

# Subjective measures in multidimensional quality of life measurement. The example of Poland.

Anna Szukielojć-Bieńkuńska

Consultant, Living Condition Division, CSO, Poland

## Abstract

In recent years, the so-called subjective indicators have been increasingly assigned significance for diagnosing and monitoring the social situation, including broadly-understood living conditions. Those indicators, differently from traditional objective ones, register not so much the existing actuality, for example, in the area of income or level of consumption, but its perception and assessment made by persons. This paper presents in a synthetic manner the current approach to subjective measures of the quality of life in Polish public statistics and further plans in this regard. According to the CSO's approach, subjective measures are regarded as an indispensable and crucial element in multidimensional measurement and the analysis of the quality of life. It is assumed that subjective indices of the quality of life will constitute an integral part of the public statistics information system in the area of social indicators. This will allow a more comprehensive analysis of the social situation and thereby will give a greater practical significance of those analyses for the purposes of social policy.

## 1. Introduction

The quality of life is a complex notion, similarly to many different notions applied in social sciences, and does not have one generally-accepted definition. Except for the definitions of this category applied in the literature on the subject, in general three main approaches to statistical quality of life measurement can be mentioned. Firstly, it can be assumed that quality of life measurement is the level of satisfaction that a person draws from different spheres of life. According to this concept, quality of life measurement is made on the basis of assessments and opinions declared directly by a unit (respondent) concerning, *inter alia*, the level of fulfilment of different kinds of needs, the level of satisfaction with activity in different domains of life, and the sense of happiness. Secondly, only the so-called objective indices characterising both material and

non-material aspects of living conditions can be taken into consideration. Each of the approaches has some benefits and limitations, and each alone does not make it possible to carry out a comprehensive (total) assessment of living conditions. Due to this fact, an approach making use of both categories of measures seems to be the optimal solution. The integration of data of objective and subjective nature considerably increases analytical possibilities, and at the same time the practical utilisation of the results of these analyses, both for the needs of creating socio-economic policy and for monitoring changes in socio-economic well-being.

## **2. Subjective quality of life measures in CSO surveys**

Subjective measures in the social surveys of the CSO have been used, with different intensity since the 1980's. Apart from the Quality of Life Survey carried out in 1988, whose main aim was to obtain information on the level of social satisfaction, subjective measures are usually complementary - they supplement objective measures. Subjective variables have been applied in surveys devoted to various selected domains of life. However, they play an especially significant role in multidimensional surveys. The first multidimensional survey of living conditions was conducted by the CSO in 1997. It was repeated in 2001 in a slightly modified form. Questions of a subjective nature included in those surveys made it possible to assess not only the social perception of the surveyed aspects of the quality of life, but they also became crucial components of synthetic indices of living conditions, poverty and social exclusion. In the case of both surveys, the preparation and elaboration of results was carried out in collaboration with the National Institute for Statistics and Economic Studies of France (INSEE). The effect of this cooperation were, *inter alia*, joint publications<sup>1</sup>.

In this paper examples of subjective measures included in two surveys, that are important for the assessment of living conditions in Poland, will be used – namely, in the household budget survey and in the new multidimensional social cohesion survey to be implemented in the 1<sup>st</sup> quarter of 2011.

---

<sup>1</sup> Fall M., Verger D., Szukielojć-Bieñkuńska A. (2000), Comparaison des conditions de vie en France et en Pologne, GUS ; Szukielojć-Bieñkuńska A., Fall M., Verger D. (2005), Pauverté et exclusion en Pologne, *Economie et statistique*, № 383-385, INSEE, p. 157 – 178.

