focuses on people perception of their standard of living. It should be noted that among economists the objective approach has been dominating for a long time (see, e.g., Nolan and Whelan, 1996, Whelan et al., 2001), while relatively little use has been made of subjective measures in official or academic research. Only in the last decade the subjective approach has been enriched by many theoretical and empirical contributes (e.g. van Praag et al., 2003,

³ An absolute poverty line that has been used extensively by the World Bank to measure poverty at the world level is the "one dollar a day" poverty line. In fact, the first Millennium Development Goal, concerned with the eradication of extreme poverty, was formulated as "halve between 1990 and 2015 the proportion of people whose income is less than \$1 a day".



Bradshaw and Finch, 2003; Pradhan and Ravallion, 2000). Considering the individual perception allows taking into account the consideration of the living context, because people evaluate the resources necessary to satisfy their needs in comparison with the general standard. However, the subjective approach could have disadvantages. Firstly, it cannot be excluded that psychological phenomena or measurement issues introduce bias in the measure of poverty: for instance, people may not want to admit not being able to afford buying certain items (Guio, 2005). Furthermore, subjective questions can be culturally influenced and require caution in international comparisons. However, dropping subjective items might lead to a measure disconnected with the reality as lived and perceived by people. For instance, methods based on current income are affected by transitory and rapid changes that potentially affect a large number of individuals. This is not the case of subjective evaluations that take into account both income and material component of the economic status. However, measures based on subjective evaluations only may fail to identify poor and not poor, because they are not able to distinguish between financial strain on the one hand and personal choices and life style on the other.

Empirical evidence shows that there is not perfect correspondence between objective and subjective measures of living conditions. This consideration is important in terms of policies, especially in periods of economic turbulence, because social interventions cannot have the desired effect on people's subjective wellbeing even if they are successful from the point of view of objective indicators (Hayo and Seifert, 2003).

Different definitions usually give different measures of poverty. It is usually found that the share of poor households increases if one moves from estimates based on absolute measures to those based on relative ones and, finally, to those based on individual perception (Santini, 2011). It has also been shown that people can be "affected" by different types of poverty and in such a situation they experience a harsher degree of poverty than those poor of only one measure. For instance, individuals who have recently retired can be income poor, but not materially deprived, because they still have the assets acquired in better times (Bradshaw and Finch, 2003).

Different approaches are used in different contexts. For instance, in developed countries computing an absolute poverty line is almost a nonsense, while this is important in less developed countries.

While each of the described approach has advantages and shortfalls, they complement each other. Since poverty is a multidimensional concept, the use of different approaches allows to take into account its various aspects. Many empirical studies stress the importance of the integration of different social indicators on poverty (Bohnke and Delhey, 1999). As argued by Sen (1985), an integrated approach to measure poverty should account for its causes and consequences, with a focus on individuals' command over resources (*capabilities*) and the resulting outcomes (*functionings*). Such a comprehensive approach provides a framework to investigate the link among different dimensions of poverty. Sen's approach can be seen as an open track to the multidimensional analysis of poverty which is based on the consideration that individual wellbeing depends not only on income, but also on health,



education, housing conditions and material goods among others (Sen, 1985). The described approaches should be used in an integrated way to capture the complexity and the multidimensionality of the concept of poverty. As a matter of fact each of them can identify different groups of poor people within a population and, then, suggests different poverty reduction policies (Sen, 1985).

This paper takes a narrower perspective to the measurements of poverty than the one outlined above. It focuses on the subjective definition of poverty measured by individual self-perception. We do not pretend to focus on a better approach than others: rather, we stress the need to integrate information from all to have a clear understanding of the phenomenon.

3. DEFINITION AND MEASUREMENT OF SUBJECTIVE POVERTY

The issue of subjective poverty is part of a larger field of analysis on the subjective perception of well-being. According to a certain stream of literature, the subjective evaluation of the economic situation is obtained by asking households or individuals how they evaluate their own income or material conditions (Rio Group, 2006).

As a subjective welfare measure van de Praag (1968) introduced and elaborated the *individual welfare function of income* that describes the welfare consideration of individual income using qualitative evaluations (good, sufficient, bad, etc.). This approach is based on the assumption that individuals giving the same answer have a similar level of satisfaction.

