SOCIAL DIAGNOSIS 2009

THE SUBJECTIVE QUALITY AND OBJECTIVE CONDITIONS OF LIFE IN POLAND

REPORT

Edited by

Janusz Czapiński

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HUMAN CAPITAL
NATIONAL COHESION STRATEGY

Human Resources Development Center

MINISTRY OF LABOUR AND SOCIAL POLICY

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The opinions and conclusions contained herein represent the authors' personal views and do not necessarily reflect the official position of the Ministry of Labour and Social Policy.

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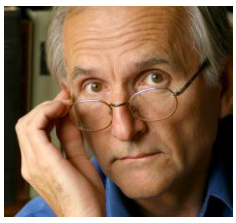

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Contents

1. INTRODUCTION

Janusz Czapiński

1.1. Project Aims and General Assumptions

There are two ways of describing the living conditions and quality of life of a society, its development potential, the direction of change and the threats and the challenges. One is based on macroeconomic (such as GDP or the inflation rate) and macrosocial (such as the registered unemployment rate, the number of doctors per 100 thousand inhabitants, infant mortality, scholarization ratio or parliamentary election turnout) institutional indicators. The other refers to the opinions and behaviours of citizens. Neither is fully accurate, reliable or sufficient. The fact that people become more affluent when GDP increases does not mean that they are more satisfied or willing to be active in civil society. The registered unemployment rate does not necessarily have to reflect the actual ratio of people who are deprived of employment against their will. These two ways of describing society should be treated complementarily; they should balance and complement one another. It is only when this condition is met that politicians, entrepreneurs and citizens can be provided with an answer to two important questions; what is the situation really like and why is it not better. This is a relatively comprehensive and reliable diagnosis, and a good diagnosis is necessary for effective therapy and wise reforms that minimize the social cost of the reform.

Our project is an attempt at complementing the diagnosis based on institutional indexes with complex data regarding households and attitudes, level of wellbeing and behaviours of people comprising these households. It is a diagnosis of the conditions and quality of life of Poles from their own point of view. Using two separate questionnaires, we examine households and all their available members aged 16 or over.

The comprehensive nature of our project means taking into account all important aspects of life of individual households and their members in a single research project. Included therein were both the economic aspects (such as income, material affluence, savings and loans) and non-economic aspects (such as education, medical treatment, ways of coping with problems, stress, psychological wellbeing, lifestyle, pathological behaviours, participation in culture, use of modern communication technologies etc). In this sense, this is an interdisciplinary project. It is also reflected in the composition of the *Council for Social Monitoring*, that is the main authors of the project and the team of experts invited by the *Council* to take part in the research process. These organs comprise economists, a demographer, a psychologist, sociologists, an insurance specialist, an expert in health economics and statisticians.

In accordance with the original concept, research conducted within the *Social Diagnosis* project has assumed the panel form; every few years, we go back to the same households and people. The first measurement was conducted in the year 2000, and the subsequent three years later. The next three waves took place in two-year intervals. The project is always conducted in March in order to eliminate the seasonality effect. This year, because of sample size, the research process lasted until mid-April. The present report not only shows the current image of Polish society, but also allows us to monitor changes that befell it in the course of ten years, and if we include earlier research concerning the quality of life in Poland (Czapiński, 1998), also in a longer period, almost from the beginning of the transformation process.

Social Diagnosis does not focus on the analysis of fleeting opinions, but more basic facts, behaviours, attitudes and experiences. It is not an ordinary descriptive survey, but a scientific project not only because the authors include scientists, university employees and professors. The decisive factor is the professional skills based on research experience of the *Council for Social Monitoring* members and the team of experts and, above all, the theoretical context of the particular subject modules. For most variables included in the project do not stem from intuition, informal observation or sponsor demands, but from scientifically-based knowledge of examined phenomena. Apart from merely describing Polish society, an important objective of the *Diagnosis* is to verify scientific hypotheses. In the present report, aimed at the "general public", the discussion of theoretical issues is out of necessity limited to a minimum. In the foreground there is an open question we aim to answer. What is the state of Polish society 20 years after the systemic transformation, 10 years after the first research conducted within the confines of the same project and 5 years following Poland's accession to the European Union?

We hope that the results of this project will provide valuable knowledge to politicians, social and local government activists responsible for the preparation, implementation and amendment of reforms that change the living conditions of all citizens. We would also like to provide society with reliable information regarding its everyday life and the changes it experiences, since the perception that individuals have of their own situation in comparison with that of other people are usually based upon selective observations, stereotypes or ideas propagated by the media, which are often false or exaggerated (e.g. the worsening condition of our society's mental health, the complete paralysis of health care services, old-age pensioners or the elderly in general being the social category that suffered most economically during the transformation process, to name but a few examples). We all deserve a relatively accurate, comprehensive and objective diagnosis of the main sources of our everyday problems, psychological discomfort, uncertainty of the future or difficulty in adapting to new conditions, but we also deserve to have pointed out to us the benefits of subsequent systemic transformations, the educational boom and lifestyle change. Private diagnoses are too often illusory, defensive, simplified and, generally speaking, wrong.

The differences between the present and the previous research projects pertain to the sample and the subject scope, which reflects the content of the questionnaire (see Annex 1). The sample was increased from the original 3005 in 2000 to 12381 households (consequently, the individual respondents sample increased from 6625 to 26178 people). Questionnaire changes in subsequent research waves pertained to several subject modules. This year, the module concerning healthcare and insurance was radically reduced, while the labour market module was developed and a new module concerning disabled persons was added.

1.2. Research issues

The project comprises of many aspects associated with the situation of households and individual citizens. The social indicators taken into account here can be divided into three general classes:

- demographic and social structure of households,
- living conditions of households connected with their material condition, access to health care services, culture and recreation, education and modern communication technologies,
- subjective quality of life, lifestyle, beliefs, attitudes and behaviours of individual respondents.

The indices describing the demographic and social structure of households are not analysed separately in the present report. They only serve as a means of stratifying groups of households and individuals in order to enable a comparison of the conditions and quality of life according to various social categories such as gender, age, education level, place of residence, social and professional status, main source of income, civil status, household type (determined based on the number of families and biological family type) and other criteria. Subject to analysis are the living conditions of households and the quality of life of individual citizens in connection with the social change that determines the global context and general rules of society's functioning. One of the main problems and questions accompanying all social reforms is the distribution of advantages and costs that result from their implementation in particular social groups over varying time intervals. Also in this research project, we wanted to find out which categories of households and citizens find their feet in the new conditions and take advantage of systemic transformations, and which social groups are unable to cope with the new situation, experiencing objective or subjective losses.

In this project, the division of social indicators into living conditions and quality of life is more or less consistent with the division between the *objective description* of the situation (conditions) and its psychological meaning expressed by the *subjective opinion* of the respondent (quality of life)[1]. This division is generally consistent with the type of unit examined and the measurement method. As for the living conditions, the examined unit is the household, and for the quality of life its individual members. Living conditions were measured by conducting an interview with one representative of the household (the person with the most knowledge of the household's situation). The quality of life on the other hand, was measured using a self-report questionnaire addressed to all available members of the examined households aged 16 or over.

The measurement of household living conditions included:

- household income and income management
- nutrition
- material affluence of the household, including modern communication technology equipment (mobile phone, computer, Internet access)
- housing conditions
- social benefits received by the household,
- education of children
- participation in culture and recreation
- taking advantage of health care services
- situation of the household and its members on the labour market
- poverty, unemployment, disability and other aspects of social exclusion.

Indicators of the quality of life and lifestyle of individual respondents included:

- general psychological wellbeing (including the will-to-live, sense of happiness, satisfaction with life, signs of depression)
- satisfaction with different areas and aspects of life
- subjective evaluation of the material standard of living

[1] This division is not entirely distinct and separable. Thus when describing living conditions, we used subjective evaluation scales. Also in the quality of life section, we asked not only for opinions, but were also interested in behaviours (such as smoking, overuse of alcohol) and objective events (such as the death of a loved one or home renovation).

- various types of stress (including administrative stress associated with contacts with public administration bodies, stress associated with state of health, stress associated with parenting, financial stress, stress associated with work, ecological stress, marital stress, stress associated with life events, such as assault, burglary, or arrest)
- psychosomatic symptoms (the measurement of distress treated as a general measurement of state of health)
- strategies of coping with stress
- taking advantage of the health care system
- personal finances (including personal income and trust towards financial institutions)
- system of values, lifestyle and individual behaviours and habits (including smoking, alcohol abuse, the use of drugs, religious practices),
- social attitudes and behaviours, including human capital
- social support
- civic attitudes and behaviours
- use of modern communication technologies – computers, the Internet, mobile phones, etc
- situation on the labour market and professional career
- problems of the disabled.

2. THE RESEARCH METHOD

Tomasz Panek, Janusz Czapiński, Irena E. Kotowska, Anita Abramowska-kmon

2.1. Research structure, procedure and progress

The *Social Diagnosis* research project is a scientific joint venture undertaken by members of the *Council for Social Monitoring*. The research concept and logistics were developed by the *Council for Social Monitoring*. Data analysis and report preparation is done by members of the *Council* together with a team of experts.

This is a panel-type research project. In the subsequent waves, all available households from the previous wave are included plus households from a new, representative sample. Five waves of the project have been conducted so far, in 2000, 2003, 2005, 2007 and 2009.

Two questionnaires were used in the survey (see Annex 1). The first serves as a source of information on household living conditions and is filled out by the interviewer during an interview with the best-informed household member. The questionnaire includes variables characterizing the household structure and its living conditions as well as the demographic and social characteristics of its individual members. The second questionnaire, filled out by all members of the examined households aged 16 or over, was aimed at gathering information regarding the quality of life of individual people.

The fieldwork was conducted by professional interviewers from the Central Statistical Office in each wave. The interviews were conducted under the supervision of the Office for Statistical Analyses and Research of the Polish Statistical Association.

2.2. Sample selection and weighting method

In the first research wave, conducted in March 2000, 3005 households (with 9,995 members) took part and 6614 accessible household members aged 16 or over were examined.

The second wave, conducted in March 2003, covered 3961 households (including 2396 from the first wave that is 79.7 per cent) with 13693 members and 9587 persons aged 16 or over who filled out the individual questionnaire (including respectively: 8180 or 81.8 per cent and 4719 or 71.3 per cent from the first wave and, respectively, 458 and 202 new persons, who joined the households examined in 2000).

In the third wave conducted in March 2005, it was assumed that all households which participated in the second panel wave would be examined, as well as all households to which members of households from the initial panel sample of households had transferred, that is all households emerging as a result of division of the initial panel household sample[2]. It was also decided that individual questionnaires would be filled out by all members born no later than March 1990. Consequently, 3113 households which participated in the second wave were introduced to the database (78.6 per cent of households from the second wave). The database included information on 9939 household members about whom we had information from 2003 (72.6 per cent of persons from the second wave), on 537 new members of these households and on 6388 individual respondents who filled out the questionnaire in 2003 (66.6 percent of all individual respondents from the second wave) and 231 new individual respondents from households examined in 2003 (mainly persons who turned 16 between the second and the third wave). Additionally, it was decided that the research would be amplified by 900 new households and their members. In order to reach the assumed number of 900 new households in the third panel wave, a supplementary 900-element basic sample was drawn out, as well as a reserve sample of the same structure and size. 738 new households were included in the database with 2351 members and 1572 individual respondents. In total, the database for the third wave comprised 3851 households with 12872 members and 8820 individual respondents.

In 2007, 5532 households were examined with 18044 members and individually 12645 members of these households aged 16 or over. Out of the 2005 sample, it was possible to examine 2760 households (70.6 per cent) with 8905 of the same members (69.2 per cent) and 5593 of the same individual respondents (63.4 per cent) and 109 households established by members of households examined in 2005 with 294 members and 207 individual respondents. In the 2005 panel sample, 883 new members and 452 individual respondents were added. From the new sample of 3000 households drawn in 2007, research was conducted in 2663 households with 8822 members and 6844 individual respondents aged 16 or over.

In 2009, 12381 households with 37841 members were examined and individually 26178 members of these households aged 16 or over. Out of the 2007 sample, it was possible to examine 3686 households (66.6 per cent) with 12154 of the same members (67.4 per cent) and 7623 of the same individual respondents (60.3 per cent).

[2] A definition of the panel sample of households is presented in chapter 2.2.1.

After ten years, in 2009, it was possible to conduct research in 1024 households from the original sample in the first wave (34.1 per cent) with 3166 of the same members (31.7 per cent) and with 1751 of the same individual respondents (26.4 per cent).

In total, in all five waves, 16760 households were examined with 52754 members and 38731 individual respondents.

Households were drawn for research using the two-stage stratified sampling method. Before the sampling, households were stratified by voivodship and the, within voivodships according to the class of their place of residence, taking into consideration large towns (over 100 thousand inhabitants), small towns (less than 100 thousand inhabitants) and rural areas. The first stage sampling units in the urban strata in each voivodship were statistical regions (comprising at least 250 dwellings), and in rural strata statistical districts. During the second stage, pairs of dwellings were drawn systematically from a randomly generated list of dwellings, independently within each stratum created during the first stage.

During the first stage of the study (in the year 2000), a sampling of the same number of households from each voivodship was applied in order to obtain a relatively large number of households, also within voivodships characterized by a relatively small number of households. It was assumed that the estimates of parameters for Poland in general would be obtained as the weighted averages based upon data for each voivodship. During the subsequent four waves of research (2003, 2005, 2007 and 2009), the number of households drawn for the sample in each voivodship was directly proportional to the share of the number of households in the overall number of households in the country, that is within the general population. In the case of a refusal to participate in the research, households were replaced with those from the additional samples for the same statistical region.

In 2009, due to a significant increase in the new sample of households, both the number of strata and the number of dwellings drawn from individual strata in the second stage of the draw were increased. First-stage draw units were census districts, drawn with proportional probabilities to the number of dwellings they contained. Urban strata included large towns (over 100 thousand inhabitants), medium-sized towns (20-100 thousand inhabitants) and small towns (below 20 thousand inhabitants). Apart from that the strata were composed of city districts in the five largest towns. At the second stage, groups of three dwellings were drawn from census districts in large towns, groups of 4 dwellings from districts in medium-sized towns and groups of 5 dwellings from districts in the smallest towns. In rural districts groups of 6 dwellings were drawn.

2.2.1. Rules of defining the panel sample

In the panel method proposed in the research, the observed panel sample of households (that is households which participated in the previous wave) is a certain dynamically changing section of the population of Polish households. Thus, it was assumed that the panel sample of households would not be complemented during the subsequent waves if the households from the panel sample die out naturally or refuse to participate in the research project any further. The first of these situations is treated as a natural dying out of part of the household population. In the second case, however, to make sure that the decrease in the number of household members does not influence the assessment of the dynamics of changes in phenomena and processes, we proposed to apply the appropriate system of weighing the results. At the same time, in subsequent waves of research (starting from wave three) the initial panel sample of households was increased by new households, to which members of households belonging to the initial panel sample of households were moved, that is households created through division of the initial panel sample of households.

A dynamic treatment of the panel sample requires not only the initial defining of household sample (the so-called panel sample of households) and their members (the so-called panel sample of persons), but also establishing the rules of treatment of these research units in the subsequent waves.

2.2.2. Sample weighting systems

2.2.2.1. Premises for the use of weights in panel studies

In panel studies based on a sample observed over a long period of time, problems arise with regard to the sample being representative and precise which are not encountered in cross-sectional research (Kalton and Brick, 1995). As a result of the long-term character of the research project, in the subsequent waves there is an outflow of units as a result of their refusal to participate in the research (households and/or their members). There are also instances of change in the place of residence of households and loss of contact with them; sometimes the households break up during the research. At the same time, new households were included in the research, consisting of people belonging to the panel sample of persons. Finally, changes occur in the structure of the examined households.

All these factors result in the sample being less and less representative during the subsequent waves of the panel study as well as a lack of comparability of the samples and results based on them between the subsequent panel waves.

If the declines are not of random character and their frequency depends on the observable features of the examined units, a systematic error burden upon the results may be eliminated thanks to the appropriate weighting of raw data from the subsequent panel waves. Similarly, households included in the panel sample must reach the appropriate weight in order to avoid upsetting the structure of the sample

The weighting system must be constructed for each stage, both for cross-sectional and longitudinal analyses. The weights for the first wave of the panel (the initial sample) are aimed at restoration of the initial sample structure distorted by refusals of participation in the research (refusals of households and their members). Weighting during the first stage of the study may also be aimed at the adjustment of the sample distribution of selected variables (of both households and respondents) on the basis of data available from independent and reliable sources for the population distribution. This type of weighting eliminates random errors associated with the sample drawn.

In the subsequent waves of the panel, weighting is aimed at adjusting sample distortion which results from the decline of the examined units (households and persons) due to refusals and loss of contact as well as including newly established households in the sample in order to include people belonging to the panel sample of individuals, and from changes in the structure of the examined households. Changes resulting from the dying out of individuals should not be adjusted, since losses of this type are representative for the population.

2.2.2.2. Cross-sectional weights

The data obtained during the research was weighted in order to make it representative, both for research conducted in 2009 and for the previous years on a national scale and for individual voivodships and the classes of places of residence.

The initial weight of the household drawn from a given strata equals the inverse of the dwelling sampling fraction in this stratum. Initial weights were then adjusted, with the use of non-response rates, in consequence of households refusing to participate in the research, when reserve samples were exhausted, or households participated in the research (the household questionnaire was filled in) but no individual interviews took place. In order to estimate the household non-response, the household sample was divided into groups according to the place of residence class (six such classes were established). It was assumed that the probability of answer completion is constant for each of the classes. In other words, the the household non-response rate observed within a given class constitutes the estimate of the answer completion ratio for each household belonging to this class.

Corrected initial weights of households were calculated for individual places of residence through dividing their initial weight by the appropriate the household non-response rate for these places of residence.

At the next stage, corrected initial weights were calibrated using external information sources in order to increase the precision of the estimate. The integrated calibration method used in the research leads to the simultaneous estimate of weights for the households and their members. In the first step, variable values for persons are aggregated within individual households through the calculation of a total of these variables within households (e.g. the number of women/men in the household). Then, calibration for the household takes place using variables regarding households and aggregated variables regarding persons. This technique is valuable in that it provides conformity between the estimate regarding households and the estimate regarding persons, since all household members (persons) receive the same cross-sectional weights as households to which they belong. The following calibration variables were used in the research:

at the household level: household size (4 size categories were established: 1-person, 2-person, 3-person and 4-person), voivodship, type of place of residence (rural area and urban area),

at the person level: sex, age group (14 age groups were established: under 16, 16-19, 11 5-year groups, 75 and over).

Information concerning calibration variables was taken from the Population Census of 2002 and from current demographic estimates.

Calibrated cross-sectional household weights were calculated as a result of applying the integrated calibration procedure.

In the next step, calibrated cross-sectional weights undergo the procedure of calculating extreme weights. Too high a diversification of the weights has an adverse effect on estimate results, since it increases estimator variation. This procedure consists in limiting their scope of variability to the [0,3;3] range. Values exceeding this range take the number equal to the closer of the range borders. Final basic weights (the so-called final weights) are calculated by applying the procedure of calculating extreme weights.

The aforementioned procedure of calculating basic weights is used separately for each of the samples included in the research in the following panel wave. At the final stage of estimating cross-sectional weights, samples from subsequent years are aggregated, and the cross-sectional weights of households and persons from these samples are subject to a simultaneous integrated calibration followed by the procedure of excluding extreme weights, thereby calculating the final cross-sectional weights for the given year (panel wave).

This method allowed us to reach the assumed sample numbers and remain representative on the national scale and in accordance with the differentiated classification cross-sections.

2.2.2.3. Longitudinal weights

Longitudinal weights are aimed at keeping the sample representative (both the sample of households and persons) throughout the entire panel duration (Ernst, 1989;Verma, Betti and Ghellini, 2007). Cross-sectional final weights for 2007 were the point of departure for the construction of longitudinal weights for 2009.

In the research, the basic rule assumed was observing the same initial panel sample of persons throughout the subsequent waves of the panel[3]. In order to minimize the influence on the comparison results as the sample were decreasing due to the outflow of the examined persons, the starting weights ascribed to these persons have been appropriately adjusted. Longitudinal weights for persons not included in the initial panel sample of persons have been calculated based on the longitudinal weights of persons belonging to the panel sample.

2.3. Basic terms and classifications

In the research project two basic types of units were taken into consideration: households and their members aged 16 or over. Both one-person households and multi-person households were subject to analysis. A one-person household is a single person who makes a living independently, without sharing his or her income with anyone, regardless of whether he or she lives alone or with other people. On the other hand, a multi-person household is a group of people living together and sharing their income.

The following classification profiles of households were applied during the research:

- socio-economic group, according to the main source of income,
- household type, determined by the number of families and biological family type,
- class of the place of residence,
- voivodship of residence,
- economic activity
- disability.

The source of income of a household served as the basis for creating seven basic socio-economic groups:

- households where the only or main (dominant) source of income is income from hired work in the public or private sector, home-based work or work on the basis of agency agreements – *employee households*
- households where the only or main (dominant) source of income is income from a farm with an area of arable land exceeding 1 ha (including users of plots of up to 1 ha of arable land and owners of farm animals owning no arable land, if income from these comprises the only or main source of income) – *farmer households*
- households where the only or main (dominant) source of income is self-employment in areas other than farming or work as a freelancer – *self-employed households*
- households where the only or main (dominant) source of income is an old-age pension – *retiree households*
- households where the only or main (dominant) source of income is disability benefits – *pensioner households*
- households where the only or main (dominant) source of income are sources other than paid work (except for old age and disability pensions) – *households living on unearned sources*

[3] Cf. chapter 2.3.

The household type includes the following categories:

- one-family households: married couples without children, married couples with children (one child, two, three and more children),
- single-parent families
- multi-family households
- non-family one-person households
- non-family multi-person households

Within the type of economic activity, examined households were divided into those with no unemployed members and households with unemployed members.

In 2009, households were also divided into those with disabled members and those with no disabled members. The distinction was made between legally verified disability (ruling of a medical commission) and biological disability (based on a declaration of disability or chronic disease which limit the ability to carry out basic functions), which in our opinion allows us to take into account the actual, and not only formally documented threat of social exclusion resulting from disability.

The class of place of residence includes urban and rural areas, and the urban centres are differentiated according to size: more than 500 thousand inhabitants, 200-500 thousand inhabitants, 100-200 thousand, 20-100 thousand, and less than 20 thousand inhabitants.

Classification in accordance with the class of place of residence and voivodship is common for households and their members. Moreover, the following classifications of household members were taken into account during research:

- gender,
- age
- education
- household income per capita
- social-professional status
- disability

With regard to the education level, four categories were taken into consideration:

- primary and lower
- basic vocational
- secondary
- higher education and vocational colleges.

In the classification of people according to household income level, three classes of households were taken into account: where income per capita is lower than the first (lower) quartile of income distribution, where it is greater than the first quartile and lower than the third quartile, and where it is greater than the third quartile.

The following types of social-professional status of household members were taken into account:

- public sector employees
- private sector employees
- entrepreneurs excluding farmers
- farmers
- pensioners
- retirees
- the unemployed (registered at labour offices or – in some analyses – differentiated according to LFS criteria)
- students
- other persons who are not professionally active

2.4. Sample characteristics according to main classifications

2.4.1. Household sample characteristics

Tables 2.4.1–2.4.3 present the characteristics of the whole sample of households and their members by the most significant socio-demographic profiles after weighting using analytical weight.

Table 2.4.1. Households according to socio-economic group and the place of residence

Socio-economic group	Place of residence						Total	
	cities above 500k	towns 200-500k	towns 100-200k	towns 20-100k	towns below 20k	rural areas	N	per cent
Employees	969	835	449	1227	828	1719	6027	48.7
Farmers	2	5	2	19	24	578	630	5.1
Self-employed	152	94	49	144	100	196	735	5.9
Retirees	499	388	289	799	471	1065	3511	28.4
Pensioners	59	104	71	183	120	345	882	7.1
Living on unearned sources	100	93	43	99	80	176	591	4.8
Total N	1781	1519	903	2471	1623	4079	12376	
Total per cent	14.4	12.3	7.3	20.0	13.1	33.0	100	

The structure of households according to source of income is comparable with that obtained in the analyses of household budgets. Employee households were the most common group and retiree households the second most common. These two groups together comprise 77.1 per cent of the examined household sample.

Two thirds of the households lived in urban areas, with one fourth in cities with over 200 thousand inhabitants. The share of households from small and smallest towns; i.e. those with 20-100 thousand and below 20 thousand inhabitants was 20 and 13.1 per cent respectively.

Among households examined in 2009, 68.2 per cent was constituted by one family. A significant difference between urban and rural areas is observed in multi-family households, which are disproportionately overrepresented in rural areas, and non-family one person households, which are disproportionately few in rural areas.

Table 2.4.2. Households according to type and place of residence

Household type	Place of residence						Total	
	cities above 500k	towns 200-500k	towns 100-200 k	towns 20-100k	towns below 20k	rural areas	N	per cent.
One-family								
Couples without childres	315	274	174	473	298	630	2164	17.9
Couples with 1 child	320	282	147	451	272	590	2062	17.0
Couples with 2 children	200	229	118	398	274	727	1946	16.1
Couples with 3 or more children	37	47	51	137	103	471	846	7.0
Single-parent families	157	177	118	235	165	380	1232	10.2
Multi-family	55	58	32	97	99	416	757	6.3
Non-family								
One-person	629	401	249	611	357	735	2982	24.6
Multi-person	25	18	7	14	16	36	116	1.0

Households from mazowieckie and śląskie voivodships were most represented (14.7 and 13.2 per cent respectively). The next largest groups were wielkopolskie, dolnośląskie, małopolskie and łódzkie voivodships.

Table 2.4.3. Households according to voivodship and place of residence

Voivodship	Place of residence						Total	
	cities above 500k	towns 200-500k	towns 100-200k	towns 20-100k	towns below 20k	rural areas	N	per cent
Dolnośląskie	246	0	86	244	160	247	983	7.9
Kujawsko-pomorskie	0	188	42	95	108	215	648	5.2
Lubelskie	0	139	0	118	88	334	679	5.5
Lubuskie	0	0	94	39	83	98	314	2.5
Łódzkie	324	0	0	227	72	269	892	7.2
Małopolskie	291	0	23	134	113	417	978	7.9
Mazowieckie	726	87	29	251	189	535	1817	14.7
Opolskie	0	0	38	84	68	140	330	2.7
Podkarpackie	0	0	47	134	86	307	574	4.6
Podlaskie	0	115	0	72	54	134	375	3.0
Pomorskie	0	261	43	148	68	195	715	5.8
Śląskie	0	494	324	404	109	302	1633	13.2
Świętokrzyskie	0	71	0	70	61	196	398	3.2
Warmińsko-mazurskie	0	0	96	99	96	159	450	3.6
Wielkopolskie	196	0	44	245	159	378	1022	8.3
Zachodniopomorskie	0	164	40	108	107	152	571	4.6

2.4.2. Household member sample characteristics

Among 37806 members of examined households in a weighted sample, women constituted 51.8 per cent. Over one third of women and men (38.7 per cent) lived in rural areas (table 2.4.4). Every fifth woman and every fifth man were in the non-active age (45-59 years); the share of women and men aged 60 or over was 21.1 and 14.8 per cent respectively. The share of children and youth aged under 24 was below 31 per cent for the entire country.

A significant feature of household members is their education level. The noticeable changes that took place in the last four years pertain to persons with the highest and lowest education level. The share of respondents with elementary or lower education has visibly decreased, while the percentage of those with higher or vocational college education has increased both among women and men. Differences in the education structure according to gender have not changed. 52.9 per cent of all respondents have basic vocational or lower education (48.2 per cent of women and 57.9 per cent of men) (in 2005, 56.8 per cent – 52.4 per cent of women and 61.6 per cent of men), but much less often these are persons with elementary or lower education. Persons with higher or vocational college education constitute 18.7 percent (21.8 per cent of women and 15.2 percent of men); while in 2005 they amounted to 15.1 per cent.

Only 36.9 per cent (36.2 per cent in 2007) of the total of respondents were persons who are hired employees, private entrepreneurs or farmers. The share of pensioners and retirees equalled 23.7 per cent (23.4 in 2007). Like two years ago, every fifth respondent is a school or university student. The share of unemployed persons has decreased (from 7.8 per cent in 2005 and 5.3 per cent in 2007 to 4.8 per cent at the moment), while that of inactive persons has slightly risen (to 13.9 per cent).

Apart from formal education, another important factor which plays a decisive role on chances on the labour market are other, so-called "modern" abilities; e.g. a driving licence, knowledge of foreign languages and ability to work using a computer. In the 2009 research, like two and four years before, respondents were asked about these abilities. We shall omit the question of computer use here, since it is subject to a separate discussion within analyses concerning the development of the information society.

44.4 per cent of household members (2 per cent points more than two years ago) have a driving licence. The highest share of persons has an active knowledge of the English language (18.1 per cent). German is second (8.1 per cent), Russian third (7.4 per cent), and French fourth (1.2 per cent). In comparison with 2007, only the knowledge of English has increased, while the active knowledge of other languages has fallen, most notably Russian.

The relatively lowest variability of the share or respondents who have a given ability in terms of the considered social-demographic characteristics (apart from gender and education level) is for driving licence holders. Knowledge of foreign languages clearly differs in the selected respondent groups. With the rise in education level and income per capita, the share of persons with foreign languages also rises. The share of persons with foreign languages decreases in smaller classes of place of residence and is lowest among inhabitants of rural areas. In terms of knowledge of foreign languages, farmers, retirees, pensioners and other professionally inactive persons diverge greatly (negatively) in comparison with persons employed in areas other than farming.

The knowledge of German is most common in Western voivodships (especially opolskie) and pomorskie voivodship. Russian is most popular in Eastern voivodships, especially podlaskie, and in the opolskie voivodship.

Table 2.4.4. Household members by social-demographic characteristics[4] (per cent of the relevant subpopulation)

Social-demographic characteristics	Women			Men			Total		
	2009	2007	2005	2009	2007	2005	2009	2007	2005
Age									
under 25	29.0	30.2	32.1	32.5	34.1	36.4	30.7	32.1	34.2
25-34	15.3	15.9	13.0	16.9	16.8	14.7	16.0	16.3	13.9
35-44	12.3	12.1	13.5	13.4	12.7	14.2	12.8	12.4	13.9
45-59	22.3	21.7	21.3	22.5	21.1	20.6	22.4	21.4	21.0
60-64	4.9	4.4	4.5	4.3	3.7	3.9	4.6	4.1	4.2
65 and over	16.2	15.7	15.5	10.5	11.5	10.1	13.5	13.7	12.9
Place of residence									
Cities over 500k	12.3	10.6	10.4	11.0	9.8	9.7	11.7	10.2	10.1
Towns 200-500k	11.1	11.5	10.4	10.6	11.2	10.3	10.9	11.3	10.4
Towns 100-200k	6.9	7.9	7.4	6.5	7.7	7.5	6.7	7.8	7.5
Towns 20-100k	19.1	19.7	20.7	18.8	19.1	19.9	18.9	19.4	20.3
Towns below 20k	12.9	13.1	13.8	13.4	13.4	14.1	13.2	13.2	14.0
Rural areas	37.7	37.2	37.2	39.7	38.9	38.4	38.7	38.0	37.8
Voivodship									
Dolnośląskie	7.6	7.9	7.5	7.5	7.6	7.6	7.6	7.8	7.6
Kujawsko-pomorskie	5.4	5.1	5.2	5.3	5.6	5.4	5.4	5.4	5.3
Lubelskie	5.6	5.6	5.8	5.7	6.0	5.9	5.6	5.8	5.9
Lubuskie	2.6	2.6	2.6	2.6	2.7	2.7	2.6	2.6	2.7
Łódzkie	6.8	6.6	6.8	6.5	6.6	6.5	6.7	6.6	6.7
Małopolskie	8.5	8.1	8.4	8.6	8.5	8.5	8.6	8.3	8.4
Mazowieckie	13.7	13.3	13.4	13.5	12.9	13.8	13.6	13.1	13.6
Opolskie	2.7	2.9	2.7	2.7	2.8	2.8	2.7	2.9	2.8
Podkarpackie	5.5	5.4	5.3	5.6	5.6	5.5	5.5	5.5	5.4
Podlaskie	3.1	3.3	3.3	3.1	3.3	3.1	3.1	3.3	3.2
Pomorskie	5.8	5.9	6.0	5.9	5.7	5.5	5.8	5.8	5.7
Śląskie	12.3	12.6	12.6	12.3	12.4	12.7	12.3	12.5	12.6
Świętokrzyskie	3.3	3.6	3.5	3.4	3.3	3.2	3.4	3.5	3.4
Warmińsko-mazurskie	3.7	3.8	3.7	3.8	3.9	3.5	3.7	3.8	3.6
Wielkopolskie	8.9	8.9	9.1	9.0	8.4	8.9	9.0	8.6	9.0
Zachodniopomorskie	4.5	4.5	4.2	4.5	4.6	4.5	4.5	4.6	4.4
Education									
Primary and lower	24.1	25.2	29.2	19.5	20.5	24.0	21.9	23.0	26.7
Basic voc. / grammar school	24.1	23.2	23.2	38.4	37.5	37.6	31.0	29.9	30.1
Secondary	29.9	31.0	30.1	26.8	27.3	25.9	28.5	29.2	28.1
Higher and vocational college	21.8	20.6	17.5	15.2	14.7	12.4	18.7	17.8	15.1
Social-professional status									
Public sector employees	12.1	12.4	12.3	9.8	9.4	10.3	11.0	10.9	11.3
Private sector employees	14.6	14.5	11.7	23.8	23.4	18.7	19.0	18.8	15.1
Private entrepreneurs	1.9	2.0	2.1	5.2	5.0	4.8	3.5	3.5	3.4
Farmers	2.4	3.5	3.8	4.5	4.3	4.6	3.4	3.9	4.2
Pensioners	7.4	7.3	8.5	5.8	5.9	6.6	6.6	6.7	7.6
Retirees	20.2	19.4	18.2	13.7	13.9	13.0	17.1	16.7	15.7
Students	19.9	19.9	20.3	21.6	22.0	22.1	20.7	20.9	21.2
Unemployed	5.2	6.1	7.5	4.4	4.5	8.2	4.8	5.3	7.8
Other professionally inactive	16.4	14.9	15.5	11.3	11.7	11.9	13.9	13.4	13.7
Total N* 2005	6638			6234			12872		
Total N* 2007	9414			8627			18041		
Total N* 2009	19777			18023			37800		
Total per cent 2005	51.5			48.5					
Total per cent 2007	51.9			48.1					
Total per cent 2009	51.8			48.2					

* For some persons from 2007 and 2009 data concerning gender was missing.

[4] The table provides weighted values (except for row Total N, which contains non-weighted values). The distribution according to education was only for persons above 12 years of age. For some persons from 2007 and 2009 data concerning gender was missing.

Tabela 2.4.5. Per cent of household members with a driving licence and knowledge of foreign languages in 2007 and 2009 by social-demographic characteristics[5]

Social-demographic characteristics	Driving licence		Language knowledge (active)							
			English		German		French		Russian	
	2009	2007	2009	2007	2009	2007	2009	2007	2009	2007
Total	44.4	42.5	18.1	17.5	8.1	8.5	1.2	1.3	7.4	8.4
Gender										
Men	57.9	56.1	18.2	17.0	8.3	8.5	0.8	0.8	6.7	7.7
Women	31.9	29.9	18.1	18.0	8.0	8.5	1.5	1.9	8.1	9.2
Age										
under 25	15.8	15.7	30.7	31.7	12.5	13.2	1.2	1.7	2.5	2.9
25-34	71.2	66.9	34.5	29.3	10.9	10.5	2.0	2.5	6.8	8.5
35-44	71.1	67.2	12.8	11.4	6.3	6.1	1.0	0.7	10.6	12.8
45-59	57.5	57.3	5.9	5.0	4.1	4.8	1.1	1.0	12.3	13.4
60-64	48.3	48.6	2.8	2.2	3.2	2.3	0.8	1.0	11.9	11.0
65 and over	29.7	28.0	1.7	1.5	5.2	5.6	0.5	0.6	6.8	8.5
Place of residence										
Cities over 500k	49.6	47.9	32.0	30.0	9.5	10.3	3.2	2.9	10.9	11.8
Towns 200-500k	45.8	44.6	24.7	24.1	8.6	8.9	1.7	2.0	8.7	11.2
Towns 100-200k	45.2	44.5	23.4	21.9	10.8	9.6	1.1	2.2	10.1	9.0
Towns 20-100k	44.7	43.2	17.7	17.5	8.5	8.4	1.0	1.6	7.8	8.6
Towns below 20k	43.8	41.0	15.1	15.3	8.1	9.8	0.8	0.7	6.7	7.6
Rural areas	42.3	40.1	12.4	12.0	7.0	7.3	0.7	0.6	5.6	6.8
Voivodship										
Dolnośląskie	44.1	42.5	16.4	16.3	10.4	12.4	0.7	1.4	7.7	6.6
Kujawsko-pomorskie	42.9	37.9	16.8	17.6	8.3	7.2	1.2	1.0	6.6	7.6
Lubelskie	42.3	40.5	16.4	16.9	5.7	7.6	0.7	1.0	10.7	13.7
Lubuskie	42.0	41.1	15.1	12.7	10.5	12.6	0.2	0.7	8.9	6.9
Łódzkie	43.5	43.7	15.9	15.7	7.5	7.2	0.9	1.0	7.1	5.9
Małopolskie	43.8	43.2	19.4	20.9	7.2	9.1	1.9	2.7	7.1	8.9
Mazowieckie	47.2	42.9	22.6	19.8	6.2	6.4	1.9	1.8	9.6	10.1
Opolskie	45.8	48.8	18.9	17.0	18.8	17.0	0.3	2.3	10.3	11.7
Podkarpackie	42.6	42.9	17.2	17.0	8.7	8.0	0.8	0.7	4.1	6.2
Podlaskie	44.6	42.3	18.7	19.2	4.6	7.4	1.7	0.4	16.8	25.4
Pomorskie	42.4	43.0	22.4	21.1	10.3	8.8	0.8	1.1	6.1	7.7
Śląskie	45.5	43.2	18.2	18.4	7.8	6.6	1.3	1.9	6.0	5.7
Świętokrzyskie	41.7	39.9	15.7	16.7	4.9	8.7	0.6	0.7	6.1	4.8
Warmińsko-mazurskie	41.2	36.5	14.0	13.8	6.1	6.6	0.4	0.7	6.5	7.5
Wielkopolskie	49.2	47.1	16.2	15.0	9.2	9.9	1.4	1.1	5.9	8.2
Zachodnio-pomorskie	40.6	38.5	17.9	14.4	10.3	10.1	0.9	0.3	4.3	5.9
Education										
Primary and lower	15.8	16.7	10.5	10.0	5.4	5.3	0.2	0.3	1.9	3.0
Basic voc. / grammar school	48.3	44.6	11.8	11.7	7.5	7.9	0.7	1.0	6.1	6.8
Secondary	64.4	61.2	21.1	21.3	10.1	11.0	1.1	1.7	9.7	11.5
Higher and voc. college	77.8	75.8	41.6	39.2	14.5	15.4	4.0	3.7	18.5	20.0
Income per capita										
Lower quartile	30.2	26.8	11.8	12.5	6.3	6.3	0.4	0.7	4.9	5.5
Median	41.9	39.7	15.0	14.9	7.5	7.5	0.9	1.0	6.9	7.5
Upper quartile	59.9	57.3	27.9	24.2	10.5	10.9	2.3	2.2	10.8	12.3
Social-professional status										
Public sector employees	73.5	70.8	23.3	24.1	8.0	8.8	2.2	1.9	14.3	16.4
Private sector employees	72.1	66.1	23.1	19.6	8.6	9.0	1.3	1.6	8.8	8.9
Private entrepreneurs	92.1	90.9	24.4	20.8	11.4	14.3	2.2	1.8	13.2	14.7
Farmers	75.7	68.6	1.8	3.4	3.4	5.8	0.5	0.3	8.2	11.4
Pensioners	32.6	31.6	6.8	7.8	4.1	5.6	0.4	0.7	6.3	7.4
Retirees	36.6	35.6	2.2	2.1	4.7	4.7	0.7	0.7	8.7	10.4
Students	13.8	12.2	37.4	36.9	15.1	14.8	1.6	2.1	2.8	2.9
Unemployed	42.9	38.6	13.3	9.9	8.1	5.4	0.6	0.7	8.2	8.3
Other professionally inactive	24.8	22.3	7.8	6.9	3.9	3.5	0.7	0.8	4.0	4.5

[5] The table provides weighted values.

Information concerning adults' disability, both legal and biological[6], served to estimate the prevalence of disability among household members. It is measured by the share of disabled persons in the population subgroup (e.g. defined according to gender, age or education level); i.e. the so-called disability rate.

The data from Social Diagnosis 2009 showed that about 12 per cent of women and men aged 16 or over were disabled (legally or biologically). Every tenth respondent (both women and men) had a valid ruling confirming his/her disability (issued by ZUS, ZOoN or both). The remaining share was persons who felt limitations when performing basic functions, but had no valid certificate confirming their disability.

The share of disabled persons increases along with the age (cf. figure 2.4.1). However, this increase is not regular, since certain age groups reveal a decrease in the disability rate (unequal for men and women). Due to this fact, quite significant differences arise in the disability profile by age for both genders. These differences are: a decline in the share of disabled persons aged 65-69 for men and 80-89 for women..

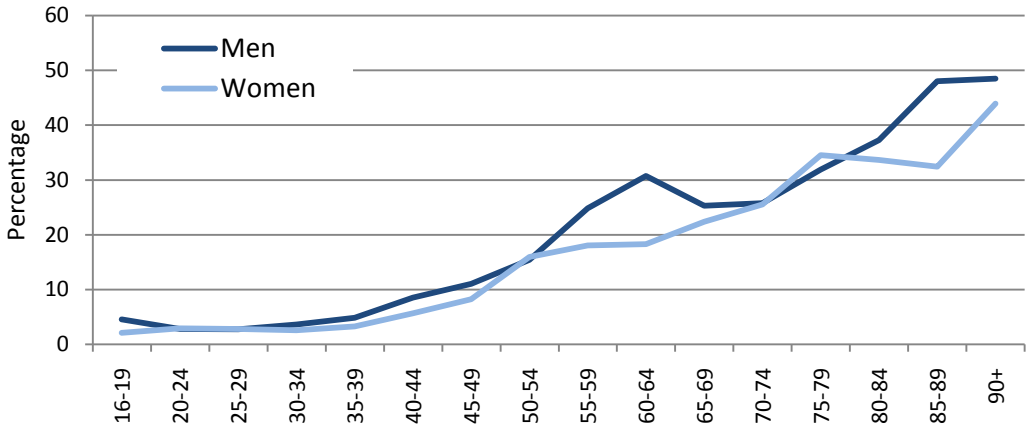


Figure 2.4.1. Age profile of disability prevalence by gender, 2009 (in per cent)

The group of elderly persons, here defined by age 65 and over, deserves particular attention[7]. This group's fast growth rate after 2005 results from the post-war baby boom. The health status of this group as well as its social-demographic characteristics, especially family situation, determine demand for health care and general care services.

Almost one third of elderly persons were disabled (30 per cent of men and 29 per cent of women). Elderly men more often had a valid ruling confirming their disability than elderly women (26 per cent and 23 per cent respectively).

Men aged 65 and more living in urban areas experience disability slightly more often than those living in rural areas (31 and 29 per cent respectively), whereas women of this age living in both urban and rural areas are disabled in an almost equal share (about 28 per cent). Differences by place of residence increase along with age for both genders. For senile persons (ie. aged 80 and more) these differences reached over 5 per cent points in favour of persons living in urban areas.

To characterise differences in the health status of the elderly taking into account their family situation we apply "a household position" defined by van Imhoff and Keilman (1991) and used also in Polish publications (Kotowska 1994, Kotowska i in. 2003, Abramowska 2006). To describe living arrangements of the elderly we used the following categories of the household position:

CHILD – child in marriage (or partner couple) or in a single-parent family,

SING – person constituting a one-person household,

MAR0 – spouse (partner) being in a relationship without children in the household,

MAR+ – spouse (partner) being in a relationship with children in the household,

H1PA – parent in a single-parent family,

NFRA – person in a one-family household not constituting a family (e.g. father, mother, father-in-law, mother-in-law or another person),

OTHR – persons constituting multi-family households (two and more families) and persons constituting multi-person non-family households.

The categories CHILD, MAR0, MAR+, H1PA and NFRA were defined for one-family households (with or without non-family members), whereas the remaining positions (SING and OTHR) were distinguished for the remaining household types (one-person, non-family or multi-family multi-person households).

6 The term "legal disability" concerns persons owning a valid ruling of the Social Insurance Institution (ZUS) or (and) a valid ruling of the Disability Ruling Panel of the Regional Family Care Centre (ZOoN przy PCPR), whereas biological disability affects persons who have declared that due to disability or illness their ability to perform such actions as study, work or managing a household is entirely or partially limited, but do not hold a ruling issued by a medical commission, as well as other disabled persons.

7 The lists also include general variables for persons aged 60 and over.

Figure 2.4.2 shows disability rates by age and the household position for men and women respectively. The highest rates were observed for persons of both genders constituting one-person households (32 per cent for women and 33 per cent for men aged 65 and over). This result is rather surprising, since persons living alone are generally perceived as more fit (their better state of health allowing them to manage a separate household), whereas those co-habiting with adult children and their families exhibited worse state of health characteristics (Population Census 2002 data, Abramowska, 2005). In general, the disability rates are higher for senile persons than those aged 65-79 in almost all household positions.

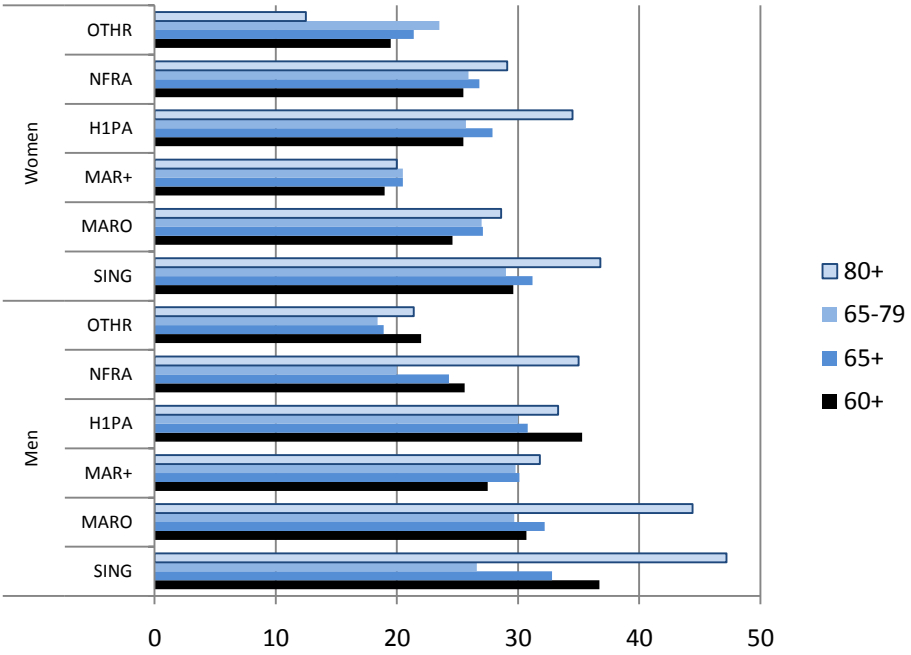
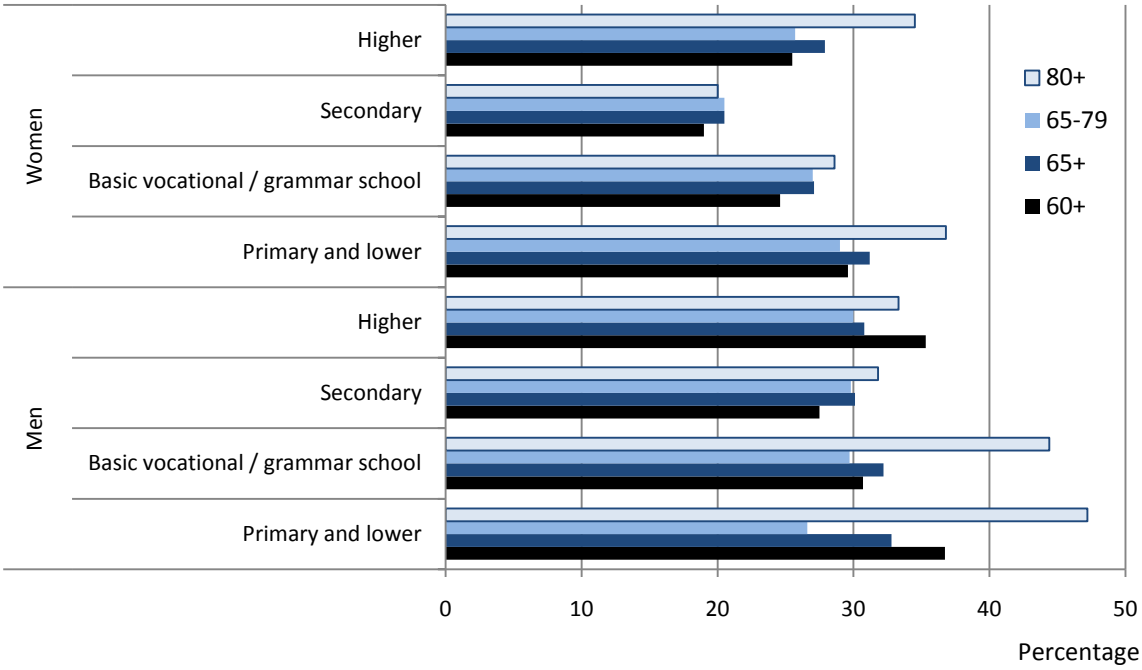


Figure 2.4.2. Percentage of disabled persons by age, gender and position in the household

This result can be associated with changes in living arrangements of elderly people. By comparing the structure by household positions of persons of that age based from PC 2002 data with that based on the Social Diagnosis 2009 one can find a significant increase in the share of one-person households (both women and men). Men are a spouse in marriage (with or without children MAR), MAR+), much more often than women, but in 2002-2009 this share declined for men and increased for women. There was also a slight increase in the share of elderly persons constituting multi-family and non-family multi-person households (OTHR). The share of persons being non-family household member (NFRA) declined as well. These changes confirm that elderly persons more and more rarely create joint multi-family households or co-habit with adult children and their families. They also reflect the influence of improved mortality, especially of men, for the family situation of the elderly. Elderly persons tend more often to live on their own, despite their disability. Similar trends are also observable in other European countries, where elderly persons stay in separate households for as long as possible.

In studies on population health possible impacts of education on the health status deserve much attention. Education is often conisdeed as a variable describing the individual's socio-economic status (the higher education level, the higher the income and the socio-economic status). Many analyses show tts relevance for the health statust (Beckett 2000, Wróblewska 2002, 2004, Abramowska-Kmon 2007, 2008). Generally speaking, the higher the level of individual's education, the better his/her status of health.

Education influences also health of the elderly (cf. fig. 2.4.3), especially in the group of persons holding a valid disability certificate, albeit to a lesser degree than one could have expected based on other analyses. In general, the greatest differences in disability rates for elderly men exist between those with the lowest education (not exceeding basic vocational training) and those with other education categories (which reveal similar values for each category). These differences are most visible for the oldest persons, however these results should be interpreted with due care (small counts in the oldest age groups). A slightly different picture emerged for elderly women. The disability rates reveal differed mostly between women with higher education and those belonging to other education categories.



NOTE: Due to (very) low number counts for age 80 and more by education level categories the results need to be interpreted with due care

Figure 2.4.3 Disability rates by gender and education, 2009

3. HOUSEHOLD LIVING CONDITIONS

3.1. Income and income management

3.1.1. Household income level and variability

Tomasz Panek

The average net income in the examined households amounted to PLN 1159 per capita (Table 3.1.1) in March 2009. In real terms, the average increase in the panel sample households in the March 2007 to March 2009 period was 16 per cent (Table 3.1.5) [8]. The highest average net income per capita was recorded in self-employed households (PLN 1591 per person). Subsequent household groups with highest average net income per capita are employee and retiree households (PLN 1240 and 1181 respectively). Households living on unearned sources had by far the lowest average net income per person (PLN 653 per capita).

The socio-economic groups with the highest and lowest equivalent income (income comparable between households of varying demographic structure, which determines their affluence level) are the same groups as in the case of income per capita (Table 3.1.1). In March 2009, net equivalent income increased in real terms by 20 per cent in comparison to March 2007 (Table 3.1.5). The greatest increase of net income in this period was recorded in employee households (real net income per capita by 24 per cent and equivalent income by 25 per cent).

In February 2009, net income per capita and net income per equivalent unit, which are the true indicators of household affluence level, were visibly lowest in households of married couples with three or more children (on average PLN 651 and 1099 respectively) (Table 3.1.2). Net income per capita as well as net income per equivalent unit were on average over PLN 500 lower in households with unemployed members than in households without unemployed members (Table 3.1.1). Households with disabled members also exhibited much lower net income per capita and per equivalent unit than households without disabled members (lower by almost PLN 300 and almost 400 respectively). In all household types equivalent income increased in real terms in the March 2007 to March 2009 period (Table 3.1.5). It increased also in households with unemployed and disabled members (Table 3.1.4.).

Both income per equivalent unit and income per capita are closely correlated with place of residence. Average income per equivalent unit decreases along with the size of the place of residence (in March 2009, it amounted to an average of PLN 2042 in the largest cities and PLN 1138 in rural areas). In all place of residence types there has been a significant increase in real monthly income per equivalent unit over the last two years (Table 3.1.6). The largest increase in this period was observed in households living in the largest cities and in rural areas (by 23 and 22 per cent respectively).

Table 3.1.1. Household net income in February 2009 according to socio-economic group, economic activity and disability

Socio-economic group	Net income in PLN		
	per household	per capita	per equivalent unit
Employees	3418.07	1239.89	1638.56
Farmers	2564.08	694.31	1003.11
Retirees	1994.15	1181.41	1265.76
Pensioners	1361.54	850.85	896.37
Entrepreneurs	4283.66	1591.42	2082.47
Living on unearned sources	1134.31	652.92	740.20
Without unemployed members	2831.36	1227.99	1495.62
With unemployed members	2162.12	639.90	907.85
Without disabled members	2912.66	1231.89	1521.09
With disabled members	2297.42	953.62	1159.42
Total	2751.99	1159.25	1426.69

[8] This indicator expresses a percentage difference between two measurements taken in the same households, which we were able to examine twice in 2007 and 2009. It should be noted that income comparison from the 2007 and 2009 research in the same panel sample, but at the level of individual households, provides much higher change indicators (in this case it is 37.5 per cent nominally and approx. 27 per cent in real terms). This second difference is namely the "base effect". In households with lower income during the first measurement, the increase (or decrease) of income by a certain amount results in a much higher percentage change indicator than in households with higher initial income, and if most change at this individual level is going in the same direction and is nominally similar (and in any case not fully proportional to the initial income amount) the average change is more influenced by changes in those households which were initially poorer, that is by greater percentage changes. While calculating the percentage change in the average income level for the entire sample, differences in the initial level of household income are of no significance, and changes in households, initially less affluent, weigh as much as those in more affluent households. It is questionable which of the two methods of calculating change indicators provides better information on the dynamics of change in the society's affluence level. In this chapter, we decided to calculate the change at the level of average values from the household sample and individual groups of households, and not the average change for individual households, since we assumed that from the social policy perspective it is more important to have aggregated data, which disregard the "base effect".

Table 3.1.2. Household net income in February 2009 according to household type

Household type	Net income in PLN		
	per household	per household	per equivalent unit
One family:			
Couples without children	2900.15	1425.61	1726.02
Couples with 1 child	3520.70	1155.42	1635.24
Couples with 2 children	3552.40	888.21	1373.98
Couples with 3 or more children	3400.42	651.11	1099.03
Single-parent families	2187.47	904.78	1163.50
Multi-family	3899.04	776.77	1260.35
Non-family:			
One-person	1489.91	1483.74	1365.91
Multi-person	2090.18	983.03	1228.75

Table 3.1.3. Household net income in February 2009 according to place of residence

Place of residence	Net income in PLN		
	per household	per household	per equivalent unit
Cities over 500k	3497.67	1772.43	2056.79
Towns 200-500k	2925.18	1310.23	1595.26
Towns 100-200k	2734.36	1213.80	1468.99
Towns 20-100k	2707.76	1152.41	1418.15
Towns below 20k	2617.85	1073.25	1331.64
Rural areas	2451.89	867.44	1128.38

Table 3.1.4. Changes in net household income in the February 2007 to February 2009 period according to socio-economic group, economic activity and disability

Socio-economic group, economic activity and disability	Net income in PLN		
	per household	per household	per equivalent unit
Employees	118.13	124.07	124.62
Farmers	107.03	114.07	115.45
Retirees	100.81	108.80	113.71
Pensioners	86.57	102.20	104.67
Entrepreneurs	112.93	112.67	115.55
Living on unearned sources	98.48	110.93	114.54
Without unemployed members	112.83	114.53	119.17
With unemployed members	114.19	112.58	117.59
Without disabled members	113.99	116.68	120.83
With disabled members	112.29	113.62	118.67
Total	113.70	116.06	120.43

Table 3.1.5. Changes in real net household income in the February 2007 to February 2009 period according to household type

Household type	Net income in PLN		
	per household	per household	per equivalent unit
One family:			
Couples without children	112.27	112.63	117.59
Couples with 1 child	117.04	117.69	120.57
Couples with 2 children	115.13	114.35	117.22
Couples with 3 or more children	129.16	132.95	134.42
Single-parent families	113.61	112.72	122.63
Multi-family	107.50	126.49	122.05
Non-family:			
One-person	114.60	114.70	121.85
Multi-person	90.95	96.94	100.87

Table 3.1.6. Changes in real net household income in the February 2007 to February 2009 period according to place of residence

Place of residence	Net income in PLN		
	per household	per household	per equivalent unit
Cities over 500k	114.42	119.20	123.32
Towns 200-500k	114.50	114.03	120.07
Towns 100-200k	108.90	111.23	114.76
Towns 20-100k	114.67	114.40	119.67
Towns below 20k	109.82	115.41	119.29
Rural areas	115.33	118.20	121.65

According to the examined households, in March 2009 the lowest minimum monthly net income in PLN amounted to PLN 1088 per capita and 1322 per equivalent unit. On average, household aspirations with regard to their minimum income increased substantially in real terms in the March 2007 to March 2009 period (net income per capita by 17 per cent and income per equivalent unit by 21 per cent).

The highest aspirations concerning income per equivalent unit allowing the minimum acceptable level of needs satisfaction were recorded in March 2009 by entrepreneur, employee and retiree households as well as households comprising married couples without children and non-family one-person households. The lowest aspirations with regard to income were declared by farmer households (PLN 1033 per equivalent unit) and households comprising married couples with 3 or more children (PLN 991 per equivalent unit). In recent years all socio-economic groups and household types showed an increase in income aspirations. Between 2007 and 2009, these aspirations grew most in households living on unearned sources, employee households and non-family one-person households.

The level of minimum net monthly income declared by households without unemployed members is significantly higher than in the case of households with unemployed members (PLN 1135 and 733 respectively in case of income per capita and PLN 1362 and 1019 respectively in the case of income per equivalent unit). Minimum income aspirations declared by households without disabled members are also significantly higher than those of households with disabled members (PLN 1118 and 1005 respectively in the case of income per capita and PLN 1364 and 1202 respectively in the case of equivalent income). This level increased in March 2009 as compared with March 2007 in all four household groups, although this rise was lowest in the group of households with unemployed members.

The level of aspirations with regard to the lowest minimum net monthly income generally decreased the smaller the place of residence. The lowest level of net minimum monthly income per equivalent unit was declared by households in rural areas (PLN 1100). Between 2007 and 2009, we observed a rise in these aspirations in all place of residence types, although the most significant increase took place in households living in the largest cities.

3.1.2. Strategies of coping with financial difficulties and social assistance

3.1.2.1. Strategies for coping in difficult financial situations

Tomasz Panek

In March 2009, the examined households most often declared that with their current income they managed to make ends meet with some difficulty (over 33 per cent), over 20 per cent of households coped with difficulty and almost 19 per cent with great difficulty. In the last two years there has been a significant decrease in the percentage of households making ends meet with great difficulty (almost 5 percentage points) (Figure 3.1.1).

The highest percentage of households making ends meet with great difficulty was found among households living on unearned sources (over 58 per cent) and disability pensioner households (almost 40 per cent). According to household type, this was most common among single-parent households (over 28 per cent) and non-family one-person households (over 26 per cent). As much as almost 39 per cent of households with unemployed members and almost 30 per cent of households with disabled members made ends meet with great difficulty with their current income. On the other hand, households without unemployed members and households without disabled members most often made ends meet with some difficulty (almost 34 and 30 per cent of households respectively). Households making ends meet with great difficulty with their current income most often lived in rural areas and the smallest towns (over 21 and 20 per cent of households respectively).

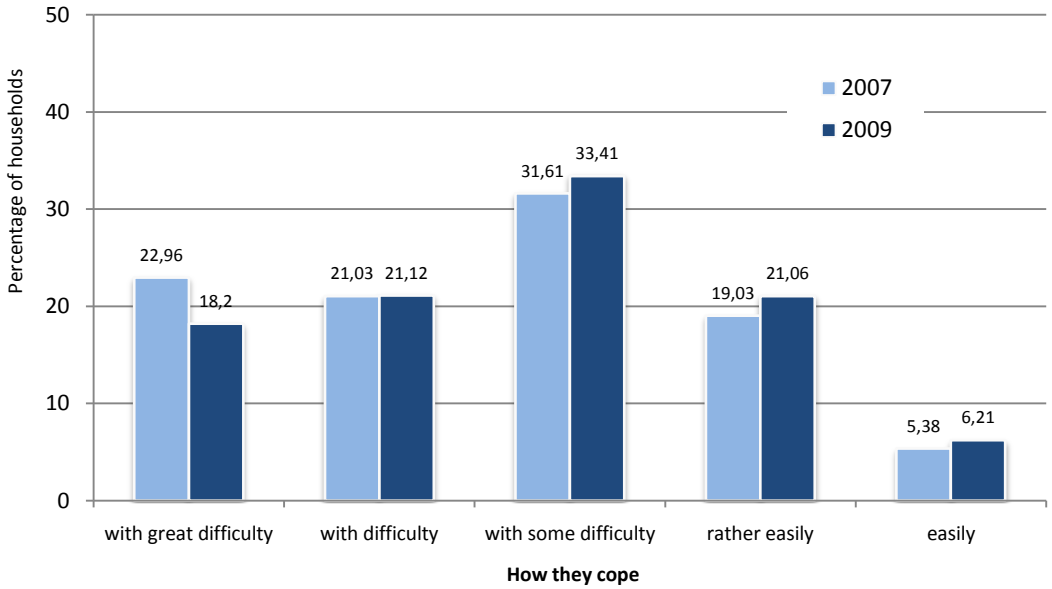


Figure 3.1.1. How households coped at the current income level in 2007 and 2009 in panel samples

In the last 2 years, the percentage of households making ends meet with great difficulty increased significantly only in households living on unearned sources (by almost 5 percentage points) and non-family multi-person households (by almost 3 percentage points). When assessing their management of funds in March 2009, households most often declared that they live economically and so can afford everything (over 39 per cent) or that they live very economically in order to afford more expensive purchases (over 16 per cent) (Figure 3.1.2). In the last 2 years, the greatest increase was observed in households declaring that they live economically and so can afford everything and households declaring they can afford everything and even save up for the future (over 3 percentage points and almost 3 percentage points respectively).

Households declaring that they cannot even afford the cheapest food (those who rate their financial situation as the worst), constituting almost 2 per cent of the total number, were predominantly found among households living on unearned sources (over 14 per cent) as well as non-family one-person households and households of married couples with 3 and more children (over 3 and almost 3 per cent respectively). Both households with unemployed members and households without unemployed members most often declared that they live economically and so can afford everything (almost 36 and almost 40 per cent of households respectively). However, as much as over 8 per cent of households with unemployed members stated that they only have money for the cheapest food, but cannot afford clothes, and almost 5 per cent claimed they do not even have enough money for the cheapest food. On the other hand, among households without unemployed members, these forms of income management were found only in over 4 per cent and over 1 per cent of households respectively.

Households with and without disabled members also predominantly declared that they live economically and so can afford everything (almost 37 per cent and over 40 per cent of households respectively). However, over 7 per cent of households with disabled members stated that they only have money for the cheapest food, but cannot afford clothes, whereas this answer was only chosen by 4 per cent of households without disabled members.

The percentages of households who assessed their financial situation as the worst did not exhibit significant variability in terms of place of residence. Relatively the highest percentage of households stating that they do not even have enough money for the cheapest food was observed in towns with 100-200 thousand inhabitants (over 2 per cent of households) and in rural areas (almost 2 per cent of households).

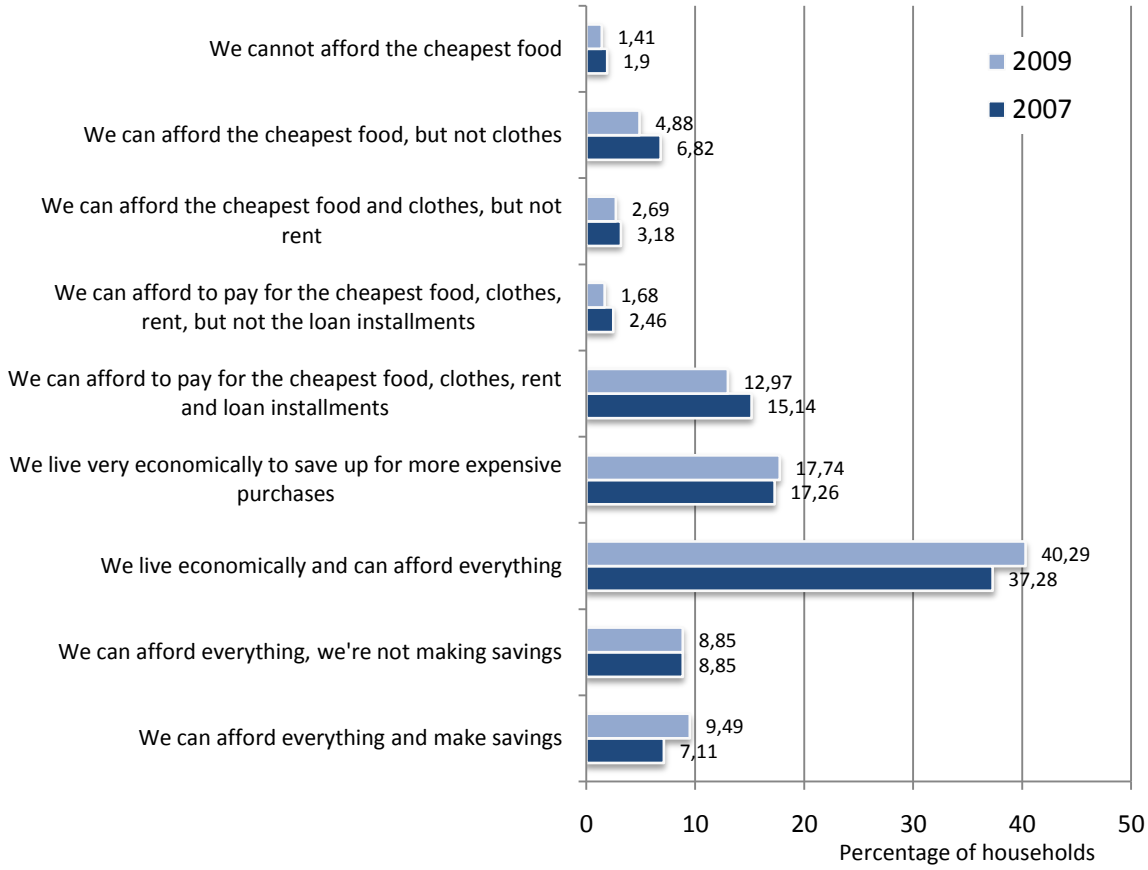


Figure 3.1.2. Ways of household income management in 2007 and 2009 in panel samples

The percentage of households stating that they cannot even afford the cheapest food has not undergone any significant change in the last 2 years (it decreased by 0.5 percentage point). The rise of these pessimistic assessments took place only in households living from unearned sources and disability pensioner households (by almost 7 and over 2 percentage points respectively) as well as non-family multi-person households and single parent households (by almost 4 and less than 1 percentage points respectively). A slight increase in the percentage of households who assessed their ways of income management most pessimistically was also found among households living in large towns with 200-500 thousand inhabitants.

28 per cent of households declared in March 2009 that their regular income is insufficient to cover current needs. In the last two years, the percentage of households whose income is insufficient to cover current needs decreased by over 5 percentage points. In March 2009, these were most often found among households living on unearned sources (over 64 per cent) and disability pensioner households (almost 55 per cent), as well as single parent households (over 40 per cent) and non-family one-person households (over 35 per cent). The same declarations were made by as much as 50 per cent of households with unemployed members, whereas this situation concerned only slightly over 25 per cent households without unemployed members. Similarly, almost 40 per cent of households with disabled members and only approximately 24 per cent of households without disabled members stated that their regular income is insufficient to secure current needs.

Households with insufficient regular income to cover current needs were most often found in rural areas (almost 32 per cent of households).

Between 2007 and 2009, the percentage of households declaring their regular income insufficient to cover current needs increased significantly only among non-family multi-person households (increase by over 5 percentage points) and households from Opolskie and Lubelskie voivodships (by over 4 and almost 2 percentage points respectively).

In March 2009, households most often declared that when their income is insufficient to cover current needs, they limit their current needs (over 86 per cent of households with insufficient income), turn to their relatives for help (almost 39 per cent) or take out loans (almost 36 per cent). Only in approximately 16 per cent of households in this situation does the household member take up an additional job.

There was no substantial variability in households grouped according to all criteria applied in the study who declared that they limited their current needs.

In March 2009, when their regular income was insufficient to cover basic needs, loans were taken out most often by employee households (approximately 45 per cent of households) and households of married couples with 3

and more children (over 48 per cent of households). These behaviours were also most often found among households living in medium-sized towns with 100-200 thousand inhabitants (almost 42 per cent of households).

In March 2009, turning to relatives for help when regular income was insufficient to cover current needs was predominant among households living on unearned sources (over 54 per cent of households) and non-family one-person households (over 46 per cent of households). This kind of household was most often found in the largest and smallest towns (almost 41 per cent of households in both cases).

When regular income was insufficient to cover current needs, both households with unemployed and disabled members and households without unemployed or disabled members most often reacted similarly to households groups specified according to other typological criteria. What is noteworthy however is that households with unemployed and disabled members much more often take advantage of social assistance in such situations than households without unemployed and disabled members (almost 29 and almost 22 per cent in the first two groups and over 12 per cent in two last groups respectively).

An active form of coping when regular income is insufficient to cover current needs, that is getting an additional job, was relatively chosen most often in entrepreneur and employee households (over 25 and almost 24 per cent of households respectively) as well as households of married couples with 2 children and married couples with 3 and more children (over 22 per cent of households in each group), whereas it was most seldom among retiree and disability pensioner households (almost 8 per cent and almost 10 per cent respectively) as well as non-family one-person households (below 8 per cent of households). Households preferring this type of actions were most often found in the largest cities and large towns with 200-500 thousand inhabitants (almost 22 per cent of households each).

Over 35 per cent of households stated that their income situation worsened in comparison with 2 years ago, and almost 47 per cent stated it did not change. The pessimistic outlook on change was most often formulated among households living on unearned sources (almost 61 per cent) and single parent households (almost 44 per cent). Over 56 per cent of households with unemployed members claimed that their income situation had worsened. On the other hand, only over 32 per cent of households without unemployed members made similar declarations. Households with disabled members had a negative outlook on changes of their income situation much more often than households without disabled members (almost 43 and almost 33 per cent of households respectively). Households stating that their income situation worsened in comparison with 2 years ago were most often found in rural areas.