## 2.1 The household budget survey

From the point of view of meeting national needs, the leading role in providing systematic data which are as timely as possible (annual data available several months after the end of the survey) on the subject of living conditions, including poverty, is played by the regular (annual) household budget survey. First of all, the survey provides objective data concerning expenditure, income, the quantity of food consumed, housing conditions, households' equipment with durable goods. A standard element of this survey is also a number of questions concerning the subjective assessment of the financial situation, and questions assessing the income of a household, which constitute the basis for estimating subjective poverty lines. Since the beginning of the 1990s, on the basis of household budget surveys, the CSO has estimated and published data concerning the scope of subjective poverty according to the LPL (Leyden Poverty Line) method. Information on the scope of the so-called subjective poverty is complementary to the data on the scale of poverty estimated on the basis of objective thresholds. They present 'the image of deprivation' in respect of living conditions in society, corrected by the diverse level of aspirations of households.

Having noticed the diagnostic significance of subjective indicators, the CSO is considering a possibility of slightly extending the regular block of subjective questions in the household budget survey (it concerns some basic information on the changes in financial situation over time, the assessments of fulfilment of basic needs, and the perception of poverty), as well as the preparation of a cyclical module survey. It is assumed that the objective of the module survey would be to collect subjective assessments of the desired and achieved level of consumption. The possibility to combine subjective opinions and objective information about the level of expenditure, consumption and other elements of the living condition of households, creates, *inter alia*, an opportunity to analyse the level of conformity between declared hierarchies and fulfilled needs and to assess relations (correlation) between declared needs and the level of consumption. This module, if implemented every few years, would allow to monitor changes in this regard.

Subjective questions in the household budget survey – the current state

1. How would you assess the general financial situation of your household?  
(very good, rather good, fair, rather bad, bad)

2. Taking into consideration your current needs and the needs of your household, please state what value of monthly (net) income of your household you would consider:

Very low income

Insufficient income

Hardly-sufficient income

Good income

Very good income

*The question is used in order to assess the poverty line with the use of the LPL method [8]*

3. With the current income, does your household “make ends meet”

With great difficulty

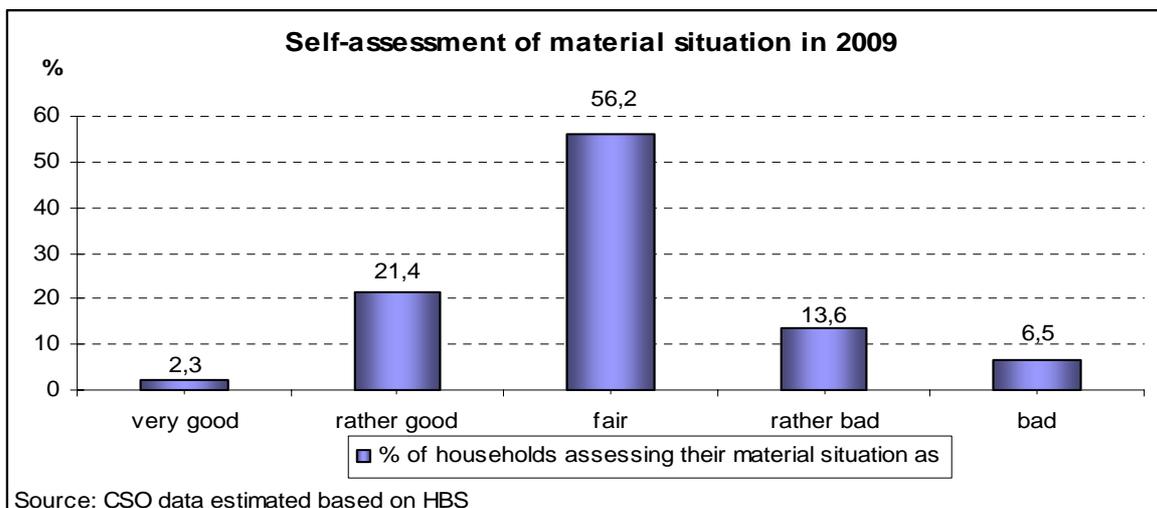
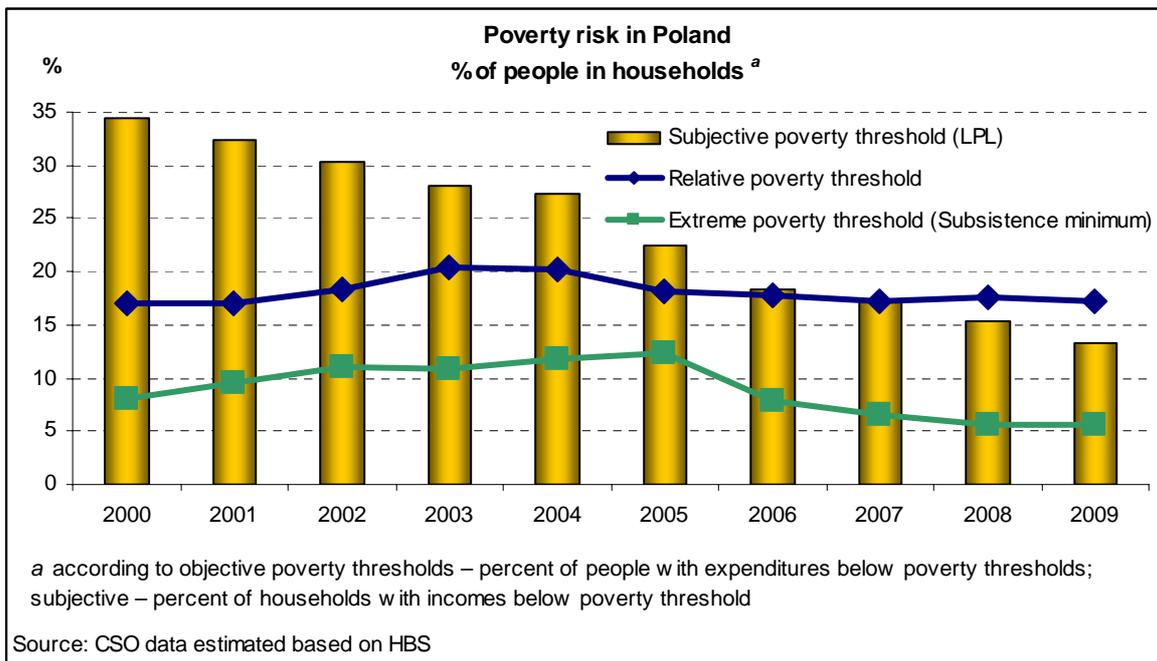
With difficulty