A different measure of the self-perceived economic status is obtained by asking people the *minimum income to make ends meet* (see, e.g., Pradhan and Ravallion 2000; Kaypten et al., 1988). It is obvious that, when giving such evaluation, people are conditioned by intervening variables such as age, sex, household size, education, beside individual preferences and tastes (Cracolici et al., 2011). This approach was used in the Breadline Britain study, carried out in the UK in 1983 and 1990, when people were asked about their idea of what a minimum standard of living should be, which items were necessary and which could be done without (Bohnke and Delhey, 1999).

An approach close to that of the minimum income question is that of the Italian National Statistical Institute in its survey on consumers' confidence. According to this definition, an individual is subjectively poor if s/he has an income inferior to the income that s/he perceives as appropriate to live without luxury, but without giving up the necessary (Isae, 2009).

Asking people about their evaluation of the minimum income can provoke bias. In fact, what is stated to be the minimally required could reflect individual social background, objective income status, tastes and ideals (Goedhart et al., 1997; Tentschert et al., 2000). This implies that no standard behavior can be imposed over individuals and this is one of the arguments against the use of income as an objective poverty measure, because its amount reflects individual tastes of leisure versus income. Past empirical studies showed that the self-perceived evaluation of income tends to be an increasing function of income and it depends on the concept of income



that respondents have in mind, their social class, aspirations and perceptions of the costs of life (Pradhan and Ravallion 2000; Isae, 2009).

To overcome these problems Pradhan and Ravallion (2000) proposed a model based on *perceived consumption needs*. They defined a subjective poverty line as the level of total spending above which respondents say (on average) that their expenditures are adequate for their needs. It is a qualitative evaluation and it is obtained by asking people whether their current consumptions are adequate.

Another approach lets people rate their own economic situation by asking whether they consider themselves poor, borderline or not poor. In this stream of literature we find studies that ask people to evaluate how they are able to make ends meet: with great difficulty, with difficulty, with some difficulty, rather easily, easily, very easily (see, e.g., Santini, 2011; Cracolici et al., 2011). This question is usually preferred to the minimum income question, since it allows overcoming the criticism connected to the ability of households to know and evaluate their income position.

The subjective evaluation of poverty is highly dependent to contextual economic circumstances. For instance, in Italy the minimum income level to live a decent life is declared constantly decreasing since 2008, the starting year of the economic crisis, because people redefine their needs in case of negative economic circumstances (Isae, 2009). In fact, people consider their economic conditions in comparison with those of the others. People compare how fast or slow living conditions are changing relative to others, not only their immediate neighbours, but also other regions and countries (Hayo and Seifert, 2003).

In general, subjective measures can be used to set or inform the choice of poverty lines, equivalence scales, economies of scale, and regional cost-of-living differences (Coudouel et al., 2002).

The choice of one of the mentioned approach is highly dependent on the available data sources. In some cases, ad hoc surveys were specifically implemented or integrated to test a measure, such as the *Living Standard Survey* in New Zealand and the *Poverty and Social Exclusion Survey* in UK (Boarini and Mira d'Ercole, 2006, Bradshaw and Finch, 2003).

The choice of the approach used to analyze poverty is sometimes guided by data availability. While data on poverty are increasingly available for several countries, few comparative studies exist. This is mostly due to the heterogeneity of data that are not conceived with comparative aims. Surveys usually differ in terms of concepts and definitions, units of analysis, temporal profile of the data (mostly carried out occasionally), wording of the survey question⁴, presentation of results.

During last decades the awareness of the lack of comparable data on poverty enhanced substantial efforts worldwide at the national and regional levels to establish comprehensive datasets allowing the construction of alternative measures. In particular, to satisfy the aims of the EU policy agenda, new data sources were implemented at European level with a major focus on comparability and timeliness of statistics on poverty and economic conditions.

⁴ For instance, whether surveys distinguish between enforced and chosen lack of a particular item is an important distinction when asking subjective evaluations of the economic situation.



The aim of the next section is to give an overview of the most suitable data sources currently available at European level to analyze the subjective evaluation of poverty in a comparative perspective.