3.1.2.2. Changes in coping strategies in the long term

Janusz Czapiński

In recent years, there has been a significant decrease in households making ends meet with great difficulty and with difficulty (by 12 and 5 percentage points respectively), and an increase in households able to cope rather easily and easily (by 10 and 3 percentage points respectively) (Figure 3.1.3).

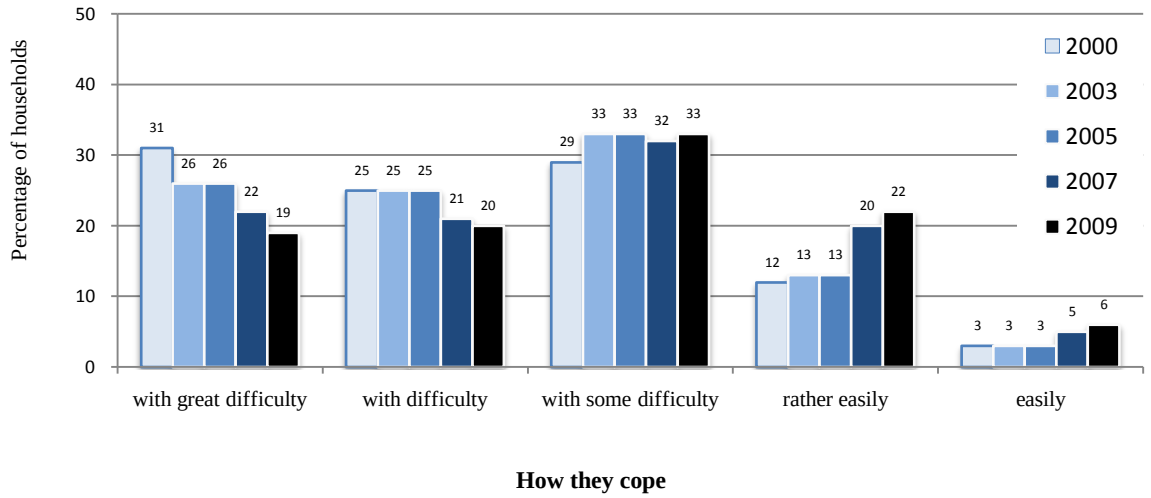


Figure 3.1.3. How households coped at the current income level from 2000 to 2009 in whole samples

In the last 10 years, the highest increase was observed among households claiming they live economically and so being able to afford everything (by 12 percentage points). There has also been an increase of 7 percentage points in households who can afford everything and still manage to save up for the future, whereas the percentage of households in the most difficult situation, who cannot afford to pay off loans, pay for rent or clothes, has fallen (Figure 3.1.4).

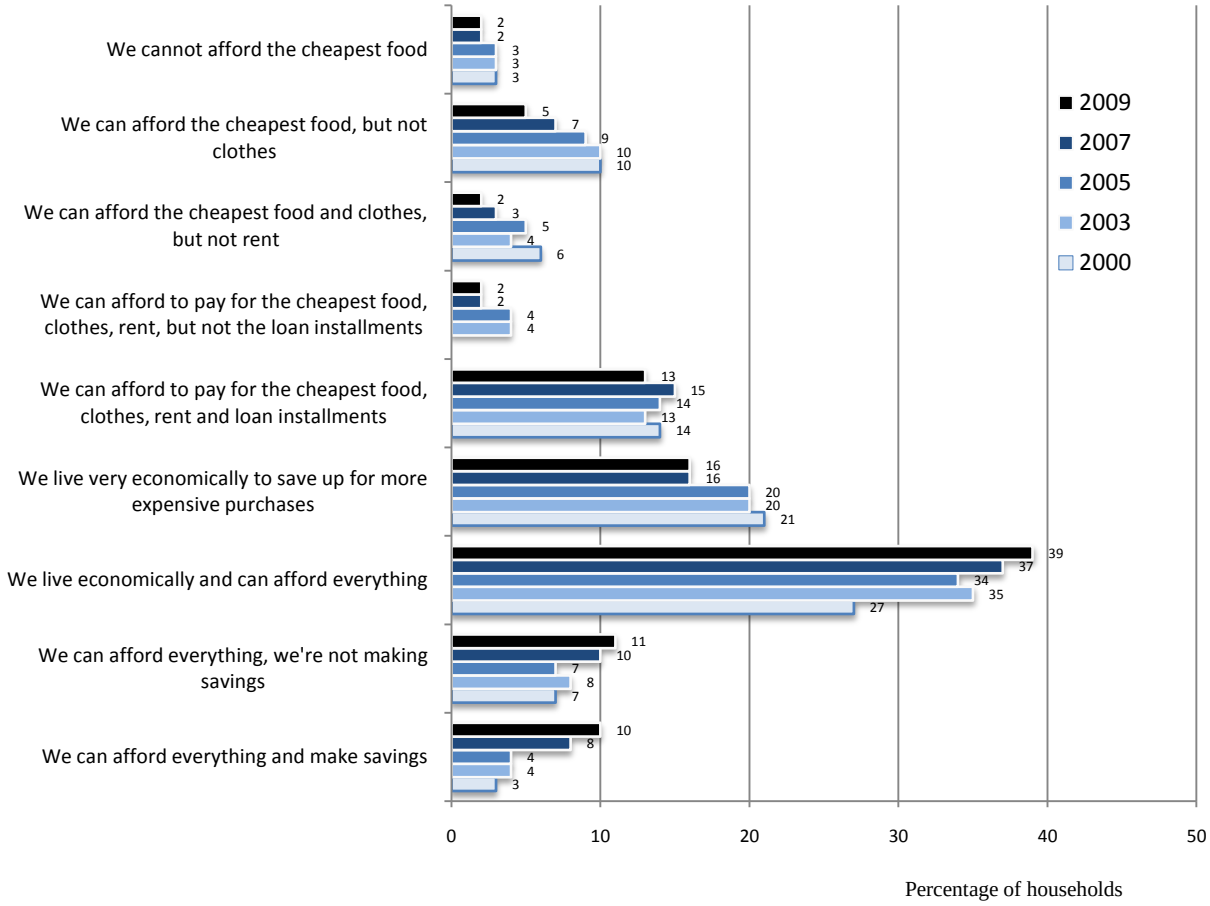
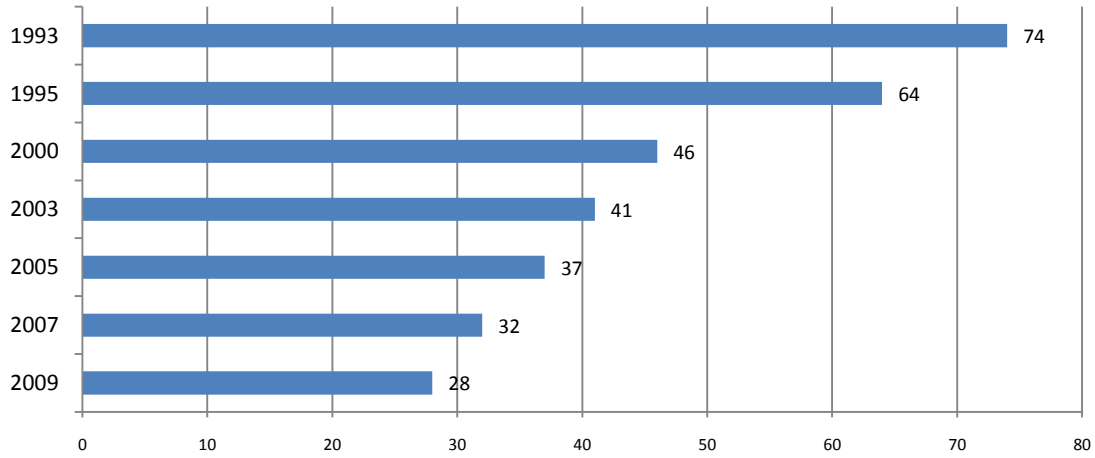


Figure 3.1.4. Household income management from 2000 to 2009 in whole samples

In March 2009, just under 28 per cent of households declared that their regular income is insufficient to cover current needs. In the last two years, the percentage of households whose income is insufficient to cover current needs decreased by 4 percentage points, and the figure is almost 2.5 times lower than the same category in 1993 (Figure 3.1.5).



Data source: 1993-1997 — Czapiński, 1998; 2000-2009 — *Social Diagnosis.*

Figure 3.1.5. Percentage of households declaring that their regular income is insufficient to cover current needs from 1993 to 2009 in whole samples

3.1.2.3. Social assistance

Janusz Czapiński

The percentage of households receiving external assistance of some kind amounted to 12 per cent, which is a slightly less than two years ago (14 per cent). In most cases it was financial assistance (75 per cent, 77 per cent in 2007), then material assistance (48 per cent, 49 per cent in 2007), and least often assistance in the form of services (25 per cent, 19 per cent in 2007) (Figure 3.1.6).

The scope of assistance is highly differentiated according to socio-economic groups, household type and voivodship.

Non-family multi-person households as well as married couples with three and more children and single parent families took advantage of social assistance much more often than the remaining household groups (21, 19 and 18 per cent respectively). Social assistance was least often sought by married couples without children (5 per cent) and married couples with one child (6 per cent) (Figure 3.1.7). There has been a significant decline in the scope of assistance for marriages with three and more children (decrease by 22 per cent) and for one-person households (decrease by 26 per cent) (Figure 3.1.8).

In all cross-sections, social assistance was mostly sought by households whose income was below the first quartile, but also by a certain percentage of households whose income was above the third quartile. The greatest number of relatively affluent households taking advantage of external assistance was found among non-family multi-person households (12 per cent) and married couples with three and more children (7.2 per cent) (Figure 3.1.7), households living on unearned sources (25 per cent), from the largest cities (3.8 per cent) and from Świętokrzyskie voivodship (7.9 per cent).

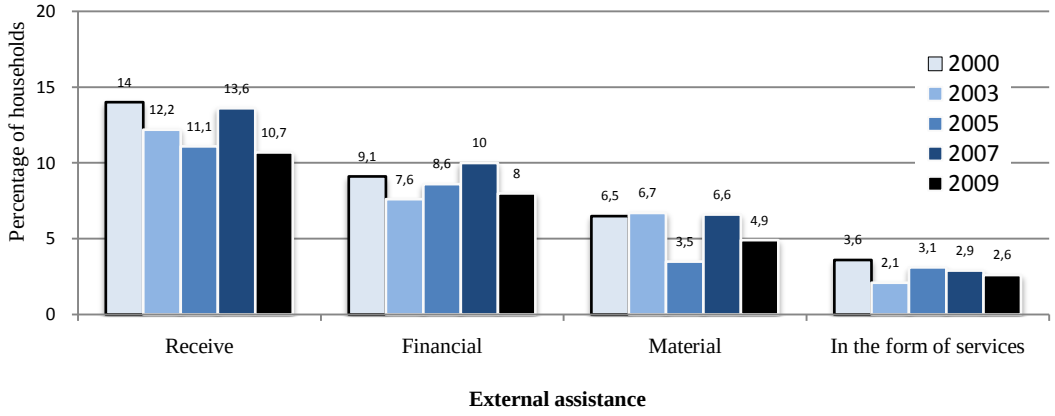
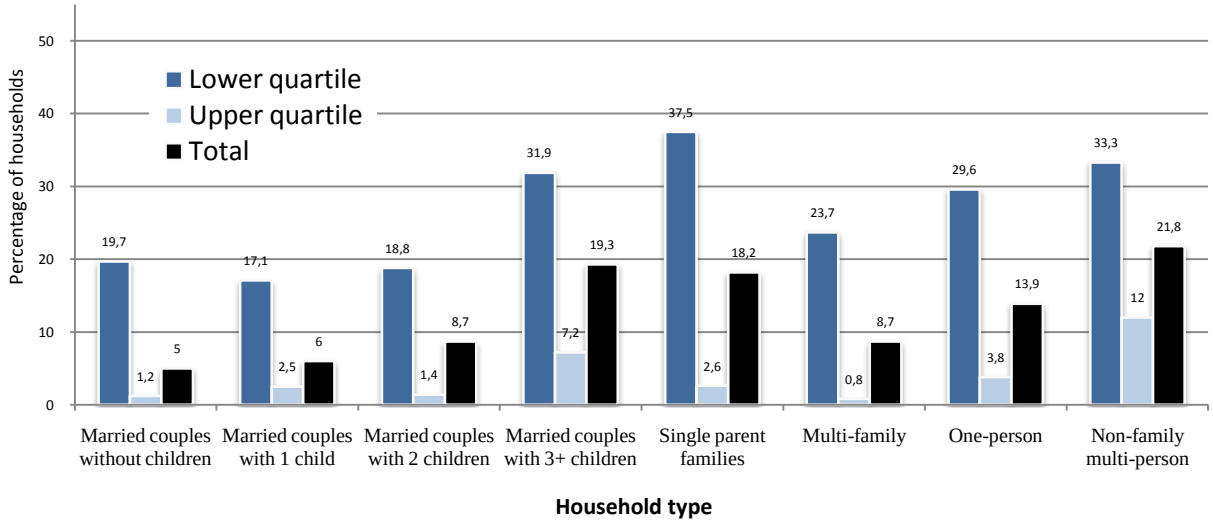
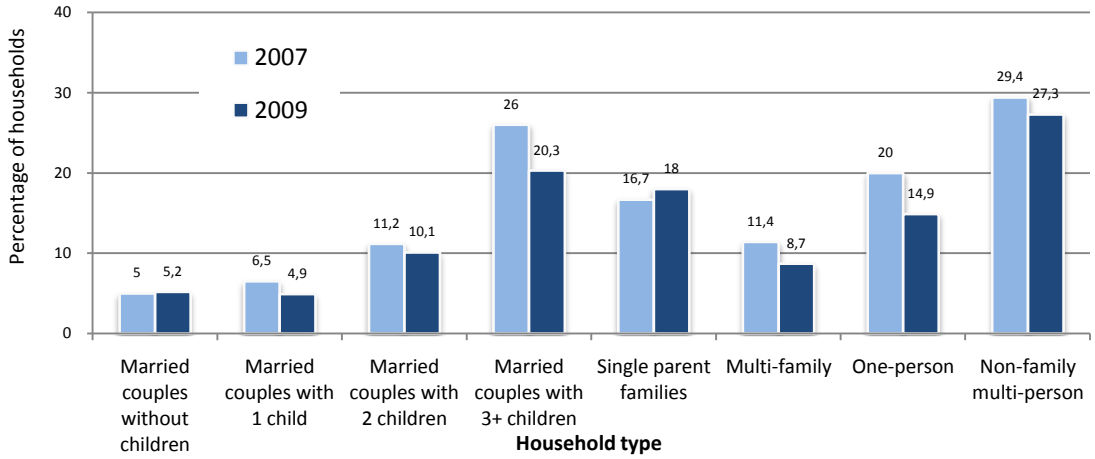


Figure 3.1.6. Percentage of households receiving external assistance and among those receiving assistance, percentage of households receiving different kinds of assistance from 2000 to 2009 in whole samples



NOTES: main effect of household type F(7, 11264)=16,861, p<0,000; η^2= 0,010, main effect of income F(2, 11264)=198,110, p<0,000, η^2=0,034, interaction effect of household type and income F(14, 11264)=6,938, p<0,000, η^2 = 0,009

Figure 3.1.7. Percentage of households receiving external assistance according to household type and income level per equivalent unit (lower and upper quartile)



NOTES: main effect of household type F(7, 3124)=23,837, p<0,000, η^2= 0,051, main effect of study F(1, 3124)=4,770, p<0,05, η^2=0,002, interaction effect of household type and year of study F(7, 3124)=2,962, p<0,01, η^2 = 0,007.

Figure 3.1.8. Percentage of households receiving external assistance in 2007 and 2009 according to household type in panel samples

3.2. Nutrition

3.2.1. The situation in 2009 and changes in the previous two years

Tomasz Panek

In March 2009, households estimated that during the previous year they mostly could not afford to satisfy nutritional needs due to financial reasons for fish and fish-based products (approximately 21 per cent of households), confectionery and stimulants (approximately 19 per cent of households each), meat and poultry as well as meat and poultry preserves (16 per cent of households each). In the last two years, household needs satisfaction level has improved in all groups of food products (Figure 3.2.1). The situation in this period has substantially improved especially for those groups of products which households are most often forced to give up due to financial difficulties, that is fish and fish preserves, stimulants and confectionery (decrease in the percentage of households unable to satisfy their nutritional needs in this regard due to financial reasons by over 4, 2 and 3 percentage points respectively).

Households living on unearned sources and disability pensioner households were most often unable to purchase food products with the greatest scale of unfulfilled needs in March 2009. Between 2007 and 2009, the possibilities of satisfying nutritional needs for all food products worsened significantly only in the group of households living on unearned sources.

According to households types, single parent families and non-family one-person households most often declared a lack of financial means to buy selected groups of food products. The next household type who could not afford to buy selected groups of food products were non-family multi-person households. In general, the financial possibilities of satisfying needs for food products have improved significantly for all household types in the last two years.

For each of the analysed product groups, the percentage of households unable to buy food products for financial reasons was significantly higher in March 2009 among households with unemployed members than among households without unemployed members.

In March 2009, households with disabled members were unable to satisfy their nutrition needs for financial reasons much more often than households without unemployed members. In the last two years, households with disabled members were the only household group in which there has been a decrease in nutritional need satisfaction (only in the case of fruit and fruit preserves and meat and poultry).

Households who in March 2009 most often had to give up purchasing selected food products for financial reasons lived predominantly in rural areas and small towns with 20-100 thousand inhabitants. From March 2007 to March 2009, a large increase in the percentage of households who were unable to satisfy their nutritional needs for financial reasons was observed only in large towns with 200-500 thousand inhabitants and this concerned most food product groups.

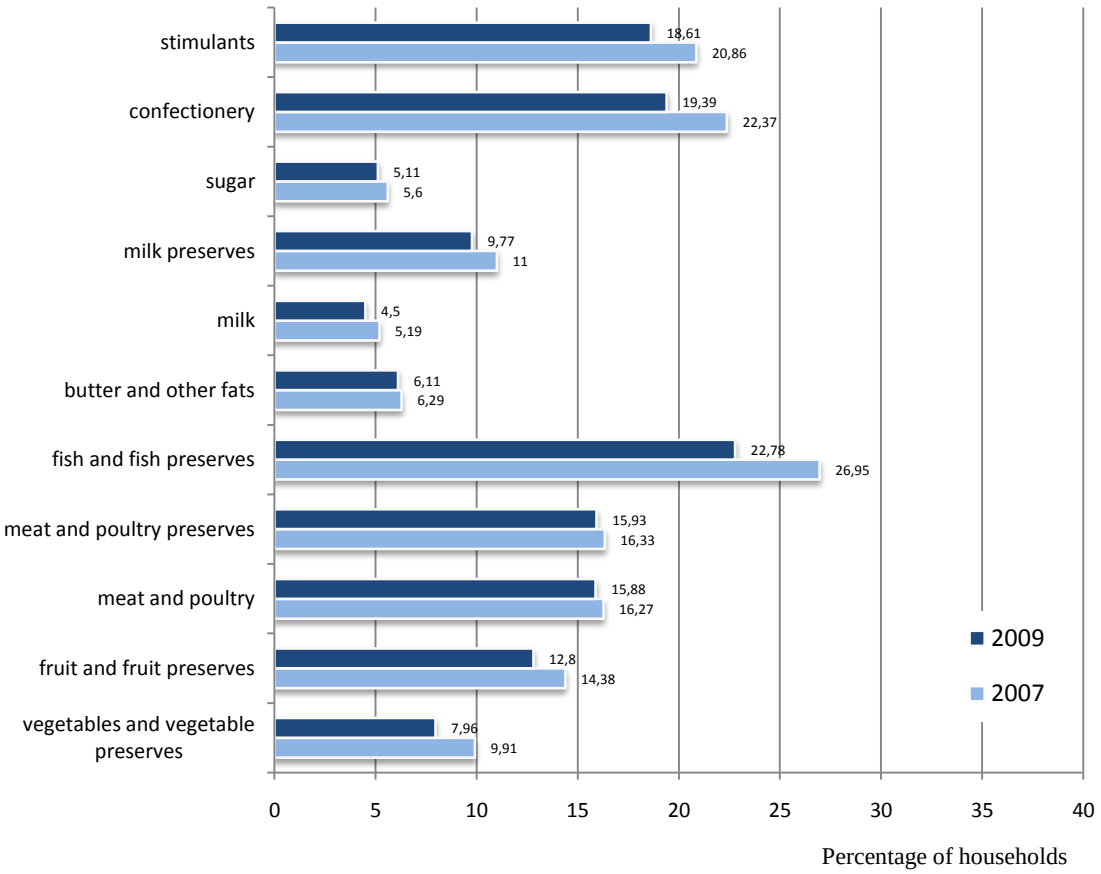


Figure 3.2.1. Percentage of households who cannot afford to buy sufficient quantities of various food products from 2007 to 2009 in panel samples

In March 2009, approximately 57 per cent of households thought that their level of nutritional need satisfaction remained unchanged in comparison with two years before, approximately 32 per cent felt it had worsened and approximately 11 per cent observed an improvement. Compared to estimations in March 2007, this is a radical positive change. Changes for the worse were most often declared by households living on unearned sources (over 52 per cent of households) and disability pensioner households (almost 48 per cent of households). Among all household types, a worsening of the nutrition situation was mostly felt by single parent households (almost 39 per cent) and non-family one-person and multi-person households (over 36 per cent and almost 35 per cent respectively).

Negative assessments of change in the level of nutritional need satisfaction were much more often formulated among households with unemployed members than among households without unemployed members (over 50 per cent and almost 30 per cent respectively).

In the group of households with disabled members, almost 41 per cent of households pointed to a change for the worse in their level of nutritional needs satisfaction, while in the group of households without disabled members this number amounted to almost 30 per cent.

There was little variability in households declaring that their level of nutritional need satisfaction worsened in terms of place of residence. Such households were most often found among households living in small towns with 20-100 thousand inhabitants (almost 35 per cent) and rural areas (over 36 per cent).

3.2.2. The change in nutritional need satisfaction between 2000 and 2009

Janusz Czapiński

In the last 10 years there has been a decline in the percentage of households unable to purchase selected products in all food product groups. The greatest percentage decrease was observed in stimulants, confectionery, fruit and fruit preserves, meat and poultry, meat and poultry preserves and fish and fish preserves; i.e. those products which households most often gave up in recent years. There has also been a change in the order of how often various food product groups were skipped during shopping on account of financial reasons; stimulants fell from the first to fourth place, fruit and fruit preserves fell from fourth to sixth place, and meat and poultry moved from sixth to fourth.

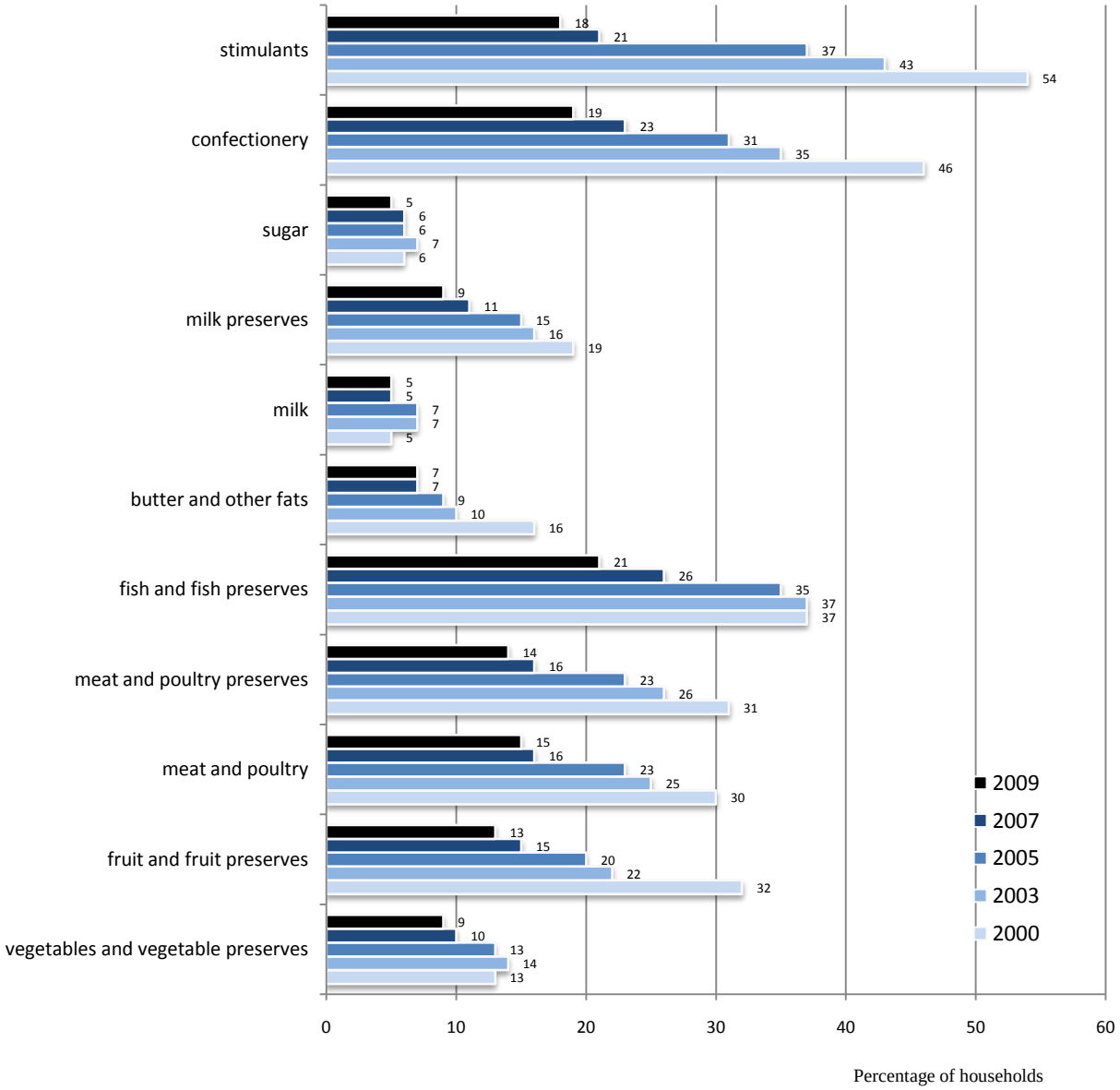


Figure 3.2.2. Percentage of households who cannot afford to buy sufficient amounts of various food products from 2000 to 2009

3.3. Material affluence

3.3.1. The situation in 2009 and changes in the last two years

Tomasz Panek

One of the basic elements making up the affluence of households is the ownership of durable goods. Among durable goods selected in the research, the washing machine and landline phone were most widespread in March 2009. Less than 13 per cent of examined households did not own a washing machine and less than 27 per cent did not have a landline phone. Among durable goods least often owned by households were the motor boat (less than 1 per cent), summer cottage (less than 5 per cent), recreational allotment (less than 12 per cent) and dishwasher (less than 14 per cent). From March 2007 to March 2009, there was a substantial increase in household ownership of almost all durable goods included in the research (Figure 3.3.1). The greatest increase was observed for Internet access, LCD or plasma TVs, DVD players and microwave ovens (respectively over 14 percentage points, over 11 percentage points and over 8 percentage points each).

On average, households living on unearned sources (other than pension or disability pension) and disability pensioner households had the lowest level of durable goods ownership. According to household type, these were predominantly non-family households (both one-person and multi-person) and single parent households. The level of durable good ownership was slightly greater among households without unemployed members than among households with unemployed members for the majority of selected goods. Households without disabled members

were also better equipped in durable goods than households with disabled members. On the other hand, the level of durable good ownership according to place of residence varies for different selected goods.

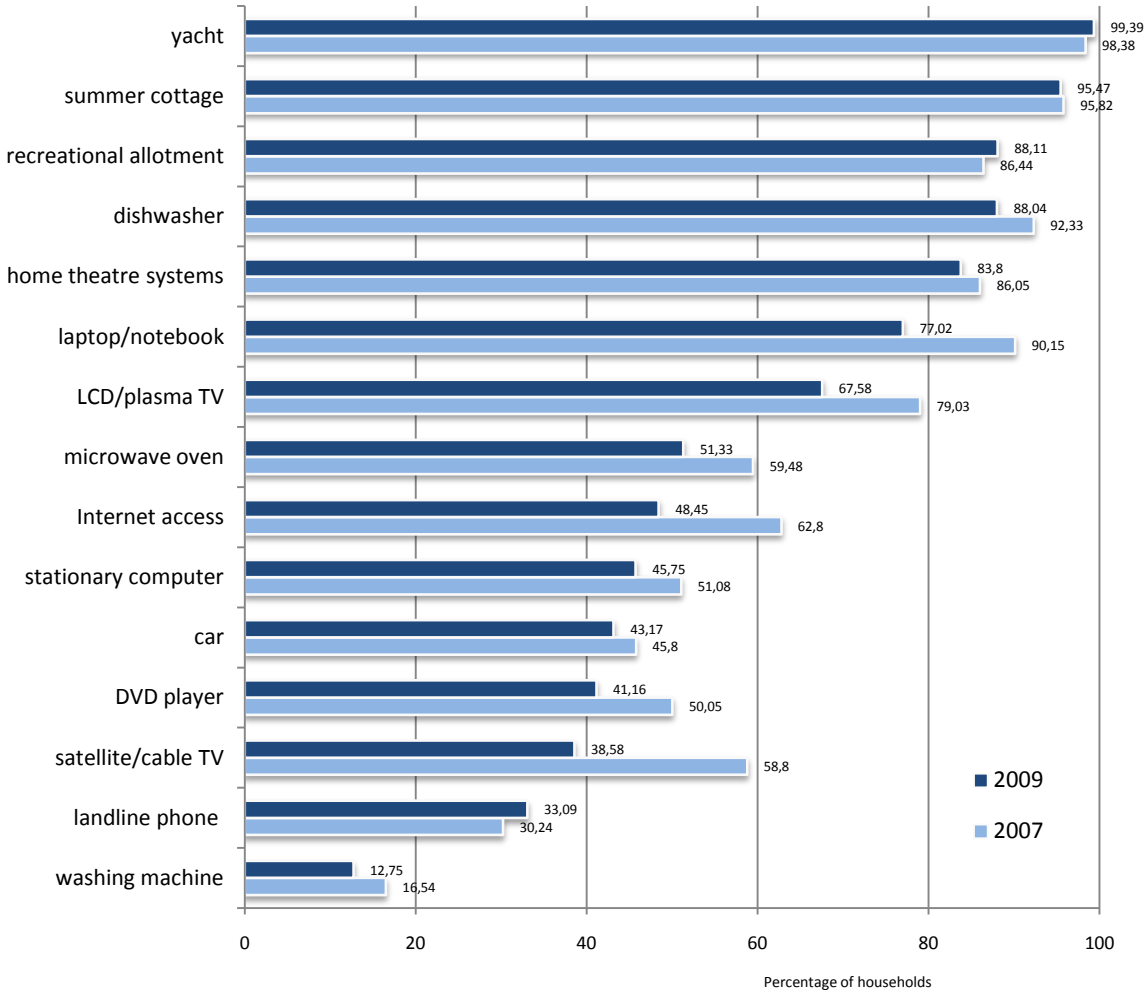


Figure 3.3.1. Percentage of households who did not own selected durable goods in 2007 and 2009 in panel samples

Often the lack of certain durable goods does not stem from the lack of financial means to obtain them, but from the lack of willingness to own them. In March 2009, the most desirable goods households could not afford, were washing machines, LCD or plasma TVs and summer cottages (almost 61 per cent, almost 52 per cent and almost 46 per cent of households respectively do not own these goods for financial reasons). In the last two years we have observed a strong increase in the percentage of households unable, for financial reasons, to purchase selected goods only in the case of satellite or cable TV and washing machines (by almost 9 and over 3 percentage points respectively). This percentage has fallen with regard to a small number of durable goods, most significantly in the case of landline phones and washing machines (by 15 and 14 percentage points respectively) (Figure 3.3.2).

In this respect, differences between household groups identified according to research criteria, albeit multi-dimensional, are not substantial. The greatest differences are observed between households without unemployed members and households with unemployed members. The percentages of households with unemployed members unable to purchase certain goods for financial reasons are significantly higher than in the case of households without unemployed members with regard to the stationary computer (almost 68 per cent and over 31 per cent of households respectively), Internet access (almost 53 per cent and over 27 per cent respectively), DVD player (over 67 per cent and over 40 per cent respectively) and washing machine (over 79 and almost 55 per cent of households without a washing machine respectively). In the analysed sector, large differences, though significantly lower than between households with and without unemployed members, are also observed between households without unemployed members and households with unemployed members. Apart from that, financial reasons for not owning certain durable goods were most often declared by households living on unearned sources and farmer households as well as multi-family households, households of married couples with 3 and more children and single-parent households.

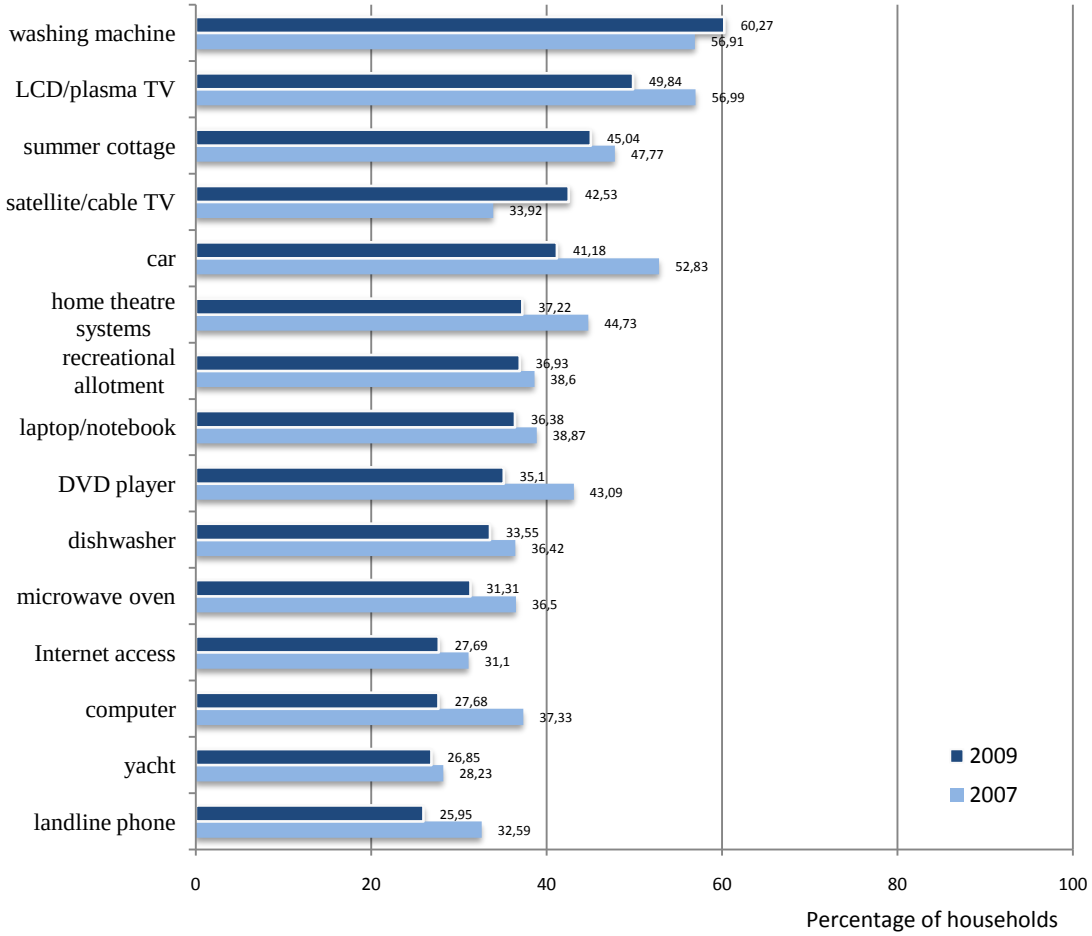


Figure 3.3.2. Percentage of households lacking in goods as a result of the lack of financial means to purchase them in 2007 and 2009 in panel samples

In March 2009, almost 68 per cent of households had no savings. Among households declaring they had savings, the dominant group were households with savings equal with their income for 1-3 months (over 28 per cent). From March 2007 to March 2009, there was a significant increase in the percentage of households with savings (by over 3 percentage points) (Figure 3.3.3)

Savings are least often declared by disability pensioner households (over 84 per cent of households) and households living on unearned sources (almost 82 per cent of households). Households without savings are most often found among multi-family and single parent households (almost 83 per cent and almost 80 per cent of households in these groups had no savings). The percentage of households without unemployed members who do not have any savings is significantly lower than in the group of households with unemployed members (over 66 per cent and over 83 per cent of households respectively). The percentage of households with no savings is visibly greater in the group of households with disabled members (over 77 per cent of households) than in the group of households without unemployed members (over 64 per cent of households). From March 2007 to March 2009, the decrease in the percentage of households with savings was observed only in the group of farmer households and households living on unearned sources (an increase in the percentage of households with no savings by over 7 and almost 2 percentage points respectively) as well as non-family multi-person households (an increase in the percentage of households with no savings by over 4 percentage points). In the remaining household groups the amount of savings has either decreased insignificantly or risen visibly in the last two years.

The smaller the place of residence, the greater the percentage of households with no savings. Households declaring a lack of savings are predominantly found in rural areas and in the smallest towns (over 75 per cent and over 72 per cent respectively).

In March 2009, over 70 per cent of households with savings had them in the form of bank deposits in PLN, and almost 42 per cent in cash. Bank savings in PLN were most common among farmer households (almost 74 per cent of households) and cash savings were relatively most common also among farmer households (over 54 per cent of households) and households living on unearned sources (over 53 per cent). In terms of household types, bank savings in PLN were most common among married couples without children (over 75 per cent). Cash savings were the relatively most common form of savings in non-family multi-person households (over 68 per cent of households). Most common, both in the group of households without unemployed members and in the group of households with unemployed members, were bank deposits in PLN (over 70 per cent and over 64 per cent households from these groups respectively) and cash savings (almost 42 per cent and over 46 per cent respectively).

These forms of savings were predominantly found also in the group of households with disabled members and households without disabled members (approximately 70 per cent of households from these groups in case of bank deposits and almost 41 and over 42 per cent in case of cash). These forms of savings were dominant also in the group of households without disabled members (over 70 per cent and over 42 per cent of households had these forms of savings) and households with disabled members (over 64 per cent and over 46 per cent of households had these forms of savings).

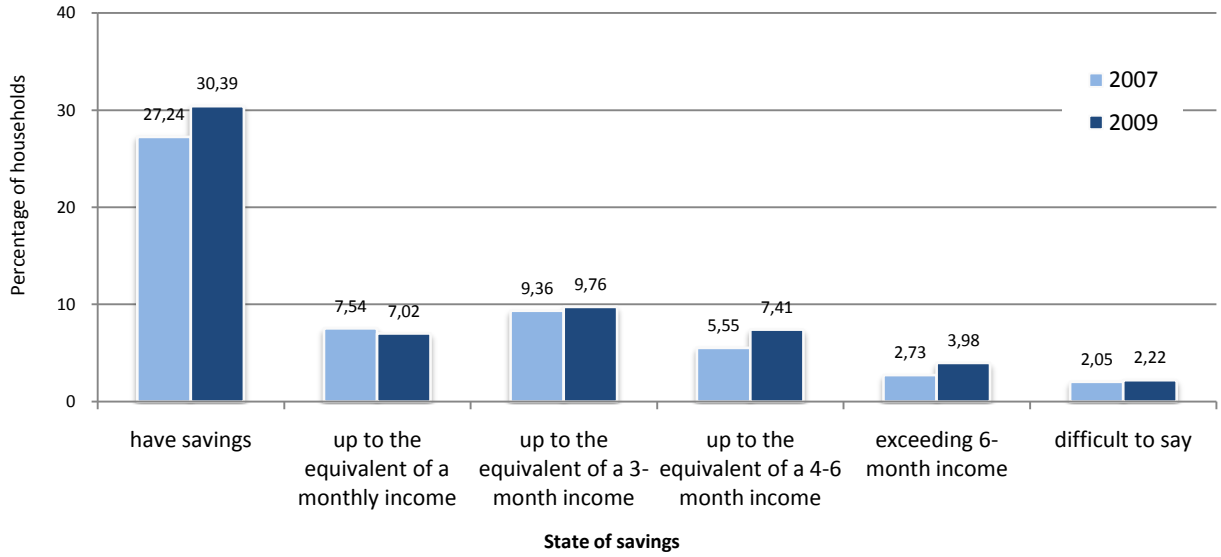


Figure 3.3.3. Percentage of households with savings and the scale of these savings in 2007 and 2009 in panel samples

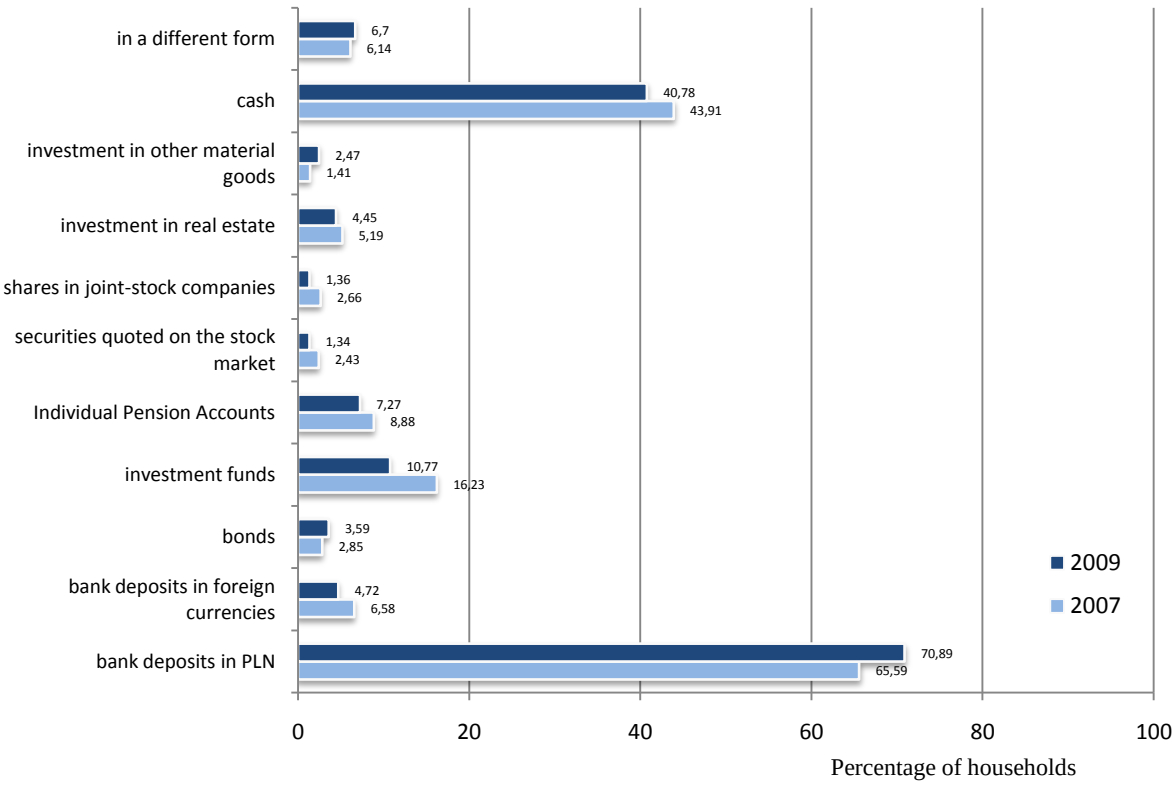


Figure 3.3.4. Forms of savings in households in 2007 and 2009 in panel samples

Relatively the highest percentage of households placing their savings in banks in PLN were in the largest cities with over 500 thousand inhabitants (over 74 per cent). Savings in cash were preferred by households living in rural areas and in the smallest towns (over 51 per cent and almost 47 per cent of households in these groups).

In March 2009, households who declared having savings most often accumulated them as a reserve for random incidents (over 61 per cent of households), provision for old age (almost 36 per cent) and reserve for current consumer expenses (almost 31 per cent).

In the last two years, there has been a significant increase in the percentage of households accumulating savings for no specific purpose and for renovating their apartment or house (Figure 3.3.5).

In March 2009, savings accumulated as a reserve for random incidents were predominantly found in retiree and disability pensioner households (this was declared respectively by 67 per cent and over 61 per cent of households with savings which belonged to these socio-economic groups). This purpose of collecting savings was most often mentioned by non-family multi-person households (almost 73 per cent of these households). Savings were accumulated predominantly as a reserve for random incidents also in the group of households with and without unemployed members (in almost 59 and 61 per cent of households from these groups respectively) and households with and without disabled members (almost 63 and over 61 per cent of households from these groups). On the other hand, the variability of households collecting savings as a reserve for random incidents according to place of residence was insignificant. This purpose of savings was predominant in large towns and the largest cities (in almost 66 and over 65 per cent of households).

In the last two years, the greatest decrease in the percentage of households accumulating savings as a reserve for random incidents took place in the group of households living on unearned sources (by over 30 percentage points), non-family one-person households (by over 7 percentage points) and households living in the largest cities with over 500 thousand inhabitants (by almost 7 percentage points). In the same period, a significant increase in the percentage of households declaring this purpose of savings was observed in the group of farmer households (by over 19 percentage points), single parent families (by almost 16 percentage points), households with unemployed members (by almost 9 percentage points) and households living in large and medium-sized towns (by almost 9 and almost 4 percentage points respectively).

In March 2009, provision for old age was the purpose of savings pointed most often in retiree and disability pensioner households (over 53 and almost 44 per cent respectively), households of married couples without children (almost 46 per cent) and households living in towns with 100-200 thousand inhabitants (almost 42 per cent). This purpose of saving was very often named also in the case of households with disabled members (almost 41 per cent).

From March 2007 to March 2009, the percentage of households with savings as a provision for old age decreased by over 3 percentage points in the scale of the entire country. In this period it decreased the most among households living on unearned sources (by over 36 percentage points), married couples with 2 children (by over 9 percentage points) and households living in cities with over 500 thousand inhabitants (by over 13 percentage points), as well as in the group of households with unemployed members (by over 8 percentage points). Simultaneously, it increased significantly in the group of farmer and retiree households (by over 13 and 7 percentage points respectively), non-family one-person households (by almost 22 percentage points) and households living in towns with 100-200 thousand inhabitants (by almost 9 and almost 3 percentage points respectively).

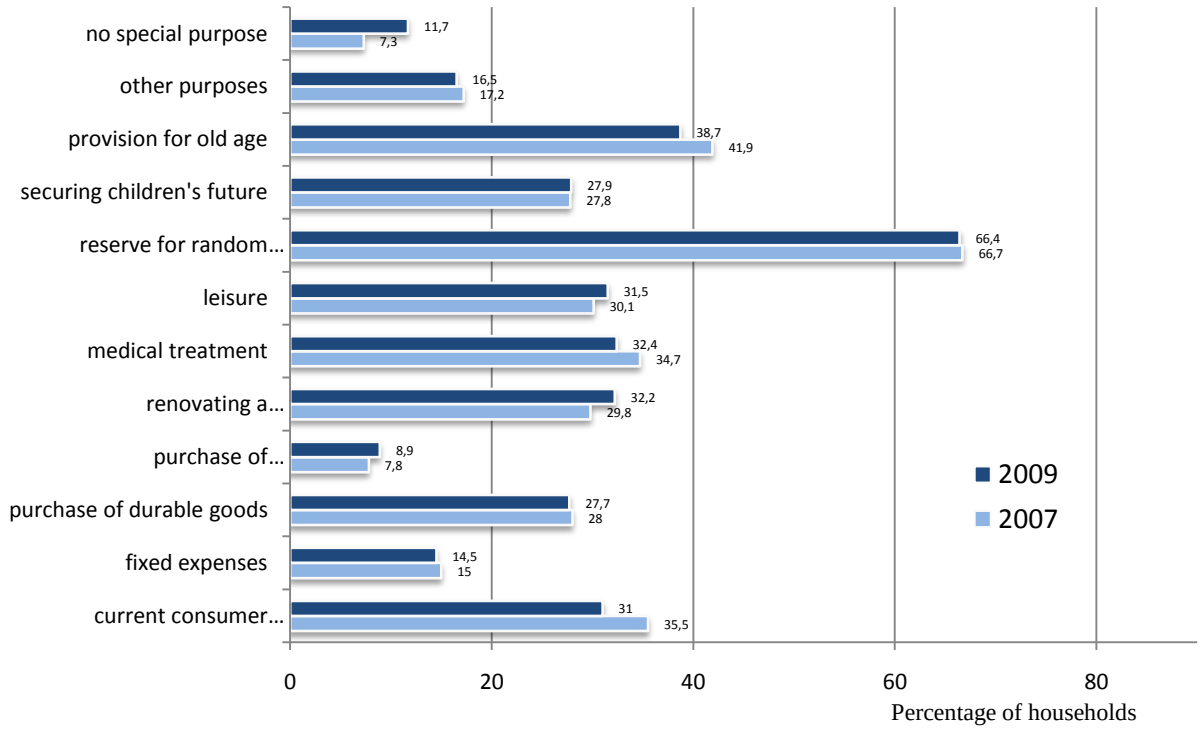


Figure 3.3.5. Purposes of collecting savings by households with savings in 2007 and 2009 in panel samples

According to socio-economic groups, savings destined to cover current consumer expenses were most often accumulated in March 2009 by households living on unearned sources and farmer households (over 59 and almost 50 per cent of households from these groups). Among household types, however, this purpose of savings was most often declared by non-family multi-person households (almost 57 per cent). Savings as a reserve for current consumer expenses were predominantly found in households living in rural areas (over 36 per cent). This purpose of collecting savings was also quite widespread among households with unemployed members (almost 47 per cent of households).

Relatively the highest increase in savings treated as a reserve for current consumer expenses was observed in the last two years in the group of disability pensioner households (by over 27 percentage points), married couples with 3 or more children (by over 10 percentage points) and households living in the smallest towns (by over 10 percentage points). In the same period, relatively the greatest decrease in accumulating savings for this purpose was observed in employee and disability pensioner households (by over 7 percentage points), households with disabled members (by over 12 percentage points), households with unemployed members (by over 7 percentage points), households of married couples with one child (by over 12 percentage points) and households living in towns with 20-100 thousand inhabitants (by over 9 percentage points).

In March 2009, almost 41 per cent of examined households declared they took advantage of loans and credits. Household debt level most often ranged from monthly to 3-month income (this debt level was declared by 45 per cent of indebted households). From March 2007 to March 2009, the percentage of households taking advantage of loans and credits underwent slight changes (it decreased by 2 percentage points) (Figure 3.3.6).

Indebted households included mostly employee, entrepreneur and farmer households (almost 51, over 48 and almost 42 per cent respectively). According to household types, the greatest percentage of indebted households was found among married couples with 3 and more children (almost 53 per cent). The debt level of households with unemployed members was by 5 percentage points greater than among households without unemployed members (approximately 45 and 40 per cent of households from these groups). The debt level of households with and without disabled members was alike (41 and 40 per cent of households from these groups respectively).

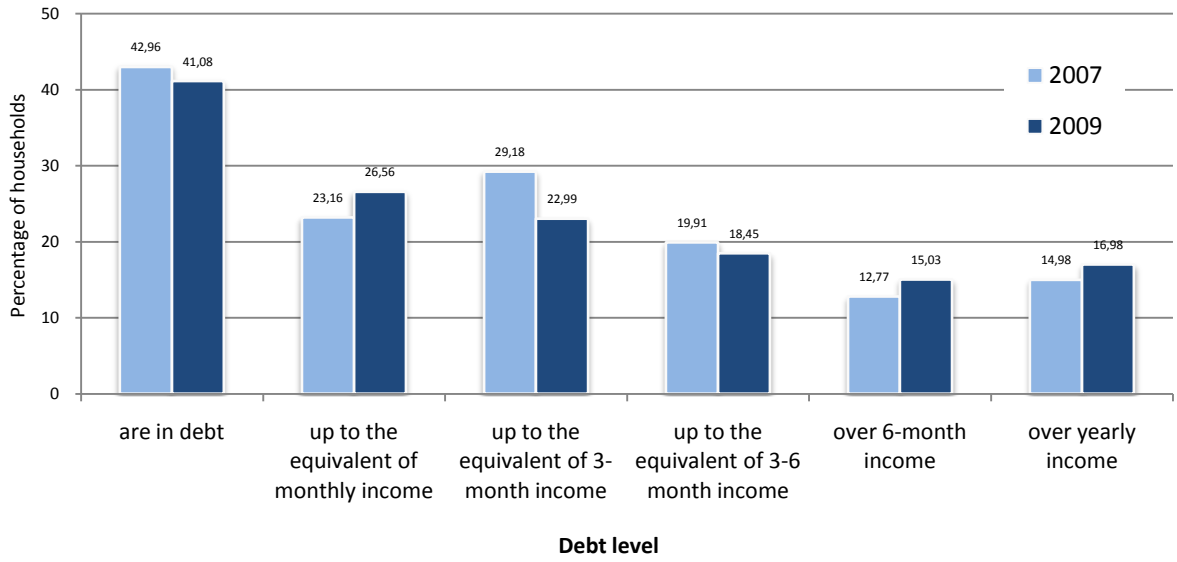


Figure 3.3.6. Percentage of indebted households and percentage of households of different debt levels among indebted households in 2007 and 2009 in panel samples

The frequency of household debt according to place of residence is comparatively unvaried. The highest percentage of indebted households exists in large towns with 200-500 thousand inhabitants (44 per cent) and the lowest in rural areas (39 per cent).

Almost 91 per cent of indebted households used banks as their external source of financing, and over 14 per cent turned to other institutions. Only approximately 5 per cent of households were indebted to private persons. From March 2007 to March 2009, there was a slight increase (by 2 percentage points) in households taking advantage of bank loans, together with a decrease (by almost 5 percentage points) in households taking advantage of loans in other institutions and loans from private persons (by over 2 percentage points) (Figure 3.3.7).

In the last two years, the greatest increase in the percentage of households taking advantage of bank loans was observed among self-employed households (by over 4 percentage points), single parent families (by almost

10 percentage points), households without disabled members (by almost 4 percentage points) and households living in rural areas (by over 3 percentage points).

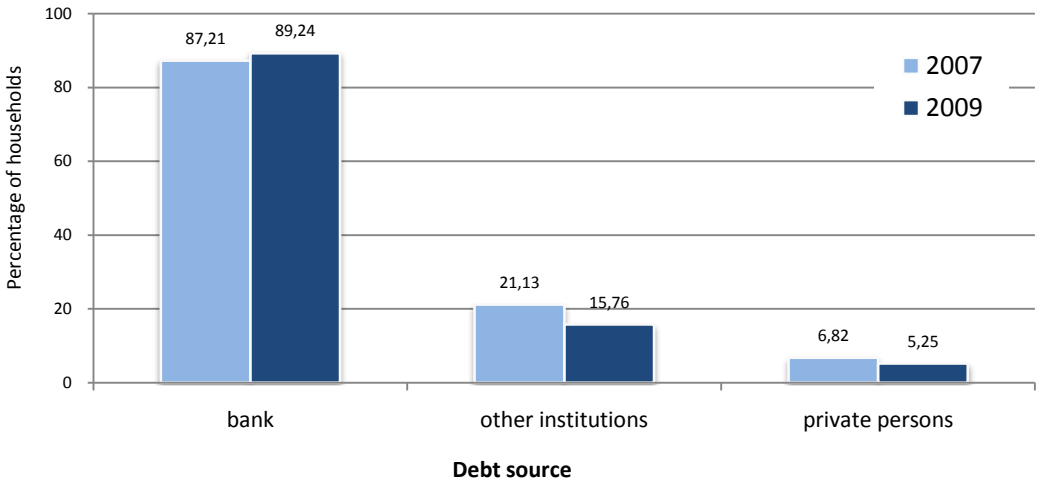


Figure 3.3.7. Household debt source in 2007 and 2009 in panel samples

In order to identify the purpose of external financing of households, we investigated why households took out specific loans and financing. Almost 39 per cent of households examined in March 2009 used their loans and credits to purchase durable goods, 35 per cent of households used their loans and credits to renovate their house or apartment, and over 18 per cent of households spent their credit on current consumer expenses. From March 2007 to March 2009, we observed a significant increase in the percentage of households taking out loans in order to purchase durable goods (by 4 percentage points).

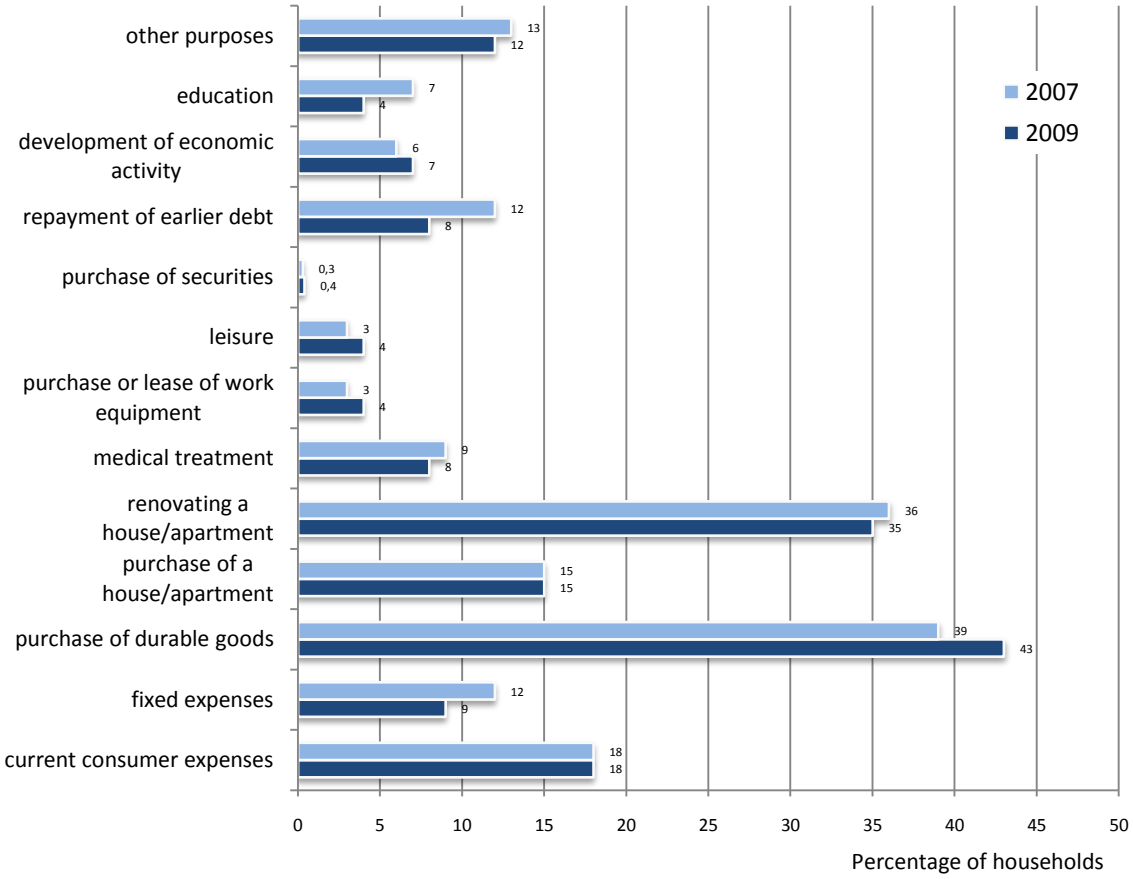


Figure 3.3.8. The purposes of credits and loans taken out by households indebted in 2007 and 2009 in panel samples

In March 2009, when assessing changes in their material affluence level in comparison to two years before, 53 per cent of households claimed that it had not changed and almost 32 per cent stated that it had worsened. Negative assessments of change in the material affluence level were most often formulated by households living on unearned sources and retiree households (over 49 and over 45 per cent of households respectively) as well as single parent households (almost 41 per cent). Among households which negatively assess these changes, there is a relative significant majority of households with unemployed members in comparison with households without unemployed members (48 and almost 30 per cent respectively) as well as households with disabled members in comparison with households without disabled members (almost 40 and over 29 per cent). Households declaring that their material affluence had worsened were predominantly found in the smallest towns and rural areas (almost 34 and 33 per cent).

3.3.2. Changes in material affluence between 2000 and 2009

Janusz Czapiński

Apart from the landline phone, which was quickly becoming widespread until 2007 after which its presence decreased to a level below that from 2005, the presence of all other durable goods, especially modern communication technologies, has increased (Figure 3.3.9). Nowadays over four times the number of households as in 2003 has access to the Internet, there has been a more than quadruple increase in the percentage of households owning a computer since 2000, and the share of households owning a portable computer has increased eight times since 2005 (when we asked about this device for the first time). There is also a dynamic growth in the ownership of modern household appliances: the microwave more than trebled since 2000, the dishwasher with an almost fivefold increase in the past decade, the washing machine increased by 20 percentage points to the level of 87 percent of households. We have stopped asking about refrigerators and TV sets, because all households which need them have them.

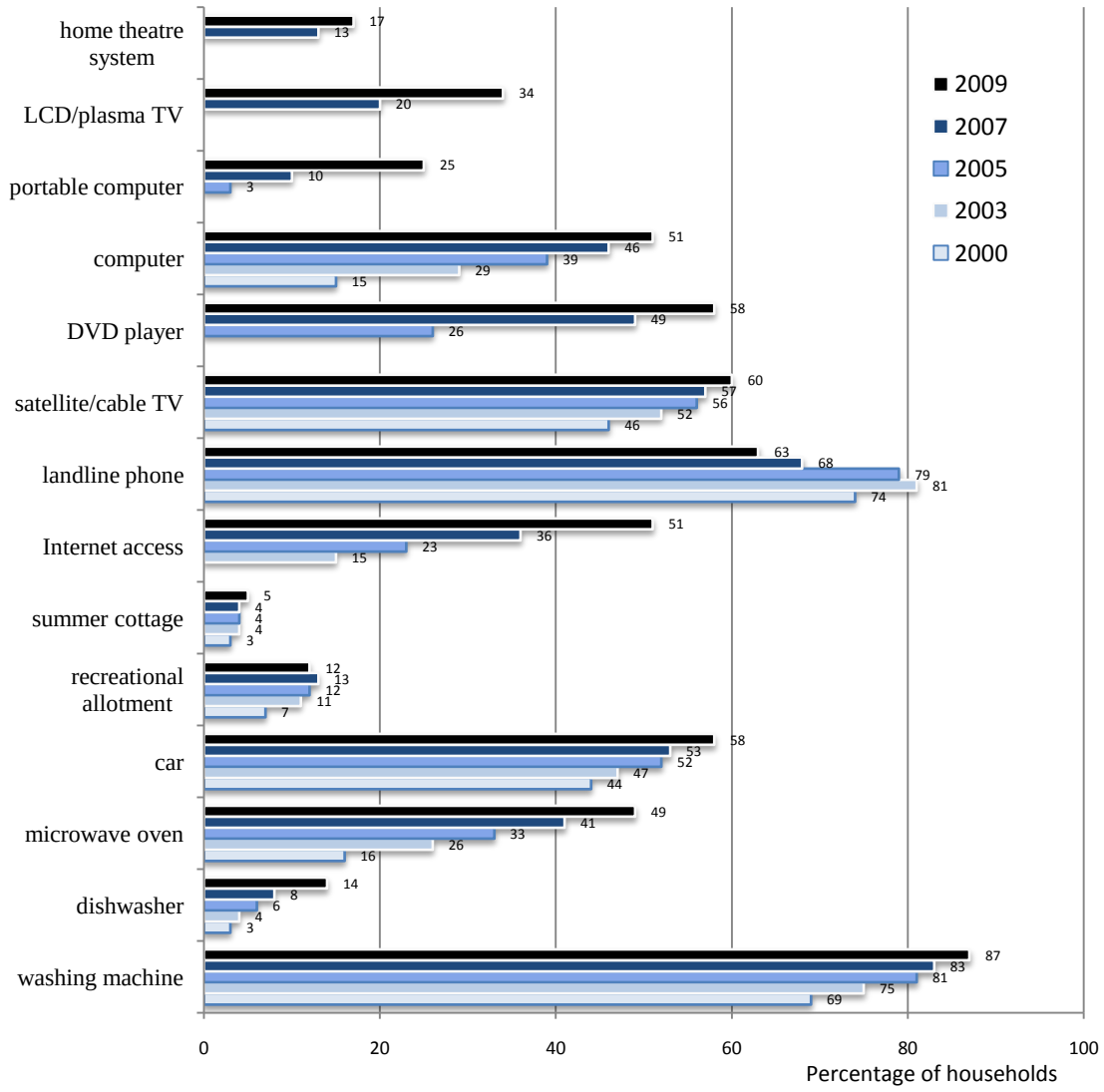


Figure 3.3.9. Household ownership of selected durable goods between 2000 and 2009

Since 2000, the percentage of households having some form of savings has risen by a third to the level of 32 per cent of households (Figure 3.3.10). Among those with savings, the savings amount structure has in fact remained unchanged since 2000. Households with savings up to the equivalent of a 3-month income are still predominant. The percentage of households with savings exceeding the equivalent of a yearly income has remained at the same low level of 8 per cent, which means as little as nearly 3 per cent of the entire household population.

In comparison with 2000, there has been a significant increase in households which have savings in cash, and a decrease in households placing their savings in banks. However, in the course of the last few years, the share of households placing their savings in banks has risen in at the expense of investment funds and the Individual Pension Accounts.

With regard to the purpose of spending savings, there has been a fall in the share of households which treat savings as a reserve for random incidents, provision for old age, medical treatment or house renovation.

The rise in indebted households has been very insignificant (from 38 to 41 per cent), whereby the share of households indebted to the amount of their 3-month income has fallen and the percentage of households whose debt exceeded their yearly income has risen.

Household debt to banks has been growing radically and systematically (from 73 per cent in 2000 to 91 per cent in 2009) at the expense of being indebted to other financial institutions.

Credits and loans are more and more rarely spent on purchasing durable goods, medical treatment or current consumer expenses. The only increase was observed in loans spent on purchasing an apartment (or house).

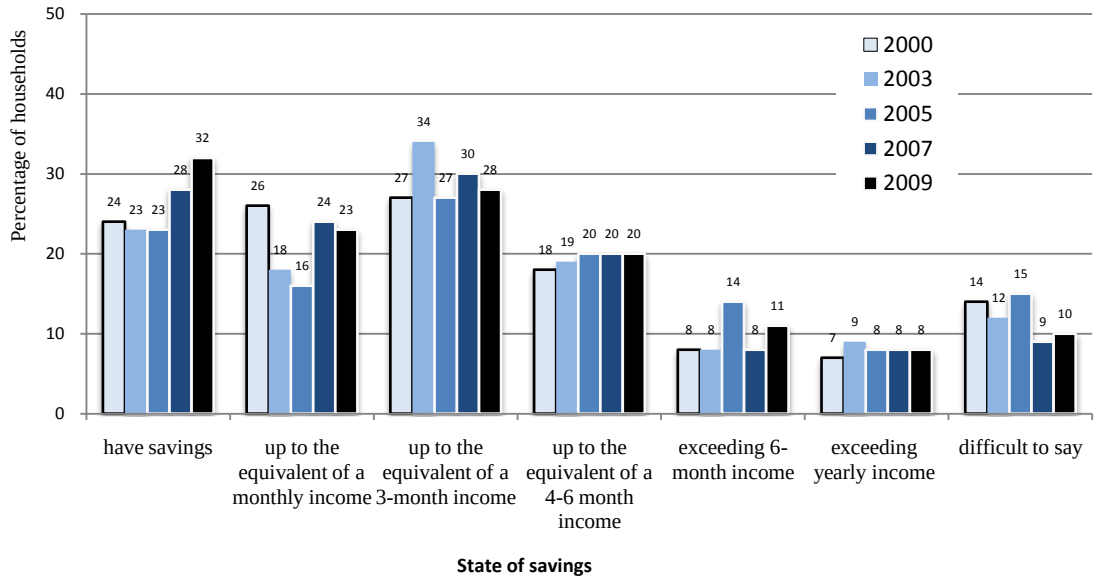


Figure 3.3.10. Percentage of households with savings and the percentage of households with different levels of saving among all households with savings between 2007 and 2009

3.4. Housing conditions

3.4.1. The situation in 2009 and the changes over the last two years

Tomasz Panek

Almost 7.2 per cent of the examined households did not occupy a separate dwelling in March 2009. This percentage did not undergo any significant change from March 2007 to March 2009.

This type of household was most common in the group living on unearned sources and in the farmer household group (over 16 and over 10 per cent respectively). Between 2007 and 2009, a significant increase in households without a separate dwelling was observed only in the group of entrepreneur and retiree households (nearly 2 percentage points each).

In terms of household type, the lack of a separate dwelling was most characteristic of non-family one-person households. There was almost 11 per cent of such households in this group. This group was also the only one in which there was a significant fall in the frequency of households living independently in March 2009 in comparison with March 2007 (by over 4 percentage points).

In the group of households without unemployed members, almost 8 per cent did not occupy a separate dwelling in 2009, whereas in the group of households with unemployed members this number amounted to less than

5 per cent. In the last two years, there has been a significant decrease in the percentage of households with unemployed members which did not occupy a separate dwelling (by over 2 percentage points).

Groups of households with and without disabled members exhibited no significant variability in terms of occupying a separate dwelling (over 7 per cent of these groups of households did not occupy a separate dwelling). At the same time, there has been an almost 1.4 per cent rise in the percentage of households with disabled members who did not occupy a separate dwelling in the last two years.

Households without a separate dwelling were predominantly found in rural areas and in the largest cities (almost 10 and over 9 per cent respectively).

In March 2009, the average housing floor space per person in the examined households amounted to nearly 32 sq. m. Compared to March 2007, it increased by over 1 sq. m by March 2009.

Among fittings and systems included in the study the water supply system, which only 3.7 per cent of households did not have, was the most widespread in households examined in March 2009. At the same time, in the last two years there has been an increase in the percentage of households which had at their disposal all fittings and systems included in the study .

Households most often did not have hot running water (almost 23 per cent). Hot running water was missing predominantly in households living on unearned sources (almost 38 per cent) and disability pensioner households (almost 36 per cent). In the last two years, we have observed a decrease in the percentage of households which did not have the selected fittings or systems in basically all socio-economic groups of households.

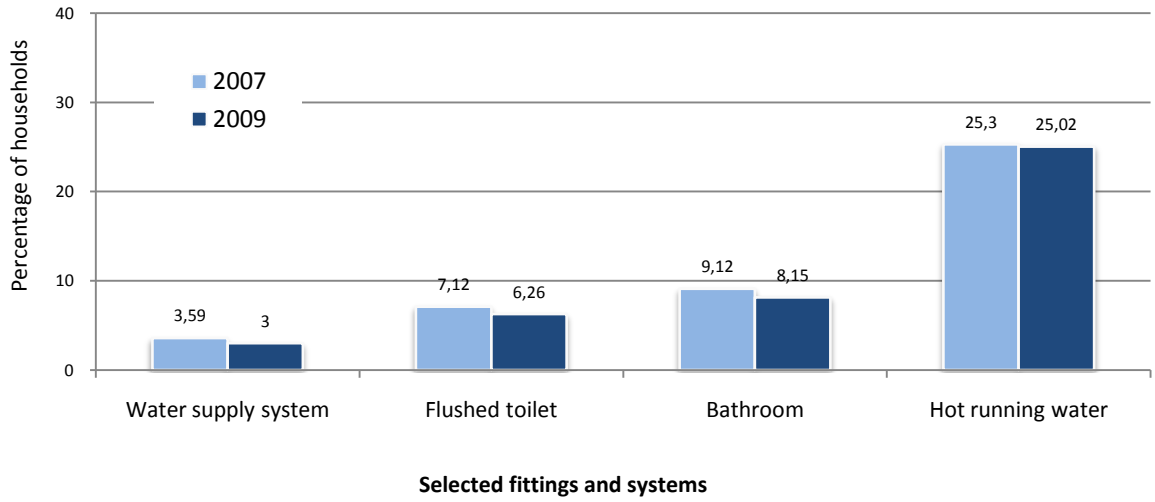


Figure 3.4.1. Percentage of households which did not have selected fittings and systems in 2007 and 2009 in panel samples

In the group of households with unemployed members, equipped households with fittings and systems were much less widespread than in the group of households without unemployed members. In the four household groups analysed, the equipment level in all selected fittings and systems has increased, apart from hot running water in households without unemployed members and households without disabled members.