With a little difficulty

Quite easily

Easily

Very easily



## 2.2. *The social cohesion survey as the basis for the assessment of quality of life and social differences<sup>2</sup>*

The objective of the social cohesion survey is the collection of information that would allow to carry out comprehensive assessments of the quality of life of Poles - both in the material and non-material dimension - and, above all, would make possible a complex assessment of the phenomena of poverty and social exclusion, including the analysis of a correlation between the two. Taking into consideration the subject matter of widely understood social relations, networks of family relations, membership of the population in non-profit organisations, and participation in their activity, are also part of the trend of developing surveys concerning the social capital.

A unit of the survey is a household and one randomly chosen person in the household, aged 16 or more. Information concerning the situation of the whole household will be filled into a household questionnaire, while information concerning persons aged 16 or more –into an individual questionnaire. In both questionnaires, questions of subjective, as well as objective nature were included. At the stage of elaboration of the results, information from both questionnaires will be combined. The subject scope of the survey was presented in Annex 1.

### 2.2.1 *The scope of subjective variables*

The complexity and multidimensionality of the subject matter of the survey, and the assumptions concerning the practical use of the results of the survey for the purpose of social policy, are the reason why a wide range of subjective questions was included in the survey. The questions included in the household questionnaire aim mainly at a more complete assessment of material living conditions and the sense of financial stability. The questions in the individual survey form will be the basis for estimating both the so-called global indices of the quality of life (a synthetic assessment of meeting one's needs and overall satisfaction) and partial ones (the level of satisfaction with different spheres of life). They will also make it possible to get to know Poles' opinions concerning different social issues, including the problems of social differences, poverty and social exclusion.