4. DATA

The richest understanding of poverty can be gained if surveys are available with information on different dimensions of poverty, especially if they contain a panel component.

Income and consumption surveys are usually the most accurate and they are regularly used in some countries worldwide for the measurement of poverty (most developed countries and a few developing countries). One of the most common consumption survey is the Living Standard Measurement Study (LSMS) developed by the World Bank. It provides a consumption indicator as a proxy of household welfare in many developed countries in Latin America and Asia.

Another common source of information on household incomes, particularly in developing countries, is the multi-purpose household survey. These surveys are very heterogeneous in their content and quality, but they usually collect data on household characteristics, employment, education, access to basic services and household incomes, and they may include additional modules on specific topics of interest. The problem with these surveys is that the income concept varies across countries so making comparisons difficult (Rio Group, 2006).

To estimate poverty in small geographical areas a combination of survey and census data has been used in particular in the US and South Africa. This allows to estimate income or expenditure in the survey using a set of explanatory variables that is also available in the census. The equation with the estimated parameters is then applied to census data to obtain the predicted value of income or expenditure for any sub-group of the population (Rio Group, 2006).

Within the European Union, on which this paper focuses, the issue of poverty and social exclusion is a subject of recurrent interest and it has received increasing political attention in recent years. To operationalize the concept of poverty different surveys were implemented since the middle '90s. In Europe sources of information exist that record individual survey responses to questions about self-perceived poverty according to the different definitions described in the previous section together with objective elements.

In the remainder of this paper we focus on three main data sources that can be used to analyze subjective poverty in a comparative perspective at European level: the European Community Household Panel (ECHP), the European Union Statistics on Income and Living Conditions (EU-SILC), the Luxembourg Income Study (LIS). Since comparability is one of the most important requisite for a cross-country comparison of subjective poverty across the EU, we are particularly interested in these data sources that guarantee a high comparative potential. In the following sections we review the main features of these surveys, highlighting their potentials and pitfalls in relation to the analysis of subjective poverty.



4.1 ECHP

ECHP is a standardized multipurpose annual survey carried out in Europe between 1994 and 2001. It is a pure panel that provides information on a wide range of topics such as demographic behaviours, education and training, labour force features, different kinds of incomes, health, housing and migration. The ECHP has been given a central place in the development of comparable, timely and reliable social statistics across EU member states, representative both at cross-sectional and longitudinal level (Eurostat, 2003). Its multidimensional and multipurpose nature allows to study the interrelationships among individual conditions, life events, behaviours and values. The panel design allows to analyze how individuals and households experience changes in their socioeconomic status and whether and how their behaviours modify with such changes or vice versa (Locatelli et al., 2001). During the period 1994-2001 ECHP has traditionally been the primary source of data for calculation of indicators in the field of income, poverty and social exclusion.

The primary target population consists of all private households, where a household is defined as one person living alone or a group of persons - not necessarily related - living at the same address with common living arrangements. The secondary target population is composed of individuals aged 16 or over living in the selected households⁵ (Nicoletti and Peracchi, 2002).

Since one of the major aim of the ECHP was comparability, a key feature of the survey is the adoption of a common questionnaire centrally designed by Eurostat. The household questionnaire collects information about demographic characteristics (household size and composition, number of people who died, who have moved in or out, number of children born between waves), children (number of children under 12, whether they are looked after on a regular basis), level of income and its composition (income from work, property or rental income, social benefits, private transfers), financial situation measured in terms of subjective perception (debts, ability to make ends meet, savings, general sensation about the current financial situation), accommodation features (number of rooms, tenure status, amount of housing costs), durables (car, computer, second home, etc.). The individual questionnaire collects demographic information (sex, age, marital status), training and education, employment and unemployment careers (activity status, type of contract, number of hours worked per day, duration of employment and unemployment spells, level of satisfaction with work, job search), a monthly calendar of activities, income from all sources (work, pensions, other social transfers, private transfers), health, social relation, migration and satisfaction with different aspects of life (Eurostat, 2003).