Dwellings without hot running water were most often occupied by non-family multi-person and one-person households (almost 30 per cent each). In the last two years, the greatest growth in the percentage of households not equipped in hot running water was observed among non-family multi-person households (by over 6 percentage points).

Dwellings without hot running water were relatively most common in households living in rural areas (almost 31 per cent). In the last two years, there has been an increase in the dwelling equipment level of the systems analysed in all places of residence, apart from the largest cities in the case of hot running water.

In March 2009, household dwellings were most equipped in individual or collective central heating systems (44 and 40 per cent of households respectively). However, almost 15 per cent of households still lived in dwellings heated by fuel-fired furnaces.

Almost 7 per cent of households were behind with bills for dwellings (rent) in March 2009 and almost 4 per cent were behind with payments for gas and electricity. The percentage of households in arrears with rent, gas and electricity bills has decreased significantly in the last two years (almost 3 and 1.5 percentage points respectively).

Households with rent and gas/electricity arrears were predominantly found among households living on unearned sources (almost 22 and almost 11 per cent respectively) as well as in the group of single parent families (16 and over 6 per cent respectively) and married couples with 3 and more children (over 11 and over 6 per cent respectively). One should also pay attention to the fact that these groups of households were also characterised by the greatest frequency of households lagging behind with fixed payments (rent) for over 12 months.

In the last two years, we have observed a significant decrease in the percentage of households lagging behind with fixed payments (rent) in all household groups apart from non-family multi-person households. In the case of gas/electricity arrears, a significant increase in the percentage of households lagging behind with these payments also took place only in the group of non-family multi-person households.

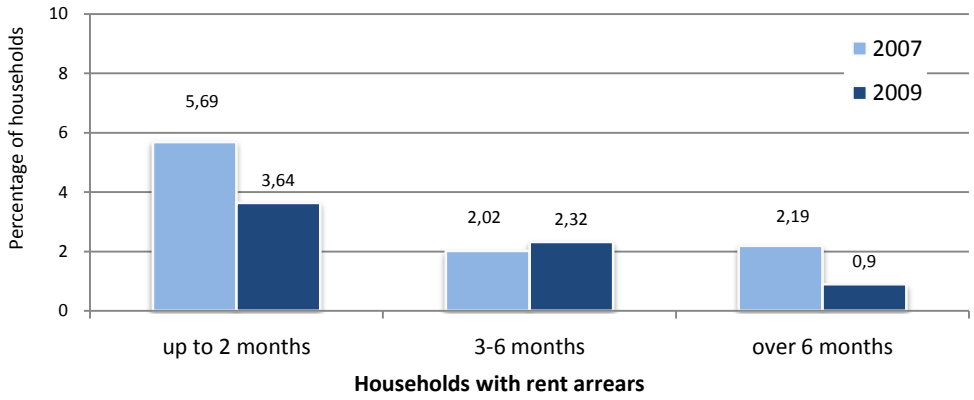


Figure 3.4.2. Households with rent arrears in 2007 and 2009 in panel samples

Rent and gas/electricity arrears were much more common among households with unemployed members than households without unemployed members. However, we have not observed any substantial differences here between groups of households with or without disabled members.

There was no substantial variability according to place of residence in households with rent and gas/electricity arrears. From March 2007 to March 2009, there has been a significant decrease in the percentage of households with rent arrears in all places of residence, and a significant decrease of households with gas/electricity arrears in all places of residence apart from towns of 100-200 thousand inhabitants.

Overdue home loan installments occurred in less than 3 per cent of households examined in March 2009. Entrepreneur and employee households were most often behind with home loan payments (almost 20 and almost 19 per cent of households from these groups respectively). In the last two years, the percentage of households with home loan arrears decreased by over 3 percentage points. Such households were most often found in the group of households living on unearned sources (over 5 per cent of households) and in the group of households made up of married couples with 3 and more children (over 5 per cent). In the last two years, the only instance of a significant increase of the percentage of households with home loan arrears was observed in the group of households living on unearned sources (by almost 10 percentage points).

Households with unemployed and disabled members lagged behind with home loan instalments slightly more often than households without unemployed and disabled members. Besides, in the last two years there has been a decrease in the percentage of households experiencing similar difficulties in all of these household groups.

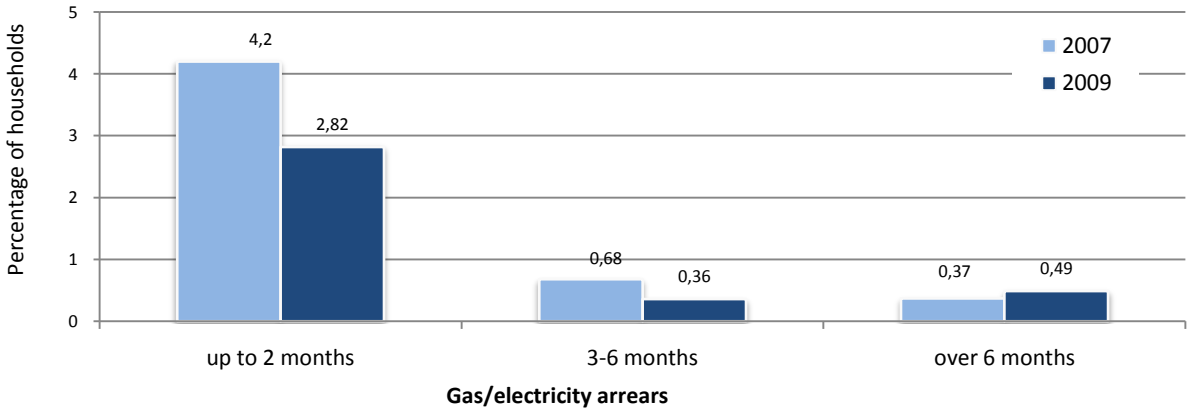


Figure 3.4.3. Households with gas/electricity arrears in 2007 and 2009 in panel samples

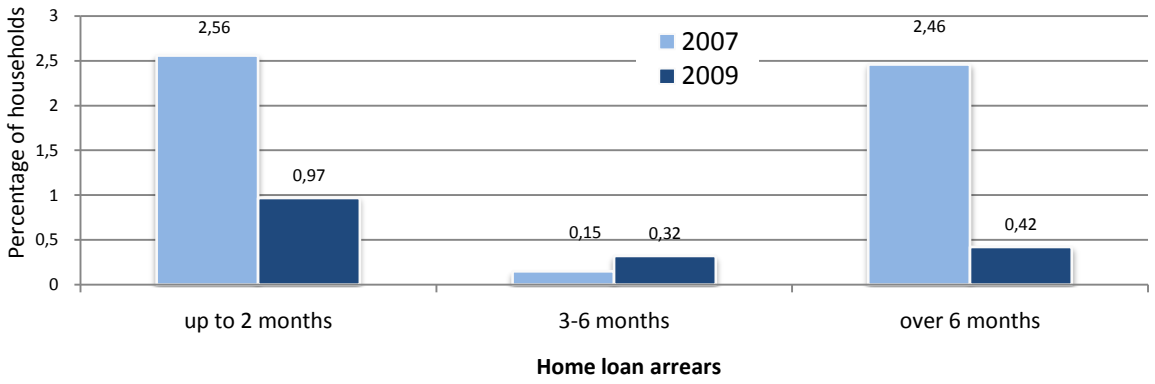


Figure 3.4.4. Households with home loan arrears in 2007 and 2009 in panel samples

The households with home loan arrears were found predominantly in the smallest towns (less than 5 per cent). From March 2007 to March 2009, a significant increase in the percentage of households lagging behind with home loan installments was observed in cities with 100-200 thousand inhabitants (by 1 percentage point).

In March 2009, a decisive majority of the examined households (over 76 per cent) thought that their housing conditions did not change in comparison with March 2007. Almost 12 per cent of households stated they had worsened. These assessments of change are similar to those formulated in March 2007. Households declaring that their housing conditions had worsened were predominantly found in the group of self-employed households (over 16 per cent) and non-family multi-person households (over 19 per cent). There was no substantial variability according to place of residence in the case of households assessing their housing conditions as worse in comparison with two years before. Households living in the largest cities most often stated that their housing conditions had worsened (over 14 per cent of households).

3.4.2. Changes in housing conditions between 2000 and 2009

Janusz Czapiński

The analysis of housing conditions between 2000 and 2009 in whole samples shows a systematical decrease of the percentage of households with no water supply system (from 5.5 to 3.7 per cent), no flushing toilet (from 11.2 to 6.2 per cent), no bathroom with a bathtub or shower (from 13.8 to 7.5 per cent) and no hot running water (from 29.6 to 22.8 per cent) (Figure 3.4.5).

In the past decade, less systematical changes occurred with regard to overdue rent payments. The greatest percentage of households with rent arrears exceeding 2 months was observed in 2003 and 2005. In later years we observe a significant decrease of the percentage of such households. In 2009, rent arrears returned to the 2000 level.

The dynamics of gas and electricity arrears was similar to the changes occurring with regard to rent arrears. Currently there is only 3.5 per cent of households with such arrears in comparison with 6.1 per cent in 2005. This can imply that suppliers have chosen to adopt a more rigorous attitude towards households with arrears, which in turn may fear that their dwelling might be cut off from the gas or electricity network.

The percentage of households with home loan arrears has also decreased, reaching the lowest level in the entire decade (2.7 per cent) (Figure 3.4.6).

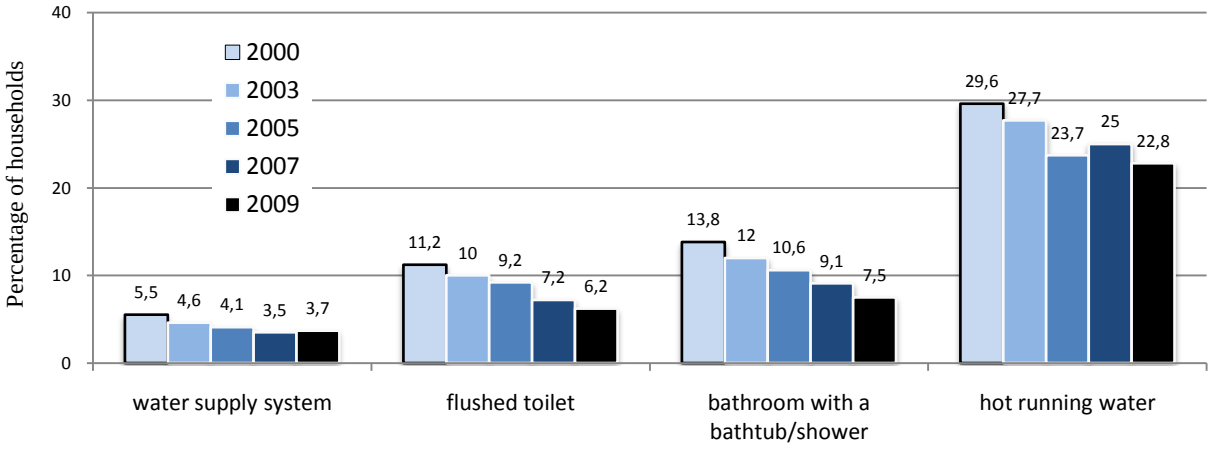


Figure 3.4.5. Percentage of households which were lacking in selected fittings and systems from 2000 to 2009 in whole samples

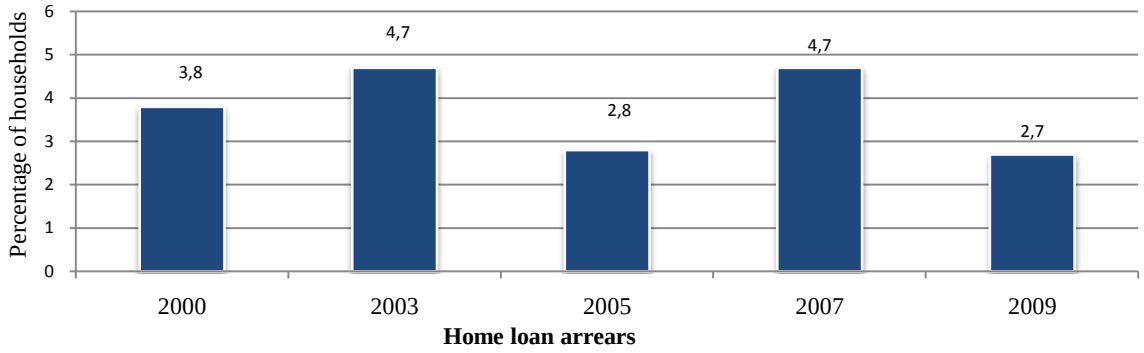


Figure 3.4.6. Percentage of households with home loan arrears from 2000 to 2009 in whole samples

3.5. Education

3.5.1. Educational status of household members

Izabela Grabowska, Irena E. Kotowska

The population's educational activity is assessed on the basis of the scope of use of selected educational services at schools (schooling in a stationary, evening and weekend mode, all types of post-graduate studies) or outside schools. The percentage of persons of a given age group taking advantage of the given educational service forms the basis for scope assessment. For educational services provided at schools, this criterion is known as the scholarization ratio, for services aimed at children under 6 years of age it is known as the coverage rate used to measure the scope of institutional care concerning children, whereas for persons aged 25 or over it can be used to assess their educational activity level. Educational activity level assessment of adults, that is persons aged 18 or over, shall also include forms of educational activity and the respondents' status on the labour market.

3.5.1.1. Household member participation in educational activity

Table 3.5.1 shows the values of this factor in 2000, 2003, 2005, 2007 and 2009, whereby in the four last waves of the Diagnosis, out-of-school educational activity has also been included, which is important in assessing the educational activity level of adults.

Like in recent studies, apart from 2003, only one in five children aged under 6 in the entire country benefited from kindergarten or crèche care services (13 per cent in 2003). Children in urban areas were still much more often sent to these care institutions than in rural areas, where only 12.6 per cent of children received such care (in the past, this amount fluctuated between 8 per cent in 2003 and 11-13 per cent in 2000, 2005 and 2007). The spatial variability of access to institutional care has deepened between urban areas (even small towns) and rural areas. The increase in the number of births observed in Poland since 2004, which is a consequence of realising deferred births and the growing number of women in reproductive age (the 1980s' baby boom), caused an increased demand for places in crèches and kindergartens. The service market in urban areas, especially with regard to private suppliers, adapted faster to the increased demand, which additionally increased the territorial differences regarding access to these institutions. Furthermore, like in recent years, the vast majority of children took advantage of public crèches or kindergartens, although the role of private institutions, especially in large cities, is on the rise.

The severe shortage of institutional child care in rural areas may limit the growth of professional activity of women in rural areas, especially with regard to taking up jobs in the non-farming sector. The necessary changes in the employment structure of rural populations associated with shifting part of the workforce to the non-farming sector render it particularly important to increase the accessibility of institutional child care in rural areas. It should also be emphasised that high quality care services accessible to parents at a suitably low price are a successful way to level off educational and economic inequalities (cf. e.g. Kotowska, Sztanderska, Woycicka 2007, Szukalski, Warzywoda-Kruszyńska, 2005).

Improvement of access to institutional care for small children is treated as a basic instrument of family policies aimed at supporting women as they reconcile family and professional duties. It is also treated as a precondition of improving the situation of women on the labour market and increasing their employment level, and it can also affect some growth in their total fertility rate (cf. e.g. Gauthier, 2005; Kotowska, 2009, 2005; Matysiak, 2008). The importance of this matter is confirmed, among others, by the fact that the Lisbon Strategy includes improving child care accessibility in its strategic objectives, recommending that until 2010 Member States should provide institutional care for at least 90 per cent of children from 3 years of age up to the age of school initiation and 33 per cent of children aged below 3. Unfortunately, the accessibility of these care services is among the lowest in the European Union.

Table 3.5.1. Household population according to educational status and place of residence (the percentage of persons of a given age and place of residence taking advantage of selected educational services)between 2000 and 2007 (in per cent)

Educational status	Place of residence						Total
	cities above 500k	towns 200-500k	towns 100-200k	towns 20-100k	towns below 20k	rural areas	
The total percentage of persons taking advantage of educational services	26.60a	28.00	25.00	25.10	25.30	25.60	25.80
	27.09b	27.26	27.59	25.17	27.26	26.61	26.60
	28.20c	27.88	29.55	27.85	30.03	26.84	27.94
	25.43d	23.78	26.73	23.97	25.76	22.22	23.91
	27.02e	26.41	24.01	27.17	27.39	24.64	25.94
Children aged 0-6 in crèches or kindergartens	31.50	32.10	27.00	21.70	23.00	12.60	20.50
	25.92	25.19	22.80	22.39	18.40	12.09	18.75
	24.17	31.23	20.46	32.12	20.84	10.78	19.77
	19.13	19.52	20.42	19.93	12.18	7.74	13.51
	31.16	22.33	14.51	33.71	27.34	12.58	21.40
Children aged 7-15 learning at schools	88.00	89.00	93.50	91.40	92.20	89.90	90.50
	96.37	97.41	97.36	99.03	96.98	98.75	98.15
	92.80	91.95	92.64	95.97	95.55	93.22	93.92
	76.74	77.07	81.36	78.27	79.88	80.14	79.23
	99.41	98.74	99.17	98.79	98.17	97.89	98.48
Youth aged 16-19 learning at schools	96.50	94.70	97.10	97.10	96.40	94.20	95.40
	97.43	98.92	93.54	91.66	98.65	95.09	95.29
	92.78	93.67	94.34	91.69	89.68	92.93	92.39
	93.67	91.07	93.85	89.12	94.01	87.74	90.39
	89.40	97.63	86.30	90.03	87.55	85.43	88.47
Persons aged 20-24 taking advantage of educational services at schools and extramurally	83.00	72.60	66.90	65.80	58.00	47.60	60.90
	80.23	72.82	57.50	64.64	62.75	49.23	60.76
	70.44	67.61	63.80	57.34	53.64	50.76	57.51
	61.64	61.51	61.02	53.92	46.33	38.98	49.90
	61.06	58.22	23.93	45.18	45.77	25.99	40.55
Persons aged 25-29 taking advantage of educational services at schools and extramurally	28.70	26.30	21.20	19.50	16.40	11.40	18.40
	34.39	19.01	26.88	16.80	15.75	8.53	17.19
	24.68	15.55	21.66	12.29	18.30	8.90	14.08
	18.29	17.32	14.99	17.01	10.02	7.56	12.69
	16.69	18.63	2.44	18.25	8.49	7.11	11.45
Persons aged 30-39 taking advantage of educational services at schools and extramurally	7.50	10.80	8.60	7.60	6.90	3.80	6.20
	11.61	8.85	10.84	8.83	8.01	2.52	6.99
	11.09	8.14	4.32	5.59	5.92	1.84	4.98
	8.10	9.64	9.01	4.64	4.88	3.19	5.44
	4.70	2.53	5.35	3.20	1.88	0.32	2.29
Persons over 39 taking advantage of educational services at schools and extramurally	2.70	2.40	1.50	1.40	1.50	0.90	1.50
	4.62	2.52	2.88	1.61	1.36	1.08	1.90
	2.10	0.90	1.77	1.30	1.45	0.93	1.26
	2.45	0.85	2.03	0.85	2.22	0.61	1.22
	0.47	0.92	0.33	0.80	1.29	0.32	0.61

a 2009
b 2007
c 2005
d 2003
e 2000

In 2009, like in recent years, we observed no territorial differences concerning access to education of children aged 7-15, the vast majority of which attend state schools. In the entire country and in rural areas approximately 90 per cent of children from this age bracket were at school, and this number fluctuated between 88 and 93 per cent in urban areas. In comparison with the results of the last two waves of the study, there has been a slight decrease in the scholarization ratio of children belonging to this age bracket, which is difficult to explain. Worse ratios from 2003 were attributed to the consequences of the 1999 education reform. Then, for the first time, this age group included not only children and youth from primary schools, but also from lower secondary schools.

In 2009, like in recent waves of the study, there were no significant territorial differences in the school access for students aged 16-19. The percentage of young people from this age bracket who attended any type of school amounted to approximately 95 per cent (94 per cent in rural areas, 94-97 per cent in urban areas). A positive change is the increase of this ratio in medium-sized and small towns (100-200 thousand inhabitants and 20-100 thousand inhabitants) in comparison with previous waves of the study, which would seem to imply an increase in motivation to continue on further stages of education.

Educational activity of adults usually implies participation in different forms of education for persons aged 18 and over, but taking into account the adopted age brackets, our analysis concerns persons aged 20 and over.

The territorial variability of access to educational services as described for children and youth aged 7-19 changes diametrically with regard to educational activity of persons belonging to subsequent age groups. The percentage of persons aged 20-24 studying at schools and extramurally has not changed and in 2009 amounted to 61 per cent (in comparison with 61 per cent in 2007, 58 per cent in 2005 and 50 per cent in 2003). In urban areas, this percentage fluctuated between 58 per cent and 83 per cent depending on their size (57-80 per cent in 2007, 54-70 per cent in 2005 and 46-61 per cent in 2003), while in rural areas it decreased slightly to 47.6 per cent in comparison with 49 per cent in 2007 and 50.7 per cent in 2005, but still remained at a visibly higher level than in 2003 (39 per cent) and 2000 (26 per cent). It should be noted, however, that the significant increase of this ratio in 2005 was caused by the broadening of the definition of educational services by including services provided extramurally. The most positive results are still found in the largest cities and large towns, where approximately 73-83 per cent of persons take advantage of educational services (73-83 per cent in 2007, 67-70 per cent in 2005). There has been a slight decrease in the share of persons taking advantage of educational services in rural areas. At this education level, the role of private institutions is growing.

What should be emphasised here are the significant differences in educational activity of men and women occurring in this age group. Women study much more often than men (67 per cent of women in 2009, 63 per cent of women in 2007 and 2005 and 54 per cent of women in 2003 in comparison with 55 per cent of men in 2009, 57 per cent of men in 2007, 52 per cent in 2005 and 47 per cent in 2003). The growth trend inhibition of educational activity of men aged 20-24 is rather alarming. This tendency may deepen in subsequent years due to abolishing obligatory conscription, which was often the main motive of taking up higher education by young males.

The territorial variability of educational activity seems to be increasing, especially for men. In 2009, the percentage of women aged 20-24 who were educationally active fluctuated in urban areas between 64 and 87 per cent (between 60 and 84 per cent in 2007, between 59 and 76 per cent in 2005), and amounted to 54.5 per cent in rural areas (54 per cent in 2007 and 59 per cent in 2005).

The percentage of men living in urban areas and taking advantage of educational services at schools or extramurally ranges from 51 to 81 per cent (57-81 per cent in 2007, 46-69 per cent in 2005) and is significantly higher in rural areas, where it amounts to 42 per cent (43 per cent in 2007, 42 per cent in 2005). It is alarming to see the territorial differences of educational activity in this age group become more visible to the disadvantage of rural area inhabitants, in consequence of educational activity stabilisation of rural area inhabitants in comparison with the rise observed in urban areas. It is also alarming that fewer men from smaller towns participate in educational services.

The scope of educational service use falls significantly in the following age group, although the share of educationally active persons aged 25-29 is higher than in recent years (18 per cent in 2009 compared with 17 per cent in 2007, 14 per cent in 2005 and 13 per cent in 2003). This change is first and foremost the result of improving ratios in large cities (200-500 thousand inhabitants) and rural areas. This ratio does not exceed 29 per cent in urban areas (34 per cent in 2007, 25 per cent in 2005 and 18 per cent in 2003), and amounts to as little as 11.4 per cent in rural areas (8.5 per cent in 2007, 8.9 per cent in 2005 and 7.5 per cent in 2003). Unlike the previous age group, differences between educational activity of urban and rural areas inhabitants levelled off in consequence of the rise of educational service use in rural areas and decrease in the largest cities and medium-sized towns (100-200 thousand inhabitants).

Women aged 25-29 still took advantage of educational services more often than men from the same age group (19 per cent of women and 17 per cent of men in 2009 and 2007 compared with 17 and 12 per cent in 2005 and 13 per cent for both sexes in 2003). This age group is characterised by the greatest fertility, which may limit the educational activity of women and lower men's motivation to continue studying as their motivation to take up work becomes greater. Territorial differences are levelling off; the percentage of female rural area inhabitants aged 25-29 who are educationally active is 2.5 times lower than the highest ratio for urban areas, which fluctuates between 16 and 32 per cent. In 2007, the percentage of educationally active women living in rural areas was over 4 times lower than the highest ratio for urban areas. The contrast between urban and rural areas is also large in the case of men; only 10.4 per cent of men living in rural areas take advantage of educational services at schools or extramurally (9 per cent in 2007 and 6 per cent in 2005) compared with 17-26 per cent in urban areas (13-35 per cent in 2007, 18-27 per cent in 2005).

Territorial differences in educational activity stay visible in the following age group (30-39). In order to keep sample size comparable with the age groups discussed above, it was decided that the 30-34 and 35-39 age groups should be presented jointly. It is the 30-34 age group, however, which has the decisive influence on the ratios given below. Persons aged 30-39 take advantage of various educational services 3 times less often compare with the 25-29 age group. The percentage of educationally active people of this age remain at the 6.2 per cent level (7 to 11 per cent in urban areas and 3.8 per cent in rural areas) compared with 7 per cent in 2007 (8 to 12 per cent in urban areas, 2.5 per cent in rural areas) and 5 per cent in 2005 (4 to 11 per cent in urban areas, 2 per cent in rural areas). In 2009, the percentage of educationally active women belonging to this age group amounted to 7.7 per cent like in 2007 (5.4 per cent in 2005 and 7 per cent in 2003), while for men it was 4.6 per cent (4.3 per cent in 2007, 4.6 per cent in 2005 and 3.5 per cent in 2003). Almost 3.8 per cent of women aged 30-39 living in rural areas are educationally active (3.3 per cent in 2007, 2.5 per cent in 2005) compared with 1.8 per cent of men (2 per cent in 2007, 1 per cent in 2005). Therefore, insofar as the previous age group revealed an improvement in educational activity, still only a

small share of persons aged 30-39 takes advantage of lifelong learning. Educational activity disappears among persons aged over 39.

On balance, the analysis of educational activity conducted separately for adult men and women taking into account their age and place of residence not only reveals the visibly higher educational aspirations which still characterise women, but also shows the territorial differences between urban and rural areas.

3.5.1.2. Individual determinants of adult educational activity

Lifelong learning, especially improving one's professional qualifications, is one of the foundations of the European Employment Strategy (available at http://ec.europa.eu/social/). To remain competitive and achieve good results in the long run, national economies have to adapt to ongoing changes and safeguard adequate balance between supply and demand on the labour market. Rapid change requires active long-term measures that prepare society to face new challenges. One of the main solutions is investment in the human being throughout his or her entire life. In order to design appropriate actions, both at the national level and in the workplace, aimed to increase adult educational activity, it is essential to know the determinants of participating in the process of improving professional qualifications.

The previously discussed differentiation in adult educational activity associated with professional qualifications according to their socio-demographic characteristics and status on the labour market can be expressed synthetically using an appropriate model. To this end, we employed the logit model in the form (Gruszczyński, 2002):

$$P(Y = y_i) = F^{-1}(x^T\beta) = \frac{e^{x^T\beta}}{1+e^{x^T\beta}}$$

where:

Y – binary random variable taking 1 when the respondent was improving his/her professional qualifications within the last two years or 0 when the respondent was not improving his/her professional qualifications within the last two years

F – cumulative logistic distribution function;

x – column vector of predictor variables;

β – column vector of parameters.

Apart from standard socio-demographic characteristics, such as age, gender, education level and place of residence, the model also included the situation of the respondent on the labour market and state of health measured in terms of legal or biological disability. The models were estimated separately for women and men (Table 3.5.2).

Table 3.5.2. Estimation results of logit models describing the educational activity of persons over 25

Type of independent variable	Independent variable - categories	Odds ratio men	Odds ratio women
Age	25-29	7.077***	8.810***
	30-34	4.204***	5.913***
	35-39	4.437***	7.311***
	40-44	3.872***	5.487***
	45-49	2.642***	5.488***
	50-54	2.001***	3.216***
	55+	ref.	ref.
Education	primary and lower	0.106***	0.070***
	basic vocational and grammar school	0.228***	0.118***
	secondary	0.462***	0.380***
	higher and vocational college	ref.	ref.
Income per consumer unit in the household	I quartile	0.787*	0.887
	II quartile	0.917	0.840*
	III quartile	0.914	0.901
	IV quartile	ref.	ref.
Status on the labour market	employed	1.989***	2.155***
	unemployed	1.939***	2.799***
	inactive	ref.	ref.
Health	healthy	1.782***	1.197
	disabled	ref.	ref.
Place of residence	cities with over 500k inhabitants	1.826***	2.903***
	towns with 200-500k inhabitants	1.681***	2.282***
	towns with 100-200k inhabitants	1.449***	1.438***
	towns with 20-100k inhabitants	1.319***	1.565***
	towns with less than 20k inhabitants	1.043	1.190
	rural areas	ref.	ref.

3.5.1.3. Conclusion

The acquired information concerning the scope of educational service use in the 2009 study and change which occurred between 2007 and 2009 can be summarised as follows:

- in 2009, as compared with 2007, the access of children aged 0-6 to institutional care facilities increased in the largest cities and stayed unchanged in rural areas, where it remains at a very low level; territorial variability is increasing;
- there has been a decrease in the percentage of students aged 7-15 in education;
- there is little territorial variability in access to education among children and young people aged 7-19;
- increase in the percentage of persons aged 20-24 who continue studying in large and medium-sized towns and the slight decrease in the share of rural area and small town inhabitants contributes to increasing the already negative spatial differences in the education structure of the population;
- the overall slight increase in the share of persons aged 25-29 who take advantage of educational services results from positive change in educational activity of rural area inhabitants and inhabitants of towns with 200-500 thousand inhabitants. Territorial differences decreased not only as a result of the increasing participation in educational services of rural area inhabitants, but also the decrease among inhabitants of the largest cities (those with over 500 thousand inhabitants);
- the low educational activity of persons aged 30-39 has not improved;
- persons aged over 39 still showed a lack of interest in taking advantage of educational services,
- the process of improving professional qualifications is still selective and has a relatively low scope for persons aged 30 and over.

The results of the *Social Diagnosis* 2005, 2007 and 2009 studies imply that the scope of adult lifelong learning, which is regarded as one of the basic conditions of increasing their employment ability, is still marginal in Poland, despite the few positive changes described above. Juxtaposing factors describing the educational activity of Polish adults with population structure according to education level, civilizational competences described in the first chapters of the study and place of residence reveals inequalities concerning development chances of urban and rural area inhabitants as well as persons aged 35 or over in general. Differences in education level, knowledge of foreign languages and computer skills between young people and persons aged 35 and over point to a competence gap, which increases along with age. This is confirmed by analyses relying on the synthetic measure of human capital (cf. chapter 3.5.2).

The gap between the demand for educational services, which stems from the existing education level and qualifications of the population on the one hand, and technological changes and workforce requirements on the other, and the above-described educational activity pattern of the selected population groups point to the urgent need of increasing the use of educational services among persons over 29. It is essential to develop different forms of supplementary education and qualification raising (evening studies, weekend or correspondence mode, post-graduate studies and other courses and workshops) and take measures to increase the scope of educational service use. The analyses confirmed that especially in rural regions, it is necessary to improve the qualifications of persons aged 30 or over with at least 25 years of professional activity ahead and hitherto low participation in lifelong learning, especially after the age of 40. These results, together with the observation that persons aged 45-64 are poorly prepared to function in the modern society and on the modern labour market on account of their human capital level, lead to the conclusion that retaining this group of people on the labour market requires specific measures aimed at increasing their employability. Poland has the lowest employment rates for persons aged 55-64 in the European Union. Without enhancing their human capital, the announced increase of their employment level is unrealistic, and the threat of unemployment is going to rise even in relatively good economic conditions.

3.5.2 Human capital

Dorota Węziak-Białowolska, Irena E. Kotowska

Development of the knowledge-based economy and information society caused an emphasis shift from material to immaterial resources irrespective of the definitions of these notions and their interpretations (cf. e.g. Drucker, 1999; Kukliński, 2004; Zacher, 1999; OECD, 1998). Often equated with intellectual resources, their most important element is human capital, which is also ascribed the greatest growth potential. The amount and productivity of intellectual resources are incredibly difficult to measure and assess. However, without an attempt to measure them, one cannot analyse the past dynamics of development processes or assess the development possibilities of individual countries or regions.

Like in 2007, the current edition of the Social Diagnosis also included the procedure of measuring the human capital of Polish society. The analysis concerns both the human capital level and its variability according to selected demographic, economic and social characteristics. This enabled us to assess the differences in human capital of various socio-economic population groups and to compare changes in the human capital level between subsequent Social Diagnosis waves.

3.5.2.1. Measuring human capital

Based on *Social Diagnosis* data from 2007 and 2009, human capital was measured according to the following procedure:

- a theoretical model of human capital was developed; definition of the human capital,
- the measurement model of human capital was developed; the choice of pointer variables,
- the accuracy of the measurement model was tested in exploratory and confirmatory factor analysis,
- a synthetic human capital index was created in the Categorical Principal Component Analysis process.

The synthetic human capital index was calculated for respective population groups determined on the basis of demographic, social and economic characteristics. Comparing index value changes with time for various population groups enables us to assess of their relative situation.

Similarly to *Social Diagnosis 2007*, human capital in *Social Diagnosis 2009* was measured using information concerning education of the respondents aged 16 or over, their civilizational competences and participation in lifelong learning and supplementary education aimed at raising their professional qualifications or other skills. This time, however, the education level was measured by the number of years in education, which enabled us to measure the results with greater precision.

The choice of indicators was motivated by the adopted definition of human capital. As early as several years ago, the scope of this definition was mainly limited to the education level, but nowadays it is much broader. The emergence of information society and knowledge-based economy engender the need of constant broadening and updating of acquired knowledge, skills and competences. Not only to meet the requirements of the modern labour market but also to function in society, it is essential to have different skills than several years ago and revise them constantly. These include, among others:

- the knowledge of information and communication technologies (ICT),
- the ability to acquire and use information from electronic sources,
- quick communication,
- competence in foreign languages, especially English, which is the main language of the Internet and science.

Apart from that, it is vital to bear in mind the necessity of broadening and updating one's knowledge and skills constantly through taking appropriate actions.

Hence, the following variables were used:

- education; measured in the number of years in education [number of years in education][9],
- civilizational competences; it was assumed that they are manifested by:
  - using a computer at work, in the house or in other places [computer],
  - using an Internet search engine (e.g. Google, Yahoo!) in order to find information [search engine],
  - knowledge of the English language [English],
- participating in lifelong and supplementary education; the measurement was conducted based on answers to the question concerning raising one's professional qualifications or other skills during the last 2 years [training courses].

Variables defining the human capital act as its stimulants, which means that their higher values are taken to signify a higher human capital level.

Out of the five variables qualified as human capital variables, the greatest values of standardised factor loadings were for: using a computer, using a search engine, knowledge of English, participation in training courses and age (in decreasing order).

These results confirm that civilisational skills, and not just education and supplementary education, are decisive for the human capital, although one should not underestimate the importance of the two latter factors.

The synthetic human capital index was calculated in the Categorical Principal Component Analysis[10] process (CATPCA), on account of the categorical character of four out of five pointer variables. To allow a comparison of the human capital indicators between 2007 and 2009, the analysis was performed on a joint set of data from *Social Diagnosis* 2007 and *Social Diagnosis* 2009.

In order to better present the differences in human capital level, its synthetic index, which is a standardized value (with a mean of zero and a standard deviation of one), was normalized to take values from the 0-100 range[11]. All comparative analyses were conducted using a non-standardised variable.

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[9] Abbreviated variable names used in further parts of the text are given in square brackets.

[10] Górniak (2000:.316) states that the principal component analysis, as opposed to factor analysis, enables the unambiguous calculation of variables representing dimensions measured by the set of indicators.

[11] 0 and 100 were given unnormalized human capital index values corresponding to the minimum and maximum indicator values; in the case of number of years in education, the minimum value = 0 and max = 30 were adopted.

3.5.2.2. The human capital of Polish society in 2007 and 2009

On a normalized scale (0-100), Polish human capital was greater in 2009 than in 2007 (38.63 as opposed to 36.45). This result is in line with conclusions from the analysis of indicator dynamics in this period. In 2009 as opposed to 2007, there was a rise in the percentage of persons using search engines and computers. On the other hand, there was a decrease in the percentage of persons participating in activities related to raising qualifications or skills (the change is not statistically significant), analogically to the slight increase in the percentage of persons with English language skills (active or passive).

These changes most likely occurred as a result of the increasing informatisation of socio-economic life in Poland and can also be seen as a consequence of entering the labour market persons with ongoing access to computers at home since the beginning of primary school. The very dynamic development of IT tools providing a more effective way of finding information on the web as well as the increased accessibility of professional software dedicated to certain types of economic activity are also significant.

The results point to the conclusion that greater accessibility of technology is reflected in its greater use. The resulting human capital development is going to help maintain the pace of reducing the gap between Poland and EU countries with high human capital levels.

The higher human capital level of women aged 15-44 is most likely the consequence of more years spent in formal education and a higher scholarisation ratio at the university level. The higher human capital level of men aged 45 and over as opposed to women may stem both from the differences in education level in older age groups, which are negative for women, and from the fact that women in this group terminate their professional activity earlier than men. Therefore, they relatively earlier lose touch with innovation most often imposed by the labour market. The very dynamically decreasing level of human capital with age seems to be a sign of the times. The history of technologies which are currently used and deemed modern is very short. In the past, individuals had much more time to gain skills, which remained in use throughout the course of their entire lives. In knowledge-based economies, the competitiveness of individuals on the labour market as well as their efficient functioning in society is determined by their ability and willingness to absorb information quickly and make adequate use of it. These civilizational challenges are tackled more successfully by younger generations, hence the highest human capital level in the 15-34 age group.

Table 3.5.3. Comparison of the average human capital level according to gender and age

Age group	Gender	Human capital in 2007			Human capital in 2009		
		number	average	standard error	number	average	standard error
15-34	Male	923	51.27	0.71	809	57.70	.70
	Female	1112	53.66	0.64	979	59.51	.62
35-44	Male	512	38.62	0.97	512	41.81	.95
	Female	638	38.69	0.88	626	43.16	.90
45 and over	Male	1684	25.86	0.43	1798	27.55	.43
	Female	2227	24.83	0.38	2372	26.56	.39

The decrease in human capital level along with the decrease in place of residence size is caused by a number of factors. First of all, large cities have a much better education base. All cities with over 500 thousand inhabitants are academic centres with a very significant levels of accumulated human capital. Usually, they also have the best secondary, and often also primary schools. They provide the students with much better infrastructure, such as for instance access to libraries and places where one can use state-of-the-art technologies. Secondly, better-educated persons migrate to large cities, because due to the accumulated human capital they are much more mobile and able to get better job offers. Thirdly, large cities are the place where large corporations locate their offices which require highly qualified employees and therefore attract persons with a higher human capital to large cities.

Professional activity is conducive to maintaining the human capital level and also acquiring new skills. Leaving the labour market hinders the process of improving qualifications and acquiring knowledge, causing the human capital level to stabilise or even decrease. However, an opposite relation is also possible; persons with a higher human capital experience much fewer difficulties in finding a job, and consequently much less often find themselves among the professionally inactive or unemployed.

In order to have a closer look on the human capital level of Poles, human capital index was calculated while simultaneously considering gender and one of the following characteristics: place of residence, socio-economic status, status on the labour market.

In 2007, women living in towns with 100-500 thousand inhabitants and in rural areas had a higher human capital level than men. In 2009, however, this was true in the case of women living in towns with 200-500 thousand inhabitants and in rural areas. Nevertheless, the differences in human capital level of men and women in 2007 and 2009 were significant only in the case of towns with 20-100 thousand inhabitants.

In groups determined according to socio-economic status, higher human capital for women than for men was recorded in the public and private sector, private entrepreneurs, unemployed, other professionally inactive women as well as school and university students (both in 2007 and 2009) and women employed in the farming sector (only in

2009). In the group of retirees and disability pensioners, however, greater human capital was found among men. The greatest human capital characterised female school and university students, then male school and university students and women employed in the public and private sectors. The lowest human index characterised female and male retirees and disability pensioners (Chart 3.5.1).

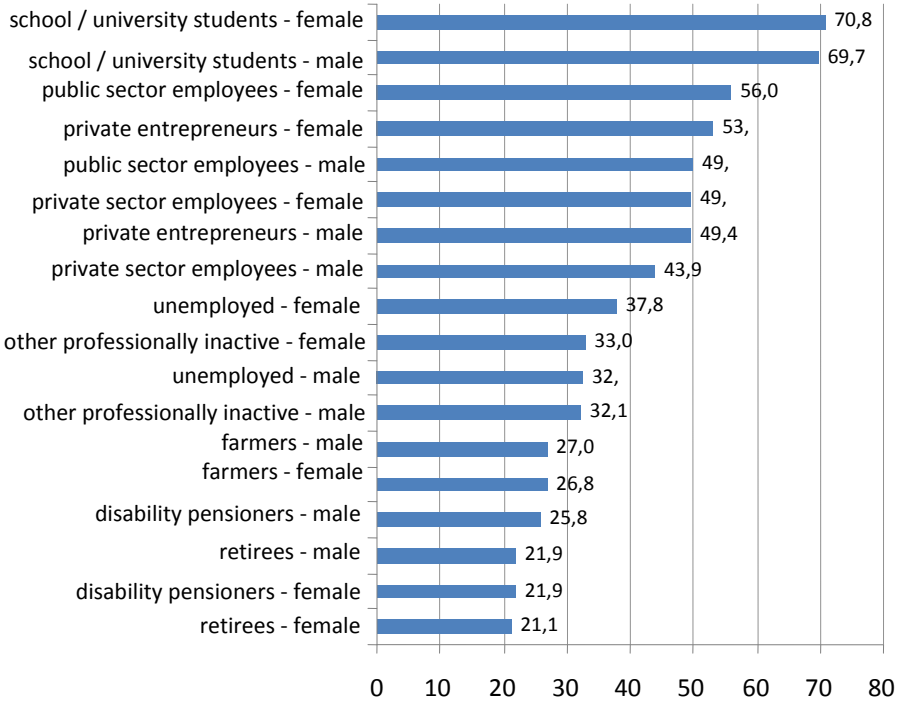

Figure 3.5.1. Human capital index by gender and socio-economic status in decreasing order

On account of labour market status, the highest level of human capital characterised employed persons, then unemployed and finally those who were professionally inactive. This conclusion remained unchanged even after including genders in the analysis. However, it is worth noting that among employed and unemployed persons a higher human capital level (in both examined periods) was the domain of women, while among professionally inactive it characterised men.

Similar analyses were also conducted for age; i.e. we measured changes of human capital on account of age group and place of residence, socio-economic status and status on the labour market.

The highest human capital level was again observed in case of the youngest persons (aged 25-34), and the lowest characterised persons aged 45 and over. This rule was confirmed in all cross-sectional analyses taking into account place of residence, socio-economic status and status on the labour market.

3.5.2.3. Conclusion

The development of human capital is one of the main factors contributing to economic growth. *Social Diagnosis* data show how important this postulate is in Poland. In 2009, like in 2007, differences in human capital of the younger and older generations (in favour of younger people) were extremely visible. On the one hand, this is a good sign, which shows that next generations entering the labour market will be able to meet the demands imposed by modern technologies. On the other hand, inequalities in human capital levels between age groups and between age groups with gender control were greater in 2009 in comparison with 2007 (Table 3.5.4), which indicates the threat of increasing inequalities and confirms that lifelong learning plays a key role in counteracting this change. This result shows that older workers need a serious improvements of their capital to stay in the labour market.

Table 3.5.4. Differences in human capital index in 2007-2009 by age groups and gender

Difference between groups	2007	2009	2007		2009	
	total		men	women	men	women
15-34 and 35-44	13.92	16.14	12.65	14.97	15.89	16.35
35-44 and 45+	13.39	15.57	12.76	13.86	14.26	16.60

Differences in human capital levels, unfavourable for rural area inhabitants, have remained the same despite the 2007 and 2009 increase in human capital which was recorded also in this group. Likewise, in spite of the observed

improvement, persons employed in the farming sector still occupy a low place on the list of socio-professional groups according to human capital level. This underlines the scale of investments in the human capital of these social groups, necessary to limit inequalities in the capital level, which could hamper rural transformation. A higher human capital level in rural areas shall mean that farms are capable of adopting modern technologies, which in a highly developed country is essential to ensure competitiveness in this sector of economy. Furthermore, in view of the rules governing EU Common Agricultural Policy, this seems crucial for further development.

Human capital analysis according to status on the labour market shows that being active on the labour market plays a very important role in shaping human capital. It should be emphasised that this index has not only improved among employed persons, but that a clearly visible change was also recorded among the unemployed. One could assume that part of the credit should be attributed to human resources development programmes, so widely implemented in recent years. What is alarming however, is the increasing inequality in the human capital level of the professionally active and inactive. The need to increase employment in Poland also entails activating persons remaining outside the labour market, which might be difficult considering the increasing differences in human capital levels.

The analyses have also shown that students have the greatest resources of human capital. In the course of their studies, they gain the necessary skills to use the knowledge database provided by modern technologies. One should also remember however, that in subsequent years they will have to make use of acquired skills in their professional life. Unfortunately, there are more and more voices that universities are inept at teaching the use of acquired knowledge in practice. Additionally, it is often pointed out that educational structure according to fields of study is poorly suited to economy needs; there are too many graduates of Social Studies and Humanities and too few graduates of scientific and technical subjects.

3.5.3. Education of children

Tomasz Panek

In March 2009, the vast majority of households wanted their children[12] to graduate from university with a master's degree (over 72 per cent). 19 per cent of households however, described the satisfactory education level of their offspring as finishing a technical or vocational college, and over 15 per cent[13] higher vocational school (bachelor's degree). Households assessed the average likelihood of achieving the above-mentioned education levels as rather high.

In comparison with the situation two years before there has been a significant increase in households wanting their offspring to graduate from a higher vocational school (by 1.3 percentage points). The likelihood assessment of achieving all education levels specified in the study basically remained unchanged. Two thirds of households assess this likelihood as high, and in over 5 per cent of households the child has already graduated at the desired level. The child's age has a moderate influence ($=-0.043$, $p<0.000$) on the education level desired by parents and a significant influence ($r=0.130$, $p<0.000$) on the likelihood assessment of achieving the desired education level by the child; the younger the child, the greater the desired education level and the higher the likelihood assessment. This means that as the child grows up, the parents' aspirations concerning his/her education become more realistic and less resemble wishful thinking. Along with age, the child verifies his/her parents' hopes.

Parental aspirations concerning the education of their offspring are slightly higher for daughters than for sons; 69.2 per cent of daughters and 63.2 per cent of sons should graduate with a master's degree.

Graduating from university with a master's degree was chosen most often by entrepreneur and employee households (over 85 and over 74 per cent respectively) as well as households created by married couples with 2 children (almost 80 per cent). Households without unemployed and disabled members declared this education level much more often than households with unemployed and disabled members (over 74 per cent each in the first two groups as opposed to almost 59 and over 61 per cent of households in the remaining two groups).

Households with this type of aspirations concerning the education of their offspring lived predominantly in large and the largest cities (over 78 per cent). This education level of children was declared as fulfilling parental aspirations least often by households living on unearned sources (less than 44 per cent) and single parent households (58 per cent). These households were relatively most often found in rural areas (approximately 65 per cent).

A distinct increase in the aspirations of households who wanted their offspring to graduate from university with a master's degree was observed in the last two years in the group of self-employed households (by almost 7 percentage points) as well as married couples with 2 children and married couples with 3 and more children (by almost 8 and over 2 percentage points respectively).

Households which named graduationg from technical or vocational college as the desired level of their children's education were relatively most often found among households living on unearned sources and farmer households (almost 40 and almost 34 per cent respectively) as well as households of married couples with 3 and more children (over 28 per cent). Households representing this level of aspirations concerning the education of their offspring relatively most often lived in rural areas (almost 28 per cent).

[12] The question concerned children under 26 years of age.

[13] The percentage sum is not a 100, because in families with 3 and more children, different education levels could be expected from different children. With regard to the entire sample of children aged under 26, parental preferences were as follows: 64.5 per cent master's degree, 11.6 bachelor's degree, 14.9 per cent technical or vocational college, 3.4 per cent secondary school and specialised secondary school and 5.6 per cent basic vocational school.

In the 2008/2009 school year, financial reasons most often forced households to give up extracurricular activities and private tuition (almost 14 and almost 12 per cent of households respectively). Changing schools to ones charging lower tuition fees occurred least often (in 1.8 per cent of households).

Households living on unearned sources and disability pensioner households were most often forced to various financial limitations with regard to educating children. Households with unemployed and disabled members were much more often forced to limitations concerning their children's education due to financial reasons than households without unemployed and disabled members. The scale of financially-motivated limitations concerning the education of children analysed according to household type reveals that in the examined period this problem was most numerous among single parent households and households of married couples with 3 and more children. The aforementioned limitations were relatively most often found among households living in the largest cities and rural areas (especially in the case of resigning from extracurricular activities) and the smallest towns (especially in the case of private tuition).

In the last two years, the percentage of households forced to financial limitations concerning the education of children has fallen with regard to all types of limitations apart from changing schools requiring higher fees. In this period, certain types of significant limitations were experienced by households living on unearned sources, retiree and disability pensioner households, households with unemployed members and households living in towns with 100-500 thousand inhabitants.

In March 2009, almost 78 per cent of households thought that their needs satisfaction level connected with the education of children had not changed in comparison with the situation two years before. 16 per cent rated the current situation as worse and over 6 per cent noticed an improvement. Changes for the worse were most often declared by households living on unearned sources and disability pensioner households (almost 34 and over 29 per cent respectively) as well as non-family multiperson and multi-family households (over 14 and almost 9 per cent respectively). Need satisfaction level connected with the education of children was much more frequently assessed as worse than two years before by households with unemployed and disabled members than by households without unembloyed and disabled members (almost 23 and over 22 per cent in the first two groups and almost 14 and over 14 per cent in the remaining two groups respectively). Households declaring a change for the worse in their needs satisfaction level with regard to the education of children were not significantly varied according to place of residence, although the highest percentage was found in the largest cities (almost 18 per cent).

3.6. Participation in culture and recreation

3.6.1. Participation in culture

Tomasz Panek, Janusz Czapiński

In 2009, between 19 and 12.4 per cent of the examined households were forced to withdraw from going to the cinema, theatre, opera, operetta, a concert, or from visiting a museum or an exhibition due to financial reasons. Most often (over 19 per cent of households) this pertained to going to the cinema and least frequently, to visiting museums or seeing exhibitions (12.4 per cent). If we only consider households which express the need to participate in these forms of culture, the indicators of withdrawal for financial reasons obviously increase. Moreover the hierarchy of withdrawal changes: the highest percentage (almost 30 per cent) refers to the theatre, whereas the lowest concerns visiting museums or seeing exhibitions (nearly 23 per cent). However, a visible improvement was observed in this regard. In the panel sample, the number of households which had to give up these cultural events has decreased since 2007 by over 6 percentage points in the case of cinema to over 5 percentage points in the case of museums. It is worth emphasising that the decrease for financial reasons resulted mainly from a falling interest in these forms of participating in culture (Figure 3.6.1).

Definitely, the highest percentage of households (even more than 54 per cent in the case of theatre, opera, operetta or a concert) forced to withdraw from taking advantage of the selected forms of participating in culture was observed in the poorest households, living on unearned sources, and the lowest percentage (about 16 per cent or less) concerned self-employed households. However, at the same time, in the first group the number of withdrawals increased significantly in comparison with 2007 (from 10 percentage points in the case of cinema to almost 17 percentage points in the case of museum or exhibition, respectively). Another group which showed an increase in withdrawals were retiree households (by almost 6 percentage points in the case of theatre, opera, operetta or a concert, by 4 percentage points in the case of museum or exhibition and by less than 1 percentage point with respect to cinema).

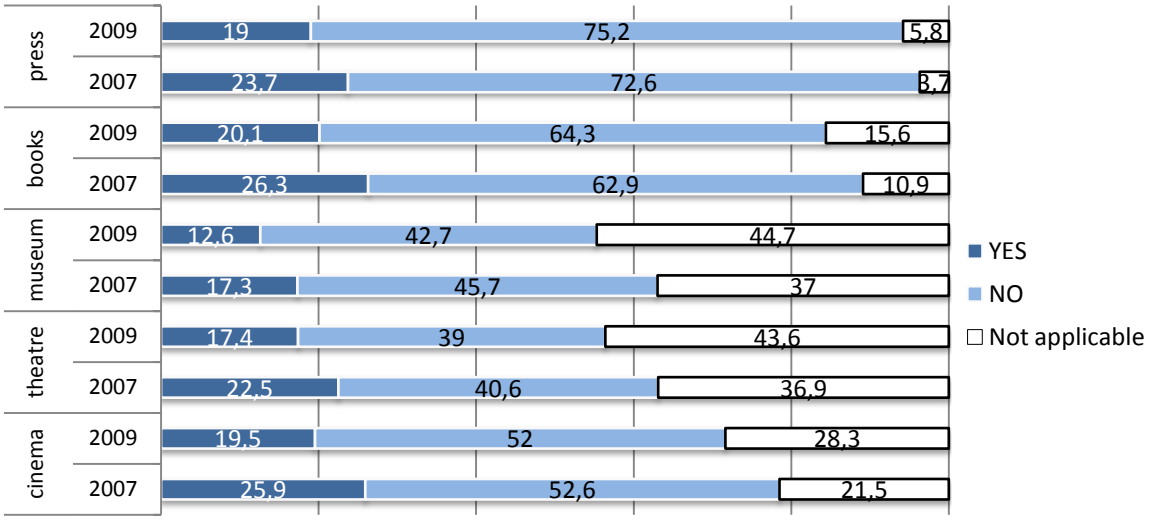

Figure 3.6.1 Did any of the household members had to resign from X due to lack of money last year (the per cent distribution of responses in the panel samples; "not applicable" refers to a lack of a given need)

Among groups of households defined according to type, withdrawing from selected ways of participation in culture mostly concerned single-parent families or families with 3 or more children. In these groups, withdrawal frequency even exceeded 40 per cent. In 2009, a significant increase in resigning from these forms of participating in culture was observed exclusively in the group of non-family multi-person households.

In 2009, financially-motivated withdrawals from all forms of culture participation under analysis were by over 20 percentage points higher among households with unemployed members than in households without unemployed members. These withdrawals concerned households with disabled members to a much greater extent than households without disabled members (from 17 to 20 percentage points).

In the last two years we observed in each of the four groups of households a decrease in the percentage of households constrained to withdraw from culture participation for financial reasons.

In 2009, the differences between groups of households representing various classes constrained to withdraw from culture participation for financial reasons were not very significant. In the majority of cases it concerned households of the rural areas. In the last two years, a fall in withdrawals from culture participation for financial reasons was observed in every place of residence class.

Slightly over 19 per cent of households in the entire examined sample was forced to abstain from purchasing a book for financial reasons (this indicator increases to 23 per cent after excluding households which did not express the need to buy books). The number of withdrawals in these households decreased by over 6 percentage points with respect to 2007, mainly due to a fall in the desire to purchase books which amounted to 5 percentage points (Figure 3.6.1).

The percentage of withdrawals from purchasing books was equal among urban and rural households. In 2009, in comparison with 2007, a fall in withdrawals from purchasing books was observed in every place of residence class.

In 2009, 19 per cent of households were forced to resign from purchasing newspapers and magazines due to financial reasons. If we only include those households which expressed such a need, this percentage increases to just over 20 per cent. In comparison with 2007, the number of such withdrawals dropped by almost 4 percentage points in the panel sample, but in the same period the desire to purchase newspapers and magazines decreased by 2 percentage points. In 2009, the socio-economic group which suffered most from these limitations was that of households living on unearned sources and those of pensioners (45 and 37 per cent of these households withdrew from the purchase of newspapers and magazines). Financial limitations with regard to the purchase of newspapers and magazines was the least frequent in self-employed households (13 per cent of households). On the other hand, in 2009 the frequency of these withdrawals decreased in all socio-economic groups of households in comparison with 2007.

In 2009, withdrawals from purchasing newspapers and magazines were much more frequent in households with unemployed members than in households without the unemployed (by almost 33 and almost 19 per cent, respectively). Households with disabled members also withdrew from purchasing newspapers and magazines more often than those without the disabled (by nearly 29 and almost 18 per cent, respectively). Between 2007 and 2009, a fall in this type of withdrawals was observed in each of the four groups of households.

In 2009 the most frequent withdrawals from purchasing newspapers and magazines for financial reasons concerned single parent families (32 per cent), families with 3 or more children as well as non-family one-person

households (over 15 per cent each). In the last two years, a fall in withdrawals from purchasing newspapers and magazines was observed in every household type.

In 2009, the highest frequency of withdrawals from purchasing newspapers and magazines for financial reasons was observed among households living in medium-sized cities with 100-200 thousand inhabitants and in rural areas (over 21 per cent of households each).

Households most often declared (more than 76 per cent of households) that the level of their cultural needs satisfaction had not changed in the last two years. On the other hand, more than 19 per cent of households stated that their situation in this regard had worsened, while only a little more than 5 per cent was convinced that it had improved. The changes were assessed most pessimistically by households living on unearned sources and those of pensioners (34 and 26 per cent, respectively, felt a worsening of the level of their cultural needs satisfaction). Among household types, the lowest evaluation was reported among single parent families as well as families with 3 or more children (almost 26 and 25 per cent of negative evaluations, respectively). In the group of households with unemployed members negative assessments were expressed by over 30 per cent of households, whereas in the group of households without the unemployed this percentage amounted to only over 17 per cent. Changes in the discussed area were much more often considered negative in the group of households with disabled members than in the group of households without the disabled (by almost 24 and over 17 per cent, respectively). Negative assessments of changes regarding the satisfaction of cultural needs were expressed by members of households living in the largest cities (almost 22 per cent of households from these cities).

In 2009, apart from withdrawal from the participation in the arts and cultural events for financial reasons, we also examined withdrawals caused by lack of such needs. The lowest percentage of households declared no need to purchase newspapers and magazines (5.8 per cent). The highest percentage in turn concerned visiting museums or seeing exhibitions (44.7 per cent) and going to the theatre, opera, operetta or a concert (43.6 per cent). No need to go to the cinema and purchase a book was declared by 28.3 and 15.6 per cent of households respectively. Generally, in the last two years we observed a significant drop in interest in all forms of participating in culture. The highest fall was observed in the case of visiting museums or seeing exhibitions (by approx. 8 percentage points) and the lowest, in the case of purchasing newspapers and magazines (by 2 percentage points) (Figure 3.6.1).

In comparison with 2007, the average number of books in household slightly decreased (Table 3.6.1). Two years ago 67.8 per cent of households had more than 25 volumes (except for handbooks and instructions), whereas in 2009 this percentage amounted to 65 per cent.

The average number of books owned, like the above-discussed ways of participation in culture, is related to material affluence (income and household equipment) which is correlated with the civilisation level (the number of modern communication tools). As both affluence and civilisation level depend on the level of education, it can be expected that numerous ways of participation in culture are correlated with the education level of household members. In fact, the results of the study confirm this fact. Nearly all households whose head member has a higher education degree dispose of a certain number of books. Most frequently (34 per cent) it amounts to between 100 and 500 volumes. This type of households represent the highest interest in the purchase of newspapers, magazines and books, visiting museums, seeing exhibitions and going to the cinema and the theatre.

Table 3.6.1. The percentage of households owning a certain amount of books in 2005, 2007 and 2009

Number of volumes	2009	2007	2005
0	12.8	10.1	12.6
up to 25	22.3	23.1	23.2
26-50	21.6	21.5	21.9
51-100	20.7	20.6	21.2
101-500	17.2	19.8	15.6
over 500	5.5	5.9	5.6

This does not mean though that persons with low civilisation indicators (a lower education, low income and a modest number of modern communication tools) do not participate in culture at all. They do participate, although nearly always only in one way, that is by watching television. The results prove that the correlation between household equipment with modern communication devices associated with culture and time dedicated by household members to watching TV is inversely correlated. 37.5 per cent of members of household with the poorest equipment watch TV for more than three hours per day, as opposed to 25.5 per cent those living in households with the best equipment. On the other hand, 47.1 per cent of respondents living in households with the best equipment watch TV for less than two hours a day, as opposed to 38.4 per cent of those living in households most poorly equipped with electronic devices associated with culture. The same correlation, only stronger, can be observed with regard to education level. The percentage of persons with basic or lower education who watch TV for more than 3 hours per day is twice as high as that of persons with a higher education (41.1 per cent and 19.8 per cent respectively).

The Internet gradually becomes a more widespread carrier of cultural content, substituting print newspapers and magazines, concerts, cinema and even traditional television.

Limited participation in culture for financial reasons, no needs associated with this participation, assessment of the cultural needs satisfaction level and the number of books owned depend mainly on the financial condition,

education level and the general civilisation level. Only TV, and to an increasing extent the Internet, are widely accessible cultural media, and the TV is more often used by those who have no other cultural needs.

3.6.2. Recreation

Tomasz Panek

The percentage of households forced in 2009 to give up recreational trips for financial reasons varied from almost 41 per cent with regard to group outings for children (holiday camps, etc.) to over 38 per cent in the case of outings for adults. However, we have observed a substantial improvement in this regard since 2007. The decrease in the percentage of such withdrawals ranged from 6 percentage points in the case of group trips for children to 8 percentage points with regard to trips of adults.

Such withdrawals took place most often in disability pensioner households and those living on unearned sources (almost 74 and almost 70 per cent in the case of trips for children and over 66 and almost 72 per cent in the case of adult trips), and least often in self-employed households (almost 25 per cent in the case of both group outings for children and family outings). An increase in the level of withdrawals was visible in comparison with 2007 in the case of group trips for children and family trips in disability pensioner households and those living on unearned sources (by 22 and almost 7 percentage points in the first group and by almost 3 and almost 5 percentage points in the second group, respectively). The percentage of withdrawals from trips for adults decreased in all household groups, except for households living on unearned sources.

In 2009, withdrawal from children's trips for financial reasons was most frequent in the group of non-family multi-person households (from almost 87 per cent in the case of group trips for children to almost 81 per cent in the case of family trips). In the last two years, the number of financially-motivated withdrawals from recreational trips dropped in practically every household group and trip types.

The frequency of financially-motivated withdrawals from all type of recreational trips was much higher in 2009 in the groups of households with unemployed and disabled members than in the groups of households without unemployed and disabled members (mostly by over 20 percentage points). In 2007 and 2009, the number of withdrawals from recreational trips decreased in all these household groups, except for households with unemployed members in the case of group trips for children.

In 2009, the highest percentage of households constrained to withdraw from the selected forms of recreation for financial reasons concerned households living in rural areas. The percentage of withdrawals from trips for adults and trips for children in this type of households amounted to over 57 and over 46 per cent, respectively. In all place of residence classes included in the study, except for small towns with 20-100 thousand inhabitants in the case of group trips for children and large cities with 100-500 thousand inhabitants and the smallest towns only in the case of family trips, the percentage of withdrawals from the selected ways of recreation decreased in comparison with 2007.

Nearly 71 per cent of households believe that their recreational needs satisfaction in 2009 did not change in comparison with the previous two years. At the same time, almost 24 per cent of households declare a worsening of the situation in this regard, while only 5 per cent perceived an improvement. Most pessimistic assessments of changes were formulated by households living on unearned sources (almost 36 per cent of households in this group believe that the level of their recreation needs satisfaction has lowered). Among household types, the most negative opinions concerning changes in the recreational needs satisfaction are expressed by households with 3 or more children and single-parent families (almost 33 and 31 per cent of negative assessments, respectively). In the group of households with unemployed members negative opinions were much more frequent than in the group of households without unemployed members (almost 37 and over 22 per cent, respectively). Households with disabled members also indicated the worse situation regarding the recreational needs satisfaction more often than households without disabled members (over 28 and almost 23 per cent, respectively). Negative assessments of changes in the level of needs satisfaction in given field were most often expressed by households living in small towns with 20-100 thousand inhabitants (over 27 per cent of households).

3.7. Health care: its use, financing and social opinions

Janusz Czapiński

3.7.1. Health care use

In the year preceding the current wave of the Diagnosis, 94 per cent of households used services provided by health care institutions. The vast majority, 92 per cent took advantage of services funded by NFZ (National Health Fund), but almost 50 per cent paid for certain services out of their own pockets and 5 per cent used health care subscriptions paid for by the employer (Table 3.7.1).

In various socio-demographic cross-sections, there is little variety in terms of using health care services paid for by the NFZ. Lower frequency of using such services characterises only households living on unearned sources and non-family households, both one-person and multi-person. On the other hand, there is great variability with regard to using services paid for by the households themselves. This is most common among self-employed households (over two thirds), married couples with 1 or 2 children (over 60 per cent), households in which income per equivalent unit is above the upper quartile (2/3) and households living in the largest cities (59 per cent), whereas

paying for health care services out of one's own pocket is least common among disability pensioner households (30 per cent), retiree households (40 per cent), non-family one-person households (33 per cent), households in which income is below the lower quartile (30 per cent) as well as households from Warmińsko-Mazurskie voivodship (26 per cent) and households living in rural areas (44 per cent).

Health care subscriptions are most frequent among employee households (9.5 per cent), married couples with children (7-8 per cent), households living in the largest cities (12 per cent) and in Mazowieckie voivodship(10 per cent, mostly because of Warsaw) as well as households in which income is above the upper quartile (12 per cent).

In the past 10 years, there has been a slight increase in the frequency of using services paid for the NFZ (earlier *Kasy Chorych*, the health insurance funds functioning in 1997-2003) and a great increase in the frequency of using health care services paid for out of one's own pocket (by over 10 percentage points). The frequency of using health care subscriptions has basically remained unchanged.

Table 3.7.1. The percentage of households using services provided by various health care institutions in the last year

Socio-demographic group	Paid for by NFZ		Paid for out of one's own pocket		Paid for by the employer (subscription)	
	2009	2007	2009	2007	2009	2007
Socio-economic group						
Employees	91.4	90.5	56.4	51.9	9.5	9.4
Farmers	90.6	89.3	45.2	38.5	-	-
Entrepreneurs	89.2	92.7	67.8	66.1	4.5	4.3
Retirees	93.7	95.0	39.6	32.9	-	-
Pensioners	94.7	95.0	29.7	28.0	-	-
Persons living on unearned sources	87.1	85.5	36.3	29.9	-	-
Household type						
One-family:						
Married couples without children	93.5	94.6	52.6	48.2	5.4	3.9
Married couples with 1 child	95.0	94.5	61.3	54.0	8.4	7.8
Married couples with 2 children	94.2	95.1	61.2	53.3	7.6	7.4
Married couples with 3 and more children	95.4	95.3	48.2	46.4	5.2	8.0
Single parent families	93.3	94.3	40.5	37.1	3.3	2.8
Multi-family	96.0	96.0	53.0	45.4	3.3	4.4
Non-family:						
One-person	84.9	85.0	33.3	30.7	2.3	2.8
Multi-person	85.1	85.1	40.5	26.4	3.3	4.2
Place of residence						
Cities above 500 k	88.1	88.9	58.7	55.2	11.9	15.3
Towns 200-500 k	93.4	92.7	54.1	51.3	8.3	4.8
Towns 100-200 k	92.8	91.9	47.9	39.8	4.8	4.2
Towns 20-100 k	92.6	92.0	49.6	42.5	4.4	3.8
Towns below 20 k	92.3	92.6	45.7	39.3	3.3	4.6
Rural areas	92.2	93.1	43.8	40.1	2.2	2.2
Voivodships						
Dolnośląskie	92.5	91.5	56.5	47.1	4.0	5.8
Kujawsko-pomorskie	90.7	89.5	40.2	33.9	2.8	2.4
Lubelskie	94.1	93.3	51.2	41.1	4.0	3.4
Lubuskie	90.8	90.9	53.8	47.1	3.6	3.6
Łódzkie	91.7	92.7	46.4	42.8	2.8	3.6
Małopolskie	96.2	97.0	54.2	49.2	6.0	5.9
Mazowieckie	87.7	89.9	53.1	50.4	10.4	12.7
Opolskie	87.5	92.5	42.4	37.3	3.4	3.8
Podkarpackie	96.0	95.6	54.4	44.4	3.5	2.0
Podlaskie	92.3	94.2	46.5	38.7	3.0	.6
Pomorskie	93.2	94.4	52.6	55.0	10.4	7.5
Śląskie	93.9	92.1	43.4	36.5	4.4	2.3
Świętokrzyskie	91.0	94.4	48.2	43.5	2.1	2.9
Warmińsko-mazurskie	91.1	89.6	26.4	26.8	.5	3.5
Wielkopolskie	91.1	92.1	52.8	46.2	4.0	4.4
Zachodniopomorskie	89.8	86.9	42.5	45.0	3.9	2.0
Income per person						
Lower quartile	91.8	92.8	30.4	24.3	1.4	1.3
Middle 50 per cent	94.0	93.0	49.0	42.0	3.3	3.5
Upper quartile	89.1	90.6	65.5	64.1	11.6	10.8
Total	91.9	92.2	48.9	43.8	5.1	5.1

- means that the number of instances was too low.

The results for households are similar to the distribution of using health care services paid for by various sources by individual respondents. In general, in 2009 over 3/4 of persons aged 16 and over took advantage of

health care services paid for by the NFZ in the past 12 months; i.e. the same number as two years before. During that time 36 per cent of respondents paid for health care services out of their own pockets and a little over 3 per cent took advantage of health care subscriptions.

Generally speaking, the frequency of using health care services depends first and foremost on age, which is strongly correlated with disease risk. Gender is also a significant differentiating factor; women used health care services much more often. This is a universal regularity; although women live on average longer than men, they suffer from various ailments more often (cf. Chapter 4.6) and more often seek treatment.

Paying for health care services out of one's own pocket and using health care subscriptions depends on education level and income per equivalent unit in the household, which is strongly correlated with education. Health care subscriptions are most common among inhabitants of the largest cities and private sector employees (11 per cent each).

During the past year, at least one of the members of every fourth household was in hospital for reasons other than pregnancy. Most often these were disability pensioner households (32 per cent) and retiree households (28 per cent), and among household types, multi-family households (34.5 per cent) and households formed by married couples with 3 or more children. Place of residence has a lesser effect on using hospital care, although households living in rural areas took advantage of it slightly more often than urban households. This is correlated with the distribution according to voivodship. In eastern voivodships; i.e. those with a greater number of rural inhabitants (Lubelskie, Podkarpackie, Podlaskie), the percentage of households whose members were in hospital is also greater.

In comparison with the last edition of the Diagnosis, the frequency of using hospital care has changed little, both in general and in various socio-demographic cross-sections. It could only be noted that a decrease in hospitalization was observed in multi-family households (by 10 percentage points) and households living in Lubelskie voivodship (by 5 percentage points), while a slight increase was observed in Warmińsko-Mazurskie (by 5 percentage points).

3.7.2. Withdrawals from health care

The largest group of households was forced to withdraw from purchasing medications and dental treatment due to lack of financial resources (Figure 3.7.1). 1 per cent of households experienced a situation in which they were forced to withdraw from hospital treatment on account of lack of funds to cover hospitalization costs. A much larger group of households was forced to withdraw from M.D. services (14 per cent) and from medical tests (9 per cent) due to financial reasons. We did not ask whether such a situation forced households to withdraw from medical services altogether or only from those which had to be paid for out of one's own pocket (some patients from this group could receive services paid for from public funds). We were interested in the scale of barriers encountered by households which experienced certain subjective health care needs and would have satisfied them had they had private funds in the sector of services paid for individually.