---

<sup>2</sup> The social cohesion survey is prepared in consultation with the INSEE experts. The pilot survey was carried out by the CSO in 2008. On the basis of its results, *inter alia*, the proposals of simple and complex indicators of living conditions, poverty and social exclusion were prepared, and presented in February 2010 at the conference in Vienna (Conference on Indicators and Survey Methodology, Vienna, February 24-26 2010; see: M. Fall, S. Merceron, A. Szukielojć-Bienkunska, D. Verger, Social capital, poverty and social exclusion. A relevant approach of their measurement”.

One particularly interesting aspect of the survey is the possibility of a joint analysis of objective and subjective measures, and the analysis of their mutual correlations. This will allow for verifying a number of research hypotheses. This pertains for instance to the thesis on the ambiguity between the real social distribution of living conditions and the perceived distribution of the social conditions. The same objectively measured level of life constitutes the basis for subjectively diversified assessments of this level, depending on the individual features of persons carrying out such assessments.

Examples of subjective variables included in the survey are presented in Annex 2.

### **3. Final remarks**

Public statistics is expected to provide more and more comprehensive information, making it possible to diagnose and monitor social development, including the living conditions, which are subject to dynamic changes. The construction of an information system in this area requires the constant improvement of research tools, as well as the increases in the scope of information. Undoubtedly, data of a subjective nature should play an important role in this system.

There are many reasons for this. Firstly – the objective and the effect of socio-economic development should be people's satisfaction with changes under way. Unquestionably, in this case the most adequate measures of the level of satisfaction are the assessments carried out directly by the persons concerned. Secondly, it is often very difficult or even impossible to perform so-called objective measurement of many elements included in the quality of life. It concerns, *inter alia*, the assessment of the non-financial needs' fulfilment level, life style, and interpersonal relations. Finally, the identification of subjective crucial components of the quality of life, the contents that people associate with this notion, and opinions on the needs, aspirations and perceptions of various social phenomena, may have a practical significance for planning specific actions in the field of socio-economic policy. It should also be noted that very often it is not the objective living standard, but that which is perceived in relation to other peoples' situation, to determine the individuals' attitudes and behaviour in personal and public life. The sense of too large dissonance between the experienced level of fulfilment of needs and aspirations in this regard may generate various adaptive actions. In case of deeper deprivation, a greater sense of unfulfilment of needs may manifest itself both in innovative actions and protest attitudes leading to social conflicts.

Undeniably, the above mentioned arguments fully justify the need for applying subjective measures in surveys of broadly-understood living conditions. *In the public statistics information system, subjective indicators of the quality of life should significantly supplement objective indicators. It implies a need for developing and defining a set of indicators, which would allow the systematic monitoring of the subjective quality of life.* It also implies the necessity to determine and prepare specific research tools providing such information. *It appears that basic data - leading indices within this range - should be collected constantly and regularly. It may be achieved by slightly extending the subject matter of regular surveys carried out by public statistics. Moreover, it seems useful to conduct every few years cyclical surveys with a broader scope regarding the subjective quality of life – for example as an integral part of special multidimensional surveys of living conditions or as a module survey.*

**Reference:**

- [1] ED Diener, Eunkook Suh (1997), Measuring quality of life: Economic, social and subjective indicators, Social Indicators Research 40, 189-216
- [2] Fall M., Verger D., Szukielójć-Bieńkuńska A. (2000), Comparaison des conditions de vie en France et en Pologne, GUS
- [3] Podgórski J. (1994), Metody wyznaczania subiektywnych linii ubóstwa, Wiadomości Statystyczne, nr 11, GUS
- [4] Rutkowski J. (1991), Badania Jakości Życia [Surveys of life quality], Jakość życia i warunki bytu, 33-46, GUS
- [5] Serivens K., Iasiello B., Indicators of “societal progress”: lessons from international experiences, STD/Doc(2010)4, OECD
- [6] Sikorska J.(1087), Zintegrowany System Badań Gospodarstw Domowych – mierniki subiektywne a obiektywne [Subjective and objective measures in the Integrated System of Household Surveys], Problemy integracji statystycznych badań gospodarstw domowych, 199-209, GUS
- [7] Szukielójć-Bieńkuńska A., Fall M, Verger D. (2005), Pauverté et exclusion en Pologne, Economie et statistique, № 383-385, INSEE, p. 157 – 178.
- [8] Van Praag B.M.S., Flik R.J.(1992), Subjective Poverty, Research Institute for Population Economics, Amsterdam
- [9] Witkowski J.(2010), Rola statystyki publicznej we współczesnym świecie, Wiadomości Statystyczne, nr 2, GUS