Questions on economic situation are asked at household level and are essentially divided in three sections. These deal with financial situation, accommodation and consumer durables. The *financial situation* module investigates both monetary and non monetary aspects of the household's finances: it contains questions on the affordability of basic needs (keeping home adequately warm, new clothes, eating meat, chicken or

⁵ It is possible to get demographic information also on children under 16 through proxy interviews.



fish every second day) and basic leisure and social activities (paying for a week's annual holiday away from home, having friends or family for drink or meal at least one a month). Several questions are asked about whether the respondent is able to make ends meet, if he/she can afford a certain number of housing outlays for basic necessities (such as heating, replacing worn-out furniture) as well as if he has some problems of arrears (for paying utility bills, rents or mortgages, hire purchase installments). The financial section contains subjective variables on the economic situation: in particular, the burden of debts other than mortgage, ability to make ends meet, the minimum income question (i.e. lowest monthly income to make ends meet), a subjective evaluation on the present financial situation compared to that of one year ago (improved, remained the same or deteriorated) and a subjective feeling about the present economic situation.

The *accommodation* module concerns housing conditions of the household. Among these conditions are included: main features of the dwelling, and in particular the state of disrepair of it, its salubrious conditions (dampness, rot, darkness, etc.) and the presence of some basic facilities (such as bathroom, indoor flushing toilet or hot running water). There is also a question on whether housing costs are felt as a financial burden (a heavy burden, somewhat a burden, not a problem).

The module on common *consumer durables* investigate on material goods owned by the household (car, colour TV, microwave, dishwasher, telephone, home, computer, etc.). Respondents can distinguish whether they cannot afford it or are not interested in.

The survey also contains questions at individual level on the satisfaction with financial or housing situation (from not satisfied to fully satisfied), as well as questions about social relationships (e.g. whether member of the household regularly participate in some social activities, if they have contacts with neighbours, friends and relatives).

Notwithstanding the fact that most questions are on objective living conditions, ECHP provides some information on the subjective evaluation of economic status, as mentioned before: it contains the minimum income question and that on "ability to make ends meet". ECHP permits to analyze the subjective evaluation of economic conditions in connection with objective items, so allowing to control the bias arising from subjective measures only. It goes without saying that ECHP is a particularly rich data source for the aims of a study on subjective poverty in a comparative perspective.

ECHP is to be praised for other reasons: its multi-dimensional coverage of a range of topics simultaneously, a standardized methodology and procedures yielding comparable information across countries, a longitudinal design (Peracchi, 2002). Compared to other social surveys in Europe, ECHP has a much broader and integrative character aiming at providing comparable and inter-related information. On the basis of such great amount of information, inter-relationships between different fields and the relevance of specific factors for the individuals' living conditions can be analyzed and compared across countries. ECHP comparative nature, notwithstanding some problems, allows comparisons across countries whose differences in terms of context, institutions, cultural background are to be taken into account when measuring poverty in a subjective perspective.



During the period 1994-2001 ECHP has been the richest source to study dynamically a large set of social issues, with poverty among them, for which there was a consistent lack of adequate information before (Atkinson et al., 2005). In this respect it is particularly useful in the study of the risk of entering or exiting from the state of poverty, of the transmission of poverty between generations, of the persistence in poverty. It allow to evaluate whether and how changes in household/individual characteristics have a significant link with the risk of becoming poor over time and to measure the intensity of poverty.

Due to the richness of ECHP data, a large number of research on poverty has been carried out both at national and cross-country level (see, e.g., Eurostat 2002, Nolan and Whelan, 2010).

4.2 EU-SILC

EU-SILC is the Eurostat project on Community Statistics on Income and Living Conditions.

EU-SILC is the EU reference source for comparable cross-sectional and longitudinal statistics on income distribution, poverty and social exclusion. Its purpose is to monitor national and EU progress towards objectives in the area of poverty, inclusion and social protection and to exchange good practices in terms of policies (Clemenceau et al., 2006). ECHP did not satisfy international recommendations developed on income and it suffered from some quality and operational problems (long delays despite improvements at the end of the panel), high attrition and non response rates, income definitions not fully in accordance with international practice, not full comparability (Atkinson et al. 2005). What was good for ECHP had been actively used to develop EU-SILC.