In 2009, the scale of withdrawals from certain types of medical services was almost the same as two years before. We only observed a slight increase (by approx. 2 percentage points) of withdrawals from purchasing medications, dental treatment and having prostheses/hip replacements and similar services.

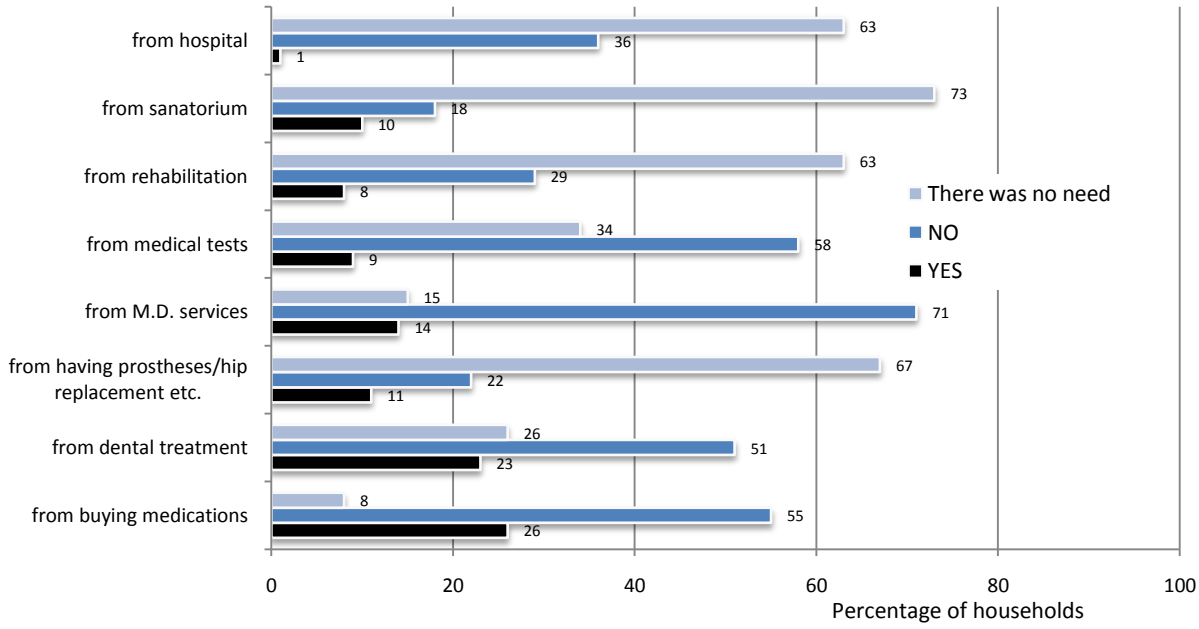

Figure 3.7.1. The scale of household withdrawals from using selected health care services on account of financial difficulties

The scale of financially-motivated withdrawals from selected health care services varies according to socio-demographic groups. If we only include these households which experienced the given needs, the most withdrawals from all or the majority of services was observed in households living on unearned sources, disability pensioner households, single-parent families, non-family one-person and multi-person households, households living in rural areas and in Łódzkie, Świętokrzyskie and Podkarpackie voivodships.

Withdrawals from all types of health care services are least frequent among self-employed households and most frequent among disability pensioner households and households living on unearned sources. These differences are mostly caused by differences in affluence level.

The frequency of withdrawals is also lower among married couples with children, especially those with a lower number of children. Among married couples with a larger number of children (3 and more), needs are probably equal, but financial means decidedly lower. According to household type, withdrawals are most frequent among single parent families, also less affluent than complete families.

On average, withdrawals are more common in rural than in urban areas. Affluence is again the decisive factor. According to voivodship, the scope of withdrawals depends of the service type. For instance, Opolskie inhabitants withdraw from hospitalization most often, and Warmińsko-Mazurskie inhabitants least often; households in Świętokrzyskie resign from medical trests most often, and Śląskie and Podlaskie inhabitants least often; households in Świętokrzyskie and Lubuskie withdraw from visiting an M.D. most often, and this is least often among inhabitants of Kujawsko-Pomorskie, Lubelskie and Zachodniopomorskie.

3.7.3. Household spending on medical services

We stated earlier that almost a half of all households bear some expenses for health care services out of their own pockets. Let us analyse the purpose and amount of these expenses in only three months preceding the survey. On average, for households bearing the given type of expenses, treatment and treatment at an outpatients' clinic were the most expensive (PLN 526). Then came the so-called tokens of gratitude; i.e. "bribes", which they used to secure faster or better quality care (e.g. greater interest in the patient's problems, greater care about his/her health, choice of the operating or supervising doctor, accelerating the service, etc.) the average value of which amounted to PLN 475. The average fee in a public hospital did not exceed PLN 200, and the amount of a sincere token of gratitude for the received care cost an average of PLN 136. During this period, almost all households (94 per cent) spent an average of PLN 378 on purchasing medications.

The amount of individual expenses varies according to socio-demographic group. Self-employed households paid most in all categories of expenses. On average, farmers spent the same amount of funds on outpatient services as employee households, but much less than employee households on informal fees, public hospital fees and medications. According to household type, multi-family households and married couples with 3 and more children spent the most on outpatient care, but the highest "bribes" were given by married couples with 1 child. However, it is the multi-family households and married couples without children who spend the most money. According to place of residence, inhabitants of the largest cities spend the most on average, while inhabitants on small towns and rural areas spend the least. As regards outpatient fees, the highest private expenses are found in Podlaskie, Mazowieckie and Dolnośląskie voivodships, while Warmińsko-Mazurskie, Świętokrzyskie and Podkarpackie are at the opposite end. The voivodship distribution is similar in terms of expenses connected with medications; the greatest expenses were in Mazowieckie voivodship, and the lowest in Warmińsko-Mazurskie.

In comparison with recent years, there has been a slight increase in average expenses connected with purchasing medications (by 17 per cent in comparison with 2007 and by 23 per cent in comparison with 2005), a significant increase in expenses connected with outpatient care (by 39 per cent in comparison with 2007 and by 74 per cent in comparison with 2005) and an increase of the number of households bearing these types of expenses (by 8 per cent in comparison with 2007 and by 35 per cent in comparison with 2005). There has also been a rise in the amount of informal fees, both in terms of "bribes" and genuine tokens of gratitude, with a simultaneous decrease of the percentage of households bearing similar expenses. The scope of corruption in the health service has shrunk, but the price of bribery seems to have grown in proportion to the increase in risk. The only type of fees which are both less common and lower than in recent years are fees paid in public hospitals (Table 3.7.2).

Table 3.7.2. The percentage of households bearing health care expenses in the course of three months and the average amount of such expenses in 2005 and 2009

	Medications and pharmaceutical products			Purchasing outpatient care services			Informal fees, the so-called tokens of gratitude ("bribes")			Gifts as genuine tokens of gratitude			Public hospital fees		
	2009	2007	2005	2009	2007	2005	2009	2007	2005	2009	2007	2005	2009	2007	2005
Percentage of households bearing the given type of expenses	94	96	92	54	50	40	2.5	4.2	5.6	3.8	5.2	8.7	3.3	4.2	7.2
Average amount of expenses in PLN	378	323	308	526	379	302	475	312	169	136	129	98	198	307	245

3.7.4. Assessment of change in health care needs satisfaction

Despite the ever-present complaints about the health care system, there is a systematic decrease in the percentage of negative retrospective assessment of change concerning the level of household health care needs satisfaction; from 41 per cent in 2000 to 25 per cent at the moment. There is no increase however in the percentage of positive assessments, there are only more and more households which do not perceive any change.

Table 3.7.3. Assessment of change in health care needs assessment in recent years (since the last survey) in three consecutive research waves (in per cent)

Health care needs satisfaction	2000	2003	2005	2007	2009
Has worsened	41	38	38	27	25
Has improved	3	4	3	4	3
Has remained unchanged	57	58	59	69	72

3.8. Comparison of household living conditions according to voivodship

Tomasz Panek

The comparison of household living conditions according to voivodship was conducted on the basis of the taxonomic living condition measurement. Household living conditions were examined from the angle of their financial ability to satisfy needs.

The taxonomic living conditions measurement is a synthetic value; an outcome of the influence of all variables (factors) describing the financial ability to satisfy household needs in all areas of life included in the research according to voivodship. The living conditions of households in individual voivodships are examined by comparing the values of indicated variables for these voivodships with the values of these variables for a hypothetic voivodship; i.e. the so-called model voivodship. Variables taken into account in the taxonomic living conditions measurement are of a differing nature, that is stimulator variables, in the case of which higher values point to better living conditions of households in a voivodship, and destimulator variables, in the case of which higher values point to worse living conditions of households in a voivodship.

The starting point for establishing a taxonomic structure of measuring living conditions is the determination of variable values for the model voivodship. These are the optimum values of individual variables describing the living conditions of households in voivodships. For stimulators, these are the maximum values, and for destimulators, the minimum values observed among all compared voivodships. When comparative analysis pertains to several periods simultaneously, the optimum values are established as the highest or lowest values among all compared voivodships throughout all analysed periods. The model voivodship is thus an ideal model to which individual voivodships are compared. From the formal perspective, the voivodships compared and the model voivodship are represented by points in the space of variables that describe them. The dimension of this space (the number of numerical axes describing this dimension) is equal to the number of variables describing the living conditions of voivodships.

In the next step of the procedure, we standardise the values of the variables selected. Such a procedure enables both the elimination of measurement units and avoiding the greater share of variables characterised by a higher numerical value of living conditions measurement.

The values of the synthetic measures of living conditions (like the group measures of living conditions in individual areas) result from calculating the distance between individual points representing voivodships and the point representing the model voivodship. The better the living conditions of households in a given voivodship, the less the distance of the point representing it from the point representing the ideal voivodship. Thanks to appropriate normalization, both the group measures of living conditions for individual areas and the synthetic measure of living conditions always assume values within the range of [0;1]. The better the living conditions in a given voivodship, the lower the value of its living conditions measure (closer to zero). The worse the living conditions in the voivodship, the higher the value of the appropriate measure of living conditions (closer to one).

Comparative analysis of living conditions in voivodships was examined, as has already been mentioned, from the perspective of financial abilities of households to meet their needs in the selected areas. This means that the assessment of the satisfaction level concerning certain needs, especially with regard to culture and recreation, may also be influenced by a lack of these needs, which in turn results in a lack of financial difficulties in this regard.

In 2009, the highest level of living conditions (column 10 in Table 3.8.1) was observed in Opolskie, Śląskie and Wielkopolskie voivodships, and the lowest in Warmińsko-Mazurskie, Świętokrzyskie and Łódzkie. The hierarchy of voiodships according to the needs satisfaction level with regard to individual areas of living conditions was diversified. In terms of income, the situation was visibly best in Mazowieckie, Pomorskie and Wielkopolskie voivodships, and the worst in Podkarpackie, Świętokrzyskie and Lubelskie voivodships.

In terms of nutrition, the highest level of needs satisfaction were in Wielkopolskie and Mazowieckie voivodships, and the lowest in Warmińsko-Mazurskie and Zachodniopomorskie voivodships. Needs with respect to material affluence were best satisfied in Opolskie and Dolnośląskie voivodships, and the worst in Warmińsko-Mazurskie, Lubelskie and Kujawsko-Pomorskie. The highest level of housing needs satisfaction was observed in Lubuskie, Pomorskie and Małopolskie voivodships, and the lowest in Świętokrzyskie, Łódzkie and Lubelskie

voivodships. In terms of children's education, the best situation was found in Lubuskie, Śląskie and Opolskie voivodships, and the worst in Mazowieckie, Warmińsko-Mazurskie and Świętokrzyskie. With regard to health care needs, these were satisfied to the greatest extent in Pomorskie, Śląskie and Wielkopolskie voivodships, and to the least extent in Dolnośląskie, Lubuskie and Świętokrzyskie voivodships. The highest level of needs satisfaction in terms of participating in culture was found in Mazowieckie, Podkarpackie and Śląskie voivodships, and the lowest in Łódzkie, Świętokrzyskie and Lubuskie. Recreation needs were satisfied to the highest extent in Mazowieckie and Śląskie voivodships, and the lowest in Łódzkie, Świętokrzyskie, Podkarpackie and Warmińsko-Mazurskie voivodships. The order of voivodships according to household living condition differs slightly from the order established according to the individual quality of life of their inhabitants (cf. chapter 8.1).

Table 3.8.1. Household living conditions according to voivodship in 2009 arranged in the order from the best to the worst according to values in column 10 (total)

Voivodship	Areas of living conditions								
	income	nutrition	material affluence	housing conditions	education of children	health care	participation in culture	recreation	total
Opolskie	0.450	0.202	0.312	0.548	0.253	0.315	0.313	0.179	0.280
Śląskie	0.450	0.208	0.607	0.441	0.225	0.215	0.260	0.144	0.289
Wielkopolskie	0.375	0.138	0.587	0.614	0.307	0.247	0.463	0.239	0.335
Pomorskie	0.189	0.390	0.437	0.304	0.641	0.212	0.307	0.415	0.340
Mazowieckie	0.000	0.156	0.661	0.534	0.699	0.506	0.230	0.133	0.390
Małopolskie	0.305	0.310	0.696	0.310	0.553	0.574	0.551	0.231	0.440
Dolnośląskie	0.376	0.560	0.374	0.427	0.514	0.696	0.429	0.181	0.480
Podlaskie	0.624	0.425	0.429	0.645	0.552	0.409	0.400	0.296	0.535
Lubuskie	0.510	0.530	0.446	0.257	0.221	0.683	0.700	0.562	0.553
Zachodniopomorskie	0.329	0.642	0.638	0.340	0.404	0.575	0.410	0.605	0.570
Kujawsko-Pomorskie	0.547	0.632	0.732	0.685	0.326	0.407	0.699	0.369	0.642
Podkarpackie	0.707	0.602	0.585	0.321	0.657	0.654	0.248	0.628	0.645
Lubelskie	0.655	0.474	0.756	0.710	0.578	0.456	0.317	0.624	0.681
Łódzkie	0.505	0.638	0.669	0.711	0.533	0.657	0.713	0.629	0.726
Świętokrzyskie	0.659	0.620	0.635	0.714	0.696	0.673	0.704	0.629	0.740
Warmińsko-Mazurskie	0.577	0.643	0.786	0.638	0.689	0.619	0.690	0.627	0.741

3.9. The labour market

Paweł Strzelecki, Irena E. Kotowska

The economic boom that lasted in Poland until November 2008 caused a stable increase in emploment and a fall in unemployment. The beginning of 2009 brought a significant change in labour market conditions, since the Poland's economy started to suffer from the effects of the global crisis. Entrepreneurs reacted to the crisis mostly by suspending new employment, but the number of dismissals was moderate and lay offs covered mostly the less qualified workers. The unemployment rise in the first half of 2009 could have also been reinforced paradoxically by the greater supply of labour connected with overcoming the falling trend in economic activity.

While conducting the Social Diagnosis survey in 2009, the labour market situation was better not only in comparison with 2007 (higher employment rate and lower unemployment rate), but also in the whole history of *Social Diagnosis* survey (since 2000). However, the labour market conditions have started to worsen since the beginning of 2009, which has also had a partial influence on the results of the current survey wave.

The labour market analysis, apart from presenting the basic indicators which reflect the assessment of the current changes, particular attention was devoted to following areas: determinants of labour force participation, emigration and reconciling work with family life. Comparisons over time are determined by the availability of appropriate data in subsequent waves of the Social Diagnosis.

3.9.1. Labour market: general trends

Improvements in the labour market situation has led to the falling trend in unemployment since 2003, accompanied by an increase in the percentage of economically active persons (Table 3.9.1). In 2009, in the contrast to the previous waves, the falling trend characterising labour force participation rates has also been overcome.

Juxtaposing rates calculated both on the *Social Diagnosis* and LFS (BAEL) data, the basic source of labour market data, shows that in terms of standard labour market rates based on International Labour Organisation definitions the trends found in LFS data are reflected in the *Social Diagnosis* indicators. Certain discrepancies

between rate values result from the declarative character of questions forming the basis of calculating rates and the different nature of both research studies[14].

Table 3.9.1. Basic labour market indicators , Social Diagnosis vs. LFS (BAEL), 2000 to 2009

Labour market rates	2000	2003	2005	2007	2009
Social Diagnosis labour market indicators					
Unemployment rate	17.6	18.6	13.4	10.6	8.8
Labour force participation rate	61.3	56.8	56.8	56.3	56.3
Employment rate	50.5	46.2	49.3	50.4	51.3
BAEL labour market indicators					
Unemployment rate	16.3	20.6	18.8	11.3	8.3
Labour force participation rate	56.4	54.4	54.3	53.2	54.5
Employment rate	47.2	44.0	44.6	47.2	50.0

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Table 3.9.2. Share of household members by employment status, 2003 - 2009 (in per cent)

Household groups	2003	2005	2007	2009
Without unemployed or employed persons	15,6	19,9	17,3	19,3
With unemployed, but without employed persons	6,9	5,4	3,3	3,2
Without unemployed, but with employed persons	57,7	60,4	67,7	68,1
With both unemployed and employed persons	19,7	14,2	11,7	9,4

Data concerning shifts in the occupational structure show that the labour market improvement was not only connected with an increase in new jobs, but also changes in the quality of required skills. There has been a stable rise in the percentage of persons employed in high executive positions and a visible rise in the percentage of persons employed as specialists (Table 3.9.3). Implementing modern technologies into the management process could have influenced the relative fall in demand for office workers, reflected in the declining percentage of persons employed in these professions (it decreased from 8.2 per cent in 2005 to 7.5 per cent in 2009). Persons with lower skills benefited from the demand for industrial workers and qualified craftsmen, which rose in 2005-2007. On the other hand, after an initial growth between 2005 and 2007, there has been a fall in demand for the lowest skilled persons, employed mainly in construction and industry sectors. This observation might also partially reflect the negative effects of economic downturn started at the end of 2008.

Table 3.9.3. Employed by occupationprofess, 2005,2007 and 2009 (in per cent)

Ocupational groups	2005	2007	2009
Managers. directors. higher officials	5.1	5.5	5.7
Specialists	14.3	15	16.5
Technicians and middle personnel	12.7	11.1	11.7
Office workers	8.2	7.6	7.5
Employees of the personal services sector and shop assistants	12.8	12.5	11.5
Farmers. gardeners. foresters. fishermen	14.4	13.3	12.8
Industrial labourers. craftsmen	16	17.5	18
Machine operators and assemblers	8.6	8.3	8.8
Employees performing simple tasks	7.9	9.1	7.6

The occupational structure of unemployed persons reveals which qualifications cause the most problems in finding employment, especially in the period of economic downturn. The largest group of the unemployed were those whose last occupation was connected with personal services, industrial workers or persons performing simple jobs (Table 3.9.4). At the same time, these professions are especially vulnerable to changes in the economic situation. The rise in demand for lower skilled workers in industry and construction in 2005-2007 led to a significant decrease in the share of these persons among the unemployed. However, this share rose in 2009 in the period of economic downturn.

[14] In comparison with the BAEL study, which is focused on the labour market, *Social Diagnosis* enables the comprehensive assessment of many non-economic aspects of life which have and influence on economic activity.

Table 3.9.4. Structure of unemployed persons according to the last performed profession from 2005 to 2009

Last performed occupation	2005	2007	2009
Managers. directors. higher officials	1.8	1.7	0.5
Specialists	3.5	3.0	3.0
Technicians and middle personnel	9.1	6.3	7.2
Office workers	8.3	11.1	8.2
Employees of the personal services sector and shop assistants	15.7	23.6	20.1
Farmers. gardeners. foresters. fishermen	2.9	3.9	1.4
Industrial labourers. craftsmen	30.5	21.8	29.4
Machine operators and assemblers	9.6	8.9	8.5
Employees performing simple tasks	18.6	19.6	21.6

The relation between data concerning the number of unemployed persons registered in employment offices and the number of persons who are defined as unemployed on the basis of their declaration (they do not work, actively seek employment and are ready to take up a job) show hows how public employment agencies work. Observations from subsequent years point to the fact that only part of persons registered in employment offices can be defined as unemployed according to the standard definition of an unemployed person by ILO used in the labour force survey[16]. On the other hand, a considerable part of those who can be classified as unemployed do not register at employment offices (Table 3.9.5).

Table 3.9.5. LFS unemployment and registered unemployment, 2003 - 2009

Indicators	2003	2005	2007	2009
Registered unemployed who fulfil the LFS criteria of an unemployed as a percentage of the total registered unemployment	69.9	56.5	60.6	61.9
Registered persons who do not fulfil the LFS criteria of an unemployed as a percentage of the total registered unemployment	30.1	43.5	39.4	38.1
Unregistered persons who fulfil the LSA criteria of an unemployed person as a percentage of the total registered unemployment	17.0	24.9	27.3	29.1

It is worth noting that the share of registered persons who at the same time did not fulfil ILO criteria of unemployment used in labour force survey (were de facto inactive or worked) has remained at approximately 40 per cent since 2005, whereas subsequent research waves showed its slow decrease. This could have been caused by the gradual rise in persons working in the households, contributing to the increase in their affluence level and the lack of need to register in employment agencies in order to receive health insurance or in order that other household members receive social security benefits.

On the other hand, in the entire period there has been a relatively increasing trend in the number of persons who were unemployed (according to the definition), but did not register themselves in employment agencies. According to their characteristics, these were mainly inhabitants of large cities, where it is relatively easy to seek new unemployment indivitually or change jobs. These were predominantly young persons entering the labour market or persons in the pre-retirement age group.

The good labour market conditions persisting from 2007 to 2009 influenced personal opinions concerning the most important aspects of their work (Table 3.9.6). Like in 2007, most common answers concerned appropriate remuneration and then lack of tensions and stress, but employment stability and personal development opportunities have become more important. Almost one in five persons invariably declared convenient working hours. Other employment characteristics were decidedly less important. The possibility of working from home was declared as important slightly more often than in 2007. Differences between women and men were mostly visible in the fact that men more often chose working independently, promotion opportunities and work in accordance with qualifications. On average, women more often chose lack of tension and stress and personal development opportunities. In comparison with 2007, answers provided by men and women were more alike in 2009. The rise in the share of men declaring lack of tension or stress as one of the most important work characteristics was proportionally greater. On the other hand, quick promotion opportunities were relatively more often declared by women.

On average, employed persons spent slightly more time on travelling to work than in 2007 (approximately 28 mins), whereas approximately 75 per cent travelled to work no longer than half an hour (80 per cent in 2007). Like in the previous wave, persons who took up employment after a period of unemployment or inactivity showed no differences in the average time of travelling to work in comparison with the already employed persons. Time spent on travelling to work was not substantially correlated with the place of residence (although persons living in large cities spend slightly more time on travelling to work), age (older persons travel to work slightly longer) or education. What is noticeable however, is that the average travel time of men (approx. 30 mins) is longer than that of women (26 mins), and voivodship is an important differentiating factor (in Warmińsko-Mazurskie this is

employment and is ready to take up a job.

approximately 21-22 minutes, in Mazowieckie 36 minutes), which can imply that the main factor influencing the time spent on travelling to work is seeking employment in large cities by a part of respondents and the relatively low infrastructure level allowing everyday commuting to the metropoly from the perifery. The relationship between the length of travel to work and income is not easy, since on the one hand, commuters seek higher income than that achieved in their immediate neighbourhood. On the other hand, persons with higher income usually migrate in a direction allowing them to be closer to their workplace.

*Table 3.9.6. The percentage of persons who chose the given characteristic of work (a maximum of three most important work characteristics selected from the list)**

	Men		Women	
Most important work characteristics	2007	2009	2007	2009
Lack of tension and stress	49.4	53.9	57.3	58.5
High degree of independence	24.7	26.8	17.4	20.2
Personal development opportunities	21.2	24.9	26.7	30.1
Work according to one's qualifications	31.5	28.9	27.8	27.0
Quick promotion opportunities	5.5	5.8	3.8	4.7
Employment stability	42.8	50.0	45.4	52.3
Convenient working hours	15.7	16.0	21.3	20.7
Possibility to work from home	1.7	2.1	1.4	2.7
Long holiday leave	3.3	3.5	3.2	3.0
Profession respected by people	3.2	3.8	3.0	3.9
Appropriate remuneration	75.2	76.9	73.7	75.0
Other factors	2.5	2.8	2.1	1.6

*The sum of percentages is not a 100 because respondents could pick up to 3 characteristics.

Table 3.9.7. Basic labour market indicators for the disabled persons

Labour market rates	2000	2003		2005	2007	2009
Unemployment rate	24.2	20.9		16.9	25.0	12.2
Employment rate	18.6	16.8		15.0	13.5	17.5
Labour force participation	24.6	21.2	18.0	18.0	19.9	

Subsequent waves of the study show changes in the situation of disabled persons on the labour market (Table 3.9.7). Until 2007, we observed a steady fall in their professional activity and the decrease in the percentage of employed persons. In 2007-2009, one can notice that the employment rate and economic activity rate increased, which may have been caused the the growth in demand for work in this period.

3.9.2. Determinants of labour force participation

Here our focus in on individual characteristics which differentiate economic activity (labour force participation). Their influence may depend on gender. To identify their impact on individual's labour market participation a logistic regression was used. Models were perfomed separately for men and women. The dependent variable was defined as a dummy variable. It takes the value of 1 when the given person was economically active, and 0 when he/she was economically . A reference person was a person aged 25-34, with higher education, single, free from disabilities, without children in the family and living in an urban area. Estimation results are given below (Table 3.9.8).

Logistic regression models confirm that for both men and women age is a very important factor influencing a person's economic activity, whereby the highest likelihood of economic activity concerns persons aged 35-44, and then begins to fall; in the 45-59 age group, it is lower than in the reference group.

Education exerts a considerable influence on labour force participation. A higher education category has a significant positive effect on labour market activity, whereby higher or vocational college education was especially influential in the case of women's economic activity (in comparison with this category, the likelihood of economic activity of a woman with secondary education was lower by 50 per cent, and in the case of men lower by approx. 40 per cent).

Marrying had a significant positive effect on the economic activity of both women and men, although this influence is much greater for men (increase in likelihood of approx. 130 per cent for men and approx. 40 per cent for women in comparison with a person whose marital status is single).

For both men and women, formally recognised or declared disability exert a strong negative effect on labour market activity. The probability of being active concerning a disabled man is 10 times lower than that of a man without disabilities, and in the case of women 5 times lower.

The results confirm that living in rural areas has a positive effect on the economic activity of both men and women.

Table 3.9.8 Odds ratios of selected variables in logistic regression models for labour force participation

Predictor variables	Men	Women
Age		
15-24	0.075***	0.123***
25-34	ref	ref
35-44	1.477***	1.609***
45-59	0.553***	0.518***
60-65	0.050***	0.049***
65+	0.010***	0.016***
Education		
Primary	0.145***	0.138***
Basic vocational	0.377***	0.242***
Secondary	0.611***	0.485***
Tertiary and vocational college	ref	ref
Marital status		
Single	ref	ref
Married	2.279***	1.399***
Widowed	1.434*	0.973
Divorced/separated	1.656***	1.982***
Disability		
Is he/she disabled ? YES	0.100***	0.207***
Children in the family		
None	ref	ref
Under 2 years old	2.007***	0.255***
Aged 3-7	1.285**	0.555***
Aged 8-12	0.921	0.986
Place of residence		
Rural area? TAK	1.351***	1.206***
Statistics		
N	15144	16918
Pseudo *R*-square	0.45	0.37

a) Parameter significance level was marked by asterisks: * means significance at the 0.1 level, ** means significance at the 0.05 level, *** means significance at the 0.01 level.
b) Odds ratio shows how the probability of a person being economicaly active changes when the predictor variable takes a given value in relation to a situation when this variable takes the reference value.

Children in the family have a different effect on the labour force participation of men and woman, which can be associated with the asymmetrical division of household chores according to gender, especially visible in couples with children. The probability of fathers to be economically active is greater (even by 100 per cent) and that of mother lower (even by 75 per cent) as compared to a single person. The effect of children depends on their age. The greatest positive influence for men and the negative influence for women concern the presence of children under 2 years of age. When children reach the age bracket of 8-12, their influence on the labour force participation of their parents or carers ceases to be significant.

Place of residence and voivodship had no significant effects and were therefore ommitted in our discussion.

3.9.3. Reconciling parenthood with employment

Changes in behaviour patterns concerning family (forming a family, decisions with regard to children) observed since the beginning of the 1990s are similar to regularities observed earlier in other European countries; that is a lower share of young people entering into relationships and deciding to have children as well as deferring these decisions. There is also a rise in the percentage of extramarital births. Changes in family related behaviour are attributed, among others, to changes in the conditions of labour market participation, extended period of education connected with the educational boom as well as transformations concerning the norms and values system and life aspirations (e.g. Kotowska 2007). Recently, this set of factors was enlarged by the wave of economic outmigration. However, it seems that subsequent generations of the births boom of 1970s and the first half of the 1980s enter the age of decisions about establishing families and having children. At the same time, the importance of increasing employment, including the employment of women, is often emphasised in the context of improving economic growth perspectives under projected population ageing and shrinking working-age population.. In parallel, a fertility increase is also highlighted. Therefore, information on possibilities of reconciling parenthood with employment in Poland seems especially important.

In the *Social Diagnosis 2009* study, respondents were asked about selected areas connected with reconciling parental duties and employment. They were aimed at defining the family model preferred by respondents according

to the division of roles in the family, the extent and manner of using parental leaves and social policy solutions, which according to respondents would enable the optimal reconciliation of parenthood and employment.

The analysis of answers to the question concerning the division of roles in the family according to the age of children was conducted for persons aged 25-44. The results show that men and women were to a great extent unanimous in their opinions. The vast majority of both men and women believes that in a family without children under 12 years of age, male and female roles are similar, i.e. they should both be active on the labour market, but working part-time is also acceptable for women. The situation with the man working part-time and the woman full-time is by a great majority considered as unacceptable.

For the majority of men and women, the presence of small children limits women's activity on the labour market. Approximately 70 per cent of respondents believe that in a family with children aged under 3, the woman should temporarily or permanently give up her job (Table 3.9.9). Part-time employment of women is most often thought as the best solution for families with children aged 3-6. However, approximately 85 per cent of respondents think that women should return to full-time employment when the children reach school age. Study results confirm the observations concerning the factual influence of the age of chldren in the family on the economic activity of women and men (logistic regression model estimation results). They are also concurrent with other studies conducted in 2001 and 2005 (e.g. Kotowska, 2005, Baranowska, 2007). They also point to the fact that as opposed to e.g. Scandinavian countries, bringing up small children does not influence expectations connected with the work of men, but influences those connected with limiting the employment of women.

Table 3.9.9. Responses by women and men aged 25-44 to the question concerning the employment family patterns

Economic family model	Family situation (presence and age of children)			
	no children under 12	children aged under 3	children aged 3-6	children aged 6-12
			Men	
Both work full time	84.6	7.5	17.8	47.9
He works full time, she – part-time	9.4	20.8	41.1	36.7
He works full time and she temporarily stops working	2.7	47.0	27.4	8.2
He works full time and she withdraws from employment	2.8	24.2	12.6	5.5
He works part-time, and she – full time	0.3	0.4	0.9	1.1
He stops working, she works full time	0.2	0.2	0.2	0.5
			Women	
Both work full time	86.0	5.7	15.8	47.1
He works full time, she – part-time	9.1	20.2	46.9	39.1
He works full time and she temporarily stops working	2.0	49.5	24.6	7.4
He works full time and she withdraws from employment	2.3	24.1	11.5	4.7
He works part-time, and she – full time	0.2	0.4	1.0	1.2
He stops working, she works full time	0.3	0.2	0.3	0.6

One of the forms of temporarily limiting labour market participation due to taking care of small children is parental leave. In the Social Diagnosis study, we asked about using this solution, the forms of using it and reasons for withdrawing from parental leave. Last year, approximately 5 per cent of persons aged over 15 were entitled to take parental leave, but only approx. 24 per cent of this persons exercised their rights in this regard. Among entitled women, this share amounted to 52 per cent and among men to 2 per cent, in spite of the fact both parents are entitled to parental leave.

Persons who took advantage of parental leave mostly used its full extent (Table 3.9.10). Results concerning the scope of taking parental leave and its forms are concurrent with the results acquired from the special Eurostat module research, *Work and family duties*, conducted as an additional BAEL module in the II quarter of 2005 (e.g. Kotowska, Baranowska 2006; Matysiak 2007).

Taking advantage of the right to take parental leave is correlated with educational status. Persons employed in the public sector exercised this right most often (approx. 24 per cent), and it was least often among private entrepreneurs (11.1 per cent) and individual farmers (6.7 per cent).

Table 3.9.10. P arental leaves by their forms

Forms of exercising the right to parental leave	Percentage of users
Working fewer hours	3.0
Parental leave (full extent)	84.9
Parental leave (reduced)	8.9
Mixed (shorter working hours and reduced parental leave)	3.2

Among reasons named by persons who did not take a parental leave, most common were the following: desire to return to work as quickly as possible (26.5 per cent) and decrease of income which was not compensated by parental benefit (18.4 per cent) (Table 3.9.11)..

The distribution of answers to this question shows that the main reason chosen by women was the unwillingness to stop working, and then a lack of parental benefit or parental benefit being too low. This second reason may indicate that they could have made a different decision if the benefits had been greater. From the perspective of women, the influence of a long absence at work on further career was also important.

*Table 3.9.11. Reasons for not taking parental leave**

Reason for not taking parental leave	Women	Men	Total
No parental benefit or parental benefit too low	26.8	7.6	18.4
Insufficient possibility to freely choose the period of such leave	1.1	1.4	1.2
Negative effects on the amount of future pension	2.9	3.3	3.1
Negative effects on professional career	6.6	11.4	9.2
I didn't want to stop working	36.0	18.4	26.5

*****the percentage of answers among persons who did not take a parental leave despite being entitled to it. In this question, a relatively large share of responses chose another reason than those selected (approx. 56 per cent)

The main reason declared by men was the unwillingness to stop working, though they said so less often than women, and the amount of social welfare benefits was less important for them. It is also interesting to note the percentage of persons who named the amount of their future pension as the reason for not taking parental leave. Although these benefits would only be paid in distant future, breaks in employment, worse career paths and consequently lower remuneration begin to be perceived as important factors influencing the pension amounts in the premium system currently in force in Poland.

Table 3.9.12. Responses to the question about solutions to reconcile parenthood and work

Solutions of reconciling parenthood and work	Percentage who chose this as the most important solution		Average value among the 10 solutions		Most important solutions according to persons entitled to parental leaves	
	Men	Women	Men	Women	Men	Women
Work part time	7.9	8.0	5.7	5.5	6.9	5.8
Shift work system	6.2	5.0	6.0	6.4	9.4	6.0
Flexible working hours	15.8	14.4	4.3	4.4	20.2	12.5
Possibility to perform part of the work from home	6.8	6.7	5.4	5.3	7.4	5.8
More days off in a week	5.6	4.6	6.0	6.3	4.9	3.8
Longer maternal leave	18.7	21.5	3.8	3.3	14.0	20.7
Longer paid parental leave	9.1	10.4	4.3	3.9	8.3	11.3
Higher benefits (parental, child)	11.1	10.9	4.7	4.6	10.3	10.9
Better care possibilities outside the house for children aged under 7	11.7	11.8	4.8	4.6	11.2	15.3
Better care possibilities outside the house for children aged 7-12	7.2	6.8	5.8	5.8	7.5	7.9

In *Social Diagnosis 2009* we also asked about the solutions which would facilitate the reconciliation of employment and parenthood, especially care duties. Each of the proposed solutions has a group of proponents among the respondents in whose opinion it would be the best. Longer maternal leave and flexible working hours were chosen most frequently both among women and men and persons entitled to parental leaves (Table 3.9.12).

Longer maternal leave was especially preferred among women, while flexible working hours were chosen most often by men in families with small children. The following were also relatively frequent: increase in the amount of social benefits (parental, child) and better care possibilities outside the house for children aged under 7.

3.9.4. Labour migration; the situation after the great migration wave

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3.9.4.1. Characteristics of migrants

In 2007 and 2009, emigration did not increase as quickly as immediatley after Poland's accession to the EU. The relatively good economic situation in Poland and the sharp decrease of demand for labour in the target countries of Polish migrants caused a large number of Polish emigrants to lose or give up their job abroad (mainly in the United Kingdom and Ireland). Besides, many persons did not undertake subsequent migrations in this period. In view of discussions concerning return migration it is important to find out why Poles returned from emigration last year (which was the year of economic crisis in main destinationcountries). One of the questions in the 2009 study concerned this area.

Social Diagnosis data confirm that losing or giving up a job were the most frequent reason for returning to the country in 2008 (Table 3.9.13). It is worth noting however the relatively high percentage of persons who declare they planned to emigrate for a limited period of time from the start. These data confirm the results of other studies,

which show that the majority of economic migrations was constituted by short-term migrations (cf. e.g. Grabowska-Lusińska, Okólski 2008), including the so-called circulation migrations. Regular returns to the country are a natural consequence of applying this type of migration strategy. Therefore, the decrease in the scope of economic migration need not have resulted in the great wave of returns. It sufficed that persons with this attitude to migrations gradually adapted themselves to the more difficult situation in the target country and temporarily withdrew from emigrating.

Due to the appreciation of Polish currency, relatively high wage growth in Poland and the decrease in the relative value of the British currency, the difference between income generated at home and abroad fell throughout most of 2008. These trends reversed at the end of 2008 as the global financial crisis deepened. Responses to questions about the importance of these factors for decisions concerning migration show that they did not have a significant effect upon migrant returns. A slight percentage of persons declaring they had no possibilities of finding a job abroad additionally reveals that the group of migrants who went abroad without prior job-seeking experience abroad or contacts in the destination country was relatively small in recent years as opposed to results from the past.

Table 3.9.13. Reasons for return migration

Reasons for returning migration since the beginning of 2008	Percentage of responses
Economic reasons	
Losing/giving up a job	33.9
Due to the decrease in work-generated income as opposed to income in Poland	5.1
Could not find a job abroad	1.6
Other reasons	
That was the plan when going abroad	30.4
Due to family reasons	18.4
Due to health reasons	3.5
Temporarily, to take care of matters in Poland	4.1
Other reasons/difficult to say	3.2

The *Social Diagnosis* results from 2007 and 2009 allow us to identify the percentage of persons currently living in Poland who lived abroad from 2005 to 2009 for employment reasons as well as the total time these persons spent abroad. The data do not include the entire migrant population, but only persons with migration experience currently living in Poland.

According to *Social Diagnosis 2009* results, approximately 4 per cent of Poles currently living in Poland went abroad to work from 2005 to 2009 as opposed to 3.2 per cent who left from 2005 to 2007 and were living in Poland in 2007[17]. Persons who left in the period from 2005 to 2009 usually were not abroad for long. The vast majority of persons who declared they had worked abroad spent less than 12 months there. This data shows that the vast majority of persons going abroad to work in the past spent less than a year working abroad. This implies that among the migration figures there was a high share of holiday or seasonal migrations. Seasonal migrations were much more often declared by women.

Comparing the distribution of time spent abroad by migrants in 2005 to 2007 and 2005 to 2009 reveals that the structure of persons according to time spent abroad has not changed significantly (Table 3.9.14). In comparison with 2005 and 2007 there has only been a rise in the share of persons who emigrated for a relatively short period of time; i.e. less than 25 per cent of the examined period. Women emigrated for less than 25 per cent of the examined period much more often than men.

Table 3.9.14. Comparison of the relative time spent abroad by labour migrants, 2005 to 2007 vs. 2005 to 2009

Time spent abroad as a percentage of the total time	Men		Women	
	2005-2007	2005-2009	2005-2007	2005-2009
less than 25 per cent of time	64.4	66.6	71.7	77.2
25-50 per cent of time	21.7	18.0	20.3	14.8
50-75 per cent of time	4.3	6.3	2.6	3.7
over 75 per cent of time	9.7	9.1	5.4	4.2

Social Diagnosis results show that according to education the structure of persons who experienced economic migration in 2005 to 2009 has changed slightly in comparison with the shorter period observed in 2007 (Table 3.9.15). The increasing share of higher education among young people who emigrate most often also meant the formal education of the total number of migrants to improve. Althought periods of working abroad were most frequent among persons aged 25-34, in 2005 to 2009 there was a significant increase in the share of persons aged under 24 who experienced working abroad.

Data concerning countries selected by persons who returned from emigration show that in the entire 2005 to 2009 period, Germany and the United Kingdom were the most popular (Table 3.9.16). Comparing observations from 2005 to 2007 and 2005 to 2009 reveals that in comparison to 2007, there has been a decrease in the

[17] In the last report, results were given without prior weighting. If we do not consider weights for the 2007 sample, 4.1 per cent of respondents aged over 16 declared going abroad in 2005-2007, whereas in 2009 for the 2005-2009 period this share amounted to 4.2 per cent of respondents.

attractiveness of Germany or the USA and a significant increase in the number of persons declaring they had experienced working in the United Kingdom, Ireland, the Netherlands, France and Italy.

Polish migrations concerned mostly young and economically active persons. Data from the 2009 study show that persons who had migration experience were more active on the Polish labour market after their return than other persons in the productive age (Table 3.9.17). It is also worth noting that inasmuch as greater economic activity of men returning from emigration went hand in hand with a greater percentage of both employed and unemployed persons than in the entire population, greater labour force participation rate of women was mainly connected with higher unemployment.

Table 3.9.15. Demographic characteristics of migrants in 2005 to 2007 and 2005 to 2009 as compared with population

Migrant characteristics	Migrating in 2005-2007	Migrating in 2005-2009	Population in 2009
Education			
Higher	16.9	20.0	19.9
Secondary	37.7	37.3	30.4
Basic vocational	37.2	35.7	32.9
Primary	8.2	7.0	16.8
Age			
Under 24	19.9	28.7	20.5
25-34	36.8	32.9	18.9
35-44	21.9	21.5	15.0
45-59	20.6	15.9	26.5
60-64	0.7	0.8	4.6
65 and over	0.2	0.2	14.6
Place of residence			
Cities over 500 k	5.4	12.9	12.2
Towns with 200-500 k	11.3	11.0	11.1
Towns with 100-200 k	5.4	6.5	7.0
Towns with 20-100 k	17.6	16.1	19.1
Towns below 20 k	14.3	16.8	13.0
Rural areas	45.9	36.8	37.4

* Results for the 2005-2007 period may be slightly different than in the previous report due to the use of weights.

Table 3.9.16. Most popular destination countries in 2005 to 2007 and 2005 to 2009

	Men		Women	
Selected countries	2007	2009	2007	2009
Germany	43.2	30.6	31.5	24.1
United Kingdom	16.6	23.0	24.4	23.5
The Netherlands	5.8	6.9	5.9	9.3
France	3.2	6.7	4.0	2.6
Italy	3.1	2.4	8.1	14.2
Ireland	4.0	6.3	4.7	3.5
Sweden	1.8	3.4	1.6	1.5
Spain	4.2	1.2	1.9	3.2
USA	4.3	2.6	7.0	2.9

Table 3.9.17. Migration experience of persons in the productive age and their status on the labour market in 2009

Status on the labour market in 2009	Percentage among persons who experienced migration	Percentage among the total number of persons in the productive age
	Men	
Employed	76.1	67.9
Unemployed	16.6	6.1
Economically inactive	7.3	26.0
	Women	
Employed	56.9	56.6
Unemployed	16.4	6.2
Economically inactive	26.7	37.2

3.9.4.2. Intentions concerning economic migration

The *Social Diagnosis* study provides unique panel data allowing assessment of the extent to which migration in 2007 to 2009 could have been predicted from earlier declarations.

In 2007, respondents were asked whether they planned to go abroad to work in the next 2 years. Comparing information concerning the planned scope of migration and actual migrations in 2007 to 2009 shows that only 14.4 per cent of persons without prior migration experience who declared the will to emigrate fulfilled those plans and

came back. Approximately 1.3 per cent of persons who did not declare migration intentions left Poland and came back. A greater correlation between intentions to leave and their realisation is found among persons with prior migration experience whose declarations concerned a following trip abroad. 30.6 per cent of this group emigrated again in 2007-2009. Among those declaring they would not emigrate, 7.7 per cent went abroad.

Changes on the Polish labour market and worse employment perspectives abroad have caused many persons to change their plans to go abroad. In 2007, 13.5 per cent of persons in the productive age group planned to go abroad, while in 2009 this share amounted to only 7.6 per cent.

Despite the significantly lower desire to go abroad, assessed on the basis of declaration to leave, the intentions concerning the planned period of being abroad have not changed much (Table 3.9.18).

Table 3.9.18. Planned period of being abroad of those intending to emigrate in 2007 and 2009

	Percentage among persons declaring labour migration in the next 2 years			
	men		women	
Planned period of being abroad	2007	2009	2007	2009
Less than a year	33.4	35.1	37.1	42.9
1-2 years	10.8	11.7	7.7	8.4
Over 2 years	6.6	6.2	7.4	3.6
Forever	6.0	6.7	5.3	3.7
It depends	43.1	40.4	42.5	41.3

The share of persons declaring the will to go abroad has decreased most significantly among persons who were employed in Poland and persons who remained inactive on the labour market (Table 3.9.19). One could say that because of the EU economic crisis, labour migration ceased to be perceived as an attractive alternative by employed persons. Economically inactive persons have in turn lost the motivation to undertake this type of migration. Unemployed persons, especially with vocational and higher education, have relatively least changed their migration plans. The problems they encounter in finding employment at home may cause them to be less sensitive to information concerning the decreasing possibilities of finding a job abroad.

Table 3.9.19. Persons planning labour migration by the labour market status and education in 2007 and 2009

Education	Employed	Unemployed	Passive
Declarations of emigrating in 2009			
Higher and vocational college	4.2	17.6	7.0
Secondary	6.5	24.1	9.2
Basic vocational/lower secondary	7.7	17.5	8.7
Primary and lower	6.7	15.5	3.0
Declarations of emigrating in 2007			
Higher and vocational college	8.3	19.4	14.0
Secondary	12.9	32.0	18.0
Basic vocational/lower secondary	14.3	22.7	15.6
Primary and lower	8.1	21.1	3.8

The increasing scope of the economic crisis also influenced migrant declarations, which means that persons potentially interested in migration quickly adapt their intentions to the changing economic situation. Observations show that above all the economic crisis in the British Isles discouraged persons interested in working abroad from going to the United Kingdom and Ireland (Table 3.9.20). On the other hand, there was a rising interest in countries closer to Poland (Germany) and those which abolished employment restrictions concerning Poles (the Netherlands). Economic difficulties experienced by the hitherto most popular migrant target countries have also caused more migrant declarations concerning countries which used to be less popular such as Norway, France or Italy.

Table 3.9.20. Most popular destinations of planned labour migrations in 2007 and 2009

Target countries for migrants from Poland	Men		Women	
	2007	2009	2007	2009
Germany	21.6	31.8	19.8	17.9
United Kingdom	39.5	19.3	41.2	29.0
The Netherlands	4.5	10.9	4.4	10.9
Norway	3.7	7.5	1.9	3.8
France	2.4	5.3	2.6	2.6
Italy	1.8	1.6	6.3	7.7
Spain	2.1	3.1	2.7	4.5
Ireland	9.8	2.9	6.5	2.8
USA	2.9	4.7	4.9	5.3

3.9.5. Development of professional skills and its influence on the situation on the labour market

Izabela Grabowska, Irena E. Kotowska

3.9.5.1. Improvement of professional skills

In the studies of both 2007 and 2009, we asked additionally about participation in any activity associated with improving one's professional qualifications or other skills in the periods 2005 to 2007 and 2007 to 2009[18]. Only about 12 per cent of persons aged 25 or more participated in any activity associated with the raising of their professional qualifications or other skills in 2007 to 2009. The analysis of persons who in *Social Diagnosis* 2007 and 2009 declared such activity confirmed the high selectivity of the process of additional training, which is determined mainly by education level and place of residence (Table 3.9.21).

Only about 12 per cent of persons aged 25 or more participated in any activity associated with the raising of professional qualifications or other skills in the last two years. Most of these were still women (about 57 and 52 per cent in 2005 to 2007 and 2007 to 2009 respectively), although the percentage decreased. In terms of the level of education, the structure of persons raising their professional qualifications did not change. About 57 per cent of all persons developing their skills had a tertiary education degree, almost 29 per cent had a secondary vocational education, and 12 per cent had a vocational or grammar education. The lowest number of persons raising their qualifications had no higher than an elementary education (about 2.2 and 1.7 per cent in from 2005 to 2007 and 2007 to 2009 respectively).

Table 3.9.21. The percentage of respondents aged 25 or more participating in any activity associated with improving professional qualification or other skills in 2005 to 2007 by gender, education, place of residence and age (percentage in a given population group)

Social and demographic group	Persons aged 25 or more participating, in the period 2005 to 2007, in any activity associated with improving professional qualification or other skills	Persons aged 25 or more participating, in the period 2007 to 2009, in any activity associated with improving professional qualification or other skills
Total	11.7	11.9
Women	56.8	51.9
Men	43.2	48.1
Tertiary	57.5	57.4
Secondary / post-secondary	28.5	29
Vocational / grammar	11.8	11.9
Elementary and lower	2.2	1.7
Cities over 500 k	23.6	24.1
Towns 200-500 k	17	17.2
Towns 100-200 k	8.4	8
Towns 20-100 k	19.6	19.2
Towns under 20 k	11.8	10.4
Rural areas	19.6	21
25-29	25.8	27.3
30-34	20.9	18.7
35-39	14.3	16.4
40-44	12.8	12
45-49	10.4	10.6
50-54	9.3	8.4
55 or more	6.4	6.6

By class of residence, the structure of persons who raised their professional qualifications did not change as well. Only every fifth person raising their qualifications in the recent years lived in rural areas. Among the inhabitants of cities developing their skills, one half of this group lives in cities with more than 200 thousand inhabitants, about 35 per cent in towns of medium size (20 to 200 thousand inhabitants), and about 13-15 per cent

[18] The results obtained in *Social Diagnosis* 2007 and 2009 cannot be directly compared with the Polish Labour Force Survey (LFS) results on educational activity of adult persons. The question in the *Diagnosis* referred to the period of two years, whereas the LFS measurement concerns 4 weeks before the survey. The question in the *Diagnosis* on any activity associated with the raising of one's professional qualifications or other skills includes both activities, at the school system and beyond it. The LFS analysis in turn focuses on these issues separately. Moreover, this part of analysis of activity associated with the raising of one's professional qualifications covers persons aged 25 or more.

from towns of less than 20 thousand inhabitants. As regards the age structure of persons raising their qualifications, no significant changes were observed in the period under study. Persons who raise their qualifications are usually young; about 47 per cent are aged 25 to 34. Persons aged 35 to 44 constitute about 28 per cent of those acquiring additional qualifications and those aged 45 to 54 about 19-21 per cent. The share of persons who are 55 or older is only 7 per cent. Summing up, a typical person participating in any kind of activity associated with the raising of professional qualifications or other skills is a 25 to 34 year old inhabitant of a large city with a tertiary education and is more likely to be a women than a men.

The presented data reflect the structure of persons raising their qualifications in 2005 to 2007 and 2007 to 2009. It does not only depend on the educational activity of defined population groups but also on the structure of respondents with respect to the categories under study[19]. In both periods women raised their qualifications as frequently as men.

The data confirm selectivity of the process of raising professional skills in terms of the place of residence category, which is particularly negative among inhabitants of rural areas. In fact, the bigger the place of residence the higher the percentage of persons engaging in activity associated with the raising of one's professional qualifications (from about 10-15 per cent of towns of less than 200 thousand inhabitants to 22-25 per cent in cities with more than 500 thousand inhabitants). Only about 6-7 per cent of inhabitants of rural areas raised their qualifications. It is necessary to underline an increase in educational activity related to raising qualifications by men living, above all, in rural areas and small, and middle towns. This improvement was also visible in the structure of persons raising their professional qualifications. The frequency of men's activity associated with vocational training confirmed these preliminary observations. However, the improvement of the situation of males is coupled with a decrease in the activity of females living in rural areas and small towns.

The percentage of persons upgrading their professional qualifications with respect to age structure did not change significantly in 2007 to 2009 as compared with 2005 to 2007.

Similarly, the percentage of persons improving their professional qualifications by the level of achieved education did not change. Better-educated persons are more eager to engage in different activities associated with raising their professional qualifications. Persons with a tertiary education degree raise their qualifications most often (about 30 per cent). Nearly every tenth person with a secondary education degree raises his or her professional qualifications, whereas persons with basic vocational education engage in this type of activity twice as seldom (about 4.8 per cent). Women with basic vocational education raise their skills three times less often than men. Basically, persons with elementary or lower education do not raise their skills at all.

These results indicate, along with the results of The Adult Education Survey *(Central Statistical Office. Warsaw 2009)* [Kształcenie Dorosłych *(Główny Urząd Statystyczny. Warszawa 2009)*][20] that the process of skills improvement is selective. Despite a slightly different and more detailed definition of participation in various education services adopted in two studies, which makes the numerical comparison of results impossible, the conclusions are similar. Generally, young, well-educated people and inhabitants of larger towns and cities raise their qualifications. About 44 per cent of persons raising their qualifications in 2005 to 2007 engaged in educational activity also in 2007 to 2009. This means that a very low percentage, merely about 5 per cent of respondents aged 25 or more, raise their qualifications continuously. In the face of challenges associated with the processes of globalisation, this result gives us cause for concern.

3.9.5.2. Qualifications and labour market status in 2000 to 2007 and 2005 to 2009

The analysis of persons who did not work due to a lack of qualifications that would be perceived as appropriate by employers and employees and whose qualifications were not fully used at work, will allow us to describe the structural mismatch on the labour market with regard to qualifications of persons belonging to the working-age group. It should be noted however that this is a subjective assessment by respondents which perhaps deviates from the opinions of employers.

The structuring of questions concerning the reasons for remaining professionally inactive allowed for a comparison of 2000 to 2007 and 2005 to 2009. Despite the continuity of these periods, it can be assumed that the first falls during the slow-down of the Polish economy in 2002 to 2004. The other period characterised a relatively good economic situation although probably the effects of the present crisis could have had an influence on the respondents' answers.

Among persons who did not work in 2000 to 2007, that is the unemployed and the professionally inactive, only about 4 per cent pointed to the lack of qualifications required by the employer[21], and most of these were women [about 57 per cent (Table 3.9.22)]. Among those who did not work due to the lack of qualifications, about 42 per cent had a grammar or lower education, every fourth person had a vocational education, about 17 per cent had a general secondary education, and almost 12 per cent had a secondary vocational education. The smallest group

[19] For example, in 2007 the inhabitants of the largest cities constituted 11 per cent of the total number of respondents and the inhabitants of rural areas and the smallest cities 13 and 38 per cent respectively. In 2009 in turn, they amounted to: 12.5, 13.3 and 37 per cent.

[20] The definition adopted by the Adult Education study includes also the activity of self-study/self-education.

[21] The respondents could provide more than one reason for having no job, thus the percentage of indications informs us of the significance of a given reason.

consisted of those with a tertiary education.

In 2005 compared to 2009, the situation was similar as about 5 per cent of respondents (of whom women constituted 54 per cent) indicated the lack of qualifications as the reason for being professionally inactive. This was an assessment from the subjective approach. Therefore, the higher percentage of women (although decreasing) in this group may result from their stronger criticism and the importance of qualifications for women's opportunities on the labour market. In fact, education is the strongest determinant of female employment and unemployment, the level of which and not sector is significant (Sztanderska, Grotkowska, 2007).

In both periods the percentage of persons with elementary or lower education who were professionally inactive due to the lack of qualifications amounted to 24 per cent. About 42 and 40 per cent of respondents had a basic vocational education in 2000 to 2007 and 2005 to 2009 respectively. In both periods about 27-28 per cent of the panel sample had a secondary education degree. Persons with a tertiary education constituted the smallest group (6 and 9 per cent in 2000 to 2007 and 2005 to 2009 respectively). The structure of respondents with a lack of qualifications required by the employer in terms of the place of residence class of was similar in both periods. Persons who were out of work due to a lack of qualifications came mainly from rural areas (about 36 and 43 per cent in 2000 to 2007 and 2005 to 2009 respectively) and from towns with 100 thousand or less inhabitants (about 37 and 32 per cent in 2000 to 2007 and 2005 to 2009 respectively). Every fourth person with insufficient qualifications lived in large or middle-sized towns, whereas the percentage of such persons form the biggest cities did not exceed 10 per cent.

Table 3.9.22. The structure of unemployed persons in 2000 to 2007 due to the lack of qualifications required by the employer by gender, the education level, the place of residence class and age (in per cent)

Social and demographic group	The percentage of unemployed persons due to the lack of qualifications required by the employer (in the subjective approach of respondents)	
	in 2000 to 2007	in 2005 to 2009
Total	4.2	4,9
Women	57.4	54.1
Men	42.6	45.7
Tertiary	6	9.2
Secondary / post-secondary	28.6	27
Vocational / grammar	42	39.8
Elementary and lower	23.4	23.8
Cities over 500 k	7.2	8.3
Towns 200-500 k	14.5	9.7
Towns 100-200 k	5.6	7.6
Towns 20-100 k	22.9	20.2
Towns under 20 k	13.6	11.5
Rural areas	36.2	42.7
25-29	41.8	25.8
30-34	9.3	16.3
35-39	7.8	9.4
40-44	7.5	7.3
45-49	10	9.5
50-54	7.4	9.4
55 or more	9.1	11.7
Total	7.1	10.6

The age structure of persons with insufficient qualifications differed in both periods mainly due to the share of the group aged 29 or less. The share of persons from the age groups (covering five-year intervals) from under 24 to 29 was relatively stable and oscillated between 7-12 per cent and did not exceed 3 percentage points in both of the compared periods. In 2005 to 2009, the share of the youngest persons in older groups at productive age decreased significantly as compared with the period of 2000 to 2007 (from 50 to 42 per cent). Moreover, among those not working due to the lack of appropriate qualifications in 2000 to 2007, only about 26 per cent participated in any activity associated with the raising of qualifications in the last two years preceding the study wave (23.7 per cent women, 29.2 per cent men).

This information is incomplete as data concerning educational activity do not cover the entire period in which respondents did not have appropriate qualifications required by the employer. However, we already dispose full data on engaging in educational activity by persons with insufficient qualifications in 2005 to 2009. About 27 per cent of professionally inactive persons, more frequently men than women, engaged in educational activity due to a lack of qualifications in 2005 to 2009.

Summing up, among persons who were not working due to the lack of necessary qualifications in 2005 compared to 2007 as well as 2005 compared to 2009, a decisive majority were those with a vocational or lower education and/or who lived in rural areas or in small and medium-sized towns. Slightly more than half were 30 or younger and almost three fourths did not engage in any activity to raise their qualifications and professional skills.

3.9.5.3. Other reasons for not working in 2000 to 2007 and 2005 to 2009

Our analyses show that failure to adjust one's qualifications to the demands of employers, according to the respondents, is generally of little importance as a reason for remaining out of work. Therefore an analysis of other reasons for remaining jobless in 2000 compared to 2007 and 2005 compared to 2009 by the same demographic and social features should provide information as to what was important. As expected, the range is different for women and men and it also varies various age group (Table 3.9.23).

Table 3.9.23. Persons who did not work in 2000 to 2007 by gender and age and the selected reasons for remaining unemployed (percentage in a given population group)[22]

Age/ gender	Study	Taking care of the house	Child care	Health	Inappropriate age	Retirement	Difficulties finding a job	Receiving social benefits	Lack of will to work	Taking care of disabled/ elderly household members
					2000-2007					
Total	24.3	7.1	6.5	15.7	11.6	33.9	13.9	4.3	2.4	1.85
Women	53.1	96.1	96.1	57.2	66.6	37.9	58.4	57.2	63.1	
Men	46.9	3.9	3.9	42.8	33.4	62.1	41.6	42.8	36.9	
under 24	90.6	4.2*	11.7*		29.8		20.3*		36.7*	
25-29	7.6	10.5	20.7	9.8*			12.2			**
30-34		16.8	24			0.6*	10.2	30.7*		
35-39		16.1	18.6		3.6*		9.9			
40-44	1.8*	12	11	3.9			10.2		63.3*	
45-49		11.2	5.4	9.6			9.5			
50-54		14.2	5	17.3	6	2.1	14.2	17.8		
55 or more		14.9	3.7	59.4	60.6	97.3	13.4	52		
					2005-2009					
Total	25.6	8.4	9	15.7	12	40.4	15.5	4.4	3.8	2.5
Women	50.5	92.4	95.6	51.7	66.7	62	54.4	55.2	57.6	77.3
Men	49.5	7.6	4.4	48.2	33.2	38	45.6	44.6	42.4	22.7
under 24	89.1	7.6	13.3	5.1*	26.1		16.1	11.6*	28.6	
25-29	9	11.3	23.2				15.1		16.2*	31.7*
30-34		15.9	26.2	5.5*		1.3*	10.8			
35-39		14.5	18.5		3.6*		9.2	11.5*		
40-44	1.9*	11.1	7.8	4.8			8.9		20.7*	
45-49		10.2	5.3	7.6			10.7	20*		33.2*
50-54		12.6	5.7*	17.6	5.5	2.3	15.5			
55 or more		16.8		59.3	64.8	96.4	13.7	57	34.6	35.1

* Groups combined due to small populations.

** Too small populations to analyse the structure by socio-economic features.

For persons aged 24 or less the basic reason for having no job is education (24 and 26 per cent of responses in years 2000-2007 and 2005-2009, respectively), and retirement among the oldest groups (34 and 40 per cent of answers in the respective periods). When it comes to the reasons for not working, along with age the responses associated with health problems (16 of answers in the periods of 2000-2007 and 2005-2009) and difficulties finding a job (14 and 15 per cent of responses in years 2000-2007 and 2005-2009, respectively) were indicated most frequently. Other reasons were given by a low percentage of respondents.

The structure of respondents who do not work for a specific reason is strongly determined by a phase in life of the individual in both compared periods. For persons under 24, the prevailing reason is study, whereas for persons aged 60 or more the most frequent reason for being without a job is retirement.

The structure of persons who do not work due to child care, the house or disabled or elderly household members show that the decision not to work is taken practically only by women, which indicates that cultural conditioning and a traditional division of duties in the family are still strong. The age structure of respondents who do not work due to difficulties finding a job is relatively uniform, with a slightly higher percentage of persons from the youngest age groups, that is those aged less than 24. The structure of persons who are professionally inactive because of

[22] Respondents could indicate a maximum of 3 reasons.

health problems is asymmetric. Persons aged 55 or more constitute a large majority in this group. Moreover, the demotivating effect of social benefits on professional activity was confirmed in the groups aged 15-49 and 50-59. However, the determination of the type of social benefits received by respondents and their correlation with the reason for remaining unemployed is not possible. The respective question concerned persons who were ever professionally inactive in 2000 compared to 2007 and 2005 to 2009. Yet the issue of benefits were not disaggregated in the cafeteria of answers. The situation is similar with respect to the lack of willingness to work, which was pointed out more often by women.

3.9.5.4. *Educational activity of adults and the dynamics of the labour market from 2005 to 2007*

The studies conducted focused mainly on changes in status on the labour market with particular consideration of the influence of professional qualification raising on the situation of unemployed and professionally inactive persons. A significant part of the analysis verifies whether the improvement of qualifications entails changes in the level of income of persons who engaged in raising their qualifications and whether their status on the labour market did not change in 2009 as compared with 2007. In the present wave of the study it is possible to conduct an analysis of the dynamics of change in the personal income level of working respondents in relation to engaging in raising their professional qualifications in the last two years. In the studies of 2007 and 2009 the individual questionnaire contained a question regarding net personal income in the last three months. In the previous waves of *Social Diagnosis*, it was necessary to use household income per capita and with the subsequent control of the number of household members. However, household income is also determined by income changes of other household members, so was impossible to consider this fact in the analysis of the dynamics of change in the personal income level of respondents who raised their qualifications and of those who remained inactive in 2005 and 2007.

Nonetheless, the presented analysis of the respondents' income situation on the basis of personal income is merely a description of the correlation between changes in the personal income level and raising of professional qualifications. Therefore, it does not allow for cause and effect interpretation.

Tables 3.9.24 and 3.9.25 show a distribution of net personal income[23] of persons working in 2009 and 2007. The data covers two groups of respondents; those who were raising their qualifications and of those who remained inactive in 2005 and 2007 along with their income dynamics. Due to different variables defining income used for the purposes of previous waves of *Social Diagnosis*, it was not possible to compare directly the income dynamics between the periods 2005 to 2007 and 2007 to 2009.

The dynamics of income increase in both of the selected groups does not change; the incomes of both persons who raised their qualifications and those who remained passive in the last 2 years amounted to on average 37 per cent. This result was different to that obtained in 2005 and 2007 when the income in households of persons who raised their qualifications were increasing faster than in the case of professionally inactive respondents. This positive income change for both household groups is associated with a general pay increase in the last two years, in particular in 2008.

Table 3.9.24. The distribution of the net personal income of respondents aged 25-39 in 2007 and 2009

Groups of respondents	Average income per capita and its differentiation (PLN)		Quartiles of the distribution of income per capita (PLN)					
			First quartile		Second quartile		Third quartile	
	2007	2009	2007	2009	2007	2009	2007	2009
Persons who raised their qualifications in the last 2 years N=247	1893* 1723**	2593* 2219**	1000	1500	1500	2000	2000	3000
Other respondents, Total N=771	1435 1010	1959 1461	805	1131	1200	1600	1800	2200
Women who raised their qualifications in the last 2 years N=121	1723 1629	2361 2280	1000	1400	1300	2000	2000	3000
Other women N=360	1224 749	1717 1277	800	1000	1000	1400	1500	2000
Men who raised their qualifications in the last 2 years N=127	2055 1779	2815 2145	1200	1800	1600	2000	2300	3051
Other men N=411	1620 1162	2172 1576	1000	1300	1300	1900	2000	2500

* The average income per capita in the last year.
** Standard deviation of income per capita in the last year.

In 2009 the average income of women who raised their qualifications in the last 2 years was lower as compared with educationally active men in 2007 to 2009 and it amounted to 37 per cent. This fact indicates that a 19 per cent gender income gap remained unchanged. The situation is different in the group of educationally inactive persons. The average income of women who did not raise their qualifications increased more than that of educationally active

[23] The respondents' net personal income from the last three months was applied in the calculations.

men (40 and 34 per cent, respectively) which denote a fall in the gender income gap from about 32 per cent in 2007 to about 26 per cent in 2009 and the improvement of situation of women of this group as compared with men.

Changes in income situation of women and men considered separately indicate some interesting phenomena. The income gap between women who raised their qualifications and those educationally inactive decreased from 40 per cent in 2007 to 37 per cent in 2009, whereas among men it increased from 27 per cent in 2007 to 30 per cent in 2009.

The dynamics of change in quartiles of the income distribution in both respondent groups shows a stronger positive influence of educational activity on changes in income distribution in the highest and the lowest income groups (cf. Table 3.9.25). The median of the income distribution of educationally inactive men was increasing faster than that of the educationally inactive. In the case of women the situation was the opposite. In the first and the last quartile group, vocational training had a stronger influence on the incomes of women.

Table 3.9.25. The dynamics of parameter change in net personal income distribution of working respondents aged 25-39 in 2005 and 2007

Respondents by gender and educational activity	Average respondent's personal income	First quartile	Second quartile	Third quartile
		Total		
Educationally active	1.37	1.50	1.33	1.50
Educationally inactive	1.37	1.40	1.33	1.22
		Women		
Educationally active	1.37	1.40	1.54	1.50
Educationally inactive	1.40	1.25	1.40	1.33
		Men		
Educationally active	1.37	1.50	1.25	1.33
Educationally inactive	1.34	1.30	1.46	1.25

Summing up, the incomes of both selected groups of respondents differ significantly in that they increase in the groups of persons who are engaged in improving their qualifications. Yet, the differences in income of educationally active and inactive respondents do not deepen. In turn differences in income distribution and their dynamics of change between women and men have been observed. In the case of professionally working women the influence of educational activity on the improvement of income status is weaker as compared to men. Educational activity however is more important as regards the improvement of the status of women on the labour market.

3.10. Disability

Piotr Błędowski, Izabela Buchowicz, Paweł Kubicki

3.10.1. Characteristics of households with disabled members

Households with disabled members constitute approximately 20 per cent of all households. Among households with disabled persons, 41.8 per cent live in rural areas. The greatest percentage of disabled persons is found among inhabitants of Małopolskie voivodship (10.3 per cent), and the lowest among inhabitants of Opolskie voivodship (2.2 per cent). The largest part (34.3 per cent) is households comprising two persons, then comprising three persons (19.0 per cent), one person (14.1 per cent) and four persons (13.7 per cent). The greatest percentage of such households are married couples without children 28.4 per cent and married couples with one child 15.1 per cent.

Over 50 per cent of disabled persons are married. Children and youth aged under 20 constitute 10 per cent, while persons over 65 years of age constitute 35 per cent of the examined disabled persons. Disabled persons in the post-productive age are characterised by a relatively low education level; the most common education levels are primary education (33 per cent), basic vocational (27 per cent) or secondary vocational (16 per cent).

Poorly educated persons; i.e. those with primary or even lower education, live predominantly in rural areas (Table 3.10.1). Disabled persons with a relatively higher education level are more often among urban inhabitants.

Two thirds of the disabled persons had a valid Social Insurance Institution (ZUS) ruling, 14 per cent a ruling issued by a Disability Ruling Panel of the Regional Family Care Centre (ZOoN przy PCPR), a little over 4 per cent a ruling issued by both of these institutions. 9 per cent of the respondents were only biologically disabled. Disabled children aged under 16 lived in 4.5 per cent of households with disabled members.

Table 3.10.1. Disabled persons according to education and voivodship, place of residence, household type and gender (in per cent)

Socio-demographic characteristics	Primary and lower	Basic/ lower secondary	Secondary	Higher and vocational coll.
Place of residence				
Cities over 500 k	3.8	6.8	10.0	16.7
Towns with 200-500 k	6.1	9.6	16.0	21.4
Towns with 100-200 k	4.0	5.0	8.2	10.0
Towns with 20-100 k	14.9	20.4	25.2	24.0
Towns below 20 k	13.0	15.8	18.4	13.6
Rural areas	58.1	42.3	22.2	14.2
Household type				
One-family:				
Married couples without children	26.5	26.6	33.3	43.0
Married couples with 1 child	12.4	17.4	17.0	15.2
Married couples with 2 children	8.3	12.2	10.7	6.5
Married couples with 3 and more children	6.9	8.8	5.5	3.7
Single parent families	13.8	10.8	10.8	10.4
Multi-family	15.3	13.7	7.6	3.4
Non-family:				
One-person	15.2	9.6	14.4	17.1
Multi-person	1.5	1.1	0.8	0.8
Gender and age				
Men total	33.3	38.3	20.4	7.9
incl.: in productive age	26.0	46.7	21.3	6.0
Women total	45.7	20.6	24.5	9.3
incl.: in productive age	28.3	33.2	28.3	10.1

Among 3658 persons with a legal ruling of disability (Table 3.10.2), almost 39 per cent had a ruling confirming their moderate inability to work and over 31 per cent considerable inability to work or total inability to work and independent existence. What is slightly surprising is the fact that the smallest group in the examined households had a ruling confirming their slight inability to work. One could have rather expected that persons with a slight grade of disability would be the most numerous. This structure confirms the view that decisions granting the right to receive disability pensions were sometimes motivated by other than medical reasons.