## Annex 1. Subject scope of the social cohesion survey

HOUSEHOLD QUESTIONNAIRE	INDIVIDUAL QUESTIONNAIRE
<p><b>Composition of the household</b> Basic socio-demographic characteristics of all persons belonging to the household (within the range of the so-called core variables in all social surveys – including age, nationality, education, status on the labour market – and additional information important from the point of view of the subject matter of social cohesion – e.g. disability, the cause of temporary absence in the country and abroad).</p>	<p><b>Skills</b> Knowledge of foreign languages, computer skills, having a driving licence <i>Application:</i> in relation to information in the field of education - in order to assess human capital, and to carry out analyses of correlation between human capital and different aspects of quality of life</p>
<p><b>Financial situation of the household</b> The income of the household (level of income, sources of income, subjective assessments concerning income situation) Savings and indebtedness of households (relative amount of savings and indebtedness, sources of loans and credits, the purpose of credit, difficulties in making payments) Defaults in payments connected with the functioning of the household (including “rent payments”) <i>Application:</i> the assessment of the diversity of the financial situation, including the income-related situation of households, calculating indices of monetary poverty (necessary for the analysis of multidimensional poverty), assessment of the scale of indebtedness of households</p>	<p><b>Economic activeness</b> Information concerning the current situation on the labour market (status on the labour market, performed profession; for the unemployed – recently performed), the situation on the labour market in the past, looking for a job, working abroad, reasons for professional inactivity <i>Application:</i> the analyses of the correlation between the situation on the labour market and various financial and non-financial aspects of the living conditions, for the assessment of unemployment as a factor increasing the risk of poverty and social exclusion, for the analysis of socio-professional stratification</p>
<p><b>Obtained and granted aid</b> Social assistance, sources and forms of aid (financial, in the form of assets or services), the significance of the aid, the addressees of the offered aid, the burden on the household due to the granted aid <i>Application:</i> the assessment of social expectations concerning aid, analysis of the obtained/granted aid in relation to the financial situation and factors increasing the risk of exclusion, assessment of the effects of the activity of units of the third sector within the range of actions supporting households</p>	<p><b>Health</b> Self-assessment of state of health, disability, difficulties in everyday life, mental condition, alcohol consumption <i>Application:</i> the analyses of the correlation between state of health and various aspects of living conditions, for the assessment of the quality of life of the disabled, for the analyses of factors increasing the risk of poverty and social exclusion</p>
<p><b>Housing conditions – housing and quality of the neighbourhood</b> Ownership and type of dwelling, standard, subjective assessments concerning adaptation of the dwelling to the household’s needs - /too small, too large, unadjusted to the needs of people with motor disability/, the quality of the so -called neighbourhood (air pollution, noise, vandalism, “prestigious district”, etc.) <i>Application:</i> the comprehensive assessment of housing conditions of different groups of population, for the analysis of some aspects of housing exclusion, for calculation of a comprehensive index of living conditions (which is necessary for the analysis of multidimensional</p>	<p><b>Social contacts</b> The type and quality of social contacts: contacts with the family, neighbours, friends, participation in social life in the particular place of residence, affiliation with organisations and associations, participation in elections <i>Application:</i> the analysis of social capital, the assessment of the meaning of social bonds for the quality of individual life, the assessment of the scale of exclusion from the point of view of the lack of social contacts (social isolation indicators)</p>