EU-SILC collects two kinds of variables. Primary target variables are collected yearly at household and individual level in cross-sectional and longitudinal component. Secondary target variables are introduced every four years or less frequently with one module per year only in the cross-sectional component (e.g. social participation, housing conditions, over indebtedness and financial exclusion and deprivation). In particular, the 2005 module was devoted to the evaluation of the intergenerational transmission of poverty. It provides information on the composition of the household of the respondent aged between 24 and 66, on his/her parents education and employment status, financial problems when he/she was a teenager.

Differently from ECHP, EU-SILC is an instrument made of harmonized indicators that can be produced with flexibility with respect to data source, sample design, reference periods, modes of data collection, questionnaires' structure. In this respect, Eurostat recommends common guidelines and procedures, common concepts (especially household and income) and classifications to maximize comparability (Clemenceau et al., 2006).



The reference population of EU-SILC is all private households and their current members residing in the territory of the member states at the time of data collection, even if temporarily absent⁶. Private household means a person living alone or a group of people who live together in the same private dwelling and share expenditures, including the joint provision of the essentials of living. The definition of household in ECHP and EU-SILC is different: the common feature is the concept of "a person living alone or a group of persons living together at the same address". Differently from ECHP, EU-SILC focuses on the fact that persons living together "share expenditure, including the joint provision of the essential of living"⁷.

The main information pertains to private households, including data on household size, composition and basic characteristics of its current members and persons aged 16 and over.

EU-SILC provides two types of annual data: *i*) cross-sectional data pertaining to a given time on income, poverty, social exclusion and other living conditions; *ii*) longitudinal data pertaining to individual-level changes over time, observed periodically over a four year period.

The first priority has been given to the delivery of comparable, timely and high quality cross-sectional data. Longitudinal data are limited to income and non-monetary variables on deprivation, aiming at evaluating the persistence of poverty and social exclusion among subgroups (Eurostat, 2004).

Depending on the country, micro data could come from: two or more national sources (surveys or/and registers), one or more existing national sources combined or not with a new survey, a new harmonized survey to meet all EU-SILC requirements. Eurostat strongly encourages the use of existing data sources. Nevertheless an integrated design was recommended for those countries planning to launch a new operation. A rotational panel was mainly suggested since it allows for more representative data than a pure panel (for further details see Ceccarelli, 2005 and Eurostat, 2005).

Four types of data are collected in EU-SILC: a) variables measured at the household level; b) information on household size and composition and basic characteristics of household members; c) income and the so-called "basic variables" (education, basic labour information and second job) measured at person-level, but normally aggregated to construct household-level variables; d) variables collected and analyzed at the person-level (health status, access to health care, detailed labour information, activity history and calendar of activities). Domains collected at household level are basic data: degree of urbanization, housing (dwelling type, tenure status, total and detailed housing costs, housing condition), social exclusion (housing and non housing related arrears, non monetary deprivation indicators, physical and social environment, subjective perception of the total housing costs and repayment of debts), income (total

⁶ Persons living in collective households and institutions are generally excluded from the target population.

⁷ This definition implies that also the domestic servants are members of the family, so altering the size and composition of the household. However, domestic servants are not sample persons and they are not interviewed neither traced.



household income - gross and disposable - tax on income, family and housing allowances, private transfers received).

Areas covered at personal level are: basic and demographic data (sex, date of birth, marital status, consensual union, presence in the household, citizenship), education (highest ISCED level attained), health (health status, chronic illness, access to health care), labour information (current activity status and main job, status in employment and number of hours worked per week, type of contract, unemployment spells, calendar of activities, short retrospective working history), income (personal employee income or income from self employment, social benefits) (Eurostat, 2004). New components of disposable income have been introduced in EU-SILC with respect to ECHP: transfers paid to other households (only transfers received from other households were taken into account in the ECHP), tax adjustments (only tax paid at source were collected in ECHP), taxes on wealth, imputed rent, interest paid on mortgage loans, non-cash employee income, values of goods produced for own consumption, employers social insurance contributions, negative income from self employment (set to 0 in ECHP) (for further details see Eurostat, 2005).