Table 3.10.2. Households with disabled members according to grade of disability and selected socio-demographic characteristics (in per cent)

Socio-demographic group	Ruling confirming serious disability or considerable inability to work or total inability to work and independent existence	Ruling confirming moderate disability or general inability to work	Ruling confirming slight disability or partial inability to work or the need for professional requalification
Total	31.4	38.6	30.0
Men	30.0	39.4	30.7
Women	32.7	37.9	29.4
Age:			
up to 24	26.8	41.4	31.8
25-34	29.8	41.7	28.6
35-44	25.2	45.2	29.6
45-59	19.0	38.8	42.3
60-64	22.8	42.1	35.1
65 and over	48.3	35.2	16.5
Place of residence		45.8	
Cities over 500 k	27.1		27.1
Towns with 200-500 k	30.3	43.2	26.5
Towns with 100-200 k	36.4	38.7	24.9
Towns with 20-100 k	31.5	40.4	28.1
Towns below 20 k	32.6	34.5	32.9
Rural areas	31.1	36.8	32.2

3.10.2. Economic activity of disabled persons aged 15 and over

Study results confirm the low professional activity of disabled persons[24]. Only 13.5 per cent among them stated they had worked in the past 7 days (Table 3.10.3). Within this respondent group, the most active were men, professionally mobile persons aged 24-44, persons with higher education, inhabitants of large towns with 200-500 thousand inhabitants and persons with a slight grade of disability. In the examined population there were also considerable inequalities of activity according to voivodship (from 19.5 per cent in Łódzkie to 7.2 per cent in Zachodniopomorskie) and household type (married couples with 3 children 22.6 per cent, with two children 20.6 per cent and married couples without children 10 per cent). If we enlarge the 13.5 per cent of persons who recently worked with the 1.7 per cent of respondents who stated that although they had a job, they temporarily did not work for various reasons, we arrive at a number of 15.2 per cent of professionally active disabled persons. Among those who work, 1/4 found a job in sheltered labour enterprises.

Disabled persons were relatively most often employed on the basis of employment contracts (for an indefinite or definite period of time), conducted their own economic activity or helped other family members on an unpaid basis. Less common employment forms included agreements under civil law (4.3 per cent), oral agreements (4.2 per cent) and casual jobs (2.6 per cent). Only single individuals ran companies employing other employees or worked in other non-typical employment forms.

Table 3.10.3 Professional activity of disabled persons (in per cent)

Did the person perform work in exchange for wage or income or did he/she help in the family business on an unpaid basis in the last 7 days?	Yes
Total	13.5
Men	16.3
Women	10.8
Age:	7.5
up to 24	
25-34	33.3
35-44	31.5
45-59	21.9
60-64	12.1
65 and over	2.0
Place of residence	15.0
Cities over 500 k	
Towns with 200-500 k	20.5
Towns with 100-200 k	14.0
Towns with 20-100 k	13.0
Towns below 20 k	11.9
Rural areas	12.2
Education	6.0
Primary and lower	
Basic/lower secondary	17.9
Secondary	16.6
Higher and vocational college	24.0
Inability to work	
Total inability to work/ I group[25]	2.1
General inability to work / II group	14.0
Partial inability to work / III group	25.0

The acquired results suggest a large variety of work performed by disabled persons depending on socio-demographic characteristics. The most important demarcation runs between rural and urban areas, which is related with the specificity of farm work. Owning a farm results in a greater percentage of persons working on their own account than in cities, as well as those helping other family members on an unpaid basis. A significant group of elderly farmers may also explain the high percentage of self-employed persons among senior citizens and persons with primary education.

Nearly 3/5 of working respondents declared they worked full-time. Factors such as age, place of residence and education level of the respondents were statistically significant for the distribution of answers. Persons aged 25-44, those living in medium-sized towns with 100-200 thousand inhabitants (80 per cent) and towns below 20 thousand inhabitants (75 per cent) and persons with higher and vocational college education (72 per cent) worked full-time more often than other groups. It is worth noting that 14 per cent of respondents, mainly young people, would be

[24] Unless stated otherwise, disabled persons are defined as those holding a valid ruling issued by ZUS or ZOoN przy PCPR as well as those without such rights who stated that due to disability or illness their ability to perform actions such as learning or work is totally or partially limited so-called biological disability.

[25] This percentage includes only persons with a valid disability ruling; i.e. it does not include respondents with the so-called biological disability.

happy to increase their working time but they were unable to find a full-time job, which is another confirmation of the fact that the youngest disabled persons are relatively in the most difficult situation on the labour market.

3.10.3. Opportunities and obstacles to the professional activation of the disabled

When assessing the opportunities and obstacles for increasing the number of professionally active disabled persons, one should not only include the already employed, but also characterise those seeking employment. Only 2.1 per cent of respondents is registered in district employment agencies as seeking employment. This percentage is greater among professionally mobile persons aged 25-34 (9.1 per cent) and 35-44 (5 per cent). One in ten unemployed disabled persons (9.8 per cent) is entitled to receive unemployment benefit, which means that these persons have previously demonstrated professional activity enabling them to receive this benefit.

The vast majority of disabled persons (82.6 per cent) have not sought a job in the last month. This means that approximately two thirds of professionally mobile disabled persons are completely outside the labour market. The main reasons declared by the respondenrs included poor health and acquiring the right to receive pension or disability benefits, and further age inconsistent with the expectations of potential employers and the need to study and gain new qualifications (Table 3.10.4).

Mostly the youngest disabled persons study and age and education, which is correlated with age, are the main factors influencing the distribution of answers. At the same time, gaining new qualifications can hardly be treated as an opportunity to professionally activate the older among the disabled.

Even offering employment possibilites to unemployed disabled persons need not lead to their employment, since as great a number as 96.3 per cent of respondents declared that they are not ready to take up employment in the nearest future. Only 2.3 per cent of professionally inactive disabled persons declared that they were actively seeking employment. Men (4.6 per cent), persons aged 25-34 (17.9 per cent), 35-44 (8 per cent) and 44-59 (7.2 per cent), living in small towns with under 20 thousand inhabitants (6.7 per cent) and medium-sized towns with 100-200 thousand inhabitants (5.7 per cent) as well as persons with vocational/lower secondary (5.4 per cent) and secondary education (5.3 per cent) are relatively more ready to work

Table 3.10.4 Main reasons for being professionally inactive (in per cent)

Why is he/she not seeking employment?	Poor health	Pension / disability benefit	Wrong age	Studying, rounding up qualifications
Total	48.8	38.9	6.0	3.6
Men	56.0	35.0	2.9	3.8
Women	42.7	42.2	8.7	3.4
Age: up to 24	30.5	0.6	0.0	66.1
25-34	82.5	1.9	0.0	2.9
35-44	93.9	0.0	0.0	0.0
45-59	88.8	6.1	1.1	0.0
60-64	56.5	39.6	1.9	0.0
65 and over	16.2	70.6	12.0	0.1
Place of residence				
Cities over 500 k	41.7	51.5	4.7	0.9
Towns with 200-500 k	41.8	40.9	7.0	5.8
Towns with 100-200 k	44.2	44.2	6.3	2.1
Towns with 20-100 k	45.9	44.1	5.6	2.9
Towns below 20 k	47.5	39.6	5.3	4.7
Rural areas	54.0	33.0	6.4	3.6
Education				
Primary and lower	42.8	42.8	9.8	2.2
Basic/lower secondary	66.0	21.5	2.1	6.6
Secondary	45.3	45.9	3.4	3.0
Higher and vocational college	29.4	61.6	6.5	1.2
Inability to work				
Total inability to work/ I group[26]	46.1	44.7	6.5	1.5
General inability to work / II group	54.2	35.2	4.8	3.5
Partial inability to work / III group	56.9	28.7	2.7	4.1
Total*	52.6	37.1	4.9	2.9

The greatest barrier in the professional activation of disabled persons is the complete passivity of a large part of this population group, which neither training courses, nor even finding a job can overcome. It would seems that besides health issues the main barrier is mental conditions.

In the case of disabled persons who, albeit currently unemployed, used to work in the past, respondents most often declared professional qualifications related with physical labour. In their last place of employment, they often worked as industrial labourers, craftsmen, farmers or employees performing simple tasks (Table 3.10.5). Much less

[26] This percentage includes only persons with a valid disability ruling, i.e. it does not include respondents with the so-called biological disability.

often these were jobs connected with office work or services. Socio-demographic variables had a great influence upon the distribution of answers. The performed profession was influenced both by gender, age and place of residence and by education level of the respondents. Better educated persons were relatively more often employed as managers or specialists, younger persons often worked in the services sector, while senior citizens and rural area inhabitants were obviously much more often employed in farming.

Table 3.10.5 Profession performed in the last place of employment (in per cent)[26]

Profession performed in the last place of employment	1	2	3	4	5	6	7	8	9
Total	3.9	6.1	8.9	6.3	8.8	18.1	22.1	10.2	15.7
Men	5.9	4.1	6.6	3.5	3.4	13.6	34.9	16.7	11.2
Women	2.3	7.8	10.8	8.6	13.4	22.0	11.0	4.5	19.6
Age up to 24	0	0	8.3	0	33.3	0	33.3	8.3	16.7
25-34	3.1	0.0	9.4	3.1	18.8	3.1	21.9	9.4	31.2
35-44	3.4	3.4	3.4	4.2	10.1	7.6	34.5	9.2	24.4
45-59	2.0	3.2	8.8	6.6	11.7	12.7	25.5	13.1	16.4
60-64	4.4	8.4	9.0	5.3	8.1	14.2	28.1	10.4	12.1
65 and over	5.2	7.7	9.3	6.6	6.5	24.1	17.0	8.3	15.2
Cities over 500 k	8.8	11.1	16.2	8.8	9.7	0.9	23.1	7.9	13.4
Towns with 200-500 k	7.5	13.6	11.6	10.9	9.9	0	21.1	9.9	15.6
Towns with 100-200 k	4.5	10.1	15.7	10.1	11.8	1.7	23.0	9.0	14.0
Towns with 20-100 k	5.6	7.6	12.3	7.9	11.5	4.1	27.6	8.7	14.8
Towns below 20 k	3.5	7.1	10.6	7.7	11.7	6.8	24.3	10.8	17.4
Rural areas	1.6	1.9	3.8	2.9	5.6	38.3	18.6	11.3	16.1
Primary and lower	0.3	0.1	1.1	2.6	6.5	35.0	15.3	11.4	27.9
Basic/lower secondary	1.1	0.2	1.3	2.9	13.3	9.6	45.4	15.1	11.1
Secondary	9.0	5.6	30.7	16.9	9.6	4.7	13.5	5.6	4.4
Higher and voc. college	17.4	57.5	12.1	6.1	2.0	0.8	2.0	0.4	1.6

1. MPs, higher officials and managers; 2. Specialists; 3. Technicians and other middle personnel; 4. Office workers; 5. Employees of the personal services sector and shop assistants; 6. Farmers, gardeners, foresters and fishermen; 7. Industrial labourers and craftsmen; 8. Machine and device operators and assemblers; 9 Employees performing simple tasks.

The above data prove that disabled persons have varied levels of professional qualification. However, these qualifications do not undergo any significant change with time. Only 4.2 per cent of respondents (including 4.4 per cent of women) declared having participated in any type of activity related with improving their professional qualifications or other skills. Activity with this regard decreases visibly with age and education of the examined population from 41 per cent among persons aged up to 24 to 11 per cent in the 25-34 age group and 7 per cent in the 35-44 age group. In case of the youngest respondents, improving their qualifications was mainly connected with completing subsequent education levels. Persons aged between 35 and 44 mostly participated in training courses financed by the employer and further those financed individually by the European Social Fund and the Labour Fund. Irrespective of age, several persons also improved other skills; i.e. driving vehicles, learning a foreign language, etc. On the other hand, apart from single instances, there were no cases of improving qualifications by persons aged over 60. Decidedly the lowest percentage of disabled persons improving their qualifications exists among rural area inhabitants; there is also a positive correlation between education level and participation in training courses. Respondents in households with disabled members often stated that disabled persons should aim to live as independently as possible (90.5 per cent), that they should work and earn even to a limited extent (94 per cent) and that employment should serve the purpose of integrating them with their surroundings (92.8 per cent), although opinions that the state should provide them will all necessary financial benefits and care services were equally frequent (93.6 per cent).

3.10.4. Material circumstances of households with disabled members

The material affluence level survey of households with a disabled member revealed their difficult financial situation. 77.5 per cent of households with a disabled member have no savings. Among those which do have savings, married couples without children (30 per cent) or married couples with one child (26 per cent) are most frequent. Urban area inhabitants have savings twice as often as rural area inhabitants. 40 per cent of households take out loans or credits. Nearly 1/5 of households taking advantage of loans or credits spend them on treatment, and almost ¼ of indebted households spend these funds on current consumer expenses. At the same time, in March 2009 fewer households with a disabled member had a loan taken out than in March 2007 (by 2.7 percentage points). In 2009, 24 per cent of respondents with loans or credits is indebted to a level below their monthly household income, 24 per cent is indebted to a level exceeding their monthly household income but not exceeding an income of 3 months. At the same time, the debt of 13 per cent of households exceeds their yearly income. As many as 8 per cent of respondents are not aware of their debt level.

Assessing the material affluence level of households with a disabled person revealed that in the case of 50.6 per cent of respondents, their material situation remained unchanged in comparison to 2007. In the case of 39.8

per cent of households it became worse, and only 9.6 per cent of households noticed an improvement. Low material affluence level of households with a disabled member is reflected in the level of their equipment in durable goods in 2009, presented in Table 3.10.6 below. Inasmuch as the lack of goods such as a motor boats is not surprising in the case of households with a disabled member, the lack of a washing machine of cable TV for financial reasons proves that the given household is in a very difficult material situation indeed.

Table 3.10.6. Percentage of households which did not have the selected products in March 2009

Type of durable goods	Percentage of households which did not have the selected products	
	total	incl.: households which did not have the selected products, because they could not afford them
Washing machine	18.8	63.3
Dishwasher	92.4	38.2
Microwave over	59.3	39.8
LCD or plasma TV	74.2	56.0
Paid satellite or cable TV	46.7	46.8
DVD player	53.4	39.6
Home theatre systems	90.2	40.4
Summer cottage	96.9	42.5
Stationary computer	60.5	29.1
Portable computer (laptop, notebook)	86.2	36.0
Car (or van)	52.7	40.9
Home or landline telephone	34.2	31.4
Motor boat, yacht	99.4	26.7
Recreational allotment	89.6	35.0

3.10.5. Income situation of households with disabled members

In February 2009, the average monthly income per household in the group of households with a disabled member amounted to PLN 2297.42. In comparison with 2008, it increased by as little as PLN 41.51, but in comparison with the last two years this increase amounted to PLN 121.16. At the same time however, the income of households without a disabled member was nearly 27 per cent higher and amounted to PLN 2912.66.

The average net montly income per person in households with a disabled member amounted to PLN 953.62 in February 2009 and in comparison with the previous year increased by PLN 19.45. This change is more perceptible in comparison to March 2007, since net income per person in the households increased by PLN 122.60. In February 2009, the average monthly income in households without disabled members was nearly 29 per cent higher. The study showed that the lowest minimum expected net monthly income per person in the household amounted to PLN 1004.53. At the same time, household net income per equivalent unit amounted to PLN 1159.42 in the same period. Households with a disabled member have lower income because members of these households exhibit a lower level of professional activity, both in terms of the disabled persons themselves and their carers.

Such a low level of income in households with disabled members is the reason, given their current net income, 54.3 per cent of respondents in this group make ends meet with difficulty or great difficulty, and only 15.6 per cent choose the answer "easily" or "rather easily". In case of households without unemployed members both groups are similar in size and constitute approximately 1/3 of the examined population.

Low income of households with disabled members mean their members to live economically. In 36.5 per cent of cases, households with a disabled person declared that they live economically and so can afford everything. 19.1 per cent of respondents stated that they live very economically to save up for larger purchases. Only 5.2 per cent of households in this group declared that "they can afford everything and are saving up for the future" (over 2 times less frequently than among households without disabled members), and 2.6 per cent admitted that they cannot even afford the cheapest food (over twice the amount as in the case of households without disabled members). At the same time, in case of 39.5 per cent of households with a disabled member, their regular income generated in March 2009 was not enough to cover basic needs. As many as 42.5 per cent of respondents stated that their income in March 2009 was worse as opposed to March 2007, whereas 44.8 per cent declared they thought it had not changed. In case of 39.5 per cent of households with a disabled person their regular income is insufficient to cover basic needs. The most frequent way of coping in the difficult situation of insufficient income is limiting current expenses (88.3 per cent).

Over 4/5 of households with a disabled person bear the expenses associated with the disability. The greatest percentage of households bearing such expenses is found among retirees (80.3 per cent) and pensioners (87.9 per cent) as well as married couples without children (84.6 per cent). In 2009, households with a disabled person spent an average of PLN 1832 on treatment and medications, PLN 287 on rehabilitation and PLN 227 on equipment. The greatest expenses concerning treatment and medications most often characterised households with elderly members, married couples without children (PLN 2200) and married couples with one child (PLN 1861).

3.10.6. Causes of disability and use of aid

Based on the acquired results, we can determine those types of illnesses which most frequently form the basis of a ruling confirming disability. These are above all bone and muscular diseases (slightly more frequent in case of women), heart diseases, diseases of the circulatory system and the respiratory system (more frequent in case of men) as well as mental diseases and disorders, including neuroses. This structure gives an indirect indication of the need for assistance and care provided by other persons, caused by these diseases. This is especially important in the case of one-person households.

Table 3.10.7 shows that slightly fewer than 50 per cent of disabled persons living in the examined households require no assistance. However, at the same time one in every 12 disabled persons requires assistance and care many times a day, and a further 8.5 per cent several times during the day. In practice, this means that 16 per cent of disabled persons are unable to live independently and require constant assistance many times a day. Most frequently, this means that a family member is forced to assume the role of carer and withdraw from professional activity.

Table 3.10.7. Disabled persons according to the need for care and care services according to gender (in per cent)

Gender	Frequency of assistance and/or care					
	1	2	3	4	5	6
Men	8.3	8.0	4.3	7.9	21.8	49.8
Women	8.1	9.0	5.8	12.5	24.9	39.7
Total	8.2	8.5	5.1	10.2	23.4	44.6

NOTES: 1 – requires assistance and/or care many times during the day, also at night; 2 - requires assistance and/or care a few times during the day; 3 - requires assistance and/or care two times a day at most; 4- requires assistance and/or care from time to time, not every day; 5 – only requires assistance from time to time; 6 – does not require assistance or care.

The distribution of answers concerning the scope of assistance provided by household members to the disabled persons reveals the existence of a statistical regularity between the scope of disability and the scope of help as well as between the age of the disabled person and the scope of assistance. Table 3.10.8 shows data concerning assistance in basic activities provided to persons with a valid ruling confirming their considerable disability or total inability to work and lead an individual life as well as persons aged 65 or over.

Table 3.10.8. Disabled persons according to the grade of independence in performing selected activities

Activity	Group of disabled persons	The disabled performs the activity completely on his own	Performs the given activity with a little assistance	Performs the given activity with considerable assistance	Does not perform this ability at all
Washing oneself	Considerable disability*	60.4	16.5	19.8	3.2
	Aged 65 or over	71.6	13.9	12.9	1.6
Dressing oneself	Considerable disability*	62.1	17.6	17.0	3.4
	Aged 65 or over	73.4	14.1	10.8	1.7
Eating	Considerable disability*	82.2	9.4	8.3	0.9
	Aged 65 or over	89.1	6.6	4.2	0.0
Cleaning	Considerable disability*	25.3	15.0	19.0	40.7
	Aged 65 or over	38.0	15.9	16.4	29.7
Preparing meals	Considerable disability*	36.2	14.8	13.9	35.1
	Aged 65 or over	50.9	12.8	10.1	26.2
Washing dishes	Considerable disability*	35.2	11.1	11.3	42.4
	Aged 65 or over	50.1	9.4	8.5	32.0
Shopping	Considerable disability*	21.2	13.3	17.2	48.3
	Aged 65 or over	34.2	14.3	14.5	37.1
Moving around the neighbourhood or on the route to school/work	Considerable disability*	33.5	19.0	28.5	19.0
	Aged 65 or over	45.4	17.7	20.6	16.3
Visiting a doctor	Considerable disability*	24.7	23.3	44.5	7.5
	Aged 65 or over	36.7	22.6	36.3	4.4
Going on holiday	Considerable disability*	12.4	5.9	10.9	70.8
	Aged 65 or over	20.7	4.9	4.6	69.8

* Considerable grade of disability or inability to work and exist independently.

It should be emphasised that 50 per cent of persons unable to individually perform such actions as eating or getting dressed are predominantly persons from the 20-60 agr group. This shows that the lack of independence as the reason for using the assistance of family members and other persons is not only characteristic of persons in the oldest age groups. Only 18.5 per cent of households with a disabled member take advantage of external assistance. Such cases are most frequent in cities with 200-500 thousand inhabitants (22 per cent), those below 20 thousand inhabitants (21 per cent) and those with 20-100 thousand inhabitants (19 per cent). Households living in rural areas are fourth on the list (18 per cent). As could have been expected, such assistance is least frequently available in the largest cities (14 per cent) and towns with 100-200 thousand inhabitants (12 per cent). On the one hand, this shows the potential decrease in the strength of social bonds in rural areas and on the other, a lack of comprehensive infrastructure in the form of social assistance institutions and non-governmental organisations. This is confirmed by data concerning the structure of assistance provided. In total in over two thirds of instances this help was substantive, whereby the percentage of households taking advantage of such assistance decreases along with place of residence size. Slightly over 1/3 of households with a disabled person take advantage of services. This is most common in towns with 100-200 thousand inhabitants (40 per cent) and least common in cities below 20 thousand inhabitants and in rural areas (27 and 30 per cent respectively).

4. INDIVIDUAL QUALITY OF LIFE

4.1. Psychological well-being

Janusz Czapiński

How psychological well-being is measured depends largely on the assumed model of the quality of life, which in general may be either hedonic or eudaimonic (Ryan, Deci, 2001; Czapiński, 2004a). Usually in the hedonic model two basic dimensions of well-being are identified: affective (a balance of emotional experiences, either current or over longer periods of time) and cognitive (evaluations of present, past and future life) (cf. Diener, 2009). This project does not examine the purely affective aspects and the closest indicator is a four-point scale of happiness[27]. Also, the scale of depression contains items measuring emotions and more precisely mood and motivation. The cognitive dimension of well-being was measured on several scales; the evaluation of life as a whole and the evaluation of the past year (question 59). Moreover, following "the onion theory of happiness" (Czapiński, 1992, 2001a, 2004b; Czapiński, Peeters, 1991), we included two more indicators of the psychological well-being; the will-to-live (suicidal tendencies and the desire to live) conditioning the long-term resistance to the worsening of subjective well-being.

Most of the indicators of well-being have the form of simple one-question scales. The depression inventory is an exception, consisting of 7 items (question 49) borrowed from Beck's 21 item Depression Inventory (Beck at al., 1961), which is well-known and often used in psychological and epidemiological studies. There were psychometric reasons for this selection of items as in previous studies these showed a stronger correlation with objective life conditions (especially with age see Czapiński, 1994, 1998, 200b). The indicator of depression was the sum of answers to all 7 items. This indicator can be treated as a measure of the degree of psychological inadaptability reflecting an inability to cope with problems or life stress. In all cases, one should not interpret indicators based on such a scale as a diagnosis of clinical affective disorders in the population in general[28].

4.1.1. Data for the whole sample

A further increase in how people assess their entire lives has so far been observed (Table 4.1.1)[29]. The percentage of people who assess their lives as at least on the whole satisfying has increased (by 2,3 pp from 2007 and by over 19 pp from 1991). This is the highest evaluation since the entire analysed period and over twice as high as in 1993, which was the worst year in this respect.

Table 4.1.1. The percentage of answers over time to the question "How do you feel about your life as a whole?" and number of sample aged 18 or over between 1991 and 2009

Answers	1991	1992	1993	1994	1995	1996	1997	2000	2003	2005	2007	2009
1. Delighted	1.1	1.2	0.9	1.2	1.4	1.8	1.5	2.7	3.0	2.7	3.5	
2. Pleased	22.4	19.5	18.9	22.9	24.1	24.5	24.3	30.0	31.3	33.5	36.9	38.7
3. Mostly satisfied	34.6	34.7	33.3	34.7	35.5	31.9	35.8	35.9	34.7	35.9	35.8	33.9
4. Mixed	30.9	32.0	33.5	30.2	29.8	31.1	27.6	24.6	22.2	19.9	17.2	16.4
5. Mostly dissatisfied	9.6	10.3	10.9	8.3	7.4	8.6	9.0	7.1	6.7	6.3	5.3	5.4
6. Unhappy	1.8	1.7	1.6	2.3	1.5	1.5	1.5	0.9	1.3	1.2	0.8	1.1
7. Terrible	0.7	0.6	0.9	0.5	0.3	0.6	0.3	0.7	0.7	0.5	0.5	0.5
N	4187	3402	2306	2302	3020	2333	2094	6403	9254	8376	12355	25568
Mean	3.35	3.38	3.43	3.30	3.23	3.27	3.24	3.09	3.05	2.99	2.88	2.86

Source of data: years 1991-1997 — Czapiński, 1998; years 2000-2009 — *Social Diagnosis.*

Also the two indicators of the will-to-live, which is the deepest level of psychological well-being, although no longer the highest throughout the entire analysed period, have improved in comparison with 2005 (Tables 4.1.2 and 4.1.3).

The intensity of the symptoms of depression was the lowest in the entire analysed period (Table 4.1.4). The sense of happiness declared by 76 per cent of respondents has not changed since 2007 and is the best result compared to the previous period. (Table 4.1.5)

[27] For a detailed analysis of these indicators see: Czapiński (2000a).

[28] In Poland the correlation between our indicator of depression and age is very high and it oscillates between 0,65 and 0,70.

[29] All the analyses of the quality of life presented below included people aged 18 or over. In terms of this criterion therefore, this was a similar population to the previous studies.

Table 4.1.2. The percentage of answers over time to the question "How often in the past months have you felt so depressed that you thought about suicide?" between 1991 and 2009

Answers	1991	1992	1993	1994	1995	1996	1997	2000	2003	2005	2007	2009
1. Very often	1.0	1.0	0.8	1.1	0.7	0.7	1.1	1.2	1.1	0.7	0.6	1.0
2. Often	3.6	4.4	3.1	3.0	2.9	2.8	2.5	3.0	3.2	2.6	2.5	2.2
3. Rarely	13.1	13.0	11.0	11.0	10.8	7.7	10.8	9.6	9.9	9.8	9.2	8.8
4. Never	82.2	81.6	85.1	84.9	85.6	88.8	85.5	86.3	85.8	86.9	87.6	88.1

Source of data: years 1991-1997 — Czapiński, 1998; years 2000-2009 — *Social Diagnosis.*

Table 4.1.3. The percentage of answers over time to the question "How strong is your will to live?"between 1991 and 2009

Answers	1991	1992	1993	1994	1995	1996	1997	2000	2003	2005	2007	2009
I don't want to live at all	0.5	0.9	0.9	0.6	0.2	0.1	0.1	1.0	1.0	1.0	0.5	0.6
2	0.8	1.1	0.7	0.7	0.5	0.6	0.7	0.8	0.7	0.6	0.6	0.6
3	1.7	2.7	2.0	1.6	1.4	1.1	1.0	1.4	1.6	2.1	1.3	1.3
4	4.7	4.7	4.5	4.1	2.7	2.1	2.3	2.5	2.2	2.5	2.1	2.0
5	7.6	8.2	7.3	7.5	4.6	3.8	4.5	5.1	6.9	6.7	6.7	6.1
6	14.1	12.3	12.4	13.2	10.9	9.0	11.2	9.2	6.4	7.0	6.8	6.7
7	14.9	11.7	10.7	11.1	10.3	9.6	10.3	8.8	9.1	9.5	9.7	9.5
8	17.4	15.5	13.9	16.7	16.2	16.4	17.0	11.7	14.4	15.8	15.9	16.4
9	12.5	13.1	14.1	13.6	17.2	17.0	16.0	15.1	13.3	14.4	14.7	15.0
I want to live very much	25.7	30.1	33.6	30.9	36.0	40.3	37.0	44.4	44.5	40.3	41.7	41.6
Mean	7.62	7.68	7.86	7.82	8.21	8.41	8.25	8.34	8.32	8.20	8.33	8.34

Source of data: years 1991-1997 — Czapiński, 1998; years 2000-2009 — *Social Diagnosis.*
In years 1991–2000, this scale was assigned numerical values from 0-9; for the sake of comparison, they were changed to 1-10 as in the latter research.

Table 4.1.4. The average level of depression in consecutive studies (for 7- item scale) between 1992 and 2009

1992	1993	1994	1995	1996	1997	2000	2003	2005	2007	2009
5.2	5.2	5.0	4.7	4.7	4.5	4.7	4.6	4.5	4.3	4.2

Source of data: years 1991-1997 — Czapiński, 1998; years 2000-2009 — *Social Diagnosis.*

Table 4.1.5. The percentage of the distribution of answers over time to the question "What all in all would you say things are like these days? Would you say that you are....?"

Answers	1991	1992	1993	1994	1995	1996	1997	2000	2003	2005	2007	2009
Very happy	3.7	3.6	4.5	4.4	5.1	6.4	6.3	5.2	5.2	5.8	7.7	9.1
Pretty happy	61.0	54.2	53.7	64.0	59.6	61.3	66.5	59.4	59.8	63.0	68.0	66.5
Not too happy	35,3*	42.1	36.4	31.6	35.3	32.3	27.2	35.4	30.5	27.9	22.1	21.9
Unhappy			5.4						4.5	3.3	2.2	2.4

Source of data: years 1991-1997 — Czapiński, 1998; years 2000-2009 — *Social Diagnosis.*
** In 1991-1992 and 1994-2000 the scale of answers finished with "not too happy".*

4.1.2. Data for panel sample 2000 to 2009

In order to say how the indicators of psychological well-being change over time, we have to take into account panel samples (the same respondents) from two or more waves. The results of the comparison of the selected psychological well-being indicators from different waves are shown in Table 4.1.6. A statistically significant increase in the value of the depression indicator in the panel samples when comparing data from previous editions of *Diagnosis* can be easily explained by a strong correlation between depression and age[30]. In 2009, respondents were 10 years older and due to this fact alone they displayed a larger number of depression symptoms than in 2000. Even for last two years a statistically significant, although lower than during longer period, increase in depression symptoms has been observed .

[30] In five studies from different parts of the world on 39,000 people, it has been established that young people have a much higher risk of experiencing at least one depressive episode than older generations (Nesse and Williams, 1994) This is explained by civilization processes (the risk of depression increases with the level of economic development of the country) which have much stronger impact on young people than on older generations growing up in the era of fear after World War II. Nesse and Williams provide the following explanation: "Mass communications, especially television and movies, effectively make us all one competitive group even as they destroy our more intimate social networks. … In the ancestral environment you would have had a good chance at being the best at something. Even if you were not the best, your group would likely value your skills. Now we all compete with those who are the best in the world. Watching these successful people on television arouses envy. Envy probably was useful to motivate our ancestors to strive for what others could obtain. Now few of us can achieve the goals envy sets for us, and none of us can attain the fantasy lives we see on television" (p. 220).

Table 4.1.6. A comparison of the variable values of general psychological well-being from 2000 to 2009 in panel samples of the same respondents.

Variable	Wave	Mean	Standard deviation	Mean difference	t	Df	p	Correlation
Depression	2000	4.96	4.130	-0.713	-7.255	1699	0.000	0,542*
	2009	5.67	4.336					
	2003	4.71	3.948	-0.475	-6.974	2953	0.000	0,605*
	2009	5.18	4.347					
	2005	4.64	3.933	-0.327	-5.537	3498	0.000	0,645*
	2009	4.97	4.319					
	2007	4.51	4.067	-0.191	-5.240	7387	0.000	0,714*
	2009	4.70	4.067					
Desire to live	2000	8.34	2.048	0.158	2.563	1521	0.010	0,306*
	2009	8.18	2.046					
	2003	8.31	2.065	0.189	0.897	2779	ns	0,359*
	2009	8.27	1.975					
	2005	8.18	2.092	-0.089	-2.624	3309	0.009	0,410*
	2009	8.28	1.958					
	2007	8.33	1.942	-0.904	-0.829	7435	ns	0,436*
	2009	8.35	1.910					
Suicidal thoughts	2000	3.79	0.532	-0.029	-1.729	1518	ns	0,175*
	2009	3.82	0.486					
	2003	3.80	0.543	-0.031	-2.564	2782	0.010	0,237*
	2009	3.83	0.483					
	2005	3.83	0.469	0.002	0.154	3320	ns	0,262*
	2009	3.83	0.489					
	2007	3.84	0.474	-0.011	-1.687	7455	ns	0,303*
	2009	3.85	0.467					
Evaluation of life as a whole	2000	3.09	1.050	0.131	4.459	1522	0.000	0,383*
	2009	2.96	1.020					
	2003	3.06	1.093	0.151	7.137	2783	0.000	0,426*
	2009	2.90	0.980					
	2005	2.96	1.018	0.076	4.363	3326	0.000	0,491*
	2009	2.89	0.975					
	2007	2.88	1.005	0.038	3.200	7459	0.001	0,477*
	2009	2.84	0.987					
Sense of happiness**	2003	2.36	0.646	0.134	10.159	3052	0.000	0,310*
	2009	2.23	0.592					
	2005	2.28	0.609	0.067	6.056	3599	0.000	0,398*
	2009	2.22	0.594					
	2007	2.20	0.584	0.007	0.894	7606	ns	0,411*
	2009	2.20	0.598					

* $p < 0{,}000$

** Due to a different scale of answers in 2000, the 2000-2009 comparison was omitted.

According to the onion theory of happiness (Czapiński, 1992, 2001a, 2004, Czapiński, Peeters, 1991), the deepest level of well-being (will-to-live), should be the most constant in time. It is independent of age and tends to return to the stable level after the deviations caused by negative life events. Two significant comparable measures of the will to live, that is the desire to live and suicidal thoughts, have remained unchanged in most of the comparisons in time. In oppositon, indicators of middle level of well being (the evaluation of life as a whole and happiness) In the most comparisons show positive changes... The evaluation of life has improved in comparison to all previous waves and happiness has increased from 2003 and 2005 and remained unchanged since 2007.

We can thus say that the psychological well-being of Poles has increased significantly in the past years. Moreover, it is not (only) a generational change as it concerned the same subjects despite their ageing and an increase in the indicator of depression, which is strongly correlated with age.

4.2. Domain satisfactions

Janusz Czapiński

According to the onion theory of happiness (Czapiński, 1992, 2001a 2004; Czapiński, Peeters, 1991), the most peripheral level of well-being in which one shows the highest rationality and the one which is most sensitive to change in objective life conditions is the level of satisfaction with specific aspects of life. This year the scale of

domain satisfactions included 20 different areas and aspects of life, coverng almost the whole spectrum of interests and activities of the average person (Annex 1, individual questionnaire). They can be divided into:

- social (satisfaction with relationships within family, relationships with friends, satisfaction with marriage, with children and with sex life)
- material (satisfaction with the family's financial situation, with the current income of the family, with providing for one's nutritional needs, domestic equipment, with living conditions and with goods and services available)
- environmental (satisfaction with the situation in the country, with the place one lives in, with moral norms in one's environment and with the sense of security in one's place of residence)
- health-related (satisfaction with one's health)
- other (satisfaction with one's achievements, prospects for the future, education, leisure, participation in culture and work).

4.2.1. Data for the whole sample

Almost all domain satisfactions have been improving with the only exception being the assessment of relationships within family and the place of residence (Table 4.2.1). Generally, the average level of all domain satisfactions is the highest since the beginning of the panels, that is since 1991. Any domain satisfaction does not show signs of the world financial crisis.

Table 4.2.1 The average level of satisfaction of particular aspects of life on a 1-6 scale, where "1 = very satisfied" and "6 = very unsatisfied" over time from 1991 to 2009 from the most positive to the least positive in 2009

Satisfaction with:	1991	1992	1993	1994	1995	1996	1997	200 0	2003	2005	2007	2009
Children	1.72	1.86	1.77	1.83	1.79	1.73	1.78	1.92	1.88	1.84	1.87	1.83
Marriage	2.13	2.12	2.03	2.11	2.04	1.96	2.01	2.11	2.10	2.08	2.07	2.03
Family relations	2.11	2.34	2.20	2.23	2.24	2.15	2.13	2.25	2.22	2.17	2.16	2.16
Relations with friends	2.48	2.70	2.54	2.51	2.53	2.50	2.46	2.61	2.51	2.49	2.47	2.43
Place of residence	2.66	2.79	2.67	2.63	2.55	2.60	2.50	2.77	2.65	2.59	2.55	2.54
Sex life	2.50	2.83	2.67	2.69	2.70	2.69	2.66	2.83	2.76	2.78	2.79	2.69
Level of security in the place of residence	nd	nd	nd	3.61	nd	nd	nd	3.48	3.08	2.98	2.73	2.69
Housing conditions	3.14	3.10	3.13	3.04	3.05	3.04	2.94	3.12	2.88	2.80	2.75	2.74
Work	3.04	3.03	2.96	2.97	2.91	2.88	2.82	3.06	2.99	2.95	2.79	2.77
Level of available goods and services	3.28	3.26	3.13	3.03	2.95	2.91	2.82	3.22	3.05	3.00	2.85	2.84
Possibility of satisfying one's nutritional needs	nd	nd	nd	nd	nd	nd	nd	3.33	3.22	3.24	2.89	2.86
Way of spending leisure	3.20	3.26	3.29	3.26	3.19	3.21	3.05	3.30	3.10	3.03	2.95	2.88
Achievements	3.29	3.48	3.50	3.37	3.32	3.26	3.27	3.31	3.14	3.15	3.01	2.95
Education	3.14	3.28	3.34	3.30	3.29	3.35	3.30	3.35	3.18	3.20	3.01	2.98
Health	3.18	3.41	3.38	3.28	3.20	3.19	3.15	3.24	3.14	3.09	3.13	3.00
Moral standards in one's environment	3.56	3.73	3.62	nd	nd	nd	nd	3.58	3.43	3.43	3.21	3.18
Financial situation of the family	4.02	4.17	4.27	4.06	3.89	3.89	3.50	3.97	3.90	3.79	3.36	3.33
Present income of the family	nd	nd	nd	nd	nd	nd	nd	4.16	4.05	3.96	3.51	3.49
Prospects for the future	4.14	4.43	4.34	4.20	3.97	3.95	3.81	4.02	4.17	4.03	3.55	3.49
Situation of the country	4.85	5.05	5.01	4.83	4.64	4.51	4.32	4.63	4.79	4.78	4.34	4.30

Source of data: years 1991-1997 — Czapiński, 1998; years 2000-2009 — *Social Diagnosis.*
NOTES: nd - no data; size of the sample for particular satisfaction categories may change due to some aspects that did not concern all the respondents

The highest increase in comparison to previous years has been observed in the satisfaction with health, sex life, level of security in the place of residence, ways of spending leisure time, prospects for the future and own achievements. The increase in satisfaction with one's own health condition is correlated to a fall in the intensity of somatic symptoms (cf. Chapter 4.6) a further fall in cigarette smoking (cf. Chapter 4.10.3.1) and the wider use of paid health services (cf. Chapter 3.7). For Poles' health has been the most important value since the beginning of the study. That is why they are willing to bear numerous costs to protect their health. The improvement of the subjective assessment of health can be influenced by a fall in life stress (cf. Chapter 4.7). The fall in life stress combined with the increase in affluence (cf. Chapter 3.1 and 4.5) could also contribute to the improvement of self-esteem

(satisfaction with life achievements), satisfaction with prospects for the future, ways of spending leisure time, financial situation of family and possibility of satisfying nutritional needs.

However, not only the aspects of one's own life and the next environment are for Poles the only source of growing satisfaction. There has been a significant increase in satisfaction with the situation in the country, which has always been the lowest-ranked unit of the analysed aspects of life.

This picture of positive changes between in the whole samples is also confirmed by the comparison of satisfactions between 2003 and 2009 as well as 2007 and 2009 in the panel samples. All types of satisfaction in at least one of these compared periods have increased, except for the satisfaction with the relationships within family, which has not significantly changed throughout the last six or two years (see below) and has always been one of the highest ranked (the ceiling effect is the exhaustion of the scale range)

4.2.2. Data for panel samples

A comparison of the level of satisfaction with various domains of life from 2003 to 2009 and 2007 to 2009 in the panel sample confirms the picture revealed by Table 4.2.1. In 2003 to 2009 there was an increase in 14 domains, whereas in a shorter period between 2007 and 2009 an increase in 12 out of 20 domains was observed (see Table 4.2.2). In 2003 to 2009 there was a decrease in the level of satisfaction with 4 domains, of which two are strictly age-related, that is of health and sex life. A decrease in this time in the level of satisfaction with marriage and relations with colleagues (group of friends) is not surprising due to the fact that time leads to weakening of positive feelings in close relationships. A decrease in the level of satisfaction with children can account for an accumulation of problems related to their adolescence. In the last six years the highest increase in the level of satisfaction has been observed in the domains of prospects for the future, possibility of satisfying nutrition needs and the situation in the country.

In comparison to 2007, similarly to a longer six-year period, we have observed a decrease in the level of satisfaction with health condition, sex life, marriage and relations with friends. A decrease in he level of satisfaction with children has turned out to be statistically irrelevant. The highest increase in the last two years has been observed in the domains of the situation of the country, present income of the family, prospects for the future and moral standards in one‘s environment.

Table 4.2.2. Change of satisfaction between 2003 and 2009, and 2007 and 2009 in the order of the size of change between 2005 and 2007 from the most positive to the most negative change

Satisfaction with:	2003-2009		2007-2009	
	size of change	significance level	size of change	significance level
Situation of the country	0.481	0.000	0.235	0.000
Present income of the family	0.545	0.000	0.128	0.000
Prospects for the future	0.589	0.000	0.123	0.000
Financial situation of the family	0.550	0.000	0.121	0.000
Moral standards in one‘s environment	0.204	0.000	0.112	0.000
Level of security in the place of residence	0.301	0.000	0.098	0.000
Possibility of satisfying one‘s nutritional needs	0.312	0.000	0.076	0.000
Education	0.114	0.000	0.075	0.000
Achievements	0.105	0.000	0.054	0.000
Level of available goods and services	0.212	0.000	0.037	0.010
Work	0.213	0.000	0.035	ns
Way of spending leisure	0.098	0.000	0.032	0.031
Place of residence	0.080	0.001	0.031	0.017
Housing conditions	0.087	0.001	0.018	ns
Family relations	0.038	ns	0.002	ns
Children	-0.082	0.000	-0.021	ns
Health	-0.077	0.003	-0.029	0.039
Relations with friends	-0.010	ns	-0.033	0.008
Marriage	-0.087	0.001	-0.038	0.012
Sex life	-0.174	0.000	-0.051	0.004

NOTE: positive value means the increase in satisfaction, while the negative – a drop; ns – means that the change is not statistically significant.

4.3. The objective indicators of life condition as predictors of the subjective quality of life

Janusz Czapiński

To determine which of the so-called objective predicators (objective factors differentiating the life situations of respondents) have a real impact on psychological well-being, and which only have an apparent impact resulting from their relationship with a real predicator, and in order to identify the real correlations between the differences in well-being, we conducted a multiple regression analysis covering a much richer set of objective indicators of the quality of life than those included in the tables presenting the distribution of answers (voivodships were omitted). The data below illustrate the results of the multiple regression analysis for particular measures of general psychological well-being and satisfaction with various aspects of life (Tables 4.3.1-4.3.5).

The most important factor explaining the overall psychological well-being of the Poles in this study turns out to be age similarly to the previous panel. The older one is, the higher the possibility that one is in a bad psychological condition, especially where symptoms of inadaptability are concerned (depression). In the case of depression, age explains specifically (after controlling effects of all other factors) over 15% of the variance. When other factors are not excluded, it is about 40% (an extraordinary value in social research). What is more, in contrast to western societies (e.g. USA, Canada), in Poland the relationship (several times stronger then it is in those countries) between age and depression is positive. In the United States, younger people more frequently suffer from depression than older people[31]and in Poland the situation is the reverse; the level of depression increases with almost every year of life[32].

The second most important predictor of well-being is marriage, and the fourth is the number of friends, which can be jointly treated as social support index. The post-1989 systemic transformation damaged some basic social bonds and it became even more important, especially when confronted with serious personal problems, to have the sense of unconditional kindness and help from other people. Friends in need are friends indeed, which this research proves. The role of friends is particularly important when the basic dimension of well-being, the will-to-live, is analysed. It is mainly friends who help stave off suicidal thoughts and help maintain the will-to-live (cf. Chapter 4.9). The third predictor, two positions higher than two years ago, is occupied by alcohol abuse. It is an important indication for the life quality prophylaxis. The fifth predictor is gender and education. The importance of household income per capita has shifted from the third to the sixth position. This indicates that material conditions of life are becoming a less important correlate of psychological well-being. Money brings happiness to those who do not have it. The achievement of income which allows the satisfaction of most basic nutritional needs favours the unblocking the innate potential for the happiness of Poles (cf. Czapiński, 2004c).

All-in-all, it can be stated that the most important condition of the subjective quality of life are social relations[33] and age determining health condition. Material well-being loses its importance after Poles have achieved a level which is sufficient for satisfying basic nutritional needs. However, the loss of employment can create such deterioration of life conditions that unemployment retains one of the top positions in the ranking of factors of physiological well-being. An increase in alcohol abuse (see Chapter 4.10.3.2) and higher importance of this factor for subjective quality of life indicates a dire need of elaboration and implementation of new programs of alcohol abuse prevention. Poland is atheising (see Chapter 4.10.2) and religious practices are becoming a less important predicator of psychological well-being.

[31] We do not know to what to attribute this Polish phenomenon of the reversed relationship between age and depression in comparison with developed countries. It could be due to the generational differences in adaptation skills; people who practised effective rules of living for a long time under the previous regime have now greater difficulties with adapting to new rules of effective functioning in the new system. The elderly feel more lost and less desired (on the labour market) in the new realities. Why is the reverse relationship between age and depression so strong? People who are now 30 years old have become adults in post-communist Poland, and similarly to 30-year olds in 1992 they are much more depressed than 20-year olds. This is the biggest mystery of the Poles and the systemic transformation.

[32] The percentage of variance was calculated as a square of part correlation multiplied by 100.

[33] Several researchers analysing the issue of psychological well-being confirm the importance of social relations. Argyle,1999; Myers, 1999).

Table 4.3.1. The percentage of the variance of particular indicators of general well-being explained specifically by particular predicators after excluding effects of other predicators, and the rank of particular predicators due to their average percentage of explained variance of all indicators of general well-being in 2007 and 2009[*] .

Predicator	Evaluation of life as a whole		Happiness		Suicidal thoughts		Desire to live		Evaluation of the past year		Depression		Average predicator value		Predicator rank	
	2009	2007	2009	2007	2009	2007	2009	2007	2009	2007	2009	2007	2009	2007	2009	2007
Age	1.1	1.0	2.5	2.5	0.0	0.0	0.7	0.6	0.6	1.0	15.0	16.5	3.3	3.6	1	1
Marriage	4.9	4.4	2.6	2.2	0.2	0.3	0.8	1.2	0.9	0.6	0.3	0.2	1.6	1.5	2	2
Alcohol abuse	0.5	0.8	0.4	0.7	1.2	0.9	1.0	0.8	0.6	0.5	0.8	0.7	0.8	0.7	3	5
Number of friends	1.0	1.6	0.5	0.6	0.2	0.4	1.2	1.7	0.4	0.5	0.6	0.6	0.7	0.9	4	4
Gender	0.1	0.1	0.0	0.0	0.3	0.5	0.2	0.2	0.0	0.0	2.2	2.5	0.6	0.7	5	5
Education	0.9	0.7	0.5	0.2	0.2	0.1	0.4	0.2	0.4	0.2	1.2	1.4	0.6	0.5	5	6
Income per capita	0.9	1.5	1.0	2.0	0.1	0.1	0.4	0.8	0.5	1.7	0.2	0.4	0.5	1.1	6	3
Unemployment	1.2	0.9	1.0	0.9	0.1	0.2	0.1	0.2	0.6	0.5	0.0	0.0	0.5	0.7	6	5
Being a pensioner	1.0	0.8	0.6	0.4	0.1	0.3	0.1	0.2	0.3	0.3	0.7	0.2	0.5	0.4	6	7
Smoking cigarettes	0.8	0.6	0.6	0.6	0.2	0.3	0.1	0.2	0.3	0.4	0.0	0.0	0.3	0.4	7	7
Being other unemployed	0.9	0.3	0.4	0.3	0.0	0.1	0.0	0.0	0.3	0.1	0.0	0.0	0.3	0.1	7	8
Religious practices	0.3	0.5	0.2	0.5	0.0	0.2	0.2	0.4	0.2	0.3	0.2	0.4	0.2	0.4	8	7
Being a farmer	0.5	0.3	0.1	0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.2	0.2	0.2	0.1	8	8
Employment in private sector	0.8	0.4	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.2	0.2	0.1	8	8
Employment in public sector	0.6	0.3	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.2	0.1	8	8
Being a retiree	0.3	0.2	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.1	0.1	9	8
Being an entrepreneur	0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.0	9	
Housing conditions	0.1	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.0	9	
Children to provide for	0.1	0.2	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Taking drugs	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Class of place of residence	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Overall percentage of explained variance (adjusted R-square x 100)	16.7	15.9	15.5	15.1	4.1	4.7	8.6	9.2	8.7	9.6	47.5	47.6				

[*]The percentage of variance was calculated as a square of part correlation multiplied by 100.

Table 4.3.2. The percentage of the variance of satisfactions with social aspects of life specifically explained by particular predicators after excluding effects of other predicators and the rank of predicators for particular aspects in 2007 and 2009 [*] *.*

Predicator	Satisfaction with family relations		Rank		Satisfaction with relations with friends		Rank		Satisfaction with marriage		Rank		Satisfaction with children		Rank		Satisfaction with sex life		Rank	
	2009	2007	2009	2007	2009	2007	2009	2007	2009	2007	2009	2007	2009	2007	2009	2007	2009	2007	2009	2007
Age	0.1	0.1	5	5	0.6	0.7	2	2	1.1	0.9	2	3	0.8	1.5	1	1	5.6	6.5	1	1
Number of friends	1.5	1.9	1	1	2.9	3.4	1	1	0.8	1.0	4	2	0.6	0.5	2	2	0.8	0.9	3	3
Marriage	0.7	0.1	3	4	0.0	0.1	4	4	[a]	[a]			0.3	0.2	4	5	2.8	3.8	2	2
Income per capita	0.0	0.1		5	0.2	0.1	4	4	0.1	0.8	7	4	0.0	0.4		3	0.0	0.2		5
Unemployment	0.0	0.0			0.3	0.1	4	4	0.1	0.0	7		0.0	0.0			0.0	0.0		
Gender	0.0	0.0			0.0	0.1	4	4	1.2	1.5	1	1	0.2	0.1	5	6	0.3	0.2	4	5
Religious practices	0.2	0.4	4	3	0.0	0.0			0.2	0.3	6	6	0.0	0.3		4	0.0	0.0		
Alcohol abuse	1.0	0.5	2	2	0.2	0.0	3		0.9	0.8	3	4	0.3	0.2	4	5	0.8	0.8	3	4
Being a pensioner	0.0	0.0			0.2	0.2	3	3	0.1	0.0	7		0.1	0.0	6		0.0	0.1		5
Smoking cigarettes	0.0	0.0			0.0	0.0			0.3	0.5	5	5	0.1	0.0	5		0.0	0.0		
Education	0.0	0.0			0.3	0.1	4	4	0.1	0.0	7		0.4	0.0	3		0.0	0.1		6
Being other unemployed	0.0	0.0			0.3	0.2	3	3	0.3	0.1	5	6	0.2	0.0	5		0.0	0.0		
Being a retiree	0.0	0.0			0.0	0.0			0.3	0.1	5	6	0.2	0.0	5		0.0	0.0		
Being an entrepreneur	0.0	0.0			0.0	0.0			0.2	0.0	6		0.2	0.0	5		0.0	0.0		
Being a farmer	0.0	0.0			0.2	0.2	3	3	0.1	0.1	7	6	0.1	0.0	6		0.0	0.0		
Children to provide for	0.0	0.0			0.1	0.1	4	4	0.0	0.0			[a]	-[a]			0.0	0.0		
Housing conditions	0.0	0.0			0.0	0.0			0.0	0.0			0.3	0.2	4	5	0.0	0.0		
Taking drugs	0.1	0.1	5	5	0.0	0.0			0.0	0.0			0.0	0.0			0.0	0.0		
Class of place of residence	0.0	0.0			0.0	0.0			0.0	0.1		6	0.0	0.0			0.0	0.0		
Employment in private sector	0.0	0.0			0.2	0.1	4	4	0.1	0.1	7	6	0.1	0.0	6		0.0	0.0		
Employment in public sector	0.0	0.0			0.1	0.0			0.1	0.0	7		0.1	0.0	6		0.0	0.0		
Overall percentage of explained variance (adjusted R-square x 100)	5.3	4.4			7.5	8.2			6.1	6.5			5.4	5.5			15.8	16.2		

[*] The percentage of variance was calculated as a square of part correlation multiplied by 100.
a Lack of variable in analysis

Table 4.3.3. The percentage of the variance of satisfactions with material aspects of life explained specifically by particular predicators after excluding effects of other predicators and the rank of predicators for particular aspects in 2007 and 2009.*

Predicator	Satisfaction with financial situation		Rank		Satisfaction with present family income		Rank		Satisfaction of nutrition needs		Rank		Satisfaction with housing conditions		Rank		Satisfaction with level of goods and services available		Rank	
	2009	2007	2009	2007	2009	2007	2009	2007	2009	2007	2009	2007	2009	2007	2009	2007	2009	2007	2009	2007
Age	0.8	1.0	3	2	0.8	1.2	3	2	1.2	1.4	3	2	0.0	0.0			0.0	0		
Number of friends	0.5	0.2	5	7	0.3	0.2	6	4	0.4	0.1	6	8	0.2	0.2	7	8	0.3	0.0	3	
Marriage	0.6	0.4	4	5	0.5	0.3	4	5	0.2	0.1	9	8	0.6	0.8	3	2	0.1	0.0	5	
Income per capita	10.9	11.1	1	1	11.8	12.3	1	1	8.0	8.9	1	1	0.7	0.6	2	3	1.1	1.2	1	1
Unemployment	1.0	0.6	2	4	1.0	0.5	2	3	1.8	1.2	2	3	0.6	0.1	3	9	0.1	0.2	5	3
Gender	0.1	0.0	9		0.0	0.0			0.2	0.1	9	8	0.1	0.0	8		0.0	0.0		
Religious practices	0.4	0.4	6	5	0.2	0.3	7	6	0.2	0.2	9	7	0.4	0.6	5	3	0.1	0.1	5	4
Alcohol abuse	0.3	0.3	7	6	0.3	0.3	6		0.2	0.2	9		0.1	0.1	8	8	0.0	0.1		4
Being a pensioner	0.3	0.3	7	6	0.4	0.3	5	5	0.9	0.7	4	4	0.6	0.3	3	6	0.1	0.1	5	4
Smoking cigarettes	0.1	0.3	9	6	0.1	0.3	8	4	0.3	0.2	8	7	0.1	0.2	8	6	0.0	0.0		
Education	0.1	0.0	5		0.0	0.0			0.1	0.0	10		0.0	0.1		6	0.0	0.0		
Being other unemployed	0.3	0.2	7	7	0.4	0.2	5	5	0.8	0.4	5	5	0.7	0.4	2	5	0.1	0.0	5	
Being a retiree	0.0	0.0			0.0	0.0		4	0.2	0.3	8	6	0.6	0.2	3	4	0.1	0.0	5	
Being an entrepreneur	0.0	0.0			0.0	0.0		4	0.0	0.1		8	0.2	0.2	7	3	0.0	0.0		
Being a farmer	0.0	0.0			0.0	0.0	5	5	0.0	0.2		7	0.5	0.4	4	5	0.1	0.0	4	
Children to provide for	0.2	0.0	8		0.3	0.0	6	7	0.4	0.1	7	8	0.0	0.0		5	0.2	0.1	5	4
Housing conditions	0.1	0.1	9	8	0.1	0.3	8	5	0.2	0.2	9	7	4.0	3.8	1	1	0.1	0.0		
Taking drugs	0.0	0.0			0.0	0.0		5	0.0	0.0			0.0	0.0			0.0	0.0		
Class of place of residence	0.2	0.7	8	3	0.3	0.8	6	5	0.1	0.3	10	6	0.3	0.3	6	4	0.8	1.0	2	4
Employment in private sector	0.1	0.1	9	8	0.1	0.2	8	6	0.5	0.4	6	5	0.6	0.6	3	3	0.0	0.0		
Employment in public sector	0.0	0.1		8	0.1	0.1	8	7	0.4	0.4	7	5	0.6	0.5	3	4	0.1	0.0	5	
Overall percentage of explained variance (adjusted R-square x 100)	22.0	19.3			21.4	20.1			19.9	18.4			12.9	10.9			5.4	6.1		

* The percentage of variance was calculated as a square of part correlation multiplied by 100.

*Table 4.3.4. The percentage of the variance of satisfactions with life conditions and health accounted for specifically by particular predicators after excluding effects of other predicators and the rank of particular predicators for particular indicators in 2007 and 2009**

Predicator	Satisfaction with situation in the country		Rank		Satisfaction with place of residence		Rank		Satisfaction with moral standards		Rank		Satisfaction with level of security		Rank		Satisfaction with health		Rank	
	2009	2007	2009	2007	2009	2007	2009	2007	2009	2007	2009	2007	2009	2007	2009	2007	2009	2007	2009	2007
Age	0.1	0.1	5	3	0.1	0.1	4	4	0.4	0.2	2	4	0.2	0.2	3	3	5.7	6.6	1	1
Number of friends	0.0	0.0			0.6	0.3	1	2	0.5	0.6	1	1	0.3	0.0	2		0.2	0.4	6	4
Marriage	0.0	0.0			0.0	0.0			0.0	0.0			0.3	0.3	2	2	0.0	0.0		
Income per capita	0.9	0.2	1	2	0.0	0.2		3	0.1	0.1	4	5	0.2	0.0	3		0.3	0.6	5	3
Unemployment	0.4	0.0	2		0.3	0.2	2	3	0.1	0.0	4		0.0	0.0			0.0	0.1		6
Gender	0.1	0.1	5	3	0.0	0.0			0.1	0.1	4	5	0.1	0.2	4	3	0.5	0.6	3	3
Religious practices	0.0	1.0		1	0.2	0.4	3	1	0.0	0.3		3	0.0	0.3		2	0.2	0.6	6	3
Alcohol abuse	0.0	0.1		3	0.2	0.0	3		0.2	0.3	3	3	0.0	0.0			0.4	0.1	4	6
Being a pensioner	0.0	0.0			0.0	0.0			0.0	0.0			0.1	0.0	4		1.9	1.6	2	2
Smoking cigarettes	0.3	0.1	3	3	0.0	0.0			0.0	0.1		5	0.0	0.1		4	0.0	0.0		
Education	0.0	0.0			0.0	0.3		2	0.0	0.0		4	0.0	0.0			0.4	0.2	4	5
Being other unemployed	0.4	0.0	2		0.0	0.0			0.0	0.0		4	0.0	0.0			0.1	0.0	7	
Being a retiree	0.2	0.0	4		0.0	0.0			0.0	0.0			0.0	0.0			0.1	0.1	7	6
Being an entrepreneur	0.0	0.0			0.0	0.0			0.0	0.0			0.0	0.0			0.0	0.0		
Being a farmer	0.2	0.0	4		0.0	0.0			0.0	0.0			0.0	0.0			0.0	0.0		
Children to provide for	0.0	0.0			0.1	0.0	4		0.1	0.0	4		0.0	0.0			0.0	0.0		
Housing conditions	0.0	0.0			0.3	0.4	2	1	0.1	0.0	4		0.2	0.0	3		0.0	0.0		
Taking drugs	0.0	0.0			0.0	0.0			0.0	0.0	4		0.0	0.0			0.0	0.0		
Class of place of residence	0.0	0.2		2	0.3	0.3	2	2	0.4	0.4	2	2	1.8	2.6	1	1	0.1	0.1	7	6
Employment in private sector	0.3	0.0	3		0.0	0.0			0.0	0.0			0.0	0.0			0.0	0.0		
Employment in public sector	0.1	0.0	5		0.0	0.0			0.0	0.0		4	0.0	0.0			0.0	0.0		
Overall percentage of explained variance (adjusted R-square x 100)	4.1	2.3			3.4	3.7			2.6	3.2			4.8	5.0			27.2	27.7		

* The percentage of variance was calculated as a square of part correlation multiplied by 100.

Table 4.3.5. The percentage of the variance of satisfactions with one's own achievements, prospects in life, and lifestyle accounted for specifically by particular predicators after excluding the effect of other predicators, and the rank of predicators for particular aspects in 2007 and 2009.*

Predicator	Satisfaction with own achievements		Rank		Satisfaction with prospects in life		Rank		Satisfaction with education		Rank		Satisfaction with work		Rank		Satisfaction with leisur		Rank	
	2009	2007	2009	2007	2009	2007	2009	2007	2009	2007	2009	2007	2009	2007	2009	2007	2009	2007	2009	2007
Age	0.4	1.0	5	2	1.2	1.8	2	2	0.1	0.2	10	7	0.0	0.6		2	0.5	0.9	2	2
Number of friends	1.7	1.0	1	2	0.5	0.4	4	4	0.9	0.3	5	6	1.0	0.5	1	3	1.4	0.9	1	1
Marriage	0.3	0.2	6	8	0.2	0.4	6	4	0.1	0.2	10	7	0.0	0.0			0.0	0.0		
Income per capita	0.4	0.9	5	3	2.0	2.4	1	1	0.1	0.2		7	0.4	1.8	3	1	0.2	0.5	5	4
Unemployment	1.6	1.1	2	1	0.9	0.4	3	4	1.4	1.1	2	2	0.5	0.2	2	6	0.3	0.1	4	4
Gender	0.1	0.0	8		0.0	0.0			0.3	0.2	9	7	0.0	0.0		3	0.1	0.1	6	
Religious practices	0.1	0.4	8	6	0.1	0.5	7	3	0.1	0.5	10	4	0.1	0.4	6	4	0.1	0.4	6	4
Alcohol abuse	0.7	0.7	4	5	0.3	0.3	5	5	0.3	0.3	9	6	0.3	0.2	4	6	0.4	0.1	3	5
Being a pensioner	0.7	0.5	4	6	0.5	0.2	4	6	0.8	0.4	6	5	0.0	0.0			0.3	0.1	4	5
Smoking cigarettes	0.3	0.2	6	8	0.2	0.0	6		0.0	0.0			0.0	0.0			0.0	0.0		5
Education	1.6	0.8	2	9	0.2	0.0	6		14.3	12.6	1	1	0.2	0.0	5		0.4	0.0	3	
Being other unemployed	1.0	0.6	3	6	0.3	0.2	5	6	1.3	0.8	3	3	0.0	0.3		5	0.2	0.1	5	
Being a retiree	0.1	0.0	8		0.1	0.0	7		0.4	0.3	8	6	0.1	0.0	6		0.0	0.0		
Being an entrepreneur	0.0	0.0			0.0	0.0			0.4	0.3	8	6	0.4	0.0	3		0.0	0.1		5
Being a farmer	0.3	0.3	6	7	0.2	0.1	6	7	0.6	0.4	7	5	0.0	0.2		6	0.3	0.3	4	3
Children to provide for	0.1	0.0			0.0	0.0			0.1	0.2	10	7	0.0	0.0			0.4	0.3	3	
Housing conditions	0.1	0.0	8		0.1	0.0	7		0.0	0.0			0.0	0.0			0.0	0.0		
Taking drugs	0.0	0.0			0.0	0.0			0.0	0.0			0.0	0.0			0.0	0.0		
Class of place of residence	0.1	0.0	8		0.0	0.0			0.1	0.0	10		0.0	0.0			0.0	0.1		
Employment in private sector	0.4	0.3	5	7	0.2	0.1	6		1.2	0.8	4	3	0.1	0.0	6		0.2	0.2	5	5
Employment in public sector	0.2	0.1	7	9	0.1	0.0	7		0.6	0.5	7	4	0.3	0.0	4		0.1	0.1	6	5
Overall percentage of explained variance (adjusted R-square x 100)	13.0	12.4			11.9	9.7			24.5	24.2			8.5	7.0			6.7	6.2		

* The percentage of variance was calculated as a square of part correlation multiplied by 100.

4.4. The onion theory of happiness in the light of *Social Diagnosis* data

Janusz Czapiński

Panel research is a great opportunity to verify the basic hypotheses of the onion theory of happiness (Czapiński, 1992, 2001a, 2004b; Czapiński, Peeters, 1991). This theory assumes that psychological well-being has a layer structure; the deeper layers, closer to the onion core are genetically determined, while others that are more peripheral and less important from the perspective of survival, are more susceptible to situational influences. Here, we can also observe a hierarchy; general well-being is less "realistic" than satisfaction with specific matters. According to this theory, each of us has an innate attractor of happiness which, regardless of our experiences, aims at the "programmed" (person specific) level of well-being (set point). It is not resistant to negative events in our life that is, it does not guarrantee a good psychological condition under any circumstances, but regardless of whether we were objectively able to cope with a difficult situation or not, it automatically restores the "proper" level of well-being characteristic for a given person. The theory predicts that the innate attractor of happiness should mostly restore the "proper" level of the most significant aspect of well-being, the deepest layer, which is the will-to-live. The will-to-live is decisive for the subjective answer to the existential question "to be or not to be" and it influences (positively or negatively, in accordance with the "top – down" model) the more peripheral layers of psychological well-being, a general subjective well-being i.e, the satisfaction with life as a whole, the feeling that life makes sense, the balance of emotions experienced, the ability to self-mobilize etc., and domain satisfactions; i.e the satisfactions with various domains or aspects of life.

The onion theory of happiness results in four hypotheses, which we would like to test here using data from the *Diagnosis*:

1. The positive influence of external factors (life events, changes in the standard of living, changes in the stress level, changes in health condition etc.) on psychological well-being should be smaller than that of the internal attractor mechanism and this disproportion should increase along with the depth of the layer. It will be the greatest for the will-to-live and the lowest for domain satisfactions.
2. External factors will influence the decline rather than the increase of the psychological well-being, and this disproportion should increase along with the depth of the well-being layer. It will be the greatest for the will-to-live and the lowest for domain satisfactions.
3. The age-dependent weakening of effectiveness of the internal attractor mechanism should be smaller in the deepest layer of well-being (the will-to-live) than in its intermediate layer, the general subjective sense of well-being. In case of domain satisfactions the changes will be mostly situationally determined, the internal attractor mechanism in general will be much weaker, and its effectiveness will not change with age.
4. Improvement in those living conditions controlled by a person (e.g. increased income, finding a partner) should lead to an increase in the level of psychological well-being not greater than the opposite relation: the increase in psychological well-being leading to an improvement in the person-controlled conditions of living. However, since psychological well-being influences our successes throughout an entire life, at a given moment it may be conducive to further successes only in subjects for whom it had previously exerted a positive influence. It may be lead to the increase of income only in the case of persons who already are relatively affluent since their affluence is a proof of a permanently high level of well-being in the past. In the case of the less affluent persons we can expect an inverse effect; that is, the greater influence of improvement in the living conditions on the level of well-being than of the level of well-being on improvement of the living conditions[34].

These hypotheses have already been partially confirmed by the earlier panel surveys (Czapiński, 2004, Czapiński, Panek, 2007) however in this year's *Diagnosis* we collected measurements for more time intervals and this increases the reliability of the verification.

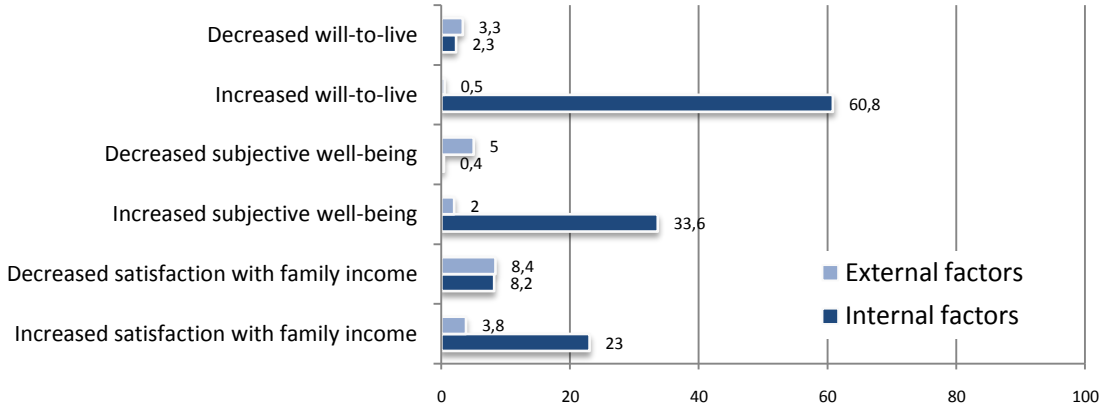
The first hypothesis was fully confirmed (Figures 4.4.1 and 4.4.2). In the case of a two-year interval, the improvement of the will–to-live was determined in almost 60 per cent by the starting value of the indicator (the lower it was, the more it improved) (Figure 4.4.1). This proves a very high effectiveness of the internal attractor mechanism at the deepest level of psychological well-being. At the intermediate level of general subjective well-being, this mechanism turns out to be much less effective while at the shallowest level, the mechanism of the unidirectional attractor changes into a balancing mechanism; both an increase and a decrease in satisfaction with family income depends on its initial level (the lower was the starting satisfaction level, the more it increased and the higher it is, the more it decreased:. the more satisfied we are with the level of income, the greater the probability that in time we will be less satisfied, and the less satisfied we are with it, the greater the probability that after some time we will be more satisfied).

The internal attractor mechanism had no impact on the decrease of well-being in the deeper layers and the external factors played a much more important role here. Thus, the improvement of well-being in the deeper layers has an internal source and it depends little on external factors while a decrease in the level of well-being in the deeper layers results mainly from the worsening of one's situation. The increase of domain satisfaction was in turn

[34] According to several theories of happiness (see Czapiński, 2004a,b) bad life conditions, e.g. low income hinder full satisfaction of all basic nutritional needs.

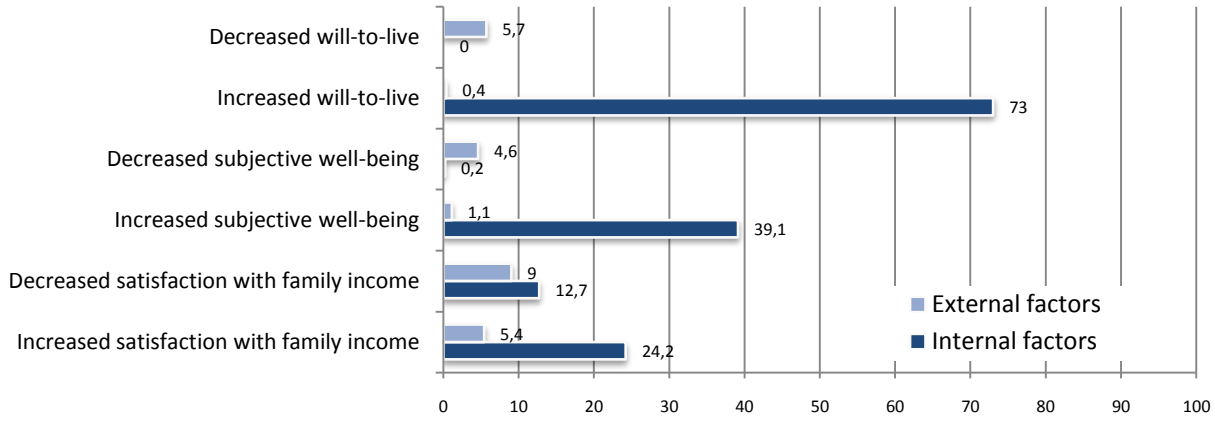
less influenced and the decrease of domain satisfaction was more influenced by the attractor. The changes in domain satisfaction level were more strongly correlated with the changes in the external conditions than the changes in deeper levels of psychological well-being. Due to the fact that the attractor works both ways for domain satisfactions, it weakens the exceptionally high and raises the exceptionally low levels. It counteracts, on one hand, prolonged dissatisfaction and on the other hand it motivates us to raise our aspirations and prevents satisfaction with the attained standard of living. Thus it is responsible for the illusion of hedonic progress ("when you get more, you will be happier").