poverty)	
<p><b>Equipment in durable goods and availability of information and telecommunication technologies</b></p> <p>Equipment in durable goods, including computers, mobile phones; in the case of the lack of the above – the reason (financial, other reason); access to the Internet</p> <p><i>Application:</i> the assessment of the degree of diversity of the equipment in durable goods of different groups of households, also for calculating deprivation indices, for the assessment of e-exclusion as one of the symptoms of social exclusion</p>	<p><b>Everyday life and leisure</b></p> <p>Forms of spending free time (passive and active), the assessment of the way in which leisure is managed</p> <p><i>Application:</i> the assessment of the lifestyle of different groups of population, including those at risk of poverty</p>
<p><b>Deprivation of basic needs</b></p> <p>The lack of possibility to fulfil basic needs such as food, clothing and footwear, healthcare, education, leisure (taking into consideration the needs of children and adults)</p> <p><i>Application:</i> for calculating indices of the deprivation of needs, for the analysis of multidimensional poverty</p>	<p><b>Satisfaction</b></p> <p>Subjective assessments of the level of satisfaction with different spheres of life (e.g. work, family, leisure, life)</p> <p><i>Application:</i> for calculating subjective measures of well-being, for the assessment of the correlation between subjective and objective quality of life measures</p>
<p><b>Assessment of material situation</b></p> <p>Subjective assessments of the material situation of the household, assessments concerning changes in time, reasons for the changes in the financial situation</p> <p><i>Application:</i> the analysis of correlation between subjective and objective indices of financial situation, for the analyses of subjective and multidimensional poverty, defined both on the basis of objective and subjective measures</p>	<p><b>Biography</b></p> <p>Information on the most important events in the life of the respondent in the fields of education, work, family life, including change of place of residence, basic information on the respondent's parents</p> <p><i>Application:</i> the analysis of factors conditioning the current situation of various population groups, for the analysis of social mobility</p>
	<p><b>Opinions concerning various aspects of social life in Poland</b></p> <p>The perception of various social phenomena (discrimination, poverty, social diversity)</p> <p><i>Application:</i> the diagnosis of the perception of important social problems by various population groups</p>

## Annex 2. Examples of subjective variables in the social cohesion survey

HOUSEHOLD QUESTIONNAIRE	INDIVIDUAL QUESTIONNAIRE
<p><b>Housing conditions, Equipment of households in durable goods</b>            In general, how do you assess the housing conditions of your household?            In general, how do you assess the equipment of your household in durable goods?            Why don't you assess the equipment of your household in durable goods as good or very good?</p> <p><b>Financial situation, income, poverty</b>            Which of the statements listed below best describes your households' financial condition?</p> <ol style="list-style-type: none"> <li>1. We can afford some luxury</li> <li>2. We can afford a lot without any special saving</li> <li>3. We can afford everyday things but we have to save for more serious shopping</li> <li>4. We have to manage our everyday finances very economically</li> <li>5. We cannot satisfy the most basic needs</li> </ol> <p>What has been the level of the obtained financial aid/ aid in the form of assets or services for your household?            Please state how much worse your household's life would look if you had to live only on your current income (without aid obtained in different forms)?</p> <ol style="list-style-type: none"> <li>1. We would live at the same level as now</li> <li>2. Our life would be slightly worse</li> <li>3. Our life would be worse than now</li> <li>4. Our life would be much worse than now</li> <li>5. We would be in a very difficult situation, I don't know how we would manage</li> <li>6. Not applicable, we do not use any form of external aid</li> </ol> <p>Please state how you assess the general financial situation of your household.            If the financial situation in your household is not good, what are the reasons?            Please give up to 3 most important reasons.</p>	<p><b>Mental health</b>            Please state how often during the last month:</p> <ul style="list-style-type: none"> <li>You have felt full of life</li> <li>You have been very upset</li> <li>You have been so depressed that nothing could cheer you up</li> <li>You have been peaceful and calm</li> <li>You have felt that you have a lot of strength and energy for action</li> <li>You have felt sad, depressed or blue</li> <li>You have felt exhausted</li> <li>You have felt happy</li> </ul> <p><b>Satisfaction with different spheres of life</b>            Do you feel satisfied:</p> <ul style="list-style-type: none"> <li>- with your present professional situation?</li> <li>- with your school, studies (for people currently studying)?</li> <li>- with your education (level, field of study)?</li> <li>- with your present family situation?</li> <li>- with relations with other people, including acquaintances and friends?</li> <li>- with your current financial situation (including income)?</li> <li>- with your financial living conditions (except for income)?</li> <li>- with the amount of leisure you have now at your disposal?</li> <li>- with the way of spending your leisure?</li> <li>- with your life in general?</li> </ul> <p>Please look at the pictures and mark the one which best describes your life so far.</p> <p><b>Opinions concerning different social issues</b>            Now I am going to read three statements. Please define your approach towards each of them.</p> <ul style="list-style-type: none"> <li>- Differences in income in Poland are too high</li> <li>- The State's responsibility should be to decrease differences between high and low incomes</li> <li>- The State should ensure a basic minimum income for everyone</li> </ul>