The richness of variables on income allows to compute a large number of Laeken indicators: e. g. the poverty indicator, persistence of low income, long-term unemployment rate (Fusco et al., 2010). At a macro level it allows the calculation of indicators on the level and intensity of poverty. Furthermore, in a dynamic perspective it allows to evaluate how long families persist in poverty status, how poverty is transmitted between generations, which features are more significantly linked with the risk of being poor. In this respect, EU-SILC provides a rich set of information for policy makers to implement effective policies to eradicate poverty. Compared to ECHP, the information on individuals' history is reduced from 8 to 4 years. This could be a limit for the methodological analysis, as dynamic models in this context could be not reliable (Hernandez-Quevedo et al., 2010).

Like in ECHP, a number of questions are asked about objective material conditions. Variables on consumer durables are usually employed to compute material deprivation indicator (see Eurostat, 2002, Fusco et al., 2010; Guio, 2005). Many questions regard the housing status (darkness, ability to keep it adequately warm, number of rooms, etc.), the financial situation (arrears on utility bills, on mortgage or rent payments). Moreover, a larger number of questions on the self-evaluation of the economic situation than in ECHP are asked: ability to keep home adequately warm, ability to make ends meet and the minimum income question, the perception of total housing costs and of the repayment of debts from hire purchases or loans. Like ECHP, EU-SILC allows a comprehensive study of various poverty dimensions.

Moreover, EU-SILC allows the analysis of poverty at regional level since the region of residence is provided for each country (according to the NUTS classification). In fact, local realities vary and policy decisions are increasingly taken at local level as decentralization advances (Coudouel et al., 2002).

The comparability issue is very important in EU-SILC and different elements can affect it. For what concerns the survey design almost all countries have used the integrated design proposed by Eurostat: all of them ensure high cross-sectional representativeness and allow to follow a significant number of individuals over four



years. In fact, even if Eurostat fosters the use of existing sources and administrative data, not all EU-SILC variables can be obtained from administrative registers and most countries started a new survey.

Another source of diversity arises from the choice of a sample of complete households and a sample of persons (this choice applies principally to the register countries⁸ to collect complex non-income variables) (Vijay, 2006).

The type of collection is another factor influencing comparability: in the register countries only a selected household respondent receives a personal questionnaire and household variables are collected either through registers or through the selected respondent. In other countries all members aged 16 or more of selected households are requested to fill in a personal questionnaire. National questionnaires can be defined in different ways, due to the different needs. National surveys can also differ through the period during which the fieldwork is carried out. The impact of different fieldwork periods over time might be noticeable when comparing indicators with seasonal pattern overtime, but it is likely to be negligible for permanent income distribution analysis.

In general, researchers judge positively the goals achieved in terms of comparability and timeliness by EU-SILC and, in this respect, they consider it a success in comparison with ECHP. However, other efforts are to be made to improve the project: identification of conceptual and operational differences, determination of their extent and impact on the social indicators for which EU-SILC was implemented, i.e. poverty, social exclusion and income distribution (Clemenceau et al., 2006).

A more detailed information on income is very valuable for the study of poverty since it takes into account different sources of monetary resources.

The potential of EU-SILC paves the way to research on poverty on different perspectives (see Atkinson and Marlier 2010, Fusco et al. 2010, Cracolici et al. 2011).

4.3 LIS

In this section we present the Luxembourg Income Study (LIS) database, that is the largest available income database of harmonised microdata collected from multiple countries worldwide. A large number of countries feed the LIS database (from North America, Latin America, Africa, Asia, and Australia)⁹.

The LIS project includes household and personal level data on market and government income, demography, employment and expenditures. To date, the LIS database is constituted by six waves for each country. However, the LIS database is not a pure panel: samples included in the LIS files represents a cross-section of the total population and each wave is a repeated survey on different samples for each country. The LIS datasets contain variables on household characteristics, socio-

⁸ Register countries are: Denmark, Finland, Iceland, Netherlands, Norway, Sweden and Slovenia (Clemenceau et al. 2006).