When the time interval between two measurements was longer (seven years), this pattern of relationships between change in well-being at various levels and external and internal factors became even more visible. The internal attractor mechanism is responsible for a positive change of the will–to-live indicator in as much as 73 per cent of cases (Figure 4.4.2).



NOTES: The will–to-live indicator is a standardized value of the sum standardized values of the desire to live and suicidal tendency scales; the indicator of general subjective well-being is the standardized value of the total standardized values of the sense of happiness, assessment of one's life and of the previous year scales; significant are values above 0.5.

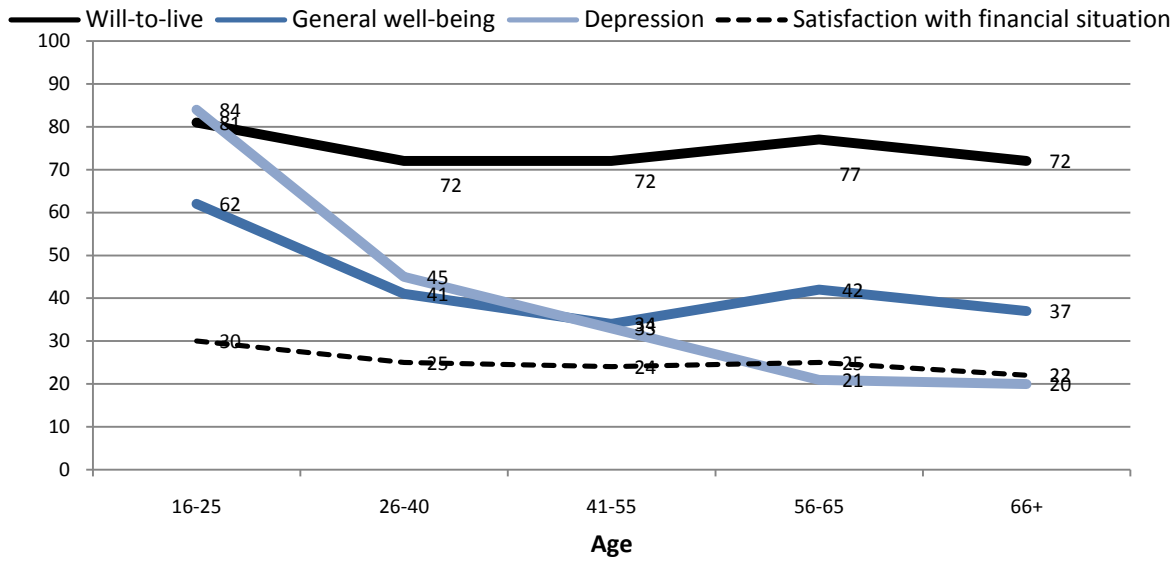
Figure 4.4.1. Predictive value (percentage of specifically explained variance) of external factors (change in the stress level, starting stress level, change in income level and starting income level) and internal factors (starting level of the appropriate well-being measures) for the decrease and increase of two synthetic indicators of psychological well-being (the will to live and general subjective well-being) and for domain satisfaction (satisfaction with family income) from 2007 to 2009 (the internal factors enter in the regression equations as the first).



NOTES: The will–to-live indicator is a standardized value of the sum standardized values of the desire to live and suicidal tendency scales; the indicator of general subjective well-being is the standardized value of the total standardized values of the sense of happiness, assessment of one's life and of the previous year scales; significant are values above 0.5.

Figure 4.4.2. Predictive value (percentage of specifically explained variance) of external factors (change in the stress level, starting stress level, change in income level and starting income level) and internal factors (starting level of the appropriate well-being measures) for the decrease and increase of two synthetic indicators of psychological well-being (the will to live and general subjective well-being) and for domain satisfaction (satisfaction with family income) from 2003 to 2009 (the internal factors enter in the regression equations as the first).

The second hypothesis was also confirmed. Both in the case of a two-year and a six-year interval, the external



factors influenced the decrease rather than the increase of psychological well-being in two deeper layers. In the external layer of the "onion" of happiness, the disproportion between the influence of external and internal factors is lower, although an increase in satisfaction with the financial situation of the family is influenced rather by internal factors than external ones (4.4.1 and 4.4.2).

Hypothesis 3 was also supported by data from the *Social Diagnosis*. Figure 4.4.3 shows that for the will-to-live, the deepest level of psychological well-being, the effectiveness of the internal attractor mechanism did not weaken with age but that it decreased with regard to general subjective well-being, particularly with reference to the measure of depression. This may explain why in Poland the correlation between age and depression is so strong (see Chapter 4.3). Perhaps the low effectiveness of the internal attractor mechanism is the cause of the fact that in the Polish population the probability of spontaneous withdrawal of depressive symptoms dramatically drops with age. This leads to differences in the intensity of depression between younger and older persons. Why though, in other countries (such as USA or Canada) is the correlation between age and depression much smaller or even inverted? It would be difficult to assume that the Americans or the Canadian have a different genetic attractor mechanism than Poles. The only rational explanation is that the system of factors which lead to depression is less unfavourable for the elderly in these countries than in Poland, and that older Americans are less threatened than Poles (and younger Americans) with being exposed to depression risk factors. In Poland, on the other hand, the risk of experiencing external factors conducive to depression grows with age and the effectiveness of the internal mechanism neutralizing the depression symptoms is weakened and thus the elderly are more prone to depression than the young. The effectiveness of the internal attractor mechanism in the domain satisfaction (satisfaction with financial situation of the family) level is equally low in all age groups.

NOTES: The will–to- live indicator is a standardized value of the sum of standardized values of the desire to live and suicidal tendency scales; the indicator of general well-being is the standardized value of the total standardized values of the sense of happiness, assessment of one's life and of the previous year scales.

Figure 4.4.3. Effectiveness of the "happy" attractor as regards various indicators of psychological well-being or the predictive value (percentage of specifically explained variance) of the starting level of well-being measures for the positive change of four indicators of psychological well-being (the will-to-live, general subjective well-being, depression and satisfaction with family income) between 2003 and 2009 in various age groups (age in 2003) (in per cent)

The last hypothesis predicted that improvement of those living conditions upon which we exert influence (such as the increase of income or finding a partner) determines the level of psychological well-being not more than the well-being influences improvement of these conditions. In other words, happy people do better than unhappy ones because they are happy.

We checked whether the level of well-being diversified among single persons the probability of getting married after 9 and 4 years[35]. In the case of both time intervals, persons with a higher indicator of general psychological

[35] A causal relationship between psychological well-being and further interpersonal relations, including the chance of getting married, was noted by other researchers (Harker, Keltner, 2001; Stutzer, Frey, 2006). Graham, Eggers and Sukhtankar (2004). However, a panel survey in Russia discarding 5-year intervals did not confirm a statistically relevant influence of well-being on the probability of getting married.

well-being had a significantly greater chance of getting married. There was no inverse correlation though so marriage does not increase the level of well-being (Tables 4.4.1 - 4.4.4). The level of well-being in the year 2000 explains 2.6 per cent of differences in the change of civil status between 2000 and 2009 among persons who were single in 2000, and getting married explains the increase in well-being in 1.4 per cent. For the panel sample of 2005-2009, the indicators amount to 0.9 per cent and 0.0 per cent, respectively.

Table 4.4.1. The predictive value of psychological well-being in the year 2000 for getting married in the next nine years

Predicators	Unstandardized coefficients		Standardized coefficients	t	p
	B	Standard deviation	Beta		
Constant	0.224	0.027		8.375	.000
Well-being in 2000	0.026	0.010	0.160	2.503	.013

R2 for well-being = 0,026

Table 4.4.2. The predictive value of getting married after the year 2000 for the change in the level of psychological well-being between 2000 and 2009

Predicators	Unstandardized coefficients		Standardized coefficients	t	p
	B	Standard deviation	Beta		
Constant	-0.264	0.080		-3.292	.001
Well-being in 2000	-0.317	0.029	-0.630	-11.060	.000
Marriage	0.419	0.180	0.132	2.325	.021

R^2 for marriage = 0,014

Table 4.4.3. The predictive value of psychological well-being in the year 2000 for getting married in the next four years

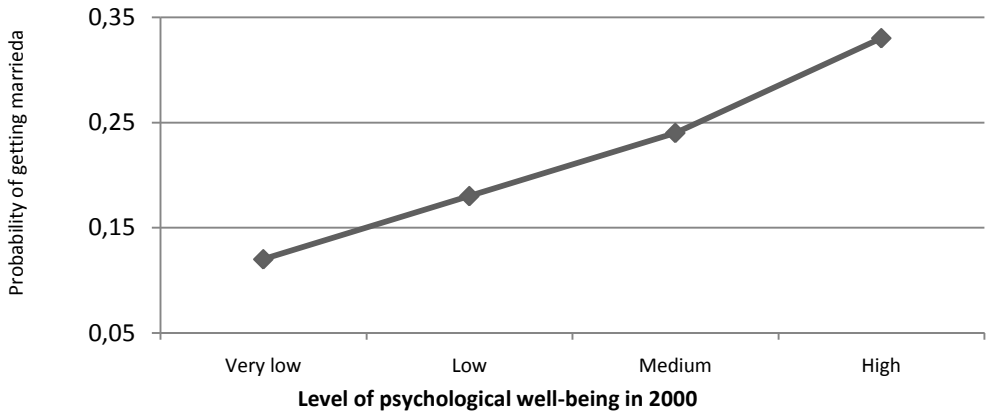
Predicators	Unstandardized coefficients		Standardized coefficients	t	p
	B	Standard deviation	Beta		
Constant	0.097	0.010		9.453	.000
Well-being in 2005	0.011	0.004	0.093	2.705	.007

R2 for well-being = 0,009

Table 4.4.4. The predictive value of getting married after the year 2005 for the change in the level of psychological well-being between 2005 and 2009

Predicators	Unstandardized coefficients		Standardized coefficients	t	p
	B	Standard deviation	Beta		
Constant	0.045	0.034		1.310	0.191
Well-being in 2005	-0.212	0.013	-0.534	-16.268	0.000
Marriage	0.186	0.118	0.052	1.572	0.116

R^2 for marriage = 0,000

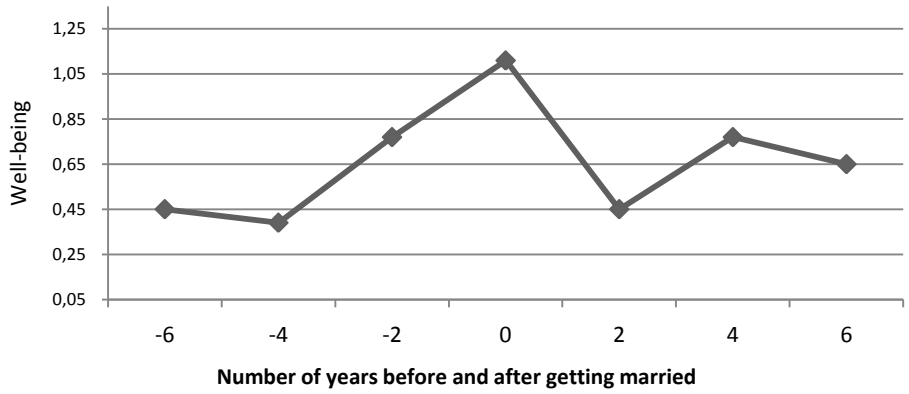


NOTES: Well-being was a sum of standardized values of assessment of the one's entire life, sense of happiness and assessment of the previous year, categorized according to value distribution every 25 per cent; the main effect of well-being $F(3, 231) = 3.168$, $p < 0,000$, $\eta 2 = 0,040$.

Figure 4.4.4. The probability of getting married between 2000 – 2009 among persons who were single in the year 2000, depending on the level of well-being in 2000

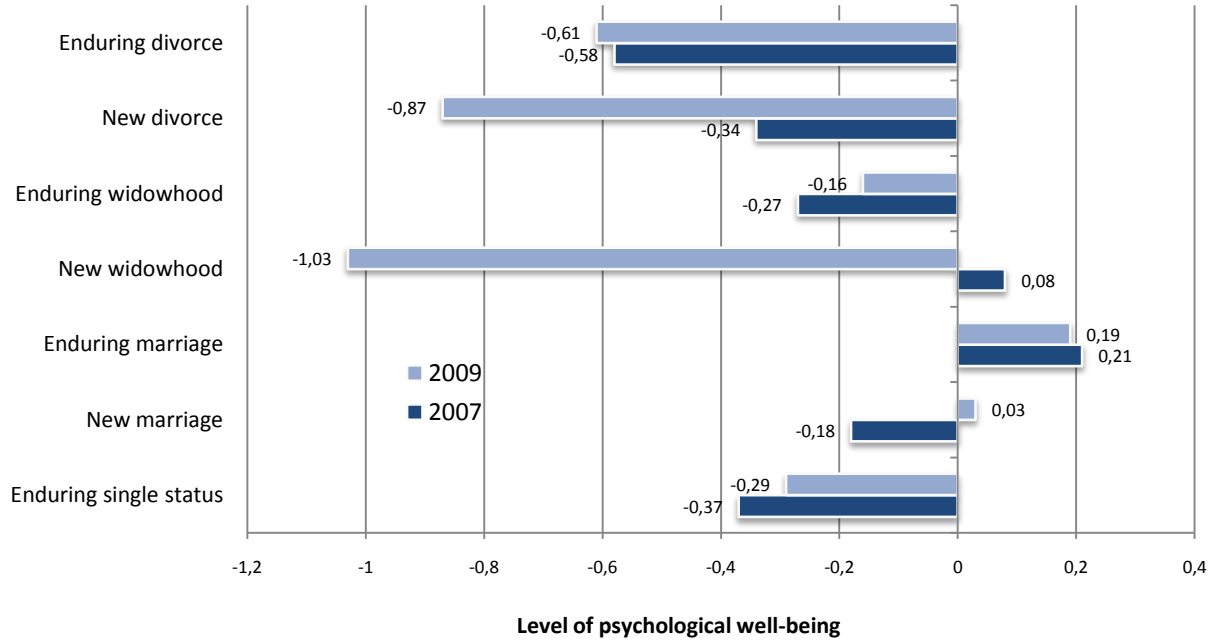
Figure 4.4.4 illustrates the size of the effect of psychological well-being when it comes to the chance for finding a partner. Persons from the group of 25 per cent of the highest level of well-being in the year 2000 had a five time greater chance of getting married in the next seven years in comparison with the group with 25 per cent of respondents with the lowest level of well-being.

The effect of marriage with respect to psychological well-being confirms previous results obtained by other researchers (Easterlin, 2005). The general rule is that psychological well-being improves as the date of marriage approaches and then it falls to a slightly higher level than of the period before getting married (Figure 4.4.5.).



NOTES: Well-being was a sum of standardized values of assessment of the one's entire life, sense of happiness and assessment of the previous year; the figure illustrates the mean after excluding the effects of gender, ages, square age and education.

Figure 4.4.5. The level of well-being before and after getting married



NOTES: Well-being is a standardized value of the sum of standardized values of the assessment of the entire life, sense of happiness, assessment of one's life and of the previous year scales; the figure shows mean values after excluding the effects of gender, age, age square and education; "enduring" means that the respondent represented a given civil status already in the first wave; "new" – that in the first wave represented a different civil status; effects: of time of measurement F(1,7247)=18,138, p<0,000, η^2=0,002, civil status F(6,7247)=98,899, p<0,000, η^2=0,076, interaction of time of measurement and civil status F(6,7247)=22,538, p<0,000, η^2=0,018; difference between enduring single status and new marriage in 2007 amounts to 0,19 and is statistically relevant at the level of 0.03.

Figure 4.4.6. The level of psychological well-being in the panel sample by civil status (its durability or change) in 2007and 2009

Figure 4.4.5. indicates that the level of psychological well-being two years before getting married is significantly higher than two years earlier, and after getting married it decreases rapidly in the next two years. It grows slightly in persons who did not divorce in this time to reach the level close to that one from 2 years before

getting married. This proves that differences in the level of psychological well-being of single and married persons, which have been indicated for decades, does not result as much from the "happiness-bringing" function of marriage as from the fact that happy persons tend to get married more frequently than unhappy ones. Relationship break-up due to death of a partner or a divorce significantly decreases the level of well-being. However, this effect diminishes over time. Widowed and divorced persons gradually regain satisfaction with life and the feeling of happiness enjoyed in the period of having a partner although not entirely (Diener, Seligman, 2004). This is illustrated in Figure 4.4.6. Persons who were widowed or divorced before 2007 were both in 2007 and in 2009 in considerably better psychological condition in comparison with persons who widowed or divorced after 2007.

In the case of income, the relationship is also bidirectional. Both the well-being predicted change in personal income, and the change in personal income predicted well-being. Among persons who were initially more affluent, the dependence of income on well-being was stronger than the reverse dependence of well-being on income. Among less affluent persons, income had a stronger impact on well-being than well-being had on income, which accords with the fourth hypothesis. However, this relationships pattern was observed only among men. Among women, particularly the more affluent ones, the increased income resulted in a greater increase in the level of well-being than the initial level of well-being resulted in an increase in the income level, and this was true both for the two-year and the four-year perspective (Figures 4.4.7–4.4.11). This can be explained by the traditional division of gender roles still strong in Poland. According to this division, women are supposed to seek men who provide for them and their children with the appropriate living conditions and men have a better chance of finding a partner if they are affluent. As a result, men are more responsible than women for the level of income of the family, and thus their income depends on their well-being to a greater extent than in the case of women.

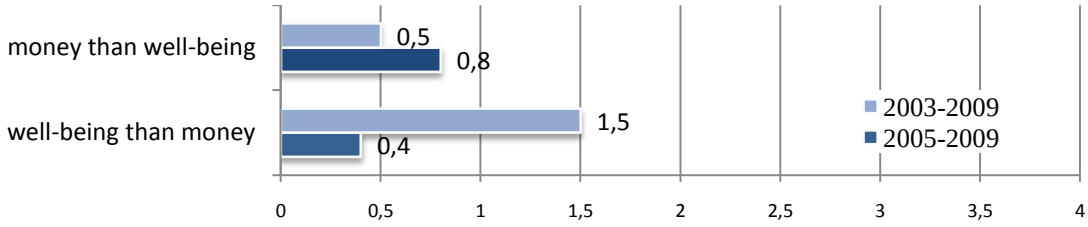


Figure 4.4.7. The percentage of variance of change in general subjective well-being between 2003 and 2007, explained by the change in the level of personal income in the groups of poor and affluent women and men after excluding the effect of the level of psychological well-being in the first measurement in 2005-2009 and 2003-2009(all values are statistically significant)

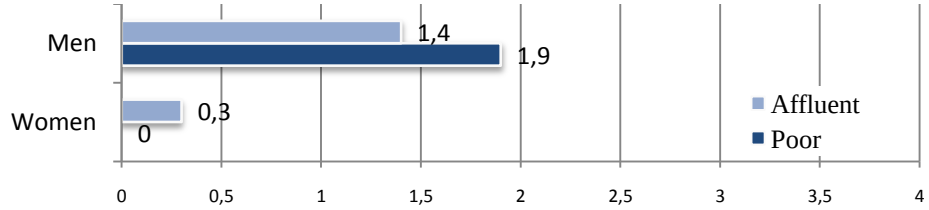


Figure 4.4.8. The percentage of variance of change in general subjective well-being between 2003 and 2007, explained by the change in the level of personal income in the groups of poor and affluent women and men after excluding the effect of the level of psychological well-being in the first measurement (only values for men are statistically significant)

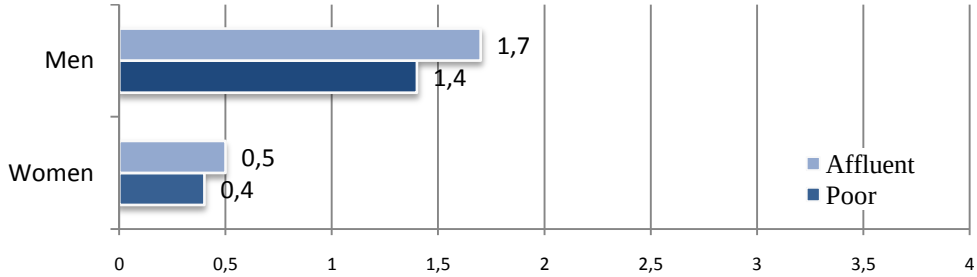


Figure 4.4.9. The percentage of variance of change in the level of personal income between 2005 and 2009 explained by subjective well-being in 2005 in the groups of poor and affluent women and men after excluding the level of income in the first measurement (only values for men are statistically significant)

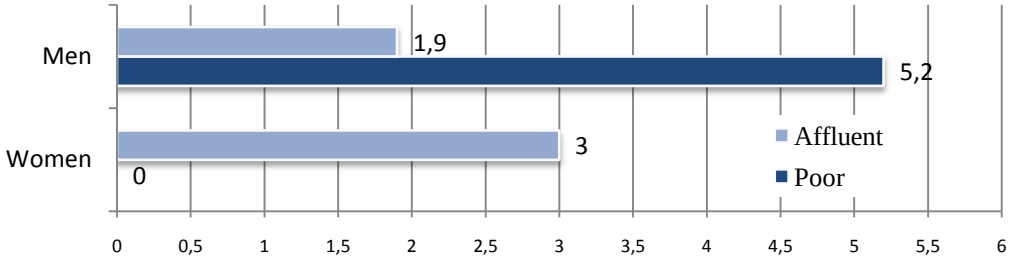


Figure 4.4.10. The percentage of variance of change in general subjective well-being between 2005 and 2007, explained by a change in the level of personal income in the groups of poor and affluent women and men after excluding the effect of the level of psychological well-being in the first measurement (all values are statistically significant except for 0)

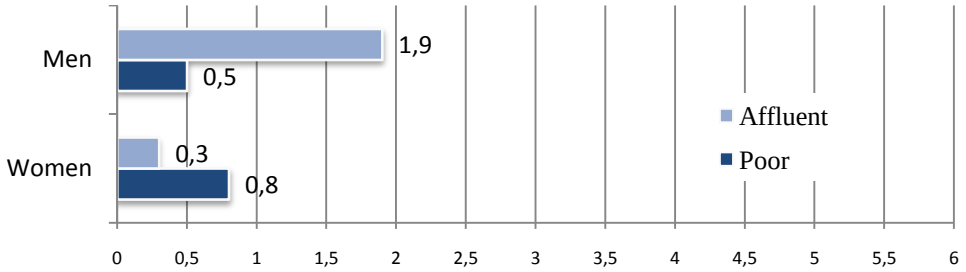


Figure 4.4.11. The percentage of variance of change in the level of personal income between 2003 and 2009, explained by subjective well-being in 2003 in the groups of poor and affluent women and men after excluding the level of income in the first measurement (statistically significant values: 1.9 and 0.8)

The main hypotheses resulting from the onion theory of happiness have thus been confirmed once again. Life events may lower the level of psychological well-being in its deepest layer, the will-to-live, but the internal attractor mechanism neutralizes this effect with time. Time heals all wounds; this common saying is very true. The ageing process weakens our ability to restore the psychological well-being at the more shallow levels, but it does not influence this ability at the deepest will-to-live level. Psychological well-being depends as much on fortune in life as (or even more so) life successes depends on psychological well-being. Those who cope well are happier but even more so the happier cope better.

4.5. Personal finances and trust in financial institutions

4.5.1 Current income and that expected in the next two years

Janusz Czapiński

The average stated personal monthly net income for the last quarter was PLN 1634 in the whole sample, and in the panel sample it was slightly lower at PLN 1607. In relation to the data of 2007, it increased in the entire sample by 25.1 per cent (a real increase of 17.6 per cent) and in the panel sample by 27.5 per cent (a real increase of 24.9 per cent).

The distribution of average income across social groups is varied (Table 4.5.1). Men state a personal income 33.2 per cent higher than women (in 2007 by 32.4 per cent) and persons with a tertiary education report income more than twice as high as persons with an elementary education. Personal income grows with age from 35 to 44 and then it drops systematically. It is subject to linear growth along with the size of the place of residence; rural inhabitants show 55 per cent (in 2005 – 68 per cent) of the income of inhabitants of the largest cities. The highest income was recorded in Mazowieckie, Pomorskie and Śląskie voivodships and the lowest in Podkarpackie (60 per cent of income in Mazowieckie), Świętokrzyskie and Lubelskie.

The incomes of persons with a tertiary education is 2.4 higher than that of persons with an elementary education. When it comes to social and professional status, entrepreneurs are in the lead and at the bottom of the hierarchy of personal income, except for students, are the unemployed and other professionally inactive groups. The incomes of retirees are higher than that of farmers. The incomes of persons the upper quartile households are more than twice as high as the incomes of the households of the lower quartile.

We asked about the expected net personal income in two years. The respondents expect that their income will increase, on average, by 42 per cent (Table 4.5.1). Two years ago these expectations were similar (43 per cent).

Table 4.5.1. Net personal income, current and expected in two years for the whole sample

Social category	Current income		Income expected in 2 years		Percentage increase of expected income
	Average	Standard deviation	Average	Standard deviation	
Total	1625	1447	2314	2292	52
Gender					
Men	1861	1520	2685	2373	57
Women	1397	1335	1955	2150	47
Age					
up to 24	1202	906	2218	1672	118
25-34	1912	1512	2990	2735	75
35-44	2057	1888	3014	2783	59
45-59	1612	1540	2179	2377	44
60-64	1399	1007	1619	1186	23
65 or over	1266	874	1478	994	20
Place of residence					
Cities over 500k	2368	2377	3316	3380	50
Towns 200-500k	1861	1437	2648	2191	56
Towns 100-20k	1754	1156	2428	2045	47
Towns 20-100k	1649	1524	2319	2332	50
Towns under 20k	1506	1138	2118	1656	51
Rural areas	1306	944	1921	1941	54
Voivodship					
Dolnośląskie	1686	1936	2361	2757	50
Kujawsko-pomorskie	1575	1767	2344	3615	52
Lubelskie	1355	1099	1995	1904	55
Lubuskie	1475	1010	2061	1287	53
Łódzkie	1415	973	2094	1639	57
Małopolskie	1616	1177	2285	1771	54
Mazowieckie	1998	2050	2847	2942	54
Opolskie	1539	961	2148	1523	50
Podkarpackie	1209	823	1820	1764	57
Podlaskie	1507	1205	2130	1743	58
Pomorskie	1804	1397	2472	2284	48
Śląskie	1718	1175	2434	2110	47
Świętokrzyskie	1332	907	1879	1561	53
Warmińsko-mazurskie	1424	948	1899	1142	45
Wielkopolskie	1664	1523	2364	2541	49
Zachodnio-pomorskie	1641	1279	2344	1805	52
Education					
Elementary/ lower	1024	628	1344	974	36
Vocational/ grammar	1402	1052	2050	1757	60
Secondary	1637	1256	2372	2302	56
Tertiary	2435	2149	3403	3112	50
Income per capita					
Lower quartile	940	675	1569	1498	72
Middle 50 per cent	1373	863	1927	1430	48
Upper quartile	2443	1883	3375	2822	46
Social and professional status					
Public sector	2114	1731	2852	2345	43
Private sector	1978	1629	2908	2476	56
Individual entrepreneurs	3007	2448	4753	4180	67
Farmers	1249	987	2096	3165	81
Pensioners	1002	743	1291	1033	36
Retirees	1319	823	1531	954	20
Students	941	855	2341	2088	179
The unemployed	851	577	1812	1345	134
Other professionally inactive groups	1028	836	1935	2244	95

* These are the average percentage values of individual differences between the personal income in 2007 and that expected in two years for persons whose personal income in 2005 was higher than PLN 0, if the expected income was also higher than PLN 0. The average total in this table is higher than the percentage difference in the average current and expected income for the entire sample (42 per cent), because the average of individual differences are overestimated due to cases of a very low base of large changes (cf. footnote 7).

The size of expected income is determined mainly by the level of present income and factors which are strongly correlated with income; the higher the present income, the higher is expected income as well. However, the size of the difference between the present and expected income, and particularly the percentage indicator, depends on slightly different social and demographic factors, and with regard to the present financial situation, the correlation is

partially inverted; the lower the present income, the higher the expected percentage increase. The greatest financial improvement like in 2007, is expected by the unemployed, school and university students and in general, the youngest persons (above 100 per cent). The expectations of entrepreneurs and farmers are greater than those of hired employees, especially those working in the public sector. The smallest increase is expected by retirees (by 20 per cent) and pensioners (36 per cent). As for the place of residence class and the regional structure, the expectations are similar. A factor which strongly diversifies the size of the expected income increase is age; the older the respondents, the less extensive are their expectations.

4.5.2. Attitudes towards financial institutions

Tadeusz Szumlicz

In Poland, the attitude towards financial institutions is still quite critical. However, it is worth emphasising that after a systematic increase in trust from 2003 to 2007, it has unfortunately been dramatically shaken by the painful financial crisis.

When we asked the respondents about the institution they deal with most often; i.e. *Do you trust banks?* the answers from *Social Diagnosis 2009* were (see the detailed data in Table 4.5.2) as follows: yes 44 per cent (in wave of 2007 54 per cent; in wave of 2005 46 per cent, in wave of 2003 44 per cent), no 26 per cent (in wave of 2007 16 per cent; in wave of 2005 20 per cent, in wave of 2003 21 per cent). 30 per cent of respondents have no opinions on this matter. Thus, among those who have formulated opinions the degree of trust towards banks has decreased to 63 per cent while in the wave of 2007 it reached 77 per cent, in the wave of 2005 70 per cent and in the wave of 2003 68 per cent.

Table 4.5.2. Trust towards banks (in per cent)

Social and demographic group	Yes		No		No opinion	
	2007	2009	2007	2009	2007	2009
Total	53.9	44.4	15.9	26.1	30.2	29.5
Gender						
Men	54.3	44.2	17.9	29.2	27.8	26.6
Women	53.5	44.7	14.3	23.2	32.2	32.1
Age						
Up to 24	44.8	40.2	10.7	18.6	44.5	41.2
25-34	59.2	50.9	16.4	26.7	24.4	22.4
35-44	55.4	44.7	19.3	29.4	25.3	25.9
45-59	56.5	44.8	17.8	28.0	25.7	27.2
60-64	59.2	45.6	13.6	26.0	27.2	28.4
65 or over	48.4	39.3	14.6	25.6	37.0	35.1
Place of residence						
Cities over 500k	57.6	44.2	16.1	29.3	26.3	26.5
Towns 200-500k	53.6	42.6	16.1	28.6	30.3	28.8
Towns 100-20k	55.2	44.7	18.8	27.2	26.0	28.1
Towns 20-100k	53.6	44.3	16.3	26.8	30.1	28.9
Towns under 20k	54.8	46.3	14.4	24.5	30.8	29.2
Rural areas	52.3	44.4	15.5	24.2	32.2	31.4
Education						
Elementary/ lower	46.6	37.5	15.2	26.1	38.2	36.4
Vocational/ grammar	47.4	40.3	17.3	25.2	35.3	34.5
Secondary	57.1	48.1	15.7	25.5	27.2	26.4
Tertiary	65.4	51.2	14.8	28.2	19.8	20.6
Income per capita						
Lower quartile	45.8	38.9	15.5	25.6	38.7	35.5
Middle 50 per cent	51.3	43.2	17.0	26.1	31.7	30.7
Upper quartile	62.8	51.4	14.2	25.6	23.0	23.0
Social and professional status						
Public sector	62.9	49.5	16.4	27.6	20.7	22.9
Private sector	56.8	49.0	18.9	28.0	24.3	23.0
Individual entrepreneurs	64.8	45.7	17.6	32.7	17.6	21.6
Farmers	60.1	53.2	14.5	23.9	25.4	22.9
Pensioners	48.9	39.6	16.5	26.2	34.6	34.2
Retirees	52.8	42.7	14.7	25.1	32.5	32.2
Students	42.2	36.9	7.8	17.3	50.0	45.8
The unemployed	43.5	37.9	17.8	28.9	38.7	33.2
Other professionally inactive groups	46.1	39.9	16.4	25.5	37.5	34.6

In 2009, the level of trust towards banks substantially differs among particular social and demographic groups. The highest level of trust, 69 per cent, was expressed farmers, which is quite surprising,. In turn, the lowest level of trust was revealed by individual entrepreneurs who probably were the group who had most felt the effects of the

financial crisis. In this group, distrust towards banks is expressed by one third of the total amount of respondents and 42 per cent of those who have opinions in this regard (in 2007 only 21 per cent).

On the other hand, when asked *Do you trust life insurance companies?* the percentage of positive answers in the wave of this year (see detailed data in Table 4.5.3) was merely 7 per cent (in wave of 2007 13 per cent, in wave of 2005 7 per cent, in wave of 2003 6 per cent); no 46 per cent (in wave of 2007 24 per cent, in wave of 2005 28 per cent, in wave of 2003 27 per cent). A large group of respondents, 47 per cent, had no opinion, whereas in the wave of 2007 this amounted to as much as 63 per cent. (in the wave of 2005 it was 65 per cent, and in the wave of 2003 67 per cent). Taking into account those who have formulated opinions, the level of trust towards life investment funds (managing investment funds) was 13 per cent (in wave of 2007 35 per cent in wave of 2005 20 per cent, in wave of 2003 18 per cent) and it is much lower than five years ago except for 2007. This can be explained mostly in terms of the increasing interest in investment funds, which have been attaining very good results.

Table 4.5.3. Trust towards investment funds (in per cent)

Social and demographic group	Yes		No		No opinion	
	2007	2009	2007	2009	2007	2009
Total	12.9	7.0	24.2	46.4	62.9	46.6
Gender						
Men	14.5	7.9	26.8	50.5	58.7	41.6
Women	11.6	6.2	22.1	42.7	66.3	51.1
Age						
Up to 24	15.3	10.6	15.6	34.7	69.1	54.7
25-34	20.4	11.3	25.2	49.5	54.4	39.2
35-44	15.2	7.6	28.5	52.4	56.3	34.0
45-59	10.8	4.9	28.2	52.5	61.0	42.6
60-64	9.0	3.8	23.4	47.5	67.6	48.7
65 or over	4.2	2.9	20.5	36.5	75.3	60.6
Place of residence						
Cities over 500k	19.7	9.1	22.1	52.3	58.2	38.6
Towns 200-500k	16.3	8.3	22.6	53.0	61.1	38.7
Towns 100-20k	15.5	7.8	23.6	48.6	60.9	43.6
Towns 20-100k	15.1	7.1	24.8	47.3	60.1	45.6
Towns under 20k	11.1	6.5	25.5	47.0	63.4	46.5
Rural areas	8.7	5.9	24.8	41.3	66.5	52.8
Education						
Elementary/ lower	4.2	3.3	22.0	33.5	73.8	63.2
Vocational/ grammar	8.5	5.5	25.4	43.4	66.1	51.1
Secondary	14.1	8.3	25.1	49.6	60.8	42.1
Tertiary	26.0	10.6	22.9	56.6	51.1	32.8
Income per capita						
Lower quartile	7.5	5.9	24.6	41.6	67.9	52.5
Middle 50 per cent	10.4	6.3	24.3	43.9	65.3	49.8
Upper quartile	19.1	8.9	24.2	52.6	56.7	38.5
Social and professional status						
Public sector	20.8	7.6	27.2	56.5	52.0	35.9
Private sector	16.6	10.1	28.1	51.9	55.3	38.0
Individual entrepreneurs	24.2	9.9	26.2	59.8	49.6	30.3
Farmers	5.0	4.9	29.4	46.5	65.6	48.6
Pensioners	6.9	3.9	22.8	40.5	70.3	55.6
Retirees	5.6	3.4	22.5	41.1	71.9	55.5
Students	16.1	10.6	10.8	31.1	73.1	58.3
The unemployed	8.8	5.6	24.0	44.0	67.2	50.4
Other professionally inactive groups	11.3	6.5	22.9	43.5	65.8	50.0

When asked about trust towards a very popular institution like the open pension funds (OFE), which cover the entire working population and which since 1999 has been obliged to transfer a part of their social insurance premium to a selected fund, the answers are not much more positive than in the previous years. Trust towards the open pension funds, and as a result the funds managing them, was declared by merely 10 per cent of all respondents (in 2007 16 per cent, and in 2005 and 2003, 16 and 13 per cent respectively) (Table 4.5.4). A lack of trust was expressed in 2009 by as many as 46 per cent of respondents (in the previous years 29-30 per cent). At present, more than 44 per cent of respondents have no opinion concerning the OFE (in the previous years 55 per cent). Among those who have formulated opinions, the level of trust towards the open pension funds now amounts to less than 18 per cent (in the wave of 2007 35 per cent, and in the previous years 30 per cent). Worth noting is the particularly worrying, although difficult to explain fully, lack of trust towards the OFE due to a change in the pension system, which at the moment of launching the system were the most significant argument for social support of the radical reform of the retirement system.

In 2009, the level of trust in banks substantially differs among particular social and demographic groups. The highest level of trust (25 per cent) of respondents who have opinions in this regard was expressed by students,

though 74 per cent did not formulate an opinion in this respect. Again, the lowest level of trust was revealed by individual entrepreneurs. 61 per cent of all respondents expressed a lack of trust towards open pension funds and 86 per cent of those who have formulated opinion in this regard (in 2007 52 per cent), which seems astounding.

Table 4.5.4. Trust towards open pension funds (in per cent)

Social and demographic group	Yes		No		No opinion	
	2007	2009	2007	2009	2007	2009
Total	15.5	10.0	29.0	46.0	55.5	44.0
Gender						
Men	16.1	10.3	31.2	49.6	52.7	40.1
Women	14.9	9.7	27.2	42.8	57.9	47.5
Age						
Up to 24	14.3	10.7	18.7	32.6	67.0	56.7
25-34	21.2	13.7	31.1	49.2	47.7	37.1
35-44	17.9	10.3	34.5	53.5	47.6	36.2
45-59	15.2	8.5	33.7	52.8	51.1	38.7
60-64	10.2	8.8	28.7	45.1	61.1	46.1
65 or over	9.3	7.3	23.2	36.0	67.5	56.7
Place of residence						
Cities over 500k	18.8	9.3	31.0	53.3	50.2	37.4
Cities 200-500k	16.1	11.2	31.5	51.8	52.4	37.0
Towns 100-20k	17.8	11.3	32.5	48.4	49.7	40.3
Towns 20-100k	16.5	8.6	30.0	49.2	53.5	42.2
Towns under 20k	14.5	9.6	29.5	47.0	56.0	43.4
Rural areas	13.5	10.4	26.2	39.4	60.3	50.2
Education						
Elementary/ lower	11.3	8.9	23.5	32.2	65.2	58.9
Vocational/ grammar	13.9	9.3	26.9	41.4	59.2	49.3
Secondary	15.7	9.9	30.4	50.6	53.9	39.5
Tertiary	21.3	12.0	35.2	57.6	43.5	30.4
Income per capita						
Lower quartile	13.0	9.6	25.2	39.1	61.8	51.3
Middle 50 per cent	13.6	9.9	28.8	43.7	57.6	46.4
Upper quartile	19.0	10.6	31.1	53.2	49.9	36.2
Social and professional status						
Public sector	21.5	10.8	37.5	57.4	41.0	31.8
Private sector	20.2	12.6	33.2	52.3	46.6	35.1
Individual entrepreneurs	21.1	9.7	35.6	61.4	43.3	28.9
Farmers	11.2	8.7	28.4	43.8	60.4	47.5
Pensioners	10.0	8.9	25.3	38.4	64.7	52.7
Retirees	10.4	8.3	25.8	40.2	63.8	51.5
Students	12.1	9.2	14.0	29.9	73.9	60.9
The unemployed	13.2	8.0	26.6	43.9	60.2	48.1
Other professionally inactive groups	13.8	9.7	28.2	43.1	58.0	47.2

Finally, there was the question concerning the Social Insurance Office (ZUS), asked for the second time in the *Social Diagnosis.* When asked *Do you trust ZUS?* the answers turned out to be interesting in comparison with those pertaining to strictly financial institutions. At present, trust towards ZUS is expressed by (see detailed data in Table 4.5.5) 22 per cent of all respondents, while a lack of trust is expressed by almost 46 per cent (in 2007 39 per cent). However, even in the case of such a well-known institution, 33 per cent of respondents did not formulate an opinion (in 2007 33 per cent). Among those who formulated opinions, the level of trust towards ZUS is now less than 32 per cent (in 2007 39 per cent). Thus, the level of trust towards ZUS is quite high on average, although lower than trust towards banks (two times) and life insurance companies, it is higher than trust towards the other financial institutions mentioned above.

In 2009 the level of trust in banks substantially differs among particular social and demographic groups. The highest level of trust is expressed by respondents of 65 years of age or more (60 per cent), retirees (58 per cent) and pensioners (49 per cent) that is, direct beneficiaries of the Social Insurance Fund (FUS). It is worth noting that the level of trust among respondents at the age of 65 and more and retirees remained at the same level as 2007, whereas it fell in the group of retirees (in 2007 - 58 per cent) Taking into account changes in benefits from FUS (stability of pension benefits and stricter conditions of granting disability pensions), this fact is fully understandable. The lowest trust towards ZUS is expressed by private entrepreneurs, the group of main contributors to the social insurance system who pay pension, disability pension and accident premiums, finance sickness benefits and fulfil obligations of insurance premium payers. The lack of trust towards open pension funds was expressed by 64 per cent of the total amount of respondents and 83 per cent of those who have formulated an opinion in this regard.

Table 4.5.5. Trust towards the Social Insurance Office (ZUS) (in per cent)

Social and demographic group	Yes		No		No opinion	
	2007	2009	2007	2009	2007	2009
Total	24.9	21.7	39.4	45.8	35.7	32.5
Gender						
Men	23.3	19.5	43.0	50.7	33.7	29.8
Women	26.2	23.8	36.5	41.2	37.3	35.0
Age						
Up to 24	12.9	9.9	31.0	40.9	56.1	49.2
25-34	17.6	13.7	46.7	55.4	35.7	30.9
35-44	18.6	13.7	50.7	55.4	30.7	30.9
45-59	27.5	22.3	42.4	47.8	30.1	29.9
60-64	39.9	34.3	29.9	36.8	30.2	28.9
65 or over	42.4	44.1	25.5	29.1	32.1	26.8
Place of residence						
Cities over 500k	21.0	16.3	50.0	55.8	29.0	27.9
Towns 200-500k	18.8	19.2	48.5	53.7	32.7	27.1
Towns 100-20k	23.0	21.3	43.7	48.0	33.3	30.7
Towns 20-100k	25.8	22.1	40.4	46.8	33.8	31.1
Towns under 20k	25.4	23.6	40.4	46.5	34.2	29.9
Rural areas	27.8	23.5	31.5	38.8	40.7	37.7
Education						
Elementary/ lower	35.4	33.8	26.1	32.3	38.5	33.9
Vocational/ grammar	24.9	20.0	34.9	42.6	40.2	37.4
Secondary	22.3	19.3	42.2	49.1	35.5	31.6
Tertiary	19.5	18.3	54.5	56.6	26.0	25.1
Income per capita						
Lower quartile	22.4	17.4	32.2	41.8	45.4	40.8
Middle 50 per cent	25.4	23.0	38.5	43.8	36.1	33.2
Upper quartile	26.5	24.0	44.3	50.4	29.2	25.6
Social and professional status						
Public sector	21.4	15.4	51.9	56.5	26.7	28.1
Private sector	19.4	14.5	49.1	56.7	31.5	28.8
Individual entrepreneurs	16.2	13.1	58.9	63.7	24.9	23.2
Farmers	21.4	20.0	30.6	40.4	48.0	39.6
Pensioners	38.2	33.9	29.6	35.7	32.2	30.4
Retirees	40.9	42.2	27.9	30.6	31.2	27.2
Students	9.3	7.2	27.3	38.3	63.4	54.5
The unemployed	20.0	16.5	38.7	46.3	41.3	37.2
Other professionally inactive groups	19.7	15.6	36.1	45.2	44.2	39.2

As can be seen, the level of social trust towards financial institutions including the ones which we use frequently, turns out to be quite low. The highest level of trust is expressed towards banks (63 per cent of positive answers among respondents who have opinion in this regard), however it has recently decreased by 14 percentage points.

Generally speaking, the economic crisis brought about a dramatic decrease in the level of trust towards financial institutions, in particular towards those which offer savings products. Any shift of this attitude will definitely take time. It should be noted, however, that the level of trust towards financial institutions is varied when we take into account the specific characteristics of respondents. The usually higher trust than average is typical for middle-aged persons (25 to 44 years of age), inhabitants of cities with a population above 100 thousand, those having at least a secondary education, those who are most affluent (only those in the upper income quartile), private entrepreneurs and persons working in the public sector. This will be an important factor for the gradual restoration of trust towards financial institutions the absence of which would substantially hinder the functioning of the economy and social development.

4.5.3. The return rate to investment from tertiary education

Janusz Czapiński

One of the most, if not the most, important factors differentiating personal incomes is education. The educational boom which has continued since the first years of the systemic transformation in Poland proves that its citizens were immediately aware of this relationship. The above-mentioned relationship is worth a closer analysis in order to estimate to what extent tertiary education, to which 70 per cent of parents of students at the age of 16 aspire, (cf. Chapter 3.5.3) is a profitable investment. A profitability index of any investment is its return rate. In the case of investment in education, it is relatively simple to calculate. It is the difference between incomes of a person graduating a given level of education reduced by its cost (tuition and incomes lost during the period of study) and their peer of the same gender whose education is lower by one level, taking into account the entire period of professional activity, dividing the result of the balance by the level of income of a better educated person and

multiplying the quotient by 100 (to express it in net income advantage of the better educated over the lower educated). We conducted the calculation for persons with a Ph.D. degree whose comparison partners were graduates with a Master's Degree as well as of tertiary education schools whose comparison partners were persons with a Bachelor's Degree. We divided the group with a tertiary education degree into graduates with a Master's Degree and a Bachelor's Degree[36].

In Poland the return to investment in education has for years been higher than in other countries on the same level of development (Psacharopoulos, Patrinos, 2004). A Bachelor diploma gives almost three times lower return on investment than a Master's diploma, whereas the return to investment in a Ph.D. degree is by 19 per cent higher than the Master's diploma. (Figure 4.5.1.). Women gain slightly less from a tertiary education than men; a little more in the Bachelor studies than in the case of Master studies (Figure 4.5.2.).

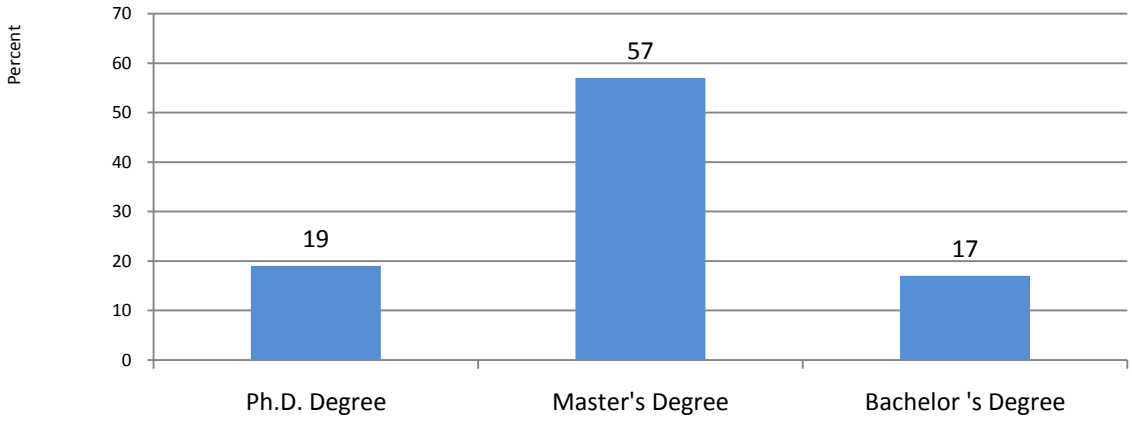


Figure 4.5.1. The return to investment in education at the level of Doctoral, Master and Bachelor studies.

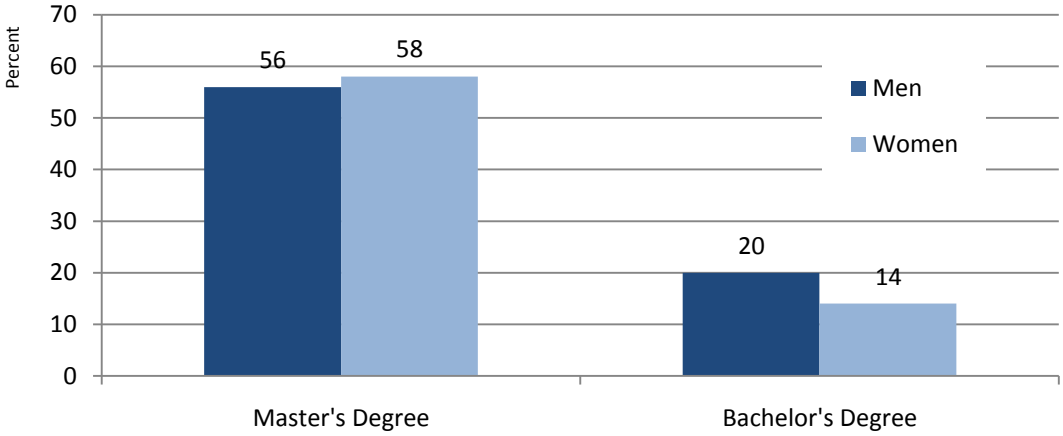


Figure 4.5.2. The return to investment in education at the level of Doctoral, Master and Bachelor studies by gender.

Which employer currently in Poland appreciates the education level of employees the most? Hired employees with a tertiary education degree in the public sector gain less profits than their counterparts from the private sector. However the highest rate of return to education on the level of Doctoral, Master and Bachelor studies are gained by entrepreneurs, in particular women (Figure 4.5.3).

[36] We assumed that all the candidates for doctor's degree and students abstain from employment and thus lose incomes which their peers earn with a tertiary and secondary education degree respectively. We also presupposed that all the candidates for doctor's degree, graduates with a Master's degree and graduates with a Bachelor's degree pay a tuition of PLN 7.000 PLN 30.000 and PLN 15.000 each.

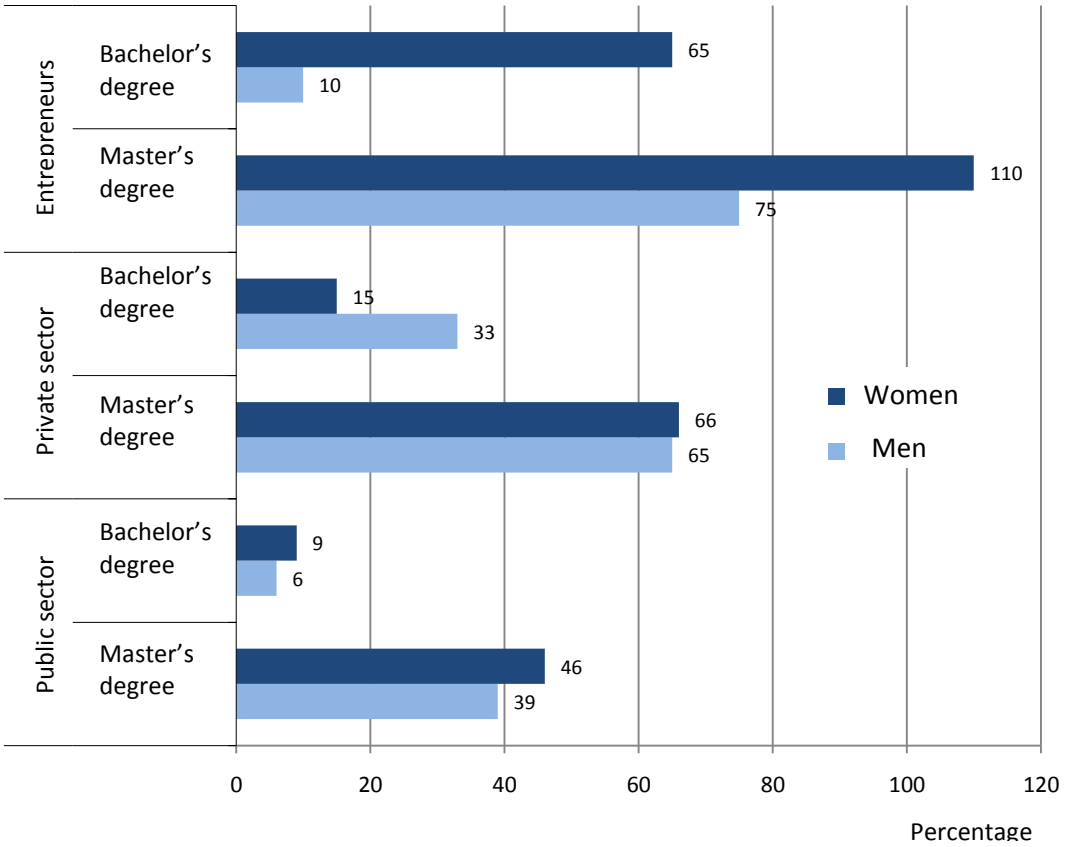
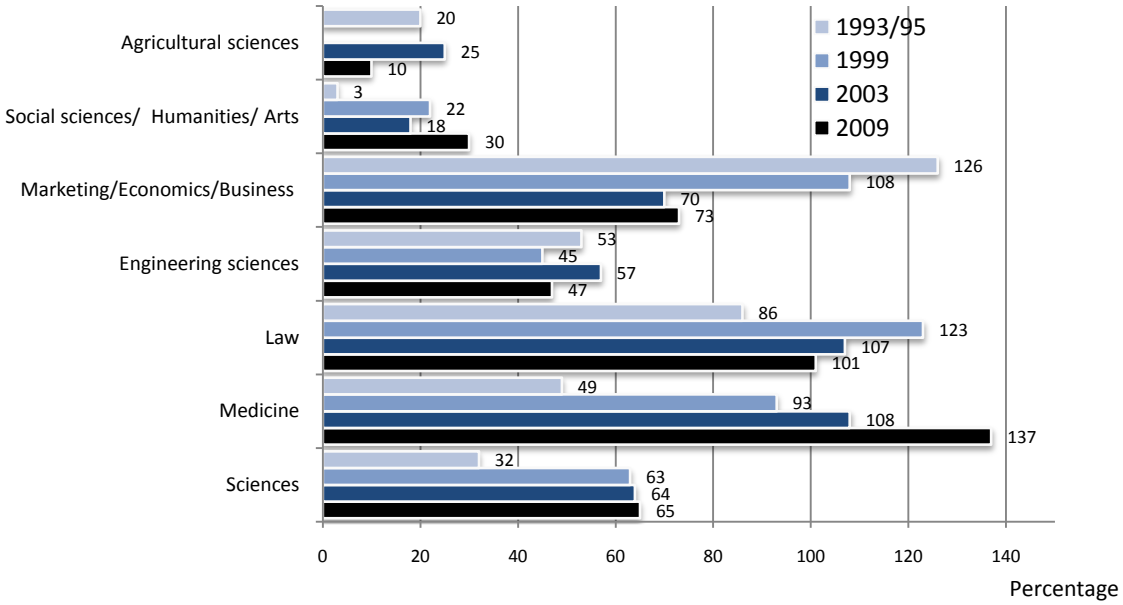


Figure 4.5.3. The return to education at the level of Doctoral, Master and Bachelor studies among men and women by sector and type of employment

Not all areas of study give the same rate of return. The most profitable is medicine and the least is agricultural science. In recent years, substantial changes in the return to investment from different fields of study has been observed (Figure 4.5.4). Since 1993/95 the return on investment from medical studies has been increasing systematically (a growth from 49 to 137 per cent). Investment in studies of law resulted in gradually higher rate of return by the end of the last centuries, then the financial profitability of this faculty started to decrease. Presently it has been approaching the value from 1993/95. Studies in economics, marketing, management and finance were giving the highest return at the beginning of the systemic transformation due to a dramatic lack of specialists in these fields. However, with the market saturation the return to these studies diminished rapidly. In the last few years it has stayed on the very good and steady level of 70 per cent. The return on investment from science studies (including computer science) has remained unchanged since 1999. Despite complaints about the lack of engineers and the introduction of government supplement for studies at engineering faculties, the return has not changed since the beginning of the present century. The return to investment from studying agricultural, artistic, human and social sciences is low and is subject to slight changes. It is important that despite thousands of new tertiary education graduates and the fact that the rate of Poles with a tertiary education degree has more than doubled, the average return to investment from studies, especially Master studies, has still been very high. This explains why the educational boom in Poland is not declining.



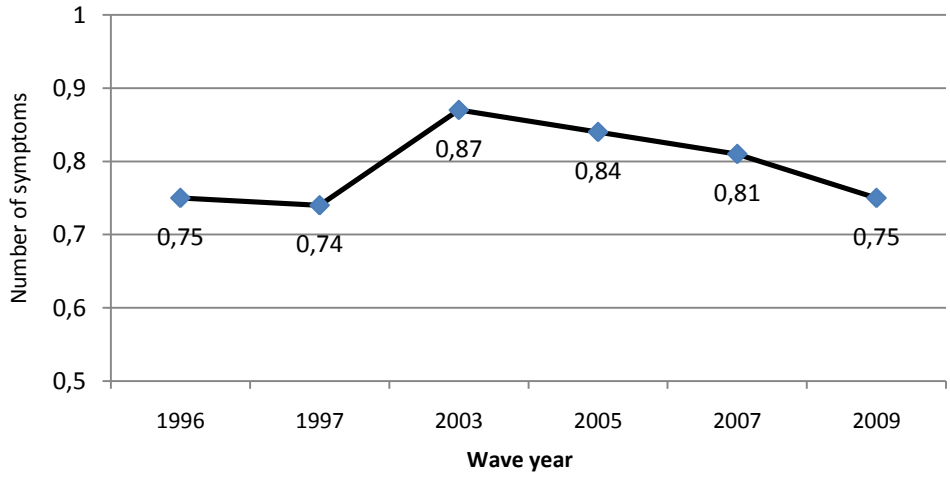
NOTES: Source of data: years 1993/95 and 1997 Czapiński J. (1998). *(The quality of life of Poles during the transformational change) Jakość życia Polaków w czasie zmiany społecznej.* Warsaw: Institute for Social Studies, Warsaw University, for years 2003 and 2009, *Social Diagnosis*; in 1997 the number of respondents graduated from the faculties of agricultural studies was too low to calculate the return on investment for this field of studies.

Figure 4.5.4. The return to investment in tertiary education by fields of studies in years 1993/95, 1997, 2003 and 2009

4.6. Health; psychosomatic symptoms

Janusz Czapiński

In 2003, a scale of distress measuring 15 psychosomatic symptoms was introduced in the individual questionnaire of the Diagnosis. This scale had been previously used for research purposes in Poland. The comparison of the results of the *Diagnosis* from 2003 to 2009 with the previous research proves a statistically significant increase in the frequency of symptoms after which a decrease to the level of the 1990s was observed (Figure 4.6.1.). Symptoms which have been observed less frequently include splitting headaches, chest and heart pains and a feeling of tiredness not connected with work (see Table 4.6.1). We have not observed a more frequent occurrence of any of the 15 symptoms since 2003.



Source of data: years 1991-1997 — Czapiński, 1998; years 2000-2009 — *Social Diagnosis.*

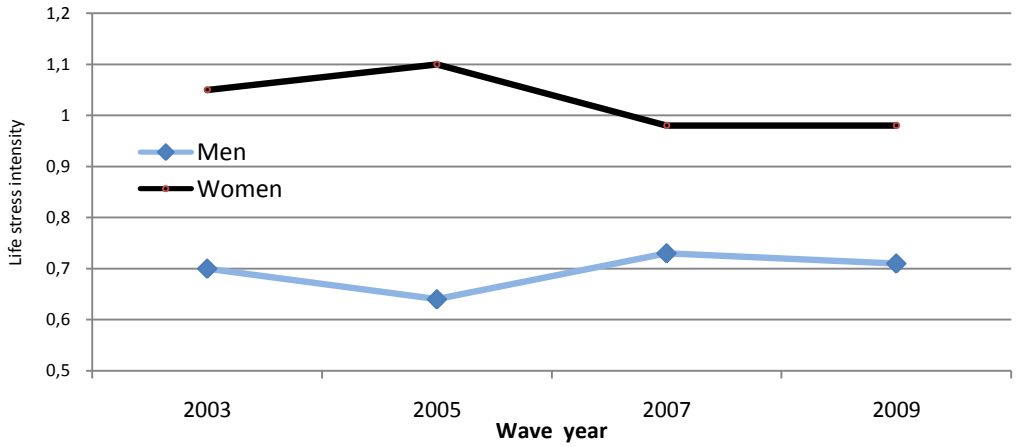
Figure 4.6.1. The average number of symptoms of respondents aged 18 or over in years 1996-2009

Table 4.6.1 The percentage of respondents aged 18 or over experiencing a different number of psychosomatic symptoms for at least 15 days a month displayed in six studies

Symptoms	1996 N=2193	1997 N=1943	2003 N=8977	2005 N=8765	2007 N=12568	2009 N=25404
Splitting headaches	8.1	9.3	8.1	7.9	7.2	6.5
Stomach-ache and bloating	4.9	4.5	5.9	6.3	6.0	5.5
Shoulder, neck, or muscle pain or tension	8.3	9.8	9.9	10.1	9.7	9.5
Pain in the chest or heart	7.1	7.1	6.8	5.7	5.5	5.2
Dryness in the mouth or the throat	5.0	4.0	5.3	5.3	5.3	5.0
Fits of sweating	5.6	6.0	5.9	5.8	5.5	5.0
Breathing difficulties	6.0	5.8	5.5	4.9	4.5	4.2
Pain in the whole body	9.1	8.9	9.2	8.7	8.0	8.0
Sudden palpitations	5.3	4.9	5.2	4.6	4.5	4.0
Shivers or quivers	0.8	1.0	1.2	1.2	1.3	1.2
A feeling of pressure on the bladder and more frequent urinating	4.0	3.3	6.4	6.1	5.5	5.4
A feeling of tiredness not connected with work	7.9	7.2	8.8	8.1	8.1	7.4
Constipation	2.7	2.4	4.4	4.1	3.7	3.5
Nose bleeding	0.3	0.4	0.9	0.9	1.0	0.8
Sudden blood pressure changes	nd	nd	7.8	7.2	6.9	6.2

Source of data: years 1991-1997 — Czapiński, 1998; years 2000-2009 — *Social Diagnosis.*

The main effect of gender is a very significant factor in this respect, which corresponds to a lower evaluation of health conditions continuously expressed by women in all the wave-panel studies. However, in the past four years some important changes were observed in this field. A disproportion between gender has diminished substantially, although still women more frequently than men experience most psychosomatic symptoms. (Figure 4.6.2).



NOTES: main effect of gender F(1, 2377)=40,872, p<0,000; η^2= 0,017, main effect of wave year F(3, 2377) < 1, eta square=0,000, ns, interaction effect wave year and gender F(3,2377) < 3, $\eta 2$ = 0,001, ns.

Figure 4.6.2. The average number of psychosomatic symptoms in men and women in the panel sample from 2003 to 2009

4.7. Life stress

Janusz Czapiński

Several categories of life stress have been identified: marital stress (Annex, individual questionnaire, quest. 5-7), parental stress related to problems with children (quest. 8-12), financial stress (quest. 14-15, 80), stress related to work (quest. 16-18, 74-76, 78), environmental stress connected with housing conditions, neighbours and the neighbourhood (quest. 19-21, 90-92), stress concerning health (quest. 22-23, 70-72), clerks‘ stress (Kafka‘s) (quest. 25-27), legal stress related to contact with police and the justice system (quest. 84-88) stress of victims (quest. 81-83, 89).

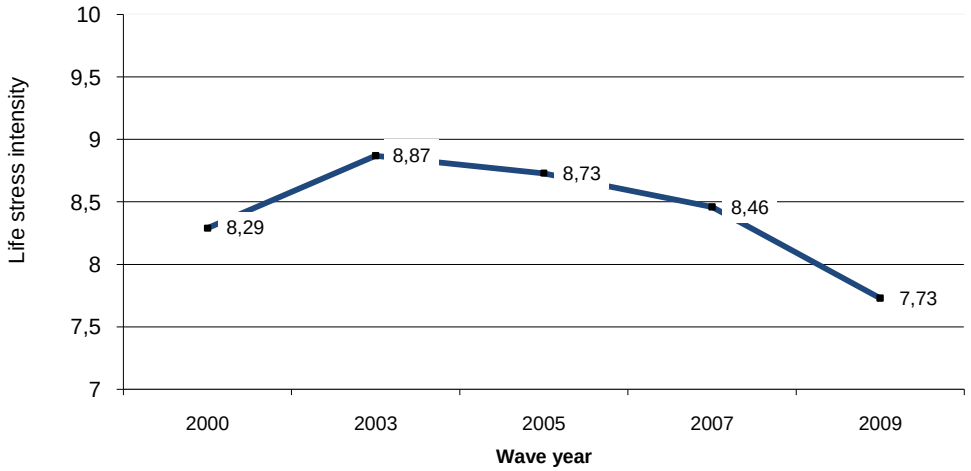


Figure 4.7.1. The average life stress intensity in all samples in years 2000, 2003, 2005 and 2007 and 2009

The intensity of life stress is treated in the literature on the quality of life as the most important, or at least the most direct factor determining well-being. In our study we distinguished 10 subject-specific categories of life stress each of which (except for the case of the death of a close person) included several types of life events or experiences, and overall stress; i.e the combined intensity of all 10 specific categories of stress. Not every specific stress is universal, e.g. that concerning the whole population. Some (e.g. marital, parental or work stress) are specific for chosen groups of people (married people, those with children, and working).

The overall level of stress turned out substantially lower in 2009 than two years earlier and the lowest since 2000. As it has been shown by data from the panel samples, this decrease was statistically significant (Table 4.7.1).

Table 4.7.1 Comparison of intensity of overall life stressa from four waves in 2000, 2003, 2005, 2007 and 2009 on the panel sample (of the same respondents in the compared years)

Variable	Wave	Mean	Standard deviation	Mean difference	Test t	Freedom degrees	Significance	Correlation
Life stress intensity	2000	8.77	4.96	0.023	0.158	1739	0.874	0,281*
	2009	8.75	5.38					
	2003	9.38	5.66	0.758	7.262	3026	0.000	0,469*
	2009	8.62	5.49					
	2005	9.03	5.86	0.603	6.298	3560	0.000	0,497*
	2009	8.43	5.49					
	2007	8.61	5.80	0.421	7.134	7539	0.000	0,588*
	2009	8.19	5.48					

* p < 0,000

4.8. Strategies of coping with problems and difficulties

Janusz Czapiński

No one is an entirely passive victim of life stress. One is not only the author of much or part of the trouble, but one can also protect oneself from its emotional, social and material consequences. There are many ways of protecting oneself against stress and its consequences. The classification of these ways also varies. It is not only related to the theory of coping, but also to a large extent to the type of stress.

One of the most popular concepts in psychological literature is the theory of coping proposed by Lazarus and Folkman (1984),which differentiates problem-focused and emotion-focused strategies. The first is aimed at real problem solving, changing situations for the better. The second aims at changing the emotional patterns associated with stress. Obviously, within each of these general strategies are various more specific ways of reacting.

In the scale used, two ways of task-oriented coping with difficult life situations were singled out: *I turn to others for help and advice and I get my act together and take action.* The emotional strategy is more varied and can be divided into 5 various ways: *I hit the bottle; I console myself with the thought that it could have been worse or that other people are in a much worse situation; I take sedatives; I pray to God for help; I get busy with other things which take my attention away from the problem and improve my mood.* Respondents could also answer that in the face of problems one does nothing and gives up, which can also be treated as a specific way of coping with difficulties; helplessness can be an escape from responsibility and the effort which solving those problems requires, although it can also be a result of the failure of all other options.

In contrast to the predominating passive strategy of coping with a difficult financial situation which households find themselves in limiting needs, the overwhelming majority of respondents said that over many years they choose an active, problem-focused strategy of coping with life stress. Getting one‘s act together and taking action,

combined with a strategy of turning to others for help and information, are chosen by nearly half the population. There are also frequent attempts as Table 4.8.1 shows of a psychological adaptation to difficulties that come about, consoling oneself with the thought that it could be worse or resorting to supernatural forces in trying to change the situation (praying to God). The need to escape into alcohol as a panacea for various problems appears rarely, considering the estimated amount of alcohol consumed in Poland and the number of people addicted to alcohol. Escape into alcoholism when confronted with problems is stated by one per cent fewer respondents who admit to alcohol abuse (see Chapter 4.10.3.2).

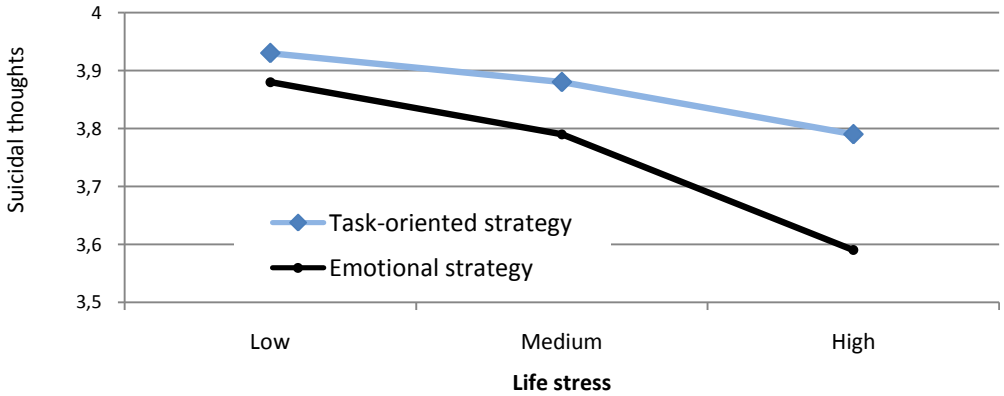
Comparing the results for the entire samples, we can see that since 2005 the frequency of the application of the task-oriented strategy has been increasing and in the last measurement, in comparison with year 2007, the frequency of the application of the emotional strategy, especially prayer, has decreased (Table 4.8.1).

Table 4.8.1. The percentage of respondents indicating particular ways of reacting to trouble or difficult life situations between 1995-1997 and 2000-2009

Strategies of coping with stress	1995. N=3020	1996 N=2333	1997 N=2094	2000 N=6403	2003 N=9188	2005 N=8593	2007 N=12672	2009 N=24171
I turn to others for advice and help	35.6	36.2	36.7	38.2	37.6	39.8	41.3	43.7
I get my act together and I become active	48.4	49.1	55.1	49.4	47.2	50.6	52.0	54.6
I drink more alcohol	4.3	3.9	3.9	4.0	3.5	4.0	3.4	4.4
I try to console myself that it could have been worse or that others face even greater difficulties	39.9	40.8	39.1	39.3	41.9	40.4	38.2	35.1
I give up and don‘t know what to do	3.1	3.0	2.6	2.9	3.4	3.4	2.9	3.5
I take sedatives	5.5	5.5	4.8	4.1	4.4	4.8	4.2	4.4
I pray	27.4	30.9	30.4	31.8	32.5	33.7	30.1	28.1
I do other things which divert my attention and improve my mood	20.6	24.1	19.9	17.9	21.8	24.8	24.0	24.2

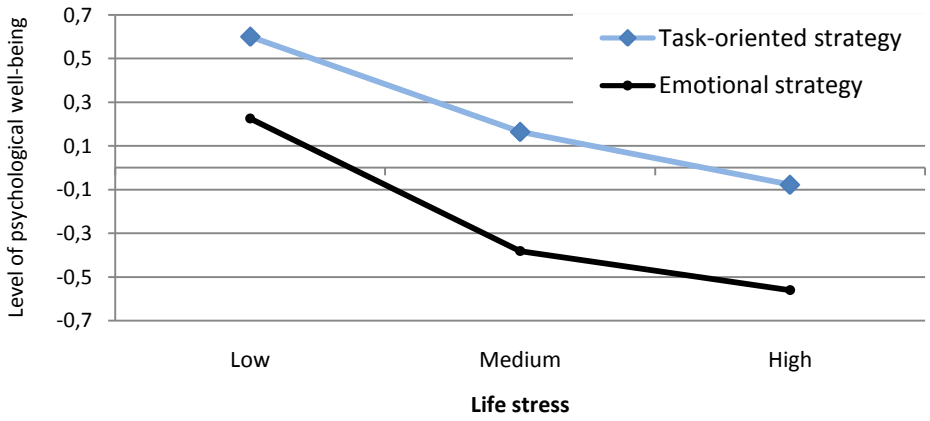
Source of data: years 1991-1997 — Czapiński, 1998; years 2000-2009 — *Social Diagnosis.*

The question arises which of these coping strategies is more effective in the face of a life crisis; i.e. it allows a sound mental condition to be maintained and stops its deterioration when trouble accumulates. To answer this question we checked whether particular strategies of coping with stress weaken (and to what degree) the impact of stress on well-being indicators. It appeared that coping strategy had a significant effect on well-being independently of life stress intensity; people maintaining an active task-oriented strategy obtain better results in terms of well-being than people using emotional strategies or giving up when confronted with difficulties, regardless of life stress intensity. However, the advantage of the task-oriented strategy also grows along with the intensity of life stress in the case of most indicators of well-being. Figures 4.8.1 and 4.8.2 illustrates this effect of interaction for suicidal tendencies and for general well-being respectively.