<p>In your opinion, during the last 12 months, have the living conditions of your household:</p> <ol style="list-style-type: none"> <li>1. improved considerably?</li> <li>2. improved slightly?</li> <li>3. not changed at all?</li> <li>4. become slightly worse?</li> <li>5. become considerably worse?</li> <li>6. Not applicable (the household was established not long ago)</li> </ol> <p>What do you think the improvement/deterioration of the standard of living of your household has resulted from: Please give up to 3 most important reasons.</p> <p>What do you think, in 2-3 years time, will the standard of living of your household:</p> <ol style="list-style-type: none"> <li>1. improve significantly</li> <li>2. improve</li> <li>3. neither improve nor become worse</li> <li>4. become worse</li> <li>5. become much worse</li> <li>6. it's hard to say</li> </ol> <p>Do you think that you and your family are under threat of poverty? Please take into consideration your current situation and the next several months.</p> <ol style="list-style-type: none"> <li>1. Yes, and I don't know how we will deal with this</li> <li>2. Yes, but I think we'll manage somehow</li> <li>3. I am not afraid of poverty, but I am worried that our situation might become worse</li> <li>4. No</li> <li>5. It's hard to say</li> </ol>	<p>Do you think that taking care over members of society is the duty of the State, the family – or both these institutions?</p> <ul style="list-style-type: none"> <li>- taking care over children of pre-school age</li> <li>- taking care over children of school age after school hours</li> <li>- financial support for persons living in poverty</li> </ul> <p>Do you feel connected with the following, and if so, how strongly:</p> <ol style="list-style-type: none"> <li>A. Poland</li> <li>B. the European Union</li> <li>C. the region in which you live</li> <li>D. the locality in which you live</li> <li>E. people from the neighbourhood and the surroundings of your place of living?</li> </ol> <p>In your opinion, in today's Poland is affiliation with any of the below mentioned groups a reason for worse treatment (discrimination):</p> <ul style="list-style-type: none"> <li>- the disabled,</li> <li>- persons above 50</li> <li>- persons below 25</li> <li>- women</li> <li>- men</li> <li>- persons of different sexual preferences</li> <li>- persons of different religion – non-catholic</li> <li>- residents of villages and small towns and, so-called bad city districts</li> <li>- persons in a poor financial situation</li> <li>- persons with a low socio-professional position</li> <li>- the homeless</li> </ul> <p>In your opinion, in today's Poland is different race, affiliation with different national or ethnic group a reason for worse treatment (discrimination)?</p> <p>Would you consider yourself a person belonging to a group of people which, for some reason, is treated worse (discriminated against) than other groups in our country?</p> <p>How do you think: what percentage – approximately – of people in our country are poor/rich? Are there any people among your acquaintances, family, or neighbours who you would consider poor/rich?</p> <p>Taking into consideration your place of residence – city, town or village – what kind of help would be most needed by people living there, whom you consider living in poverty?</p>
---	--