⁹ For a complete list of participating countries see the website: www.lisdatacenter.org.



demographic and labour market variables, market income, public transfers and taxes, household- and person-level characteristics, and, in some cases, expenditures. Concerning labour information, the LIS database provides also some retrospective information on past work experience (e.g. beginning of employment, years of total work experience). Furthermore, different types of income data are available in a highly detailed level: labour income, self-employed income, capital income, social benefits and private transfers, windfall income (i.e. windfall gains and other, such as irregular and typically one-time receipts) and assets/liabilities transactions¹⁰. Income and consumption variables are classified in *monetary* and *non monetary*: a flow is classified as monetary if it involves a cash or cash equivalent transaction between the household/individual and a second party, while it is classified as non-monetary if it concerns the movement of goods or services themselves, without an associated cash or cash equivalent transaction.

LIS datasets are harmonised into a common template for cross-national research. However, harmonization is not perfect: definitions of some variables are different (such as the definition of head of household); data imputation or weight calculation are not operated by the LIS staff, but by the data provider (both at the household and individual level) (Orsini 2001).

The LIS microdata are often used for studies on the effects of economic and social policies on poverty, income inequality and other socioeconomic outcomes (Jesuit, 2008). On the one hand, it allows to study poverty by an income approach; on the other hand, poverty analyses based on non-monetary approach are not possible, since LIS does not provide information on the possession of durables (the possession of colour TV, car, mobile phone, etc.) or other non-monetary indicators. Data on consumption allows to calculate poverty from a consumption perspective. Unfortunately, the LIS database is not suitable to study poverty from a subjective perspective, since it does not provide data on self-evaluation of the individual or household economic situation.

Atkinson et al. (2010) compared LIS and EU-SILC data and showed that the estimates of poverty risk in the two sources are close. Due to the imperfect comparability of the dataset and the limitation of variables on material and subjective poverty, the LIS database is not the best data source to study subjective poverty on a cross-country perspective, but ECHP and EU-SILC are preferable. However, it constitutes a rich source to examine income distribution, inequality of economic resources and income poverty among households and individuals across Europe and worldwide.

¹⁰ Monetary inflows that do not constitute income (neither current nor windfall) and outflows that do not represent consumption, and do not reduce or increase the net worth of the household, but rather change the composition between cash, financial and nonfinancial assets and liabilities.



5 – CONCLUSIONS AND FUTURE RESEARCH PROSPECTS

The aim of this paper has been to review the literature on subjective poverty and the main approaches used worldwide to measure it. In particular, we focus on data sources available at European level: ECHP, EU-SILC and LIS databases, currently the surveys with the highest comparative potential.

A large stream of research on poverty has been carried out since the second half of the '90s in European countries, as a consequence of the increasing policy attention on economic conditions of populations. Different countries with different social contexts and economic conditions usually adopt diverse approaches and methods to assess poverty with the consequence that cross-country comparisons are rarely possible in EU.

The surveys described in this paper allow to analyze poverty on different perspectives and make possible comparative analysis among European countries.

For what concerns self-perceived poverty, the described surveys show that including subjective questions in an household survey is possible. It seems more desirable and cost-effective than having an independent survey on subjective poverty, because it avoids the duplication of information and also produces figures that are comparable with objective poverty measurements. When a method that requires expenditure figures is used (such as the perception of consumption adequacy), it should be taken into account that, while consumption patterns generally change relatively slowly, perceptions may vary more rapidly as the income or expenditure distribution changes. If this is the case, household expenditure surveys need to be implemented more often and to include questions on subjective poverty (Rio Group, 2006).

It has been stressed that the subjective approach is not just an alternative to the objective approach of assessing poverty, as it leads to the identification of situations that could be different to those recognized through objective methods. Individuals who are identified as non-poor under an objective approach may feel poor.

The subjective approach also plays a significant role when multiple dimensions are to be considered in the study of welfare. The subjective measures are applied in order to identify which of these dimensions are relevant for economic analysis and measuring the extent of deprivations.

Such circumstances are analytically interesting because, they may help explain certain individual behaviours and the success or failure of policies aiming at reducing poverty.

In order to implement policies for poverty reduction in Europe cross-country comparable data are needed. As shown in section 4.2, comparability can be affected by different elements (sample design, mode of data collection, etc.) and none of the examined surveys allows perfect comparisons. However, they currently are the most comprehensive sources available at European level and have been developed in response to a high policy interest on poverty and exclusion.



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