NOTES: the scale of suicidal tendencies is directed inversely: the lower the value, the higher the frequency of suicidal thoughts; the main effects of stress intensity; the main effects of stress intensity $F(2, 23167)=280.80$, $\eta 2 = 0{,}024$, $p < 0{,}000$, the main effect of the coping strategy $F(1, 23167) = 268.15$, $\eta 2 = 0{,}011$, $p < 0.000$, effect of interaction between stress and coping strategy $F(2.3167) = 34.22$, $\eta 2 = 0{,}003$, $p < 0{,}00$.

Figure 4.8.1. The lack of suicidal thoughts in the conditions of intense life stress among respondents choosing problem-focused strategy



NOTES: the indicator of psychological well-being is a standardized sum of standardized values of satisfaction with life, sense of happiness, evaluation of the past year and symptoms of depression; the main effects of stress intensity F(2, 22614)=961,44, η^2=0,078, p<0,000, the main effect of the coping strategy F(1, 22614)=161,15, η^2=0,007, p<0.000, effect of interaction between stress and coping strategy F(2, 22614)=16,02, η^2 =0,001, p < 0,000.

Figure 4.8.2. The level of psychological well-being in the conditions of different intensity of life stress among respondents choosing problem-focused strategy

4.9. Social support

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Since the beginning of the transformation period, the stated sense of support from the immediate social environment has not changed and stands at above 90 per cent (*I feel loved and trusted*)! Only 21 per cent of respondents said they feel lonely against their will (see Table 4.9.1). Social support is an important category in the psychology of stress and coping. The majority of theoreticians are inclined to support what is known as the "buffer" hypothesis which assumes that social support acts as a buffer by weakening and preventing the negative effects of stress (friends are particularly important at bad times). The hypothesis of the "main effect" is also popular. It suggests that support always affects well-being positively and not only in conditions of intensified life stress. Although these hypotheses are not mutually exclusive, we tested the extent to which each adequately describes the Poles; whether respondents, who feel loved and trusted, do not feel lonely and have more friends cope with life stress better, or whether, regardless of life events, people enjoying greater support are in a better mental condition.

It appears that social support measured by the number of friends generally influences various aspects of psychological well-being positively and it alleviates the influence of life stress. Suicidal tendencies increase and the sense of happiness decreases along with the level of life stress more among lonely persons than those who have many friends (Figure 4.9.1) similar to psychological depression, which is intensified by life stress in persons who have no friends. The number of friends is the third most significant factor explaining psychological well-being.

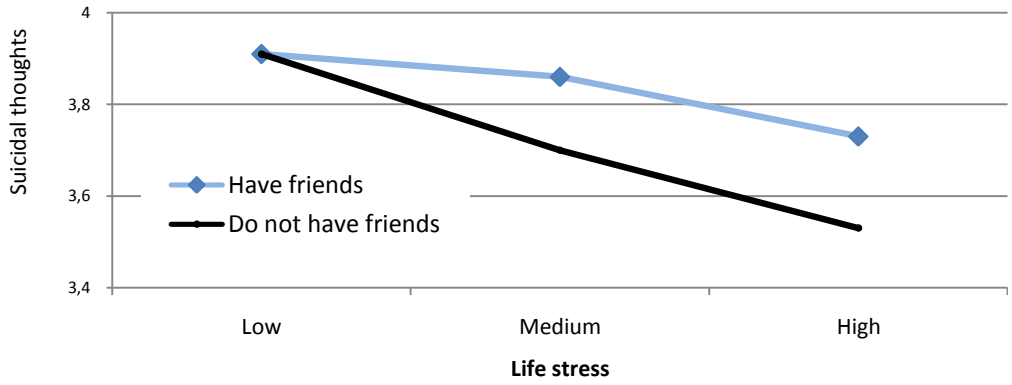
Table 4.9.1. The percentage of respondents declaring various forms of social support in 1991/1992 and 2000 to 2009

Forms of social support	1991/1992 N=4187/3402	2000 N=6403	2003 N=9037	2005 N=8593	2007 N=12211	2009 N=
The respondent feels loved and trusted	90	90	91	91	92	91
The respondent feels lonely despite the fact that he/she does not want to	21	22	19	22	21	21

Source of data: years 1991-1997 — Czapiński, 1998; years 2000-2009 — *Social Diagnosis.*

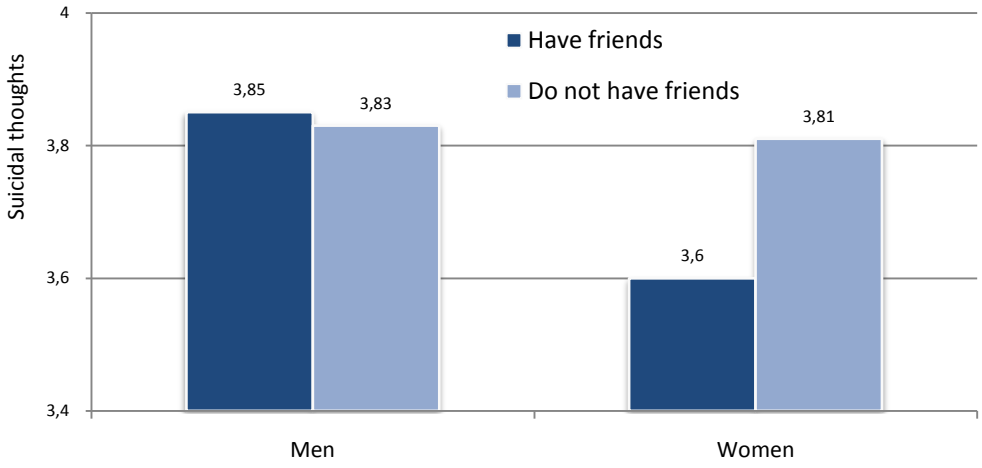
For women more so than men, friends have a higher "buffering" importance (alleviating the influence of stress) for general psychological well-being (Figure 4.9.2).

As for the suicidal thoughts, two indicators of support; a feeling of being loved and trusted and a feeling of loneliness have an important buffering effect (Figure 4.9.3).



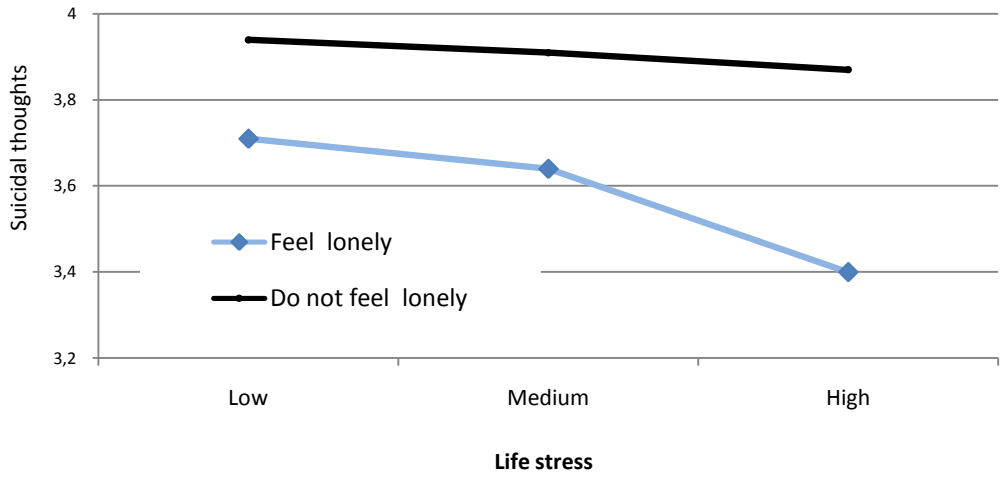
NOTES: the scale suicidal tendencies is directed inversely; the lower the value, the higher the frequency of suicidal thoughts; the main effects of friends F(1, 25287)=56,069, p<0,000, η^2=0,002, stress F(2, 25287)=90,823, p<0,000, η^2=0,007, the interaction effect of stress and friends F(2, 25287)=11,037, p<0.01, η^2= 0,001, the control variable was age F(1, 25287) <2, ns and gender F(1, 25287)=70,858, η^2= 0,003, p<0,000.

Figure 4.9.1. Suicidal tendencies for respondents who have friends by intensity of life stress



NOTES: the scale of suicidal tendencies is directed inversely; the lower the value, the higher the frequency of suicidal thoughts; the main effects of friends F(1, 12153) = 18.767, p < 0,000,

Figure 4.9.2. Suicidal tendencies for respondents who have friends by gender



NOTES: the scale of suicidal tendencies is directed inversely; the lower the value, the higher the frequency of suicidal thoughts; the main effects of loneliness F(1, 25450)=1687,399, p<0,000, η^2=0,062, stress F(2, 25450)=206,894, p< 0,000, η^2=0,016, the interaction effect of stress and loneliness F(2, 25450)=87,769, p<0.01, η^2= 0,007, the control variable was age F(1, 25450)=4,603, p< 0,01, η^2=0,000 and gender F(1, 25450)<3, η^2= 0,000, ni.

Figure 4.9.3. Suicidal tendencies by intensity of life stress and sense of loneliness

4.10. Personality and lifestyle

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4.10.1. Values

Assessing systems of personal values is one of the most difficult tasks in the psychology of the quality of life. There are several scales more or less standardized and verified with regard to their reliability (e.g. Rokeach's or Schwartz's scales) but none of them have been applied in large surveys, which focus on brevity, the simplicity of questions and the ease of answering them. Taking those criteria into consideration we used the Conditions for Happy Life Scale (Annex, individual questionnaire, quest. 2), which listed 13 specific values and one undefined. Because all of those 13 values are commonly accepted, we limited respondents' choice to the three which are the most important in the respondent's opinion.

Table 4.10.1 The percentage of respondents aged 18 or over listing particular values as the most important conditions of happiness in the following years

Value	1992 N=3402	1993 N=2306	1994 N=2302	1995 N=3020	1997 N=2094	2000 N=6632	2003 N=3020	2005 N=3020	2007 N=12365	2009 N=23784
Money	37.2	39.8	32.1	36.1	39.3	39.2	33.3	32.9	30.7	30.3
Children	52.3	50.0	55.0	51.0	50.3	43.4	43.3	45.1	45.9	48.8
Successful marriage	56.3	57.6	56.5	55.9	58.8	58.0	53.7	55.6	55.8	56.6
Work	26.6	30.1	29.2	29.6	28.9	30.8	35.5	34.7	30.2	31.9
Friends	4.7	4.8	4.2	5.6	5.0	4.6	5.9	8.0	8.6	10.4
Providence, God	16.7	13.2	13.1	16.4	15.6	16.0	15.4	15.6	15.1	15.4
Cheerfulness, optimism	8.5	7.8	8.2	9.0	7.9	7.8	8.2	9.1	9.5	10.7
Honesty	12.3	10.6	10.0	10.0	9.0	8.8	9.0	10.2	9.7	11.1
Respect from others	9.0	7.5	9.3	7.4	6.0	7.8	5.9	6.7	6.9	8.4
Freedom	3.6	3.3	3.6	3.8	1.9	3.0	3.3	3.5	4.1	4.7
Health	59.6	62.9	65.8	59.6	60.2	62.9	63.7	64.9	65.1	67.8
Education	1.9	2.4	1.3	3.7	4.2	4.6	5.1	6.0	6.2	6.3
Strong character	4.0	3.5	4.5	4.1	5.5	3.4	4.5	4.9	5.0	5.8
Other	0.5	0.4	1.3	0.7	0.4	0.6	0.7	1.2	1.0	1.0

Source of data: years 1991-1997 — Czapiński, 1998; years 2000-2009 — *Social Diagnosis.*

Table 4.10.1 proves that the Poles' system of values is very stable. Worth noting however is the substantial increase in the importance of friends (doubling of the percentage of indications in comparison with year 2000 when as we remember, a deep crisis of relations with friends was observed displayed by a decrease in the average number of friends). The importance of education is also growing slowly, although still both friends and education seem to be underestimated in the light of their influence on the subjective quality of life.

The quick growth of Polish affluence is also reflected in the decreased number of indications pointing to money as one of the three cardinal values (by 22 per cent in relation to year 2000). Like in the previous years, most respondents pointed to health (67.8 per cent of responses, the highest result of all the measurements) and then a good marriage (a slight increase), children (a slight increase), money and work. Least often freedom (a small increase this year), a strong character, education, friendliness and the respect of others (in this last case a significant increase has been observed).

4.10.2 Religious practices

In 2009, 43.4 per cent of adults stated systematic participation in masses and other religious celebrations (Table 4.10.2). This value is almost 3 per cent point lower than in 2007 and one fourth lower in comparison with 1992. However, the results obtained in the measurements of panel samples are similar (Table 4.10.3).

The average frequency of participation in religious services during the month in the panel samples decreased in comparison with 2000 and 2005 (Table 4.10.2). In other words, Poles rarely went to church, but prayed more frequently. This suggested de-institutionalisation (privatisation) of faith and reflected the process of individualisation of religious practices or a decrease in institutional forms of relations between humans and God in Western countries. However, in 2007 the falling trend concerning institutional religious practices was also accompanied by prayer in difficult life situations and this drop was even deeper in 2009. Changes in the sample panels indicate an increase of the indicator of prayer in comparison with year 2000 and 2003 and then its decrease with respect to years 2005 and 2007 (Table 4.10.3). Instead of de-institutionalisation of faith, since 2007 we have observed a decrease in religiosity. Both variables are correlated together (r=0,337). Persons who attend church services more frequently also resort to divine help in difficult situations (Table 4.10.4).

Table 4.10.2. The percentage of respondents participating in religious and solemn practices at least 4 times a month and prayer in difficult situations in 1992 to 2009

Behaviour	1992 N=3384	1993 N=2304	1995 N=3018	1996 N=2339	1997 N=2097	2000 N=6635	2003 N=9420	2005 N=8566	2007 N=12365	2009 N=23594
Participating in religious services 4 times or more a month	55.7	51.8	50.3	53.5	51.4	50.1	46.4	46.4	46.1	43.4
Prayer	nd	nd	27.4	30.9	30.4	31.9	32.1	33.8	30.5	28.3

Source of data: years 1991-1997 — Czapiński, 1998; years 2000-2009 — *Social Diagnosis.*

Table 4.10.3. The comparison of frequency of religious practices and praying in panel samples from 2000 to 2009

Variable	Wave	Mean	Standard deviation	Mean difference	Test t	Freedom degrees	Significance	Correlation
Prayer in difficult situations (per cent)	2000	32	46.7	-0.035	-2.300	1212	0.022	0,389*
	2009	35	47.9					
	2003	31	46.3	-0.024	-2.296	2356	0.022	0,392*
	2009	34	47.2					
	2005	35	47.7	0.027	2.715	2713	0.007	0,407*
	2009	32	46.8					
	2007	31	46.4	0.015	2.512	6129	0.012	0,492*
	2009	30	45.7					
Frequency of participating in religious services per month	2000	3.27	4.246	0.371	3.108	1257	0.002	0,413*
	2009	2.90	3.486					
	2003	2.92	3.432	0.177	3.052	2444	0.002	0,633*
	2009	2.75	3.261					
	2005	3.07	4.025	0.376	5.864	2829	0.000	0,586*
	2009	2.69	3.360					
	2007	2.99	3.387	0.208	6.462	6584	0.000	0,699*
	2009	2.78	3.335					

* p<0,000

The most religious groups in the population according to both criteria (institutional practices and prayers) are: women, older people (aged 65 and over), inhabitants of rural areas (not necessarily farmers), the retired and pensioners, as well as people with an elementary education, and the lowest behavioural indicators of religiosity are characteristic of men, people aged up to 34, inhabitants of the biggest cities, people with the highest education and entrepreneurs.

Table 4.10.4. Percentage distribution of answers to two questions: "How many times a month do you usually participate in religious practices?" and "Do you usually pray for help in troubles and difficult life situations?"

Social and demographic group	Frequency of participating in religious practices per month				Prayer
	0	1-3 times	4	over 4 times	
Total	30.8	25.6	31.5	12.2	28
Gender					
Men	36.3	26.8	28.1	8.8	16
Women	25.8	24.5	34.5	15.3	39
Age					
Up to 24	31.2	29.2	27.9	11.8	20
25-34	40.0	28.4	24.8	6.8	21
35-44	30.5	26.9	31.4	11.2	25
45-59	30.3	24.8	32.3	12.6	28
60-64	24.6	24.1	36.4	14.9	33
65 or over	22.5	19.1	39.9	18.5	48

Table 4.10.4. (continued)

Social and demographic group	Frequency of participating in religious practices per month				Prayer
	0	1-3 times	4	over 4 times	
Place of residence					
Zielona Góra	63.0	9.8	13.0	14.1	23
Łódź	58.4	23.2	14.4	4.0	15
Wrocław	55.4	15.5	20.4	8.6	27
Warsaw	55.1	17.4	20.4	7.1	26
Poznań	54.2	17.2	20.5	8.1	20
Szczecin	49.0	21.1	21.1	8.8	35
Katowice	46.2	15.1	29.5	9.2	24
Olsztyn	43.6	30.0	20.0	6.4	32
Białystok	41.1	22.2	26.6	10.1	26
Opole	35.3	14.7	23.5	26.5	56
Bydgoszcz	34.5	20.2	31.1	14.3	24
Lublin	34.2	19.0	31.6	15.2	38
Kielce	33.9	37.0	21.3	7.9	24
Gdańsk	33.3	26.7	25.8	14.2	27
Rzeszów	32.1	16.5	30.3	21.1	40
Kraków	27.6	26.6	35.8	10.0	25
Cities over 500k	50.6	19.9	22.1	7.4	23
Towns 200-500k	39.9	21.6	27.0	11.5	27
Towns 100-20k	39.7	21.0	27.1	12.2	26
Towns 20-100k	32.4	26.6	29.2	11.8	25
Towns under 20k	29.6	25.8	31.1	13.4	28
Rural areas	19.5	28.8	37.9	13.8	32
Voivodship					
Dolnośląskie	41.1	24.1	25.6	9.3	23
Kujawsko-pomorskie	30.7	28.8	30.6	9.9	23
Lubelskie	19.8	32.1	33.6	14.5	34
Lubuskie	44.1	22.9	22.4	10.7	26
Łódzkie	41.3	30.5	22.3	5.9	21
Małopolskie	16.9	17.4	47.3	18.3	32
Mazowieckie	35.5	27.9	28.4	8.3	29
Opolskie	26.4	16.1	30.7	26.8	37
Podkarpackie	11.4	19.4	49.1	20.0	36
Podlaskie	28.5	30.4	30.5	10.6	36
Pomorskie	30.0	23.4	31.7	14.9	30
Śląskie	31.9	21.5	31.7	14.9	28
Świętokrzyskie	29.4	34.5	26.5	9.6	27
Warmińsko-mazurskie	29.8	35.3	27.1	7.8	26
Wielkopolskie	31.1	26.6	31.9	10.5	25
Zachodniopomorskie	42.4	25.9	23.0	8.7	25
Education					
Elementary/ lower	26.2	24.6	34.6	14.6	42
Vocational/ grammar	28.2	27.7	32.0	12.1	22
Secondary	32.2	25.0	30.6	12.1	27
Tertiary	36.8	23.7	29.0	10.5	28
Income per capita					
Lower quartile	29.0	26.8	32.7	11.5	32
Middle 50 per cent	27.6	26.2	32.8	13.5	29
Upper quartile	37.4	23.9	28.1	10.6	25
Social and professional status					
Public sector	30.6	26.8	31.1	11.4	27
Private sector	38.6	27.7	26.1	7.6	19
Private entrepreneurs	41.1	24.5	24.7	9.7	19
Farmers	15.2	32.5	40.9	11.4	25
Pensioners	27.5	22.1	36.0	14.4	39
Retirees	22.5	21.2	38.9	17.5	42
Students	26.7	27.8	30.6	14.9	22
The unemployed	39.6	26.3	25.0	9.1	23
Other professionally inactive groups	34.1	25.2	29.1	11.6	29

As for the regional structure, the most "religious" voivodships are: Opolskie, Podkarpackie and Małopolskie, where, except for Opolskie voivodship, the local population has lived for many generations; and the least religious are Zachodniopomorskie, Łódzkie, Warmińsko-Mazurskie and Dolnośląskie, that is, mainly the north-western region of the so-called Regained Territories, populated mainly by former inhabitants of other regions. (Table

4.10.4). Podkarpackie voivodship is the most different from the country average value where only 16% of adults (in 2005 it was less than 13 per cent) do not go to church at all, and almost one half (40 per cent) pray in difficult life situations. At the opposite extreme, we have Zachodniopomorskie voivodship where almost half of the population (43%) do not go to church and only one in four inhabitants (25.5%) resort to divine help in difficult situations. The largest cities (above 500 thousand inhabitants) are the least religious (45 per cent do not attend church at all in comparison with 17 per cent of the rural population). Among these, Łódź is in the lead with 2/3 of the population not going to church at all and only 15 per cent praying (while the national average is 30 per cent). In comparison with this data, Warsaw is in a much better situation with 47 per cent of its inhabitants not going to church, and 30 per cent praying.

Table 4.10.5. Correlations between the position of God in the hierarchy of values, the frequency of participation in religious practices, the percentage of praying in difficult life situations and the synthetic indicator of religiosity in 2007 and 2009 by voivodships

	2	3	4	5	6	7	8
1. practices 2009	0.970(**)	0.821(**)	0.778(**)	0.836(**)	0.851(**)	0.939(**)	0.919(**)
2. practices 2007		0.757(**)	0.785(**)	0.802(**)	0.843(**)	0.894(**)	0.929(**)
3. praying 2009			0.817(**)	0.843(**)	0.827(**)	0.942(**)	0.850(**)
4. praying 2007				0.835(**)	0.869(**)	0.859(**)	0.939(**)
5. God 2009					0.866(**)	0.947(**)	0.885(**)
6. God 2007						0.900(**)	0.959(**)
7. religiosity 2009							0.938(**)
8. religiosity 2007							

** The correlation is significant on the level of 0,01 (bilateral test).

Table 4.10.6. Correlations between the position of God in the hierarchy of values, the frequency of participation in religious practices, the percentage of praying in difficult life situations and the synthetic indicator of religiosity on the individual level in 2007 and 2009

	2	3	4	5	6	7	8
1. practices 2009	0.685(**)	0.326(**)	0.279(**)	0.297(**)	0.254(**)	0.728(**)	0.547(**)
2. practices 2007		0.298(**)	0.329(**)	0.247(**)	0.287(**)	0.552(**)	0.723(**)
3. praying 2009			0.468(**)	0.403(**)	0.327(**)	0.767(**)	0.490(**)
4. praying 2007				0.311(**)	0.381(**)	0.476(**)	0.765(**)
5. God 2009					0.386(**)	0.754(**)	0.422(**)
6. God 2007						0.438(**)	0.746(**)
7. religiosity 2009							0.657(**)
8. religiosity 2007							

** The correlation is significant on the level of 0.01 (bilateral test).

The frequency of religious practices, resorting to praying in difficult life situations and selecting God (Providence) as one of the three main predicators for a successful, happy life (see Chapter 4.10.1) can be treated as signs of religiosity. This assumption is motivated through high correlation coefficients of these indicators from the voivodship perspective (Table 4.10.5) and statistically significant correlation coefficients on the individual level (Table 4.10.6). As a result we have established a synthetic indicator of religiosity. It is made up of a sum of standardized values of three partial indicators. The distribution of this indicator in the voivodship and voivodship cities is illustrated by Table 4.10.7. According to this indicator, the most "religious" voivoships are Podkarpackie, Opolskie, Małopolskie and Lubelskie, whereas the least religious are Łódzkie, Zachodniopomorskie and Dolnośląskie. The ranking has not changed since 2007. In terms of voivoship cities, the most religious are the inhabitants of Opole, Rzeszów and Lublin and the least religious,are the inhabitants of Łódź and Ponzań. As far as professions are concerned, the most religious are farmers, gardeners and tertiary education teachers and the least religious are computer scientists, policemen and labourers of the mining and construction sectors.

Table 4.10.7. The frequency of participation in religious practices per month, the percentage of persons praying in difficult life situations, the percentage of persons indicating God as the cardinal value in their life and the synthetic indicator of religiosity by voivodships and voivodship cities

Group	Frequency of religious practices		Percentage of respondents who pray		Percentage of respondents declaring God as their cardinal value		Religiosity	
	2009	2007	2009	2007	2009	2007	2009	2007
Voivodship								
Podkarpackie	4.05	4.17	36	39	21	25	0.6251	0.8244
Opolskie	3.88	3.78	37	36	23	18	0.6054	0.4484
Małopolskie	3.59	3.76	32	40	19	19	0.3574	0.5308
Lubelskie	3.16	2.97	34	37	20	20	0.2745	0.2375
Podlaskie	2.67	2.70	36	33	17	17	0.0089	-0.0050
Pomorskie	3.09	3.21	30	28	15	14	-0.0078	-0.0325
Śląskie	2.87	3.09	28	27	16	17	-0.1030	0.0225
Mazowieckie	2.45	2.59	29	32	17	16	-0.1752	-0.0843
Świętokrzyskie	2.42	2.87	27	35	14	15	-0.2569	0.0630
Kujawsko-pomorskie	2.58	2.61	23	27	14	14	-0.2713	-0.2565
Lubuskie	2.28	2.38	26	26	13	11	-0.3407	-0.4004
Wielkopolskie	2.57	2.74	25	26	11	10	-0.3410	-0.3428
Warmińsko-mazurskie	2.38	2.39	26	26	10	12	-0.3807	-0.3792
Dolnośląskie	2.37	2.46	23	25	12	12	-0.4176	-0.3983
Zachodniopomorskie	2.12	2.05	25	26	11	10	-0.4446	-0.5528
Łódzkie	1.91	2.17	21	25	14	10	-0.5511	-0.5353
City *								
Opole	2.80		56		36		1.0046	
Rzeszów	3.47		40		33		0.8753	
Lublin	3.31		38		22		0.4057	
Gdańsk	2.92		27		17		0.0355	
Szczecin	2.15		35		14		-0.0647	
Białystok	2.68		26		15		-0.1728	
Kraków	2.73		25		15		-0.1828	
Bydgoszcz	2.61		24		16		-0.2025	
Wrocław	2.17		27		14		-0.3398	
Olsztyn	1.88		32		08		-0.4151	
Zielona Góra	1.72		23		19		-0.4766	
Warsaw	1.90		26		16		-0.4838	
Katowice	2.25		24		09		-0.5650	
Kielce	2.04		24		09		-0.5675	
Poznań	1.81		20		08		-0.7500	
Łódź	1.34		15		11		-0.9373	

* Due to too low samples in several voivodship cities, the data from 2007 has been omitted.

4.10.3. Self-destructive behaviours

4.10.3.1. Smoking cigarettes

Nearly one in three Polish adults smokes cigarettes. On average people smoke 16 cigarettes a day. A systematic fall in the number of smokers and the number of cigarettes smoked may be encouraging (Table 4.10.8). In relation to 1995, the percentage of smokers decreased by almost 10 per cent and in relation to the beginning of the 1990s, by approx. 14 per cent . In the panel samples there is a significant decrease in the percentage of smokers between 2000 and 2009 but not in the number of the cigarettes smoked (Table 4.10.9).

The highest percentage of smokers are men as well as middle-aged persons and with vocational education (Table 4.10.10). Definitely the highest percentage of smokers are represented by the unemployed and hired labourers of the private sectors. Moreover, among the workers of the private sector in the recent four years an increase of smokers (from 38 per cent to 42 per cent) has been observed. At the same time, among the unemployed the number of smokers diminished by 4 per cent. The most visible drop has been observed in the group of entrepreneurs (from 46 to 34 per cent). The lowest percentage of smokers are elderly people (65 year olds and more 12 per cent), retirees (17 per cent), students (16 per cent), persons with tertiary education (20 per cent) and women (23 per cent).

Table 4.10.8. The percentage of cigarette smokers, former smokers among the non-smoking, and the average number of cigarettes smoked a day between 1995 and 2009

Variable	1995 N= 3042	1996 N=2350	2000 N=6617	2003 N=9602	2005 N=8788	2007 N=12629	2009 N=26134
The percentage of people smoking cigarettes	37.9	35.9	32.3	30.7	29.3	29.6	27.8
The percentage of people who quit smoking among non-smokers	32.2	nd	34.2	35.6	38.9	36.1	36.1
The average number of cigarettes smoked a day	nd	17.27	16.48	16.22	15.88	15.99	15.81

Source of data: years 1991-1997 — Czapiński, 1998; years 2000-2009 — *Social Diagnosis.*

Table 4.10.9. The comparison of the number of smokers and the average number of cigarettes smoked a day in the panel samples in 2000 and 2009

Variable	Wave	Mean	Standard deviation	Mean difference	Test t	Freedom degrees	Significance	Correlation
The percentage of people smoking cigarettes	2000	0.341	0.474	0.052	5.396	1751	0.000	0,624*
	2009	0.289	0.454					
	2003	0.321	0.467	0.029	4.216	3044	0.000	0,663*
	2009	0.292	0.455					
	2005	0.296	0.457	0.005	<1	3585	ns	0,681*
	2009	0.291	0.454					
	2007	0.301	0.459	0.012	2.893	7569	0.004	0,738*
	2009	0.290	0.454					
The average number of cigarettes smoked a day	2000	17.84	8.812	0.289	<1	401	ns	0,495*
	2009	17.55	8.730					
	2003	17.49	8.385	0.381	<2	710	ns	0,595*
	2009	17.11	8.638					
	2005	17.38	8.042	-0.038	<2	798	ns	0,558*
	2009	17.42	8.424					
	2007	16.97	7.858	0.062	<1	1730	ns	0,637*
	2009	16.91	8.083					

* p < 0,000

Zachodniopomorskie (37 per cent of smokers) and Kujawsko-pomorskie (35 per cent) voivodships are the most affected by cigarette smoking, whereas the south-eastern region (Świętokrzyskie and Podkarpackie 22 and 26 per cent of smokers) is a part of Poland where this habit is the least widespread. The extent of cigarette smoking is generally correlated with the number of the cigarettes smoked although it is necessary to emphasise that men outstrip women in terms of the percentage of smokers and the number of cigarettes smoked a day, whereas students, among whom smokers constitute a relatively low percentage, also smoke fewer cigarettes than other social groups.

Table 4.10.10. The percentage of smokers

Social and demographic group	2009	2007	2005	2003	2000
Total	27.8	29.6	29.3	30.7	32.3
Gender					
Men	35.5	37.7	38.0	40.5	43.3
Women	20.8	22.9	21.7	22.2	22.7
Age					
under 25	19.6	22.7	21.4	23.3	28.4
25-34	28.9	32.0	33.1	35.2	35.6
35-44	34.6	39.8	39.5	41.5	46.4
45-59	37.7	37.3	37.6	38.5	37.3
60-64	27.0	26.8	24.3	21.7	21.7
65 or over	12.4	12.2	11.4	12.9	12.4
Place of residence					
Cities over 500k	29.4	31.8	31.7	32.9	31.3
Towns 200-500k	29.6	31.1	32.0	33.2	37.0
Towns 100-20k	30.9	32.3	29.2	33.1	35.0
Towns 20-100k	28.5	29.6	31.0	31.4	31.3
Towns under 20k	30.9	31.6	32.6	32.6	34.7
Rural areas	24.8	27.2	25.7	27.9	29.0

Table 4.10.10. (continued)

Social and demographic group	2009	2007	2005	2003	2000
Voivodship					
Dolnośląskie	32.8	30.2	31.2	33.7	33.0
Kujawsko-pomorskie	28.4	34.7	37.9	38.8	38.8
Lubelskie	24.9	28.7	31.1	30.5	32.4
Lubuskie	30.8	32.7	29.2	32.0	38.5
Łódzkie	28.3	28.0	29.2	30.0	29.8
Małopolskie	22.0	28.1	24.1	24.5	28.2
Mazowieckie	28.0	29.6	29.7	29.8	32.2
Opolskie	28.4	31.1	33.9	30.1	34.1
Podkarpackie	22.1	25.0	22.8	24.4	24.4
Podlaskie	27.6	29.2	28.1	31.6	31.3
Pomorskie	28.7	30.2	25.6	32.3	32.7
Śląskie	28.6	29.5	29.7	32.2	34.8
Świętokrzyskie	23.7	21.6	25.6	24.4	31.2
Warmińsko-mazurskie	33.6	31.0	30.3	33.3	33.0
Wielkopolskie	27.6	29.4	30.5	31.0	32.4
Zachodniopomorskie	32.9	36.6	31.9	34.8	33.0
Education					
Elementary/ lower	26.5	27.5	26.6	25.1	26.9
Vocational/ grammar	34.5	36.9	36.3	41.5	44.1
Secondary	27.1	28.9	28.1	29.2	30.4
Tertiary	19.1	20.5	21.7	23.1	23.4
Household income per equivalent unit					
Lower quartile	32.3	37.4	39.0	37.0	39.9
Over lower quartile	27.1	32.3	27.1	30.9	35.2
Under upper quartile	27.1	28.6	26.7	28.2	29.0
Upper quartile	25.6	24.5	25.6	27.1	30.3
Social and professional status					
Public sector	27.3	29.1	28.9	31.1	34.4
Private sector	36.5	41.9	38.6	39.8	43.7
Individual entrepreneurs	29.0	33.5	34.0	44.2	42.2
Farmers	33.4	30.7	30.2	34.2	33.3
Pensioners	26.5	27.4	27.6	28.9	28.7
Retirees	17.3	17.2	17.5	16.4	17.2
Students	12.5	13.9	13.6	15.5	17.4
The unemployed	42.6	41.9	46.6	44.2	46.0
Other professionally inactive groups	35.8	37.7	36.7	38.6	36.0

4.10.3.2. Alcohol abuse

The individual questionnaire included two questions. One concerned a respondent's typical reaction to trouble and difficult life situations and in the choice of answers there was the statement *"I drink".* The second question asked about alcohol abuse directly: *"in the past year I drank too much alcohol".* The percentage of people whose reaction to trouble is resorting to drinking is lower (4.4 per cent, two years ago it was 3.5 per cent) than the percentage of people who admit to abusing alcohol (6.5 per cent, two years ago it was 5.8 per cent) Table 4.10.11.

Table 4.10.11. The percentage of respondents admitting alcohol abuse and drinking in difficult life situations in 1991-2009 in the population of adult Poles

Variable	1991N=3989	1993 N=2238	1995 N=3045	1997 N=2350	2000 N=6615	2003 N=9420	2005 N=8543	2007 N=12365	2009 N=23076
Abuse of alcohol	6.6	6.4	6.3	5.4	5.3	4.4	6.0	5.8	6.5
Alcohol as a solution to difficult life situations	nd	nd	4.3	3.9	3.9	3.4	3.9	3.5	4.4

Source of data: years 1991-1997 — Czapiński, 1998; years 2000-2009 — *Social Diagnosis.*

Men admit that in the past year they drank too much alcohol, over 4.5 times more often than women (six years ago it was over eight times more often). They were decidedly more often inhabitants of big cities than small towns or rural areas, middle-aged people rather than the elderly and the young, much more often the rich than the poor (previously it was the opposite), entrepreneurs slightly more often than employees (since 2003, an increase has been significant in both groups and amounts to about 50 per cent), and the unemployed two times more often than

employees of the public sector, farmers as often as employees of the private sector and twice as frequently as in 2003. Students abuse alcohol more often than employees of the public sector and twice as frequently as in 2003.

The percentage of persons abusing alcohol increased in the panel sample in comparison with 2003 by a statistically significant level ($t = 5{,}136$, $p < 0{,}000$) and in the last two measurements it was the highest since the mid-1990s (Table 4.10.11). After 2003, the percentage of persons abusing alcohol increased both among men and among women and among women it was more rapid (over twice as much) than among men (by 35 per cent). (Table 4.10.12), which resulted in the difference between men abusing alcohol over women decreased from a ninefold a fivefold one. This difference reflects to some extent the base effect (the starting level of abuse among women was much lower than among men), which also proves a behaviour change for women, in particular the young living in large agglomerations. In 2003-2009, there was a double increase of women abusing alcohol aged 16-24 observed in comparison with older generations and also it was twice as high in big cities as in towns and rural areas. Among men the increase in alcohol abuse was distributed more evenly in terms of age and the place of residence class. Among women aged 16-24 living in the biggest cities, the percentage of alcohol abuse increased from 1 to 10 per cent in 2003-2009. This rule confirms a previously observed phenomenon in Poland called "a female tsunami" or an effect of the generation of transformation consisting in rapid dissemination among young women of behaviours which traditionally "pertain" to men (drinking alcohol, cigarette smoking[37] and aggression) (cf. Czapiński, Panek, 2006, 2007).

Table 4.10.12. The percentage of respondents aged 16 or over admitting alcohol abuse and drinking in difficult life situations by social and demographic groups

Group	Drinking too much				Reaching for alcohol			
	2009	2007	2005	2003	2009	2007	2005	2003
Total	6.44	5.68	5.96	4.28	4.38	3.45	3.81	3.33
Gender								
Men	10.91	10.37	10.66	8.08	7.55	6.34	7.04	6.35
Women	2.38	1.80	1.84	0.97	1.49	1.06	0.97	0.70
Age								
under 25	7.25	5.38	4.91	3.47	3.45	2.32	4.14	2.68
25-34	6.61	5.62	6.87	4.53	4.33	2.77	4.02	3.36
35-44	8.39	7.97	8.67	5.33	4.87	5.30	4.41	4.33
45-59	7.78	6.93	6.89	5.79	6.29	4.65	2.51	4.58
60-64	5.11	4.86	5.54	3.11	3.63	3.96	4.81	2.61
65 or over	1.80	1.96	1.78	1.67	1.95	1.51	3.45	1.15
Place of residence								
Cities over 500k	8.41	7.07	7.14	5.02	4.92	4.00	4.28	4.38
Towns 200-500k	8.45	6.91	6.60	6.44	4.80	3.46	4.45	3.68
Towns 100-20k	7.67	5.58	4.90	3.80	4.06	2.79	3.12	1.97
Towns 20-100k	5.39	4.69	6.72	3.59	3.81	3.07	3.89	3.52
Towns under 20k	5.78	5.77	7.05	3.41	3.97	3.74	3.93	2.91
Rural areas	5.75	5.39	4.81	4.21	4.59	3.53	3.53	3.23
Voivodship								
Dolnośląskie	5.92	4.94	7.34	5.40	3.51	3.18	4.14	3.59
Kujawsko-pomorskie	6.54	5.43	6.60	3.52	5.72	3.31	4.02	3.24
Lubelskie	6.02	6.06	7.05	5.94	4.86	3.57	4.41	4.67
Lubuskie	9.18	5.89	4.41	4.72	4.38	4.23	2.51	3.91
Łódzkie	5.68	5.61	7.81	4.74	3.69	2.32	4.81	3.45
Małopolskie	4.90	5.38	3.45	2.64	3.17	3.24	3.45	2.56
Mazowieckie	7.82	6.01	6.51	3.84	5.63	4.19	3.33	3.85
Opolskie	6.36	4.24	5.25	3.69	4.99	1.88	2.89	2.59
Podkarpackie	4.64	6.07	4.16	3.79	3.14	3.50	2.44	2.74
Podlaskie	7.58	7.81	7.05	5.51	4.49	4.44	4.08	4.87
Pomorskie	6.00	5.96	5.68	5.08	3.57	3.34	3.85	2.45
Śląskie	7.02	5.16	6.31	4.74	4.33	3.26	3.88	3.51
Świętokrzyskie	5.24	3.88	6.35	4.67	4.94	3.47	5.06	3.47
Warmińsko-mazurskie	5.56	9.23	9.52	4.94	6.78	6.82	7.30	4.18
Wielkopolskie	6.36	4.66	3.39	2.89	3.18	1.89	2.16	1.94
Zachodniopomorskie	8.28	6.48	5.81	4.03	6.50	4.22	4.92	3.21

[37] In the case of cigarette smoking, the phenomenon is slightly different. From 2003 to 2009, the percentage of smokers aged 16-24 decreased among men by one third and among women it remained at the same level. Thus the gender difference shrunk substantially.

Table 4.10.12. (continued)

Group	Drinking too much				Reaching for alcohol			
	2009	2007	2005	2003	2009	2007	2005	2003
Education								
Elementary/ lower	5.14	4.79	5.03	3.52	4.88	4.00	434	2.94
Vocational/ grammar	7.61	6.97	6.93	5.66	5.42	3.46	439	4.38
Secondary	6.18	5.18	6.03	3.82	3.79	2.79	347	2.88
Tertiary	6.00	5.18	5.16	3.99	3.15	3.07	254	2.99
Income per capita								
Lower quartile	6.81	6.96	8.44	5.43	5.99	4.75	5.85	4.11
Middle 50 per cent	5.78	5.20	5.83	3.59	3.93	3.29	3.43	3.28
Upper quartile	7.66	5.59	6.25	4.52	4.21	2.80	3.20	2.71
Social and professional status								
Public sector	5.48	5.00	5.81	4.35	3.59	3.02	3.25	3.95
Private sector	8.36	8.83	7.39	5.56	5.08	5.23	4.19	4.58
Private entrepreneurs	9.69	9.79	9.27	6.73	5.42	5.23	6.94	4.52
Farmers	8.89	6.34	6.09	4.14	6.87	3.97	3.96	3.23
Pensioners	5.23	5.09	6.78	3.41	4.45	3.02	4.94	2.65
Retirees	2.67	2.24	2.60	2.38	2.28	1.80	1.66	1.45
Students	6.35	3.78	4.22	3.06	3.04	1.50	1.34	1.62
The unemployed	11.24	8.54	11.52	6.85	7.87	5.35	8.06	5.82
Other professionally inactive groups	6.81	4.45	4.84	3.81	5.86	3.37	3.90	2.78

Table 4.10.13. The results of logistic regression of alcohol abuse and drinking in difficult life situations

Predicator*	Alcohol abuse		Reaching for alcohol	
	p	Exp(B)/Wald	p	Exp(B)/Wald
Woman	0.000	0.208	0.000	0.214
Age	0.000	Wald=53,36	0.000	Wald=43,54
25-34	0.540	0.934	0.096	1.295
35-44	0.033	1.298	0.033	1.430
45-59	0.060	1.252	0.000	1.959
60-64	0.969	0.993	0.287	1.281
under 65	0.000	0.438	0.507	0.849
Equivalent income per capita	0.007	Wald=9,91	0.031	Wald=6,92
Income per capita - middle 50 per cent	0.901	0.991	0.009	0.798
Income per capita - over upper quartile	0.022	1.222	0.145	0.853
Class of the place of residence	0.000	Wald=49,94	0.006	Wald=16,17
Towns 200-500k	0.308	0.884	0.027	0.701
Towns 100-500k	0.087	0.797	0.008	0.624
Towns 20-500k	0.000	0.609	0.001	0.640
Towns 200-500k	0.000	0.579	0.000	0.576
Rural areas	0.000	0.586	0.001	0.651
Voivodship	0.001	Wald=37,66	0.000	Wald=60,79
Kujawsko-pomorskie	0.330	1.164	0.000	1.941
Lubelskie	0.490	1.115	0.017	1.584
Lubuskie	0.002	1.729	0.215	1.356
Łódzkie	0.739	0.952	0.815	1.046
Małopolskie	0.296	0.860	0.903	0.977
Mazowieckie	0.038	1.285	0.000	1.774
Opolskie	0.634	1.100	0.006	1.897
Podkarpackie	0.546	0.904	0.726	1.076
Podlaskie	0.052	1.406	0.103	1.484
Pomorskie	0.974	1.005	0.614	1.116
Śląskie	0.052	1.288	0.016	1.519
Świętokrzyskie	0.638	0.912	0.020	1.657
Warmińsko-mazurskie	0.852	0.966	0.000	2.119
Wielkopolskie	0.228	1.177	0.726	1.066
Zachodniopomorskie	0.037	1.378	0.000	2.131
Education	0.028	Wald=9,13	0.011	Wald=11,17
Vocational	0.031	0.825	0.036	0.808
Secondary	0.007	0.770	0.002	0.700
Tertiary	0.005	0.725	0.005	0.674

Table 4.10.13. (continued)

Predicator*	Alcohol abuse		Reaching for alcohol	
	p	Exp(B)/Wald	p	Exp(B)/Wald
Social and professional status	0.000	Wald=69,90	0.000	Wald=47,06
Employees of the private sector	0.004	1.310	0.011	1.380
Individual entrepreneurs	0.026	1.353	0.099	1.346
Farmers	0.005	1.508	0.019	1.512
Pensioners	0.533	1.091	0.112	1.304
Retirees	0.833	0.968	0.988	0.997
Students	0.795	1.038	0.551	1.130
The unemployed	0.000	2.348	0.000	2.215
Other professionally inactive groups	0.001	1.526	0.000	2.075
Civil status	0.000	Wald=63,11	0.000	Wald=55,42
Married	0.000	0.686	0.041	0.817
Widowed	0.002	0.562	0.830	0.959
Divorces	0.051	1.288	0.000	1.765
Separated	0.018	1.782	0.000	2.791
Total percentage of the explained variance Cox & Snell R^2 x 100	5.0		3.8	
Total percentage of the explained variance Nagelkerke R^2 x 100	13.0		12.5	

*Reference categories for specific predicators are: gender - man, aged 16-24, income – under lower quartile, class of the place of residence – cities over 500k, voivodship – Dolnośląskie, education – elementary, social and professional status – employees of the public sector, civil status – unmarried.

In order to check which social and demographic variables determine the frequency of alcohol abuse and drinking in difficult life situations independently of other variables, we conducted an analysis of logistic regression through introducing to equations of 8 predicators: gender, age, class of the place of residence, voivodship, equivalent income per capita in household, level of education and civil status. Table 4.10.13 indicates that all these predicators explain a statistically important part of differentiation of frequency of alcohol abuse and drinking in difficult life situations at the control of other predicators. It means that e.g. age is a substantial predicator for variables explained independently of the place of residence, the level of education and gender. In the framework of each predicator, certain reference groups were also distinguished with which corresponding frequencies for other groups were compared. This is provided by the Exp(B) indicator which indicates the frequency in a given group with respect to a reference group. According to this indicator, women drink in difficult life situations five times less frequently than men, middle-aged persons have a slightly more serious and the eldest ones significantly less serious alcohol problem in comparison with the youngest persons, the least affluent persons abuse alcohol less frequently than the most affluent ones but they drink in difficult life situations more often than mid-affluent respondents. Inhabitants of big cities abuse alcohol more frequently than those living in towns and rural areas. Voivodships whose inhabitants abuse alcohol independently of all other variables in comparison with those from Dolnośląskie are: Lubuskie (by 70 per cent more frequently), Zachodniopomorskie (by 34 per cent more frequently) i mazowieckie (by 30 per cent more frequently), whereas the inhabitants of the following voivodships drink in difficult life situations more frequently than the inhabitants of Dolnośląskie: Zachodniopomorskie and Kujawsko-pomorskiego (a twofold difference), Opolskie (by 90 per cent more frequently), Mazowieckie (by 80 per cent more frequently), Świętokrzyskie (by 70 per cent more frequently) and Lubelskie (by 60 per cent more frequently). Better-educated persons abuse alcohol more rarely and drink in difficult life situations less frequently. Individual entrepreneurs (50 per cent) abuse alcohol more often than employees of the private sector (30 per cent), and above all the unemployed (2.3 times) and other professionally inactive persons (by 50 per cent). The comparison in the scope of the other variable looks similar. Drinking in difficult situations in comparison with the unmarried persons, the divorced and separated ones resort to drinking more frequently, whereas the widowed and married more rarely.

4.10.3.3. Drugs

The percentage of persons admitting that they used drugs increased until 2005. This year it grew slightly in comparison with 2007 (Table 4.10.14) but it is still much higher than throughout the entire period covered by the study until 2003 (increased three times in comparison with 1992).

Table 4.10.14. The percentage of persons admitting they took narcotics from 1992 to 2009 in the adult population

1992	1993	1994	1995	1996	1997	2000	2003	2005	2007	2009
N=3396	N=2307	N=2298	N=3024	N=2329	N=2100	N=6608	N=9620	N=8609	N=12323	N=23573
0.4	0.3	0.3	0.7	0.9	0.9	1.0	0.9	1.3	1.0	1.2

Source of data: years 1991-1997 — Czapiński, 1998; years 2000-2009 — *Social Diagnosis.*

The social and territorial range of drug abuse has been increasing. Although men and inhabitants of larger cities (mostly inhabitants of the biggest cities) still dominate, increasingly often narcotics are taken by entrepreneurs, the unemployed and other professionally inactive persons.

At present, apart from the groups mentioned, students are most threatened by drug abuse (as are younger persons in general) and territorially the population of Mazowieckie voivodship (Table 4.10.15 i 4.10.16).

Like seven and two years ago, most threatened by drug abuse are young men aged 24 or less. After 35 years of age both among women and men, the percentage of those using narcotics suddenly drops to zero.

Table 4.10.15. Did you use narcotics in the previous year? (the percentage of positive answers in the entire samples aged 16 or over)

Group	2009	2007	2005	2003
Total	1.16	1.03	1.31	0.96
Gender				
Men	1.78	1.67	1.91	1.51
Women	0.58	0.51	0.79	0.48
Age				
under 25	3.75	3.67	3.83	3.91
25-34	2.14	1.54	2.45	1.31
35-44	0.47	0.53	0.48	0.05
45-59	0.14	0.05	0.27	0.08
Place of residence				
Cities over 500k	2.60	1.54	2.64	2.03
Towns 200-500k	0.93	1.91	1.80	1.91
Towns 100-20k	1.74	1.28	1.91	0.60
Towns 20-100k	1.09	0.65	1.44	0.68
Towns under 20k	1.18	1.54	0.99	0.80
Rural areas	0.66	1.91	0.72	0.63
Voivodship				
Dolnośląskie	1.21	0.92	1.04	1.57
Kujawsko-pomorskie	1.13	1.63	1.25	1.64
Lubelskie	0.53	1.58	0.47	1.08
Lubuskie	1.26	1.17	1.15	1.24
Łódzkie	1.13	0.85	1.23	0.68
Małopolskie	0.81	0.87	1.33	0.43
Mazowieckie	2.07	0.84	2.20	1.01
Opolskie	1.20	1.11	0.96	0.66
Podkarpackie	0.97	0.98	1.44	0.89
Podlaskie	0.44	1.18	0.97	0.61
Pomorskie	0.81	1.77	2.17	1.49
Śląskie	1.06	0.91	1.23	1.15
Świętokrzyskie	0.44	1.00	1.07	0.80
Warmińsko-mazurskie	0.80	0.55	1.04	0.58
Wielkopolskie	1.34	0.83	0.70	0.41
Zachodniopomorskie	1.59	1.08	1.53	0.96
Education				
Elementary/ lower	0.55	0.34	0.74	1.02
Vocational/ grammar	1.15	1.47	1.51	0.67
Secondary	1.43	1.16	1.55	1.41
Tertiary	1.26	0.70	1.17	0.55
Income per capita				
Lower quartile	0.88	1.39	0.96	0.53
Middle 50 per cent	1.16	0.98	1.25	1.15
Upper quartile	1.47	0.86	1.95	1.27
Social and professional status				
Public sector	0.19	0.32	0.43	0.38
Private sector	1.39	1.58	1.47	1.23
Private entrepreneurs	2.07	1.44	1.53	0.34
Farmers	0.14	0.14	0.17	0.00
Pensioners	0.59	0.59	0.87	0.44
Retirees	0.03	0.00	0.10	0.23
Students	3.38	3.37	4.31	4.06
The unemployed	2.65	1.05	2.03	1.42
Other professionally inactive groups	1.46	1.06	1.28	0.55

The results of logistic regression (Table 4.10.16) indicate that women abuse drugs three times less frequently than men, elderly people (aged 45 and more) over ten times less frequently than the youngest (aged 24 or less), more affluent persons by 50 per cent more often than 25 per cent of the least affluent, the populations of towns and rural

areas two times less frequently than the inhabitants of the largest agglomerations (over 500k), the population of Zachodniopomorskie almost twice as often as those of Podlaskie and almost twice as rarely as those of Dolnośląskie, private entrepreneurs 10 times, the unemployed 13 times and students 4 times more frequently than the employees of the public sector and unmarried persons almost four times as much as the married. The percentage of persons abusing drugs is not differentiated by the level of education which in this case is not statistically significant.

Table 4.10.16. The results of logistic regression for drug abuse

Predicator*	Drugs	
	p	Exp(B)/Wald
Woman	0.000	0.370
Age	0.000	Wald=61,56
25-34	0.028	0.678
35-44	0.000	0.237
45-59	0.000	0.066
60-64	0.004	0.039
under 65	0.001	0.014
Equivalent income per capita	0.007	Wald=5,35
Income per capita - middle 50 per cent	0.021	1.516
Income per capita - middle 50 per cent	0.111	1.406
Class of the place of residence	0.069	Wald=50,26
Towns 200-500k	0.000	0.284
Towns 100-500k	0.119	0.663
Towns 20-500k	0.000	0.412
Towns 200-500k	0.000	0.416
Rural areas	0.000	0.256
Voivodship	0.014	Wald=29,55
Kujawsko-pomorskie	0.389	1.361
Lubelskie	0.509	0.752
Lubuskie	0.795	1.117
Łódzkie	0.954	0.982
Małopolskie	0.084	0.551
Mazowieckie	0.024	1.743
Opolskie	0.391	1.443
Podkarpackie	0.896	1.048
Podlaskie	0.368	0.589
Pomorskie	0.883	0.945
Śląskie	0.792	1.082
Świętokrzyskie	0.449	0.654
Warmińsko-mazurskie	0.587	0.791
Wielkopolskie	0.319	1.325
Zachodniopomorskie	0.056	1.889
Education	0.000	Wald=61,88
Vocational	0.281	0.762
Secondary	0.549	0.858
Tertiary	0.842	1.059
Social and professional status	0.000	Wald=69,90
Employees of the private sector	0.000	4.236
Private entrepreneurs	0.000	9.850
Farmers	0.443	2.009
Pensioners	0.001	5.528
Retirees	0.329	2.733
Students	0.001	4.262
The unemployed	0.000	12.811
Other professionally inactive groups	0.000	7.723
Civil status	0.000	Wald=44,91
Married	0.000	0.275
Widowed	0.705	0.761
Divorces	0.660	1.176
Separated	0.998	0.998
Total percentage of the explained variance Cox & Snell R^2 x 100	3.0	
Total percentage of the explained variance Nagelkerke R^2 x 100	24.8	

*Reference categories for specific predicators are: gender - male, aged 16-24, income – under lower quartile, class of the place of residence – cities over 500k, voivodship – Dolnośląskie, education – elementary, social and professional status – employees of the public sector, civil status – unmarried.

4.10.4. Criminals and victims of crime

Since the systemic transformation, Poland has seen a significant increase in crime. From 1990 to 2001, on average approx. 1 million crimes a year were reported, twice as many as in the 1980s. Since 1996, a systematic increase of about 10% a year in the numbers of crimes has taken place (KGP, 2001; Siemaszko, Gruszczyńska, Marczewski, 2003). This means that in the late 20th and early 21st centuries, an average citizen was two and a half times more at risk from crime. In recent years, the indicators of crime have been falling though those changes are not so visible in the surveys. As Table 4.10.17 shows, from 1993 to 2000 the number of thefts and house break-ins was on the rise but the number of mugging and battery victims remained unchanged. In turn the surveys showed that in the panel samples in this period there was a growing number of people accused in both criminal and civil cases. After the year 2000, there was a substantial decrease in the percentage of theft victims (by more than 1/3), break-ins (between 2003 and 2007, by almost one half), and mugging and battery victims (by 40 per cent in comparison with the year 2000). This explains the substantial increase in the sense of security (the percentage of persons satisfied with security in their place of residence has grown by 45 per cent since 2000, which is comparable with a decrease in the number of victims of theft, break-ins and mugging).

It is interesting to see a steady tendency of the majority of such events over a period of time with respect to particular individuals. Someone who was a victim of theft or a house break-in in the year 2000 also had a significantly higher risk of being a victim of those crimes after three years, five years and even seven years. Only mugging and battery appear to be purely random events in the sense that their victims are not more endangered than others with the repetition of the same experience. The repetition in the experience of crime is not surprising at all; being accused and arrested by the police increases in a statistically significant way the probability of repetition after three years (all correlations for criminals and victims between 2005 and 2009, except for mugging and battery, are statistically significant). We can then talk not only about a permanent predisposition to break the law, but also about the recurring profile of a victim with reference to certain categories of experience, which confirms the thesis of victimologists; certain people are more endangered than others of reliveing the experience of being a victim of someone‘s aggression.

Table 4.10.17. The percentage of respondents admitting to experiencing crime between 1993 and 2009

Experience	1993	1995	2000	2003	2005	2007	2009
Victim of theft	5.1	5.4	6.8	5.6	5.7	4.3	3.3
Victim of mugging and battery	1.6	1.7	1.5	1.3	1.2	1.1	0.9
Victim of a house break-in	1.2	1.2	2.0	4,1*	3.5	2.1	1.7
Accused in a criminal case	0.5	0.4	1.0	1.1	1.2	1.5	1.2
Accused in a civil case	0.4	0.6	0.8	0.9	0.9	0.9	0.7
Detained by the police	nd	nd	nd	2.2	2.5	3.2	3.4
A close relative/ friend was detained or in conflict with the law	nd	nd	2.9	2.8	3.6	3.8	3.0
Caused a collision or a car accident	nd	nd	nd	Nd	nd	1.6	1.7

*we have been asking about house or a car break-ins since 2003
Source of data: years 1993-1995 — Czapiński, 1998; years 2000-2009 — *Social Diagnosis.*

It is worth mentioning that among those accused of criminal acts or those arrested by the police there is a much higher percentage of victims of mugging and battery than in the general population (Table 4.10.18). This means that many crimes are committed within criminal circles. Those who break the law are threatened more than other lawful citizens with being victims themselves.

Regardless of their character (as a victim or a perpetrator), experiences of crime and criminal activity are correlated with alcohol consumption (Table 4.10.19). Persons abusing alcohol or drinking in difficult life situations are more often the perpetrators but also the victims of aggression.

Both the percentage of victims and perpetrators is much higher among men than among women, it is also much higher in younger age groups in comparison with older persons. In the larger cities, the frequency of crime experienced is two to three times higher than in rural areas and small towns.

Particularly interesting is the correlation between the distribution of frequency of victims and perpetrators and the education level. Victims of theft and house or car break-ins are usually persons with a tertiary education, which is probably due to the level of affluence of this group of citizens also proven by the high indicator of victims of crimes of this type among persons with high income and particularly and private entrepreneurs out of which almost one in fifteen and two years ago one in seven has been a victim of theft and every twenty fifth (two years ago it was every twelfth) has experienced a car or a house break-in. On the other hand, perpetrators are much more often persons with a vocational education and are less affluent The largest percentage of those accused of crimes and detained by the police, apart from graduates of vocational schools, can be found among students, the unemployed, employees of the private sector, young persons (up to 24 years of age) and inhabitants of larger cities.

Table 4.10.18. Intercorrelations between crimes experienced in 2009

Experience	2	3	4	5	6	7	8
1. Victim of theft	0.204	0.327	0.093	0.104	0.086	0.058	0.062
2. Victim of assault		0.064	0.096	0.094	0.083	0.016	0.053
3. Victim of house or car break-in			0.043	0.067	0.085	0.073	0.043
4. Accused of an offence and penalized with a fine or imprisonment				0.272	0.405	0.100	0.105
5. Detained by the police					0.230	0.127	0.095
6. Accused in a civil case						0.101	0.077
7. Caused a collision or a car accident							0.025
8. A close relative/ friend was detained or in conflict with the law							

NOTES: all correlation coefficients are statistically significant at the level of $p < 0,01$

In 2007, we asked for the first time about the perpetrators of car accidents and collisions. In general, the percentage of perpetrators of such events is directly proportional to the level of ownership of motor vehicles in particular group (Table 4.10.19). It is the highest among young persons (up to 34 years of age), inhabitants of the larger cities, persons with a tertiary education, the relatively affluent and the working (except for farmers) and particularly among private entrepreneurs.

Table 4.10.19. Correlations of experiences associated with crime and the abuse of alcohol

Experience	Alcohol abuse	Reching for alcohol in difficult situations
Victim of theft	0.078	0.053
Victim of assault	0.107	0.081
Victim of house or car break-in	0.047	0.031
Accused of an offence and penalized with a fine or imprisonment	0.116	0.082
Detained by the police	0.171	0.125
Accused in a civil case	0.105	0.076
Caused a collision or a car accident	0.068	0.029
A close relative/ friend was detained or in conflict with the law	0.081	0.058

NOTES: all correlation coefficients are statistically significant at the level of $p < 0,000$

Discrimination can be considered as a separate category of aggression. The percentage of respondents who admit being discriminated against on any basis in the previous year, is relatively low (1.7 per cent). It is lower than two and four years ago, but higher than in 2000 and much higher than in the first years of measurement of this variable (in 1992 - 0.8 per cent., in 1993 - 1.0 per cent., in 1994 - 0.7 per cent).

Table 4.10.20. The percentage of persons admitting being discriminated against from 1991 to 2009 in the adult population

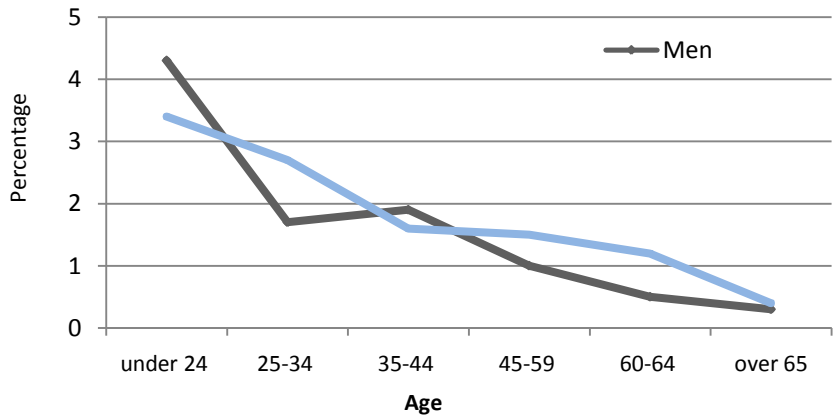
Variable	2000 N=6605	2003 N=9583	2005 N=8805	2007 N=12638	2009 N=23076
I was discriminated against on the basis of nationality, physical appearance, beliefs or other reasons	1.30	1.48	1.83	1.86	1.70

The sense of discrimination among men and women decreases with age at similar pace although generally with the exception of the youngest and persons aged 35-44; women complain more frequently about being subject to discrimination (Figure 4.10.1).

Table 4.10.21. The significance test of change in the sense of being discriminated against in panel samples from 2000 to 2009 and 2007 to 2009

Variable	Wave	Mean	Standard deviation	Mean difference	t	Freedom degrees	Significance	Correlation
Sense of being discriminated	2000	1.03	0.101	-0.11	< 1	1745	ns	0.042
	2009	1.15	0.106					
	2007	1.53	0.123	0.34	2.031	7598	$p < 0.05$	0,195*
	2009	1.18	0.108					

* $p < 0.000$

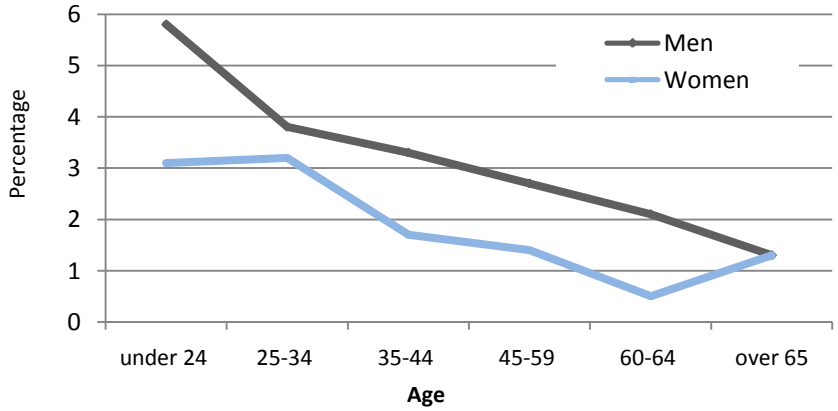


NOTES: age effect F(5, 14156)=8.462, p<0.00; η^2= 0.003, gender effect F(1, 14156) = 12.516, p<0.00; η^2= 0.001; interaction effect of gender and age F < 2, ns.

Figure 4.10.1. The percentage of men and women of different age groups who feel discriminated against.

3.2 per cent of persons with a driving license admitted to having caused a collision or accident. Among the perpetrators of collisions and accidents, the number of men was much greater than that of women, and the number of young persons was much higher than that of the elderly. The interaction between gender and age is also significant (Figure 4.10.2).

We checked whether the abuse of alcohol was conducive to causing collisions and road accidents. The effect of alcohol abuse turned out to be statistically significant, but it diminished as the control of gender was introduced (Table 4.10.22). Thus the interaction between road accidents and alcohol is apparent, especially in the group of youngest drivers (Figure 4.10.3). The second order interaction effect between age, alcohol abuse and gender is also significant (Figure 4.10.4). Among men aged 24, more alcohol abuse does not increase the probability of causing a road accident, whereas in the group of women abusing alcohol, the percentage of road accident perpetrators falls only among those aged 34 or over. This can probably be result of differences in years of experience as a driver. Women on average get a driving licence at an older age, and thus they obtain capabilities, which eliminate the relationship between alcohol abuse and road accident perpetuation, at a later time.



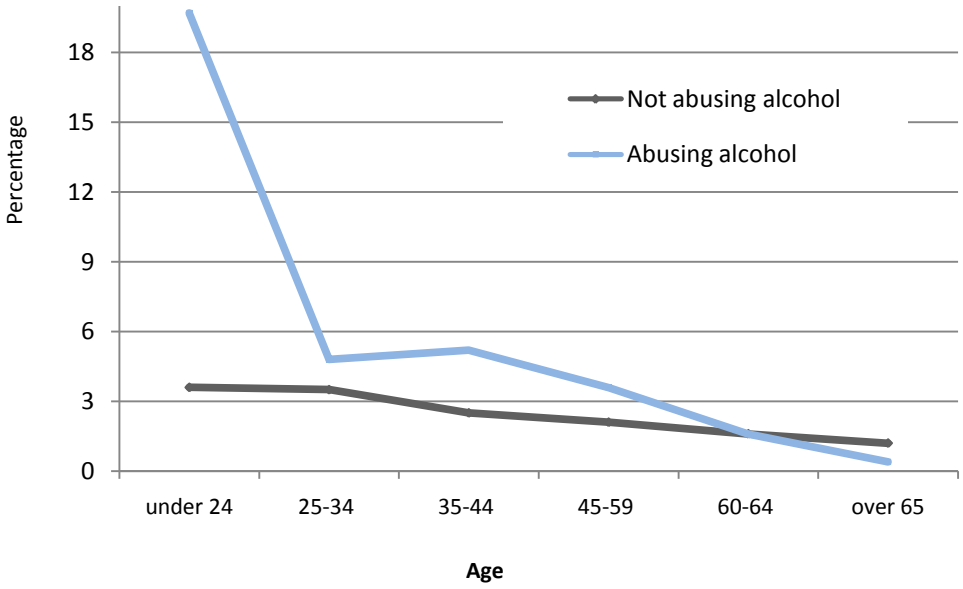
NOTES: age effect F(5, 14156)=8.462, p<0.00; η^2= 0.003, gender effect F(1, 14156) = 12.516, p<0.00; η^2= 0.001; interaction effect of gender and age F < 2, ns.

Figure 4.10.2. The percentage of road collisions and accidents among men and women with driving licenses at different ages

Table 4.10.22. The results of logistic regression of the probability of being a perpetrator of a road collision or accident due to gender and alcohol abuse

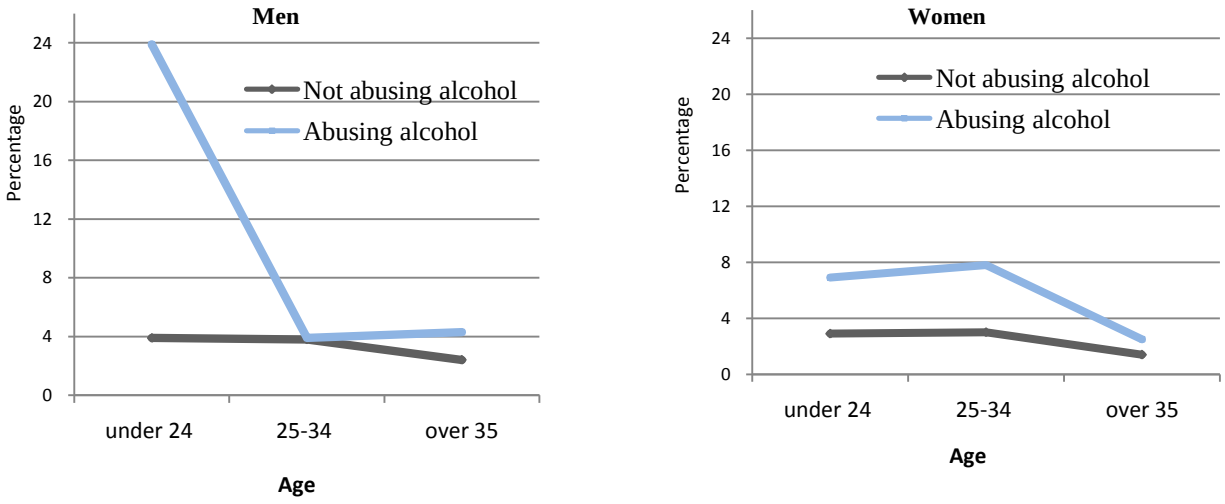
	B	S.E.	Wald	df	p.	Exp(B)
Alcohol abuse	.980	.126	60.589	1	.000	2.666
Men	.966	.109	78.364	1	.000	2.628
Constant	-4.746	.091	2709.314	1	.000	.009

NOTES: Reference groups are persons not abusing alcohol and women.



NOTES: age effect F(5, 14141)=22,493, p<0.000, η^2= 0,008; alcohol abuse effect F(1, 14141)=21,558, p<0.000, η^2= 0,002; interaction effect of alcohol abuse and age F(1, 14141)=21,558, p<0.000, η^2= 0,002; gender was a co-variant F(1, 14141)=13,216, p<0.000, η^2=0,001.

Figure 4.10.3. The percentage of road collisions and accidents among persons with a driving license who abuse or do not abuse alcohol at different ages



UWAGI: age effect F(5, 14141)=21,593, p<0.000, η^2= 0,003; alcohol abuse effect F(1, 14141)=43,949, p<0.000, η^2= 0,003; interaction effect of alcohol abuse and age F(1, 14141)=13,327, p<0.000, η^2= 0,002; gender effect F(1, 14141)=13,590, p<0.000, η^2=0,001; interaction effect of age and gender F(1, 14141)=11,637, p<0.000, η^2= 0,002; interaction effect of gender alcohol abuse F(1, 14141)=6,374, p<0.05, η^2= 0,00; interaction effect of gender, alcohol abuse and age F(1, 14141)=11,237, p<0.000, η^2= 0,002.

Figure 4.10.4. The percentage of road collisions and accidents among persons with a driving license who abuse or do not abuse alcohol at different ages

4.11. Evaluation of systemic transformation and its impact on the lives of the Poles

Antoni Sułek

The systemic reforms conducted in Poland after 1989, the introduction of democracy and the free market economy, brought about great changes in society and influenced the fate of individuals. In time, the social range and assessment of this influence is changing. To evaluate the entire period of changes after 1989 we used a simple question *"Were reforms conducted in Poland after 1989 successful in general or rather unsuccessful?"* and *"When was it easier for you to live; before 1989 or now?"* The responses to the first question expressed a general and direct assessment of the systemic transformation, whereas the answers to the second question, an indirect assessment from one's own life perspective. The first question has been asked since 1997 and the other since 2000, which enables dynamic comparisons this year encompassing the period of the entire decade.

4.11.1. A general evaluation of reforms and their social diversification

Any general evaluation of the reforms in Poland after 1989 is for most respondents a difficult task. Only half of them (48.9 per cent) were able to do it while the other half (51.1 per cent) was in the category "Hard to say" and even among persons with a higher than secondary education this percentage is only slightly lower (43.8 per cent). After twenty years since the implementation of reforms, their assessment is not much less difficult than several years ago; in 1997 59.8 of respondents had opinions in this regard.

Among those respondents who were able to evaluate the reforms introduced after 1989, belief that the reforms were not successful is definitely dominant (36.3 per cent) in relation to the belief that the reforms were successful (12.5 per cent). The dominant opinion that reforms were unsuccessful varies according to social position (age groups, education level, income, social and professional status) but only among populations of all types it is being gradually replaced by the opinion that the reforms were successful. Thus this is the opinion of the decisive although relative majority. Further analysis will be focused on those who believe that the reforms were successful and the majority will serve as a background.

Education is significant for the assessment of reforms after year 1989 (Table 4.11.1). In four main education groups elementary and lower, vocational/grammar, secondary and tertiary) 6.4, 7.7, 12.5 and 25.1 per cent of respondents respectively consider the reforms as successful. Persons with a tertiary education are more eager than others to perceive reforms as successful. Only in the group with a Master's degree, positive assessments reach the frequency (30 per cent) close to that of the negative opinions (30.8 per cent), and only in the elite group of those with a Ph.D. degree, positive opinions are a majority (38.8 per cent) over the negative ones (25.3 per cent).

Table 4.11.1. The percentage distribution of answers to the question "Were the reforms conducted in Poland after 1989 generally successful or unsuccessful?" in education groups of persons aged 18 or over.

Completed education level	Were reforms conducted in Poland after 1989 successful in general or rather unsuccessful?			
	Successful	Unsuccessful	Hard to say	N
University not lower than Ph. D.	38.8	25.5	35.7	98
University – M.A., M. Sc. or its equivalents	30.0	30.8	39.2	3284
University – engineer, bachelor degree	16.6	29.7	53.6	977
Postsecondary	14.1	34.5	51.4	830
Vocational secondary	11.9	39.1	49.0	5341
General secondary	13.9	29.3	56.8	2605
Vocational	7.4	42.7	49.9	6691
Grammar	9.2	11.6	79.2	1455
Elementary	6.4	42.5	51.1	3895
No education/ incomplete elementary	6.3	33.6	60.1	363
Total	12.5	36.3	51.2	25544

Of similar character are the correlations between the size of place of residence and the income and assessment of reforms (Table 4.11.2). As the size of the place of residence increases, the assessment of reforms as being successful become very slowly more frequent and only in the larger cities over 500k does their frequency reach 21.5 per cent.

Table 4.11.2. The percentage distribution of answers to the question "Were the reforms conducted in Poland after 1989 generally successful or unsuccessful?" by place of residence among persons aged 18 or over

Class of the place of residence	Were reforms conducted in Poland after 1989 successful in general or rather unsuccessful?			
	Successful	Unsuccessful	Hard to say	N
Cities over 500k	21.5	31.8	46.7	3158
Towns 200-500k	16.3	34.9	48.8	2865
Towns 100-500k	14.5	37.3	48.2	1815
Towns 20-100k	12.0	36.8	51.2	4891
Towns under 20k	12.2	38.0	49.9	3342
Rural areas	8.5	37.2	54.4	9496

The amount of income is also one of the factors influencing the assessment of reforms. In the lower quartile of income per capita in a household, 6.9 per cent of respondents consider reforms successful, whereas in the middle 50 per cent 9.4 per cent and in the upper quartile 25.1 per cent.

With respect to large social and professional groups, the highest percentage of positive assessments of the reforms is constituted by private entrepreneurs. 22.7 per cent of the group considers the reforms and successful and 29.9 per cent as unsuccessful. As a result, even in a group regarded as the greatest beneficiary of the market reform, the majority does not evaluate it as successful. Each of the other status groups assesses the reforms negatively at least two times more frequently than positively. Students are an exception in that the percentage of positive and negative assessments is similar (13.7 and 13.6 per cent) however they will probably adapt the assessments of the groups among which they will work in the future.

To recapitulate, people convinced of the success of the reforms in Poland after 1989 are encountered more often at the higher levels of the social ladder. At the lower levels, the share of those assessing reforms as unsuccessful and/ or are unable to assess them positively or negatively increases visibly.

4.11.2. Factors shaping the general evaluation of the reforms

The correlation between the evaluation of reforms and features of social position such as education, place of residence and income must be determined by factors associated with the social position exerting a more direct influence upon the evaluation.

The first factor is one's **own experiences**; whether the respondent's life is easier now or was easier before year 1989. Asked "*When was it easier for you to live; before 1989 or now?",* 30.3 per cent of respondents said before, 20.0 per cent after, 23.3 per cent could not say and 26.4 per cent were too young to remember those times. This means that among the respondents who remember those times, 41.2 per cent believe that it was easier to get by then and 27.2 per cent that life is better now. Speaking more precisely, half of the adult part of society with an opinion is represented by persons who claim they and probably "other people" found it easier to live before 1989.

The relationship between the subjective improvement or worsening of one's personal life situation after 1989 and the assessment of the reforms then started is not surprising (see Table 4.11.3). Persons who assess the influence of reforms on their lives as positive differ substantially in their evaluations from those whose opinions are the opposite. The second group very rarely assesses reforms as successful (6.0 per cent) and generally they consider the reforms as having been unsuccessful (57.9 per cent along with 36.1 "hard to say" answers). It is worth emphasising that the evaluations of persons who are unable to assess comparably their situation from before and after 1989 are similar to those who find it harder to live after 1989. It is probable their opinions are formulated through observing others' experiences and their generally critical views of the reforms implemented after 1989.

Table 4.11.3. The percentage distribution of answers to the question "Were reforms conducted in Poland after 1989 generally successful or unsuccessful?" depending on the impression that life was easier before 1989 compared to now among persons aged 18 or over

When was it easier for you to live; before 1989 or now?	Were reforms conducted in Poland after 1989 successful in general or rather unsuccessful?			
	Successful	Unsuccessful	Hard to say	N
It was easier to live before year 1989	6.0	57.9	36.1	7722
My life is easier now	27.9	31.4	40.7	5105
Hard to say	7.6	33.8	58.5	5929
I am too young to remember the times before year 1989	12.8	17.5	69.7	6747

A basic correlation between a change in the conditions of one's own life and a general assessments of reforms after 1989 was analysed in different education groups. The initial relation is holds although it partly results from the influence of the level of education on both assessments. An interesting interaction was observed in this respect; the

higher education group not only expresses positive assessment of changes in one's own life and general changes in Poland but also a stronger influence of personal experiences on the general evaluation of reforms.

People tend to assess the effect of reforms in terms of their direct influence on their own lives. It is more difficult to generalize about our positive experiences than about the negative ones. 27.9 per cent of those who find their lives are easier believe that the reforms were successful, while twice as many of respondents (57.9 per cent) who found it was easier to live before year 1989 assess them as unsuccessful. Moreover, the evaluations of persons who are unable to assess their situation comparatively are substantially similar to those of persons who find it harder to live after 1989. Their opinions are likely to be formulated through observing of others' experiences and generally critical views on the reforms implemented after 1989. This effect corresponds to the theory of social ingratitude (Czapiński 2000, 2002) which says that negative experiences exert a stronger influence than positive ones and also have a stronger impact upon general assessments regarding the field of these experiences.

The second factor which influences the general assessment of reforms after 1989 are **political values**; i.e the belief that democracy is a good system. On the scale of acceptance of democracy, 24.2 per cent, that is less than one fourth of the population, chose the view that "democracy is better than any other form of government"' 13.3 per cent believed that "Sometimes, a non-democratic government may be better than a democratic government"' for 19.1 per cent "It does not matter whether the government is democratic or not", 3.2 per cent believe that "Democracy is a bad form of government" and 40.1 per cent did not provide an answer. Therefore, the unconditional acceptance of democracy as a form of government is low in Poland

Such low level of acceptance of political democracy is not conducive to a positive assessment of reforms undertaken since 1989. However, it explains to some extent the individual diversification of these evaluations (Table 4.11.4). People considering democracy to be the best form of government differ greatly from those supporting any other views concerning democracy. The supporters of democracy also consider the reforms to be successful several times more often than others. At the other end of the spectrum, there are as many as 65.4 per cent of respondents who are convinced that "democracy is a bad form of government", which means that virtually everyone able to assess the reforms conducted after year 1989 perceives them as unsuccessful.

The acceptance of democracy influences the assessment of reforms at any level of education. Those who unconditionally accept democracy more or less twice as frequently consider the reforms as successful (17.0 in comparison with 6.4 per cent, 19.4 in comparison with 7.8 per cent, 25.9 in comparison with 12.6 per cent and 40.1 in comparison with 21.5 in the tertiary education group). The results are similar in all classes of place of residence and income quartiles. There is thus a real influence of the acceptance of democracy on the assessments of reforms after 1989.

Table 4.11.4. The percentage distribution of answers to the question "Were the reforms conducted in Poland after 1989 successful in general or rather unsuccessful?" by the acceptance of democracy as a form of government by respondents aged 18 or over

With which of the following statements do you identify with most?	Were the reforms conducted in Poland after 1989 successful in general or rather unsuccessful?			
	Successful	Unsuccessful	Hard to say	N
Democracy has the advantage over all other forms of government	28.6	27.9	43.5	6154
Some undemocratic governments can be better than democratic ones	12.8	48.4	38.8	3385
It does not matter whether the government is democratic or not	7.5	45.0	47.5	4862
Democracy is a bad form of government	6.3	64.6	29.1	838
Hard to say	5.8	30.9	63.4	10179

A visible improvement of life conditions after 1989 and the acceptance of democracy as the best form of government tends to dominate among the layers with a higher education, those who live in bigger cities and in higher income groups. In these groups the reforms are considered successful more frequently than in other segments of society. These two factors also tend to coexist on the individual level and thus the reforms are positively assessed among persons who find it easier to live now and who at the same time express acceptance of democracy.

4.11.3. Dynamics of assessment between 1996 and 2009

A dynamic comparison of social reforms after 1989 involves six observations beginning in 1997 the results of which are shown in Tables 5 and 6. Throughout this period there is a lack of a general trend in the assessment formulation be it steady improvement or deterioration. It is visible however that at first in the years between 1997 and 2003, the already small minority assessing the reforms positively decreased, while the share of those convinced that the reforms were unsuccessful grew by as much as twice. Then since 2003, the direction has been changing and the assessment of reforms has improved visibly from 6.1 per cent in 2003 to 12.5 in 2009. At the same time, the percentage of negative assessments has dropped from 57.4 to 36.3 per cent. (Table 4.11.5). This improvement may be due to the present economic growth in Poland and its positive effects on the respondents. Its influence however may not be very strong as the time interval between the two phenomena is increasing. On the other hand, it may also

be suppressed by the political criticism of liberal economic reforms after year 1989, which has become stronger in the recent years.

Table 4.11.5. The percentage distribution of answers to the question "Were the reforms conducted in Poland after 1989 generally successful or unsuccessful?"between 1997 and 2009 among persons aged 18 or over

Answers	1997 N=2094	2000 N=6403	2003 N=9380	2005 N=8539	2007 N=12747	2009 N=25568
Successful	10.4	7.7	6.1	7.4	10.3	12.5
Unsuccessful	29.8	47.4	57.4	46.7	40.1	36.3
Hard to say	59.8	45.0	36.5	45.9	49.6	51.2

Source of data: year 1997 — Czapiński, 1998; years 2000-2009 — *Social Diagnosis.*

As popular as the belief that reforms in Poland after 1989 were unsuccessful is the view that the changes which took place in Poland after 1989 influenced the lives of Poles. Excluding the respondents who were too young to make such a comparison, we obtain the following order for 2000 to 2009 (Table 4.11.6):

Table 4.11.6. The percentage distribution of answers to the question "Did the changes that took place in Poland after 1989 influence your life?"between 1996 and 2007 among persons who remember the time before 1989

Answers	2000	2003	2005	2007	2009
It was easier to live before 1989	61.3	58.7	53.8	43.6	41.1
My life is easier now	14.2	13.6	17.2	24.8	27.2
Hard to say	24.5	27.7	29.0	31.6	31.7

The assessment of the new system from one's own life perspective, is improving over time despite being low.

The comparison of changes in social assessment of reforms after 1989 and changes in comparable assessments of life before and after 1989 indicates that these two processes have been taking place alongside each other.

However, the general assessments of the reforms are systematically worse than the assessments of the influence of changes after 1989 on one's own life. If the general assessments of reforms were formulated only on the basis of personal experience, there would not be such a significant discrepancy. The question is why this happens.

The general assessment of reforms is definitely clearly susceptible to the influence of social interactions and public discourse. People assess the influence of reforms on their lives for themselves although others and the media interfere with this process. The general assessment of reforms is definitely much more susceptible to the influence of social interactions and the public discourse. In social contacts, people who assess the reforms negatively dominate, which overlaps with a tendency for public grumbling. Public discourse popularizes a strong voice of criticism against the "reforms of Balcerowicz". The discrepancy in the assessment of one's own situation and that of society is known to social researchers. Many more people talk about the danger of crime at a national level than feel personally under threat of crime. Likewise many more critically assess the health service than have actually negative experience of it etc.

The assessment of reforms in general may be less favourable than that of their influence upon the lives of the respondents due to psychological reasons (Czapiński, 2004). People who were successful thanks to the conditions established by the reforms conducted after 1989 may assess themselves better by underlining the difficulties they had to overcome, showing that despite the reforms in general not being successful, they were able to take advantage of the opportunities they provided. Those who were not successful in the conditions established by reforms may defend their self-assessment by showing that the reforms were generally unsuccessful and they were victims of the process like many others, like "all of us". Both of these processes of raising one's self-assessment and self-justification, lead to the same phenomenon, which is a critical view of the reforms conducted in Poland after 1989.

5. THE STATE OF CIVIL SOCIETY

5.1. The civil experiences and competences of the Poles

Antoni Sułek

Civil society is a network of voluntary organizations, associations and contacts that fills the space between the individual and society, the citizen and the state. In the civil associations creating civil society, people acquire democratic experience and learn the civil skills necessary for democracy and being the citizens of a democratic state. The development of democracy and the growth of civil competences in society reinforce each other.

5.1.1. The forming and joining of associations and joint actions

The forming of associations and the percentage of citizens who belong to voluntary organizations is the simplest measure of the condition of a civil society. In Poland in 2009, 13.2 per cent of respondents were members of organizations, associations, parties, committees, councils, religious groups, unions and circles. Out of these, 10.1 per cent are members of just one organization, 2.3 per cent of two, and 0.8 per cent of more than two. Meanwhile, 86.8 per cent do not belong to any organization at all. A higher level of participation in the civil society is the performing of roles in organizations. 37.9 per cent of respondents who stated their present membership in an organization, stated that they "performed some functions in the organizations in their lives, not necessarily now and not necessarily in the same organization".

In relation to the recent years (see Table 5.1.1), there has not been any steady increase of the membership indicator observed, whereas in the field of participation in the management of an organization even a certain regress has taken place. Civil society in Poland understood as participation in voluntary organizations, is not developing and more people are not becoming involved in its networks and structures.

Association membership is socially stratified and the differences between groups are related to the unequal organizational offer aimed at particular groups and their different readiness for membership. The percentage of members increases regularly along with the size of the place of residence, from 11.6 per cent in rural areas to 15.8 per cent in larger cities (though in towns of 100-200k it has dropped to 11.9). It also increases visibly along with the education level (elementary and lower, vocational/grammar; tertiary), it amounts to 7.1, 22.1, 16.6 and 22.1 per cent respectively, as well as along with income (from 10.0 in the lower quartile and 12 per cent in the middle 50 per cent to 18.3 per cent in the upper quartile of income per capita). Most eager to join associations within socio-professional groups are employees of the public sector (23.0 per cent) and the least eager are the unemployed (7.7 per cent) and other professionally inactive groups (7.3 per cent).

Table 5.1.1. The percentage of association members and persons performing functions in organizations between 2003 and 2009 among respondents aged 18 or over

Variable	2003	2005	2007	2009
Organization members	12.2	12.1	15.1	13.2
Performing functions among members	45.1	55.7	41.4	37.9
Performing functions among the general population	5.3	6.8	7.0	5.0

A similar social diversification and even stratification is associated with the experience of performing functions in organizations, taking advantage of the active and passive electoral rights and participation in the management of organizations. Within four main education categories, persons who have ever performed any functions constitute 31.9 per cent of members of the lower quartile, 33.7 per cent of the middle 50 per cent and 44.2 of the upper quartile.

Education and income are the basic factors of stratification. Therefore, association membership is conditioned by stratification. Strata from the higher levels of the social ladder are associated to a greater extent and those from the lower levels are less associated.

A similar social diversification and even stratification is associated with the experience of performing functions in organizations. Managerial functions have been performed by 31.9 per cent of members from the group with the lowest income per capita in a household, 33.7 from the middle 50 per cent and 50 per cent from the group with the highest income. As in the case of association membership, the most important factor here is education. The higher the education category, the more often the respondents perform functions in organizations (see Table 5.1.3).

Association membership as a measure of development of civil society is only one of the possibilities. People who want to do something for their community do not have to establish formal organizations for this purpose. It is enough if they undertake or join any activities on behalf of the local community. The study shows however that this phenomenon is just as rare as membership in formal organizations. Only 15.6 per cent of respondents became engaged in activities on behalf of their own society (community, the neighbourhood or the local area) in the last two

years. In 2007, the number of such persons was 14.1 per cent, in 2005 it was 13.6 per cent, in 2003 it was 12.9 per cent and in 2000 it was 8 per cent. Thus, we can observe a systematic although slow increase in the level of commitment of Poles in activities on behalf of the local communities.

Commitment of this kind increases along with education in the four subsequent aggregated groups of education, the percentages of those engaged are 7.3, 13.4, 16.2 and 24.7 per cent. In the subsequent quartiles of income, 13.6, 14.3, 19.1 per cent of respondents respectively became engaged. Research on the independent influence of education and income showed that: (1) the influence of education on the involvement increases along with the level of income, and (2) involvement among persons with elementary education decreases along with the increase of income. Income is insignificant in the case of persons with vocational and secondary education. Among persons with a high education level the involvement increases in the group with the highest income.

5.1.2. Participation in meetings

Citizens also participate in democracy when they gather to discuss and take common decisions. The most common civil experience is participation in a public meeting. The research results show that every fifth respondent attended some kind of political meeting in the previous year (except for the workplace). Since 2003 this percentage has been quite steady and oscillates around 19.0 per cent. (Table 5.1.2).

Table 5.1.2. The percentage of persons taking an active part at meetings in 2003, 2005, 2007 and 2009 among the respondents aged 18 or over

Variable	2003	2005	2007	2009
Participation in a public meeting	18.5	19.0	20.3	19.2
Spoke (in relation to those present)	57.5	60.6	57.4	46.7
Spoke (in relation to the general population)	10.5	11.4	11.7	8.9
Organized a meeting (in relation to the general population)	nd	nd	5.4	5.1

Active participation is more important than just presence at a meeting. Meeting participants are eager to speak (46.7 per cent). Those who speak during public meetings express their own opinions and influence the opinions of the community become socially recognizable and in time may become leaders of their local communities or even their representatives. The higher the education level, the more often respondents speak during public meetings. Only 5.1 per cent of respondents had experience of organizing meetings. These could include many various activities, from attempting to organize a meeting, through to conducting the meeting, recording the conclusions or counting votes. These experiences and civil competencies are strongly stratified. As a result, 1.8 per cent of all respondents had an elementary education and 9.6 per cent a tertiary (see Table 5.1.3). It is also twice as frequent in the group with the highest income as in that with the lowest income (7.5 and 3.2 per cent, respectively).

Better educated people practice grass-root democracy much more frequently than others and have more civil experiences. They organise, lead, speak, express their opinions on the public matters concerning themselves and other people. They develop their civil skills through the involvement in civil life.

5.1.3. Participation in elections

Participation in elections is the most common experience of democracy. When asked about participation in the parliamentary elections of 2007, 66 per cent of respondents gave a positive answer. This percentage is overrated with respect to the actual turnout of 54 per cent. It can be assumed that this impact on the result is relatively independent of the factors of social position and does not render impossible the conducting of a study of social conditions which determine the participation in elections. This participation is related to social position measured by education; in four aggregated education groups it amounts to 57.3, 53.2, 71.9 and 74.1 per cent. In the lower quartile it is 52.6 per cent, in the middle ones 50 per cent and in the upper quartile it is 77.0 per cent. Generally similar results were observed in the previous editions of *Social Diagnosis* where the questions concerned the participation in self-government election. In 2007, 65 per cent of respondents declared participation in the local government election of November 2006.

All the civil experiences and competences are thus related, some of them very strongly, with social position measured by the level of education. This correlation is presented in Table 5.1.3.

Table 5.1.3. Civil experiences and competences by education level among persons aged 18 +

(*(per cent)*

Completed education level	Voted in the local election in 2007	Belongs to an organization	Performed functions (in relation to the members)	Acted on behalf of the community	Participated in a meeting	Spoke (in relation to the members)	Organized a meeting	The average number of experiences
University not lower than Ph. D.	83.7	41.2	65.9	33.3	58.6	71.9	25.0	3.0
University M.A., M. Sc. or its equivalents	86.8	24.8	50.2	27.0	29.2	59.5	10.6	2.1
University engineer, bachelor degree	81.0	14.8	48.7	18.0	20.3	49.2	7.9	1.6
Postsecondary	77.7	17.8	46.3	22.2	23.6	50.0	6.0	1.7
Vocational secondary	72.9	14.7	38.9	17.2	21.5	49.9	5.4	1.5
General secondary	69.8	12.8	41.4	14.3	18.6	44.6	5.6	1.4
Vocational	62.8	9.6	28.3	12.9	17.6	41.3	3.3	1.2
Grammar	9.1	11.3	42.1	15.8	12.6	34.5	4.7	0.6
Elementary	58.2	7.4	17.0	7.6	11.8	33.8	1.9	0.9
No education	47.0	3.3	12.5	4.3	5.5	17.6	1.1	0.6
Total	66.0	13.2	37.9	15.6	19.1	46.7	5.1	1.4

5.1.4. The influence on civil activity of acceptance of democracy and trust towards people.

The higher the education level, the more often people tend to establish organizations and join already existing ones and perform voluntary functions. The more eager they are to participate in activities on behalf of their community, the more often they organize public meetings, and as *Social Diagnosis 2007* noted, the more often they sign, and probably also initiate collective letters, protests and petitions. They also participate in local elections more often. Educated people are better organized socially and are more able to express their interests. They are more efficient in taking advantage of the opportunities of local level democracy.

5.1.5. Conclusion

The study shows how few civil experiences the Poles have. In other words, they have little democratic experience which is built and gathered through membership in organizations, participation in bottom-up social initiatives and even public meetings. If Poles do not associate eagerly, rarely take actions in relation to their own communities, do not meet readily to make common decisions, they have no opportunities to learn an organized social action and acquire the skills necessary to participate in civil society. They cannot learn how the simplest voluntary organisation operates, how to organise themselves to resolve a local problem, how to conduct a meeting to make it efficient, how to put forward one's own arguments successfully, how to find allies, how to conduct elections, how to write a petition to an office and how to influence its decision. In the countries of better civil organisation these competences are more widespread.

Poles are unable to organise themselves and act together efficiently, because they have not learnt from experience. They cannot do it, because they do not act, they do not act, because they cannot do it. There are several explanations concerning the poor development of civil society in Poland. The entire social and political history of the country with an emphasis on the Partitions, the period of monocentric communist regime, the "national character" with its exuberant individualism reaching back to the Nobles' Republic, the low level of people's trust in each other, an indispensable "ingredient" of civic society etc. Each of these factors: the tradition, the social personality and interpersonal attitudes partly explain this complex phenomenon. In addition, the modest civil competences of the Poles complete this picture.

5.2 Social capital

Janusz Czapiński

Social capital is the core of civil society and surely of any developmentally efficient society (e.g. Woolcock, 1998)[38]. Why should social capital influence the economic development of a community? A theoretical response is so simple, almost so obvious, that it is insufficiently documented (e.g. Sabatini, 2007). It facilitates negotiations, lowers transaction costs, shortens the investment process (diminishes a probability of appealing further decisions of administrative authorities), decreases corruption, increases reliability of contracting parties, favours long-term investments and dissemination of knowledge, prevents the abuse of the common good, increases intergroup solidarity and also, through the development of third sector, it favours social control of the authorities (Coleman, 1990; Knack, Keefer, 1997; Sztompka, 1999; LaPorta i in., 1997; Glaeser, Laibson, Sacerdote, 2002; Putnam, 2000,

[38] In particular in more affluent countries (Czapiński, 2008, 2009).

2003). Indeed, the advantages of social capital are not limited solely to economic effects; they expand to what is widely understood as the quality of life of a society.

The concept of social capital is not clearly defined. Instead, it is very wide and covers all the issues which determine appropriate social relations, caring about the common good and cooperation[39].

According to Robert Putnam (2000, 2003), social capital is a cultural phenomenon and it includes the civil attitudes of society members, the social norms that support the common activities, interpersonal trust as well as trust of citizens towards the public institutions. Research conducted by Putnam in Italy shows that social capital is built in a long historical perspective and its nature makes it a public good. It is not a resource or a trait of individuals though it depends on individuals, their attitudes, beliefs and value system.

Francis Fukuyama (1995, 2002), like Putnam, defines social capital as a "set of informal values and ethic norms that are common for members of a specific group enabling them to cooperate efficiently". The basis for cooperation on behalf of the common good is the mutual trust between the group members. The rules, which define the social capital, range from the standard of mutuality among two friends to very complex and codified doctrines, such as Christianity or Confucianism. However, not every system of standards is a part of social capital.

Unlike Putnam, Pierre Bourdieu (1986, 1993) defines social capital as individual investments in social networks. According to him, social capital is a private and not a public good and it may lead to the creation of cultural capital, affluence or "symbolic capital" that is, signs of social status. The social capital of an individual is the basic element of this individual's social position.

In our study, we assumed a definition closer to those of Putnam and Fukuyama than to that of Bourdieu. Social capital is understood here as the social networks regulated by moral standards or customs (and not or not only, by the formal rules of the law), which binds individuals to society in a manner enabling them to cooperate with others for a common good. On the basis of his research conducted in Italy, Putnam postulated a high economic significance of social capital. The level of economic development may be treated as the final result of social capital or as one of its functions. Moreover, it is a tool of:

- integration and social solidarity; it counteracts exclusion and discrimination;
- the complementing and substitution of inefficient state institutions;
- the control of the government sector and enforcement of its accountability
- the control of the commercial sector
- the strengthening and protection of local culture in the face of its commercialization.

We treat the following as the indices of social capital understood thus: interpersonal trust, voluntary (not enforced by say the statute of a trade union) membership in organizations and performing functions in them, participation in voluntary public meetings and speaking during these meetings, the organization of such meetings, voluntary activities on behalf of the local community, participation in the local elections, and a positive attitude towards democracy, which provides the most favourable conditions for the development of social capital and thrives on it[40].

Some indicators of social capital may be measures of a civil society, especially interpersonal trust and voluntary activities in the third sector (voluntary non-governmental and non-familial organisations, associations and foundations) that is, the network of formal relations. The network of informal relations (familial, social) can also create social capital, but the efficiency of social capital in the case of informal relations is usually lower, due to a higher risk of maximisation of particular benefits (familial, coterial) at the expense of the common good. "Relying on informal social capital ('connetions'), especially in the public sphere, can challenge the belief in the impartiality of public institutions and distort their functioning through corruption, clientelism and the 'removal' of public resources into private hands". (Raiser, Haerpfer, Nowotny & Wallace, 2001). It does not mean that such a risk does not exist in non-governmental organisations, in particular in corporations and trade unions.

According to Jeremy Rifkin (2000), Western civilisation is at a turning point. With the weakness of the state in the face of an aggressive expansion of commercialism, culture weakens and its diversity disappears, all of which are the premises for sustainable development. Three scenarios are possible: an increase of fundamentalism, fourth sector development (criminal groups) or third sector development (renewal of civic society). The only efficient scenario which can save democracy and guarantee sustainable development is the building of the third sector. Yet according to Putman it requires the fulfillment of two conditions defining social capital; mutual trust between people and substantial participation of volunteer work in the economically active population.

Volunteer work, that is unpaid activity on behalf of community is the necessary basis for the development of non-governmental organizations, that is of the third sector, whose development, according to Rifkin, is the only positive scenario for democracy and sustainable development

Poland does not meet any of these two criteria of a civil society. As for general trust, we occupy the last place among the countries included in the European Social Survey (ESS) in 2006 (Figure 5.2.1). In Poland, according to our research, the statement that "most people can be trusted" was supported by only 10.5 per cent of respondents in 2003 and 2005, in 2007 it was 11.5 per cent, in 2009 it was 13.4 per cent and in ESS in 2006 it was 15.9 per cent

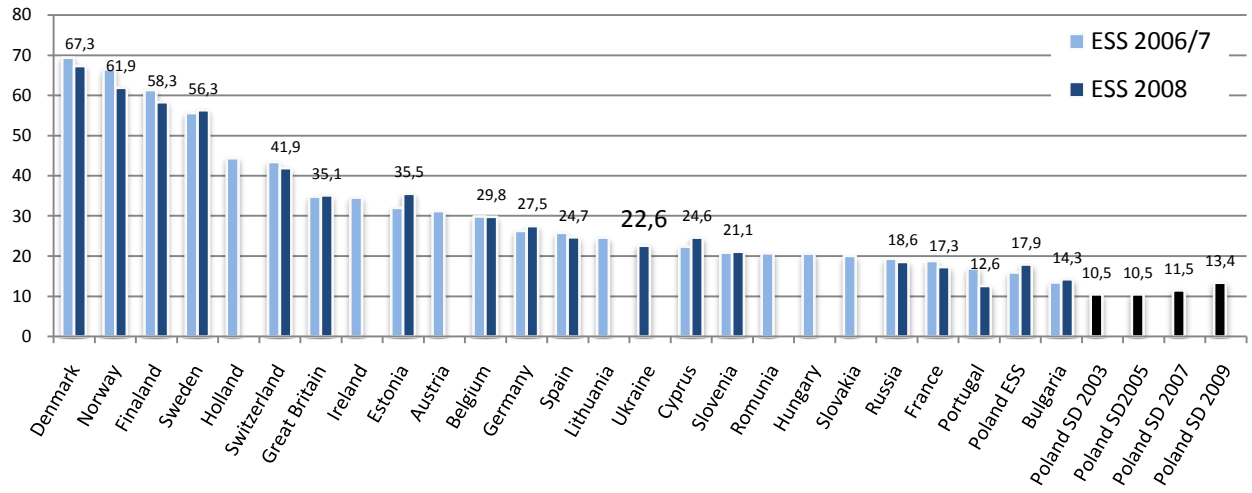
[39] For a critical review of different definitions of social capital, see Hardin (2006).

[40] We will discuss here the results pertaining to some of these indicators. All of them were used for construction of the synthetic indicator of social capital, constituting one of the dimensions of quality of life (see Chapter 8.1).

over four times less than in Denmark and Norway, which in the last ranking of quality of life among 179 countries occupied 2nd and 13th place, respectively (UNDP, 2005 (UNDP, 2007/8)[41].

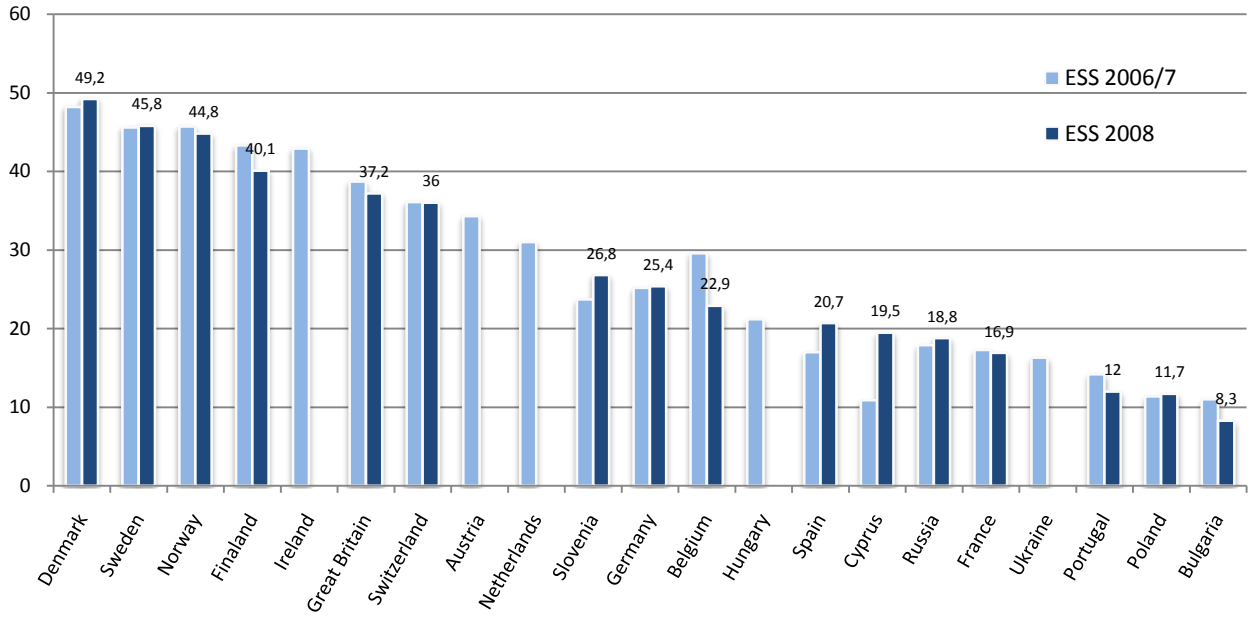
As for the second condition for the development of a civil society, the third sector, the situation is as follows. In 2008, the REGON register including 58237 associations and more than 9000 foundations. Only 58 per cent of these are actively operating and 10 per cent are engaged in no activities at all ([*Voluntary and philanthropic work and 1 per cent*] as reported in the study of 2003, Klon/Jawor Association 2003), three out of four have no employees, and only 8 per cent hire more than 5 employees (http://badania.ngo.pl/files/badania.ngo.pl/ public/ podstawowefakty 2006).

Forming associations, when membership in organizations became fully voluntary, dropped abruptly from 30.5 per cent in 1989 (World Value Survey) to 13 per cent (in 2007 - 15 per cent). In this regard, just as in the case of trust, we are in the last position among the countries encompassed by the *European Social Survey* (Figure 5.2.2)



Source of data: For all countries including Poland ESS – European Social Survey 2004 (percentage of answers 7–10 on scale: 0–"you cannot be too careful", 10–"most people can be trusted"), for Poland DS – Social Diagnosis of 2003–2007 (the percentage of answers "most people can be trusted" according to scale: most people can be trusted, you can never be too careful, hard to say); average for all countries in ESS – 32 per cent

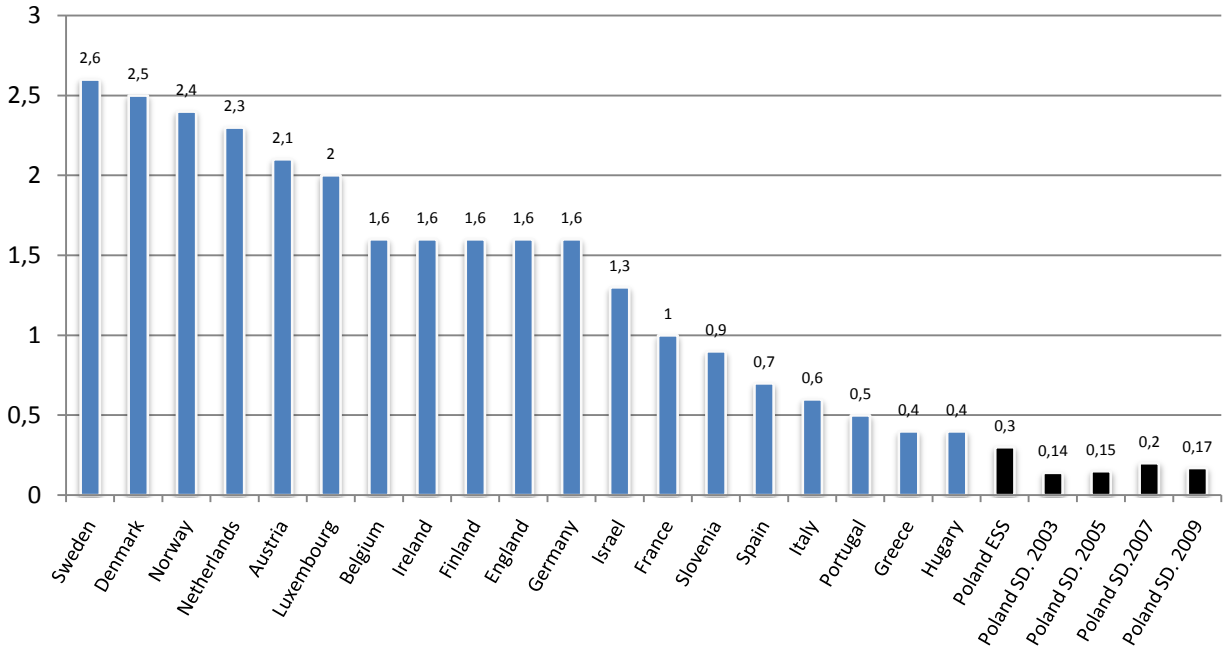
Figure 5.2.1. The percentage of persons aged 16 or over that trust other people



Source of data: For all countries including *European Social Survey 2006/7* (percentage of answers 7–10 on scale: 0–"people most often care only about their own business" 10–"people most often try to be helpful", average for all countries in ESS – 26.5

Figure 5.2.2. The percentage of persons aged 16 or over who are convinced that people most often try to be helpful

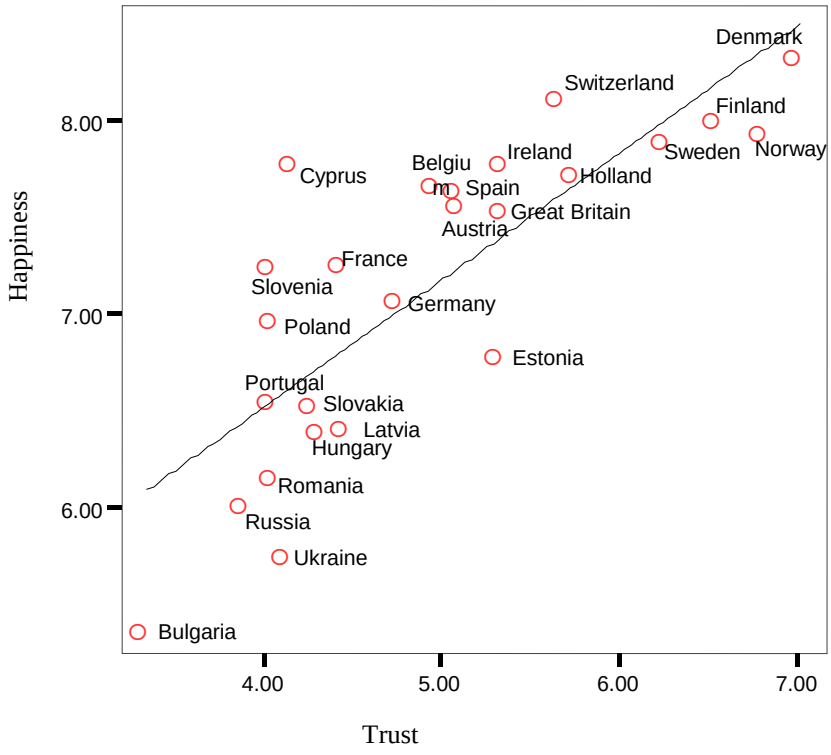
[41] In this ranking, Poland occupied 39th place, which is 5 places better than in 1998 (UNDP, 2000).



Source of data: For all countries including Poland ESS – *European Social Survey 2002* for Poland DS – Social Diagnosis of 2003–2007.

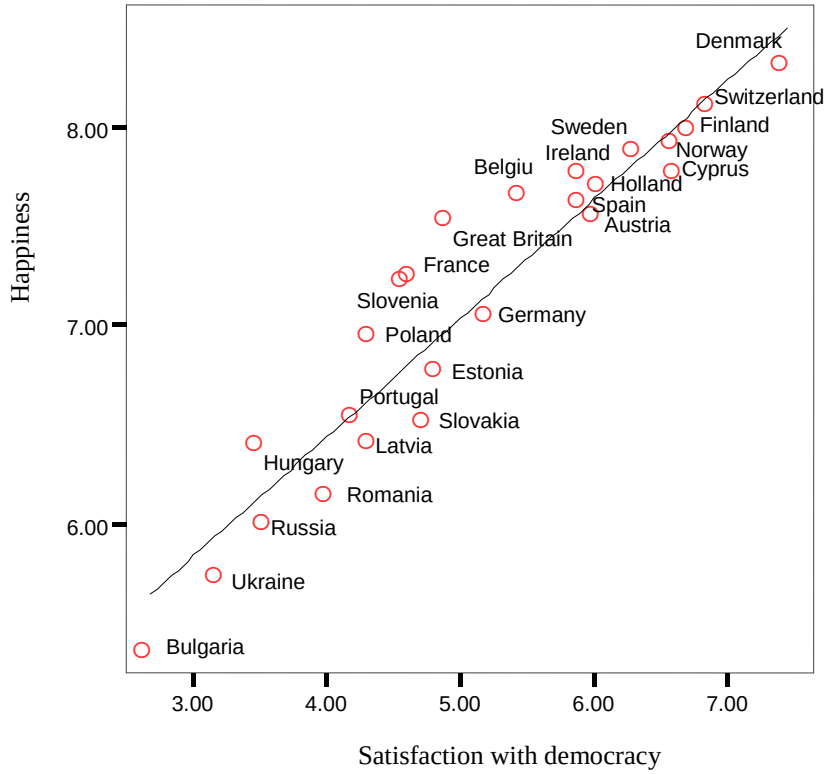
Figure 5.2.3 The average number of organizations to which respondents aged 16 or over belong

So far we have been discussing the importance of social capital for the development of a society and thus for the quality of life, but we have not presented any evidence confirming this statement. Here is some information in this regard. Internationally, the level of interpersonal trust and voluntary membership in organizations is associated very strongly, among other things, with psychological well-being (Figures 5.2.4 and 5.2.5) measured as the level of satisfaction with life and the material life quality (Figures 5.2.6 and 5.2.7)



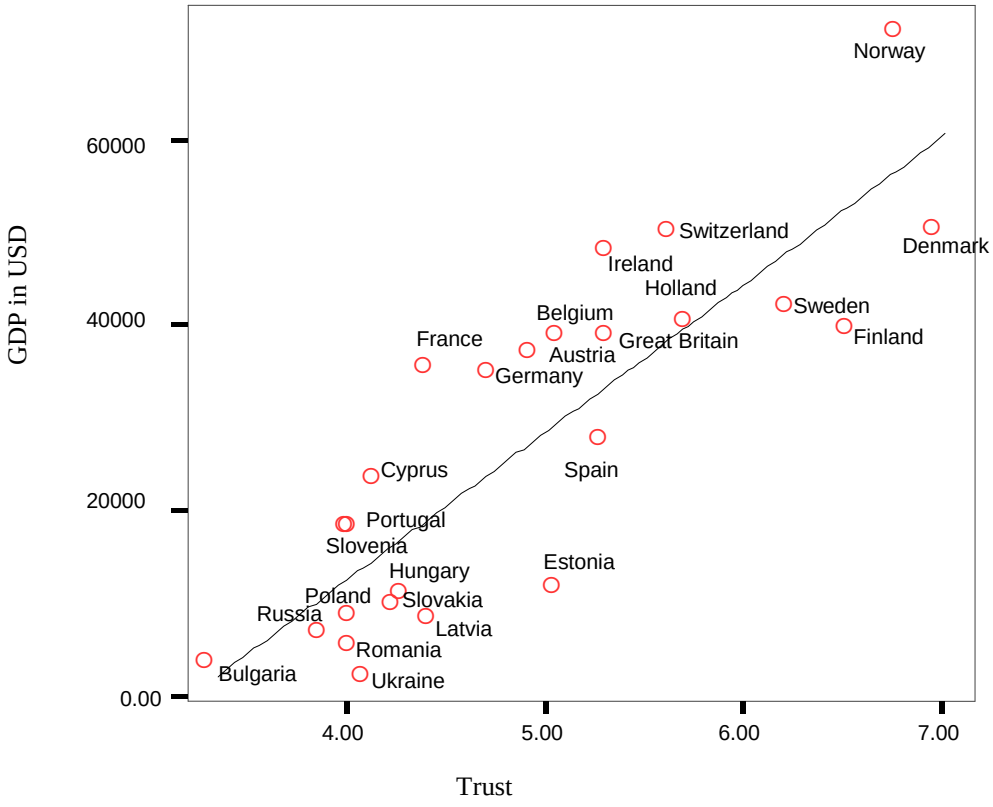
R^2 = 0,64.
Source of data: *European Social Survey* 2006/7.

Figure 5.2.4. Interpersonal trust vs. sense of happiness by countries



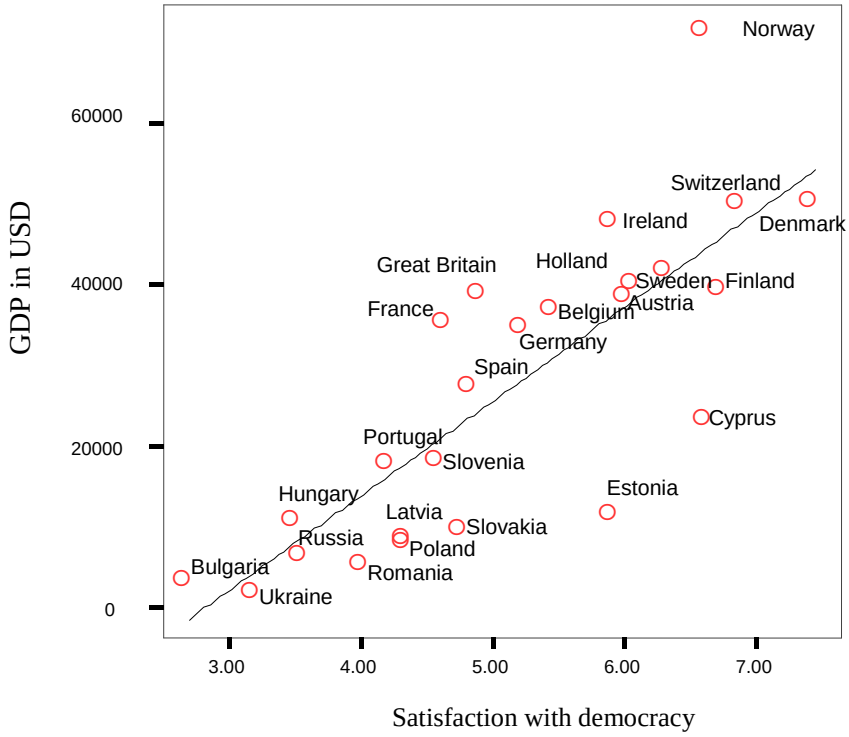
R^2 = 0,90
Source of data: *European Social Survey* 2006/7.

Figure 5.2.5. Satisfaction with democracy vs. sense of happiness by countries



R^2 = 0,71
Source of data: *European Social Survey* 2006/7 and Yearbook of Statistics, Central Statistical Office, 2007..

Figure 5.2.6. Interpersonal trust vs. GDP per capita (in USD) by countries



R^2 = 0,643
Source of data: *European Social Survey* 2006/7 and Yearbook of Statistics, Central Statistical Office, 2007.

Figure 5.2.7. Satisfaction with democracy vs. GDP per capita (in USD) by countries

Also our data confirm a strong correlation between social capital defined according to the adopted indicators (see above) and other life quality dimensions (see Chapter 8.1) (Table 5.2.1). The correlation with material affluence is the highest. Also, the correlation with civilization level and the general life quality indicator is high. The only statistically insignificant correlations are with social well-being[42] and pathologies[43]indicators. A positive correlation with life stress shows that groups in which the social capital is high are engaged in many various fields of activity and thus they are exposed to a greater number of stressful events and perhaps are also more sensitive to whatever is happening in their environment.

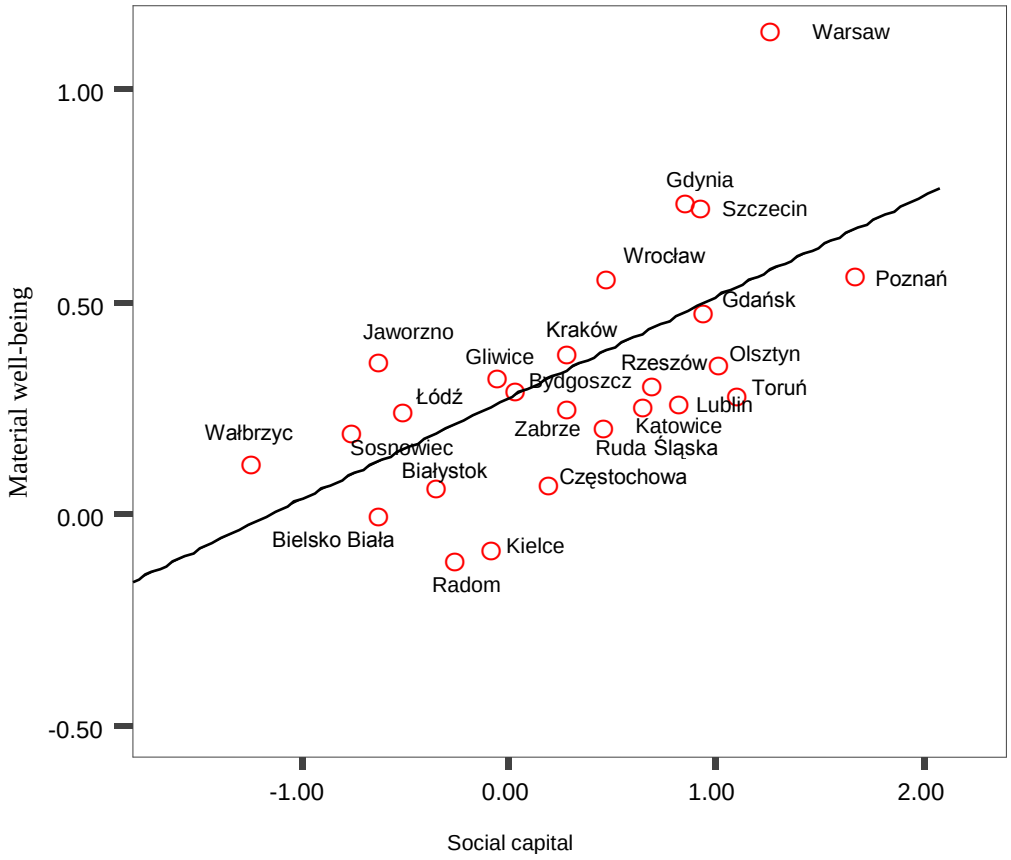
The level of social capital in the biggest cities of Poland is also strictly correlated with material well-being (Figure 5.2.8 and 5.2.9). The strength of this correlation was similar in the measurements of 2007 and 2005.

Table 5.2.1.Correlations between social capital and other indicators of the life quality for 104 social, demographic and professional groups

	Civilization level	Social well-being	Physical well-being	Psychological well-being	Pathologies	Life stress	Material well-being	General life quality
Pearson‘s r	0.748	0.249	0.282	0.410	0.051	0.459	0.730	0.741
p	0.000	0.01	0.01	0.000	ns	0.000	0.000	0.000

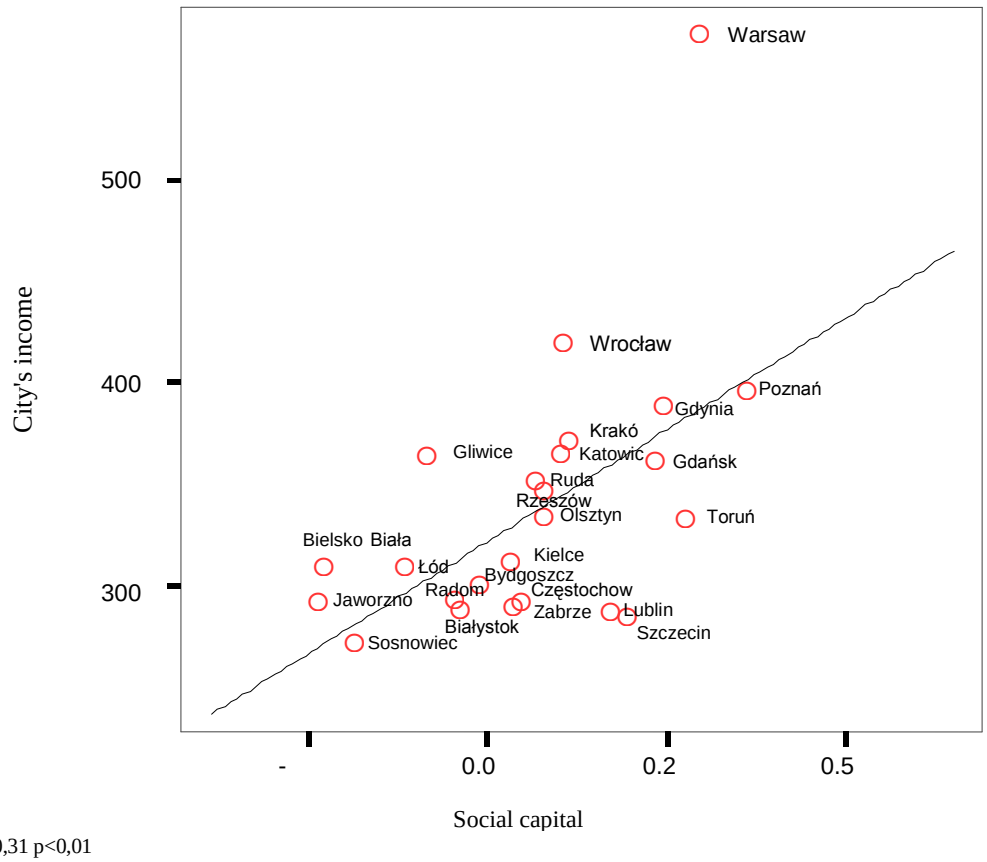
* life quality measures and definition of social and demographic groups – see Chapter 8.

[42] Social well-being is understood here as the quality of social ties with the closest relatives and friends (operating definition – see Chapter. 8.1)
[43] The pathology indicator includes both the perpetrators and victims of crimes and alcohol and drug abuse, as well as attending a psychiatrist or a psychologist (see Chapter 8.1).



R^2=0,42, p<0,01

Figure 5.2.8. Social capital and material well-being in the largest cities

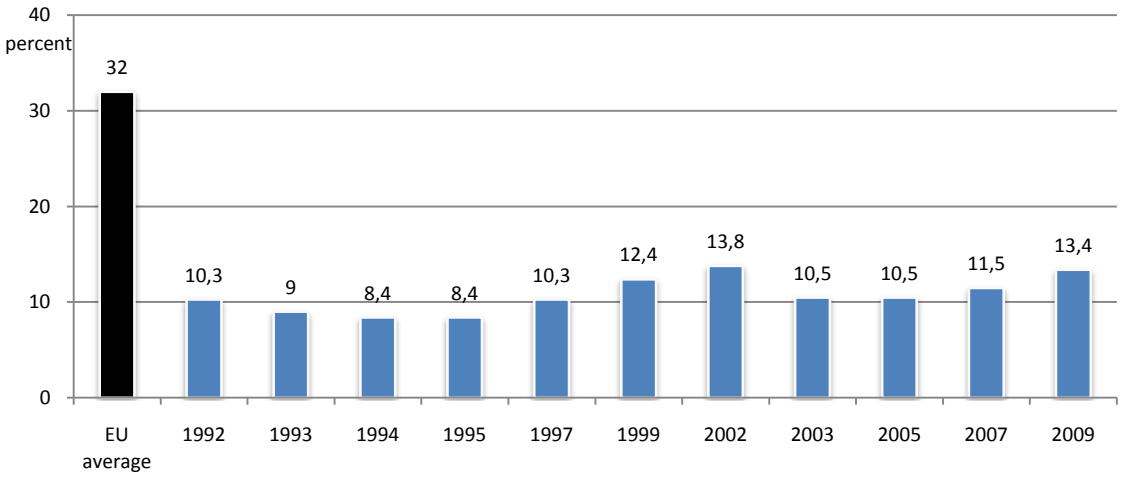


R^2=0,31 p<0,01

Figure 5.2.9. City's income per capita in 2007 vs. social capital in 2009

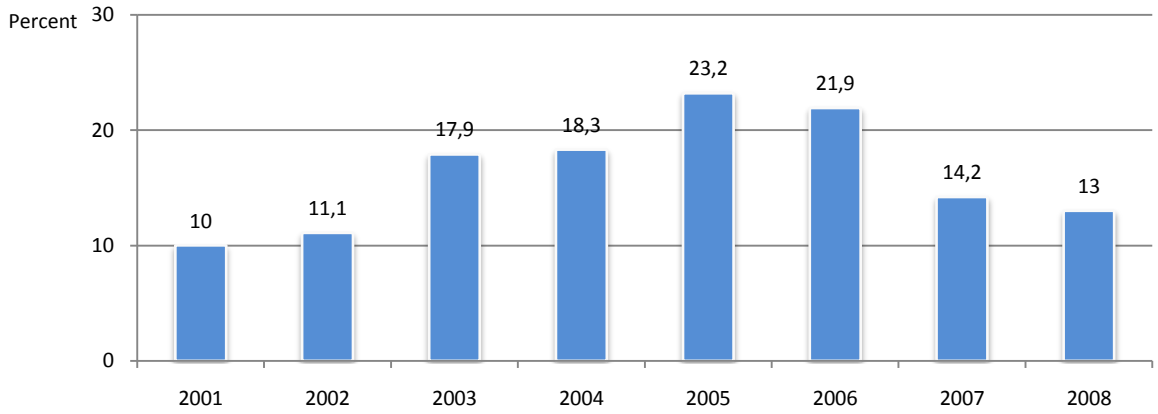
Obviously correlations do not entitle us to draw conclusions about the direction of these relationships such as whether happier and more affluent communities favour social capital or social capital favours happiness and affluence of citizens. However, longitudinal analyses of international data proves that social capital determines further country development and the opposite (Czapiński, 2009). Yet, this correlation is true only after a certain development threshold has been exceeded; in less affluent countries a stronger premise for the economic development is human capital.

Let us see how the two selected social capital indicators in Poland were shaped in recent years. The social trust indicator fluctuated, but it did not reach the lowest value in the group of countries included in the *European Social Survey* (Figure 5.2.10). The percentage of volunteers among adult Poles was growing until 2005 and then it started to decrease to reach the level from before 2003 (Figure 5.2.11).



Source of data: EU average – ESS – *European Social Survey* 2006/7; Poland for years 1992–2002 – *Polish General Social Survey, for years 2003–2007 – Social Diagnosis [own work]*

Figure 5.2.10. The percentage of persons in Poland who trust other people between 1992 and 2007 and the average level of trust in the EU in 2004



Source of data: *Volunteering, Philanthropy and 1 per cent* [Wolontariat, filantropia i 1 proc.] Report of the 2007 Study Stowarzyszenie Klon/Jawor.

Figure 5.2.11. The percentage of volunteers among adult Poles between 2000 and 2008

After a temporary increase, the number of Polish citizens satisfied with democracy started to diminish according to the data from the *Polish General Social Survey* (PGSS, 1999). In our study, in which we applied a different scale of assessment of democracy in Poland, the percentage of supporters of the view that democracy has the advantage over all other forms of government has remained at a very low though growing level; in 2003 17 per cent, in 2005 21 per cent and in 2007 24 per cent.

A general question regarding the prospects for Poland is as follows; what is the source of economic development in the Third Republic despite such a constantly low level of social capital? The development of Warsaw, Poznań or Gdynia can be related to a higher level of social capital than in other cities, yet the material level of life is growing relatively evenly in the entire population and also in the regions with the lowest levels of social

capital. A hypothetical answer is that we are in a phase of molecular development, in contrast to the community development (Czapiński, 2008). This contrast is reflected in a gap between the pace of improvement of the quality of life in households, their furnishing with durable goods (cf. Chapter 3.3), and the pace of infrastructural development such as roads and difficulties in the realisation of any type of public investments. The economic advancement of particular persons or families is determined by rapidly growing human capital in Poland, in particular the level of education. Social capital is indispensable for successful realisation of corporate undertakings, which require effective cooperation of central and local authorities as well as local communities and particular citizens. Know-how and health become insufficient, especially when the community reaches a high level of development which includes the complexity of internal economic and administrative relations and more generally, institutional and interpersonal ones.

We live in a a country of ever more efficient individuals and a ever highly inefficient community. The common good is measured at least by that the sum of the national budget increases only due to the fact that those who must put a significant part of their taxable income into the national money-box are becoming more affluent. However, this is of little use for public investments. The fact that the current financial support from the EU balances this asymmetry to some extent should not appease politicians. As soon as the level of external financing diminishes and social capital does not grow, we will be threatened by a slow-down of development.

International studies prove that human capital is more a more important factor than social capital in the development of less affluent countries. Clearly in this respect at least, Poland can be still included in the latter group. However, after a certain level of affluence is exceeded,[44] social capital becomes essential for our development. This explains why so far we have been developing economically at quite a good pace, despite a very low level of social capital. Probably Poland will exceed the affluence level over which further investment in human capital will not be sufficient in ten years time. We have more or less this time left for building social capital if we want to develop further (Czapiński, 2009).

Table 5.2.2. Results of a regression analysis for the change of personal income between 2005 and 2009

Model	Predicator	Non-standard indicators		Standard indicators	t	p.	R^2
		B	SE	Beta			
1	(Constant)	278.897	20.788		13.416	0.000	0.004
	Social capital change between 2005 and 2009	-2.146	20.585	-0.002	-0.104	0.917	
	Years of education change between 2005 and 2009	45.907	15.508	0.068	2.960	0.003	
2	(Constant)	-86.786	81.554		-1.064	0.287	0.017
	Social capital change between 2005 and 2009	3.929	23.673	0.004	0.166	0.868	
	Years of education change between 2005 and 2009	52.703	15.603	0.078	3.378	0.001	
	Number of years of education in 2005	31.290	6.842	0.114	4.573	0.000	
	Social capital in 2005	13.727	24.215	0.016	0.567	0.571	
3	(Constant)	-56.492	78.305		-0.721	0.471	0.095
	Social capital change between 2005 and 2009	9.208	22.723	0.010	0.405	0.685	
	Years of education change between 2005 and 2009	38.597	15.016	0.057	2.570	0.010	
	Number of years of education in 2005	3.009	6.934	0.011	0.434	0.664	
	Social capital in 2005	-8.043	23.302	-0.009	-0.345	0.730	
	Personal income in 2005	0.229	.018	0.302	12.694	0.000	

We considered the asymmetrical role of human and social capital in the individual and community perspectives on the basis of data from *Diagnosis*. The importance of education level and social capital for the dynamics of personal income between 2005 and 2009 is presented in Table 5.2.2. It indicates that a significant predicator of income increase in this period is only the growth of the level of education and its initial level in 2005. Moreover, after including to the regression formula of the initial income level, the predicator of growth in the level of education remains significant (as the economic effect of the initial level of education was already "consumed" in 2005). Social capital appears to be a better predicator than the level of education of the average level of affluence of the urban populations, but only in the cities which have exceeded a certain threshold in terms of the size of their budgets (Table 5.2.3).

[44] The affluence level measured by e.g. the GDP *per capita* is only an indicator, available for most of the countries, of the complexity of economic relations, technological advancement, economic competitiveness and other determinants of the development level of society.

Table 5.2.3. Results of a regression analysis for the material well-being of the inhabitants of less and more developed cities***

Less developed cities (N=25)

Model	Predicator	Non-standard indicators		Standard indicator	t	p	R^2
		B	SE	Beta			
1	(Constant)	-2.968	.914		-3.248	.003	
	Average number of years of education of inhabitants	.245	.073	.568	3.383	.002	0.323
2	(Constant)	-3.409	1.069		-3.190	.004	
	Average number of years of education of inhabitants	.280	.085	.649	3.309	.003	0.342
	Social capital of inhabitants	-,300	.369	-,159	-,813	.425	

Better developed cities (N=25)

Model	Predicator	Non-standard indicators		Standard indicator	t	p	R^2
		B	SE	Beta			
1	(Constant)	-1.652	.673		-2.456	.022	
	Average number of years of education of inhabitants	.148	.051	.508	2.893	.008	0.259
2	(Constant)	.144	.797		.180	.859	
	Average number of years of education of inhabitants	.006	.062	.021	.098	.923	0.489
	Social capital of inhabitants	.938	.291	.685	3.225	.004	

* For the indicator of material well-being, see Chapter 9.1.

**W adopted s a division criterion the city income of 2007 amounting to PLN 3270 per capita.

The problem is that although it is possible to invest individually in human capital, which Poles have actually done (at present two thirds of students already pay tuition fees), it is not possible to invest individually in social capital. First of all, as Putman states, it depends on a historical process going back in time which shapes civil society, and secondly what happens in the public sphere plays a vital role in this historical process: in politics, at schools, in local authorities, in the streets and in public offices in general. All this depends on *elites*, especially politicians. Currently it is hard to point out any examples of political and more generally institutional motivation for Poles, from the education system to the parliament, for a higher level of mutual trust and readiness to cooperate with each other. The passing of time will not change anything.

To recapitulate, at present a sufficient source of development of the Poles at on individual level is growing human capital, which is reinforced through the effort of Poland as a national state, attracting foreign investors and financial support from the EU. However, in some time, without significant external support, we will severely feel the lack of social capital which determines the development of communities and Polish society as a whole.

6. THE USE OF NEW COMMUNICATION TECHNOLOGY

DOMINIK BATORSKI

Information and communication technology is more and more widespread and ever more frequently applied in different fields of life. The development and spread of these technologies is related to changes in social communication, lifestyles and organisational patterns. The spread of new communication tools is becoming an ever more important factor of civilisation and social change. Over the last twenty years, the main factor of change was the systemic transformation, the importance of which is now less significant, while today one of the most important transformational stimuli is just the development of technology. This Chapter of *Social Diagnosis* focuses on a diagnosis of the state of development of information society in Poland as well as the conditions, means and consequences of the use of new information and communication technologies.

6.1. New technologies in households

6.1.1. Computers and access to the Internet

In the first half of 2009, over 60 per cent of households had a computer. Thus we observe a constant increase in the number of computerised households (Figure 6.1.1). However, this growth was slower in the last two years in comparison to the previous time. The slow-down can indicate gradual market saturation, the first sign of which is the diminishing pace of the increase in computerised households. About 30 per cent of computerised households have more than one computer which constitutes almost 17 per cent of the total number of households (in comparison with 10.0 per cent in 2007). In the computerised households there is one computer for to 2.8 persons (in 2007 it was only 3.5). Therefore, the number of computers is increasing in the computerised households. In addition, the number of portable computers is growing; in the last two years the percentage of households with a laptop grew from 11.0 to 25.0 per cent.

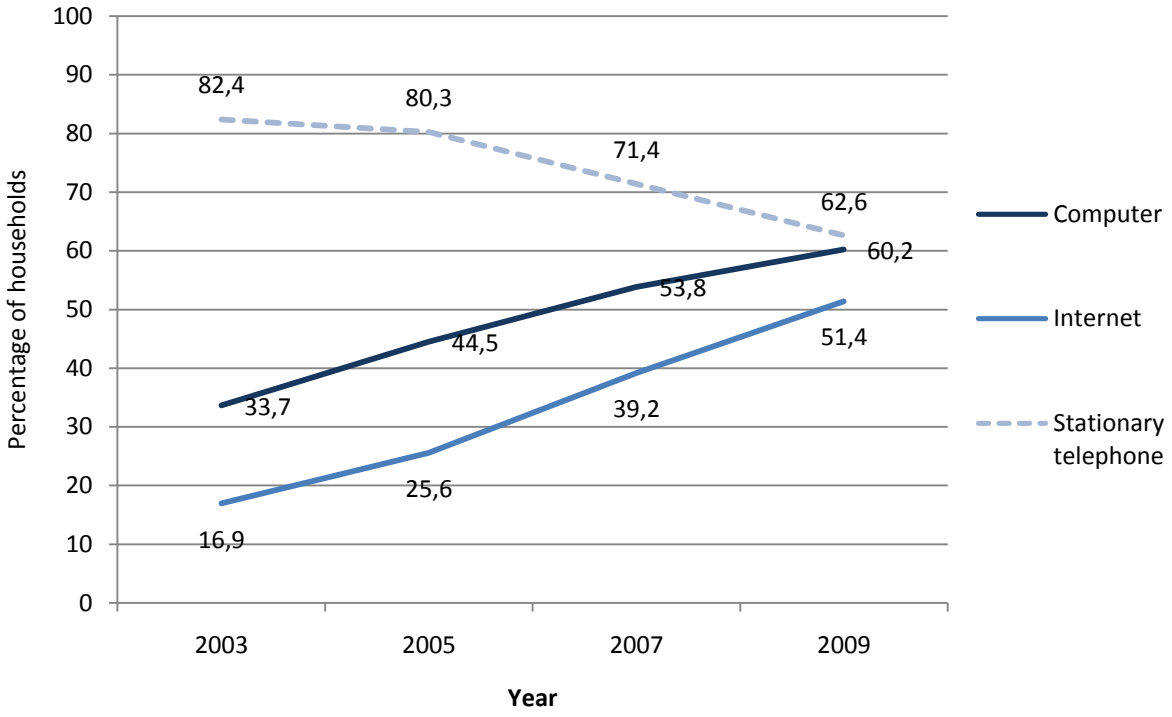


Figure 6.1.1. Households with a computer, access to the Internet and a stationary telephone between 2003 and 2009

Similarly to previous years, the number of households with a computer increased. As a consequence, 69.4 per cent of Poles have a computer in their homes (an increase from 62 per cent). However, not all the persons with a computer at home actually use it. It turns out that 17.3 per cent of Poles aged 16 or over do not use computers despite having one in their household. The number of such persons is increasing (a 1 per cent point growth from 2007). Such a large percentage shows that the lack of access is not a key barrier to the spread of the use of

computers. What then are the decisive factors which determine the use of computers by persons with access to them? Motivation as well as computer literacy are the key. Household members who do not use them are often aged 65 or over, have a lower education (among persons with a lower education merely 27 per cent use computers) and work in agriculture. Retirees and pensioners belong to this group as well. Members of households in smaller towns use computers less frequently.

51.4 per cent of households have access to the Internet. In the last two years a substantial increase took place in this regard. In the last four years, the number of households which had Internet access doubled, and in addition, virtually all have broadband access. The Internet is present in households of many members. As a consequence, 59.5 per cent of Poles have a computer with Internet access. In the last two years the number of persons with access to the Internet at home increased by 15 per cent. In almost all cases, having a computer is also related to having access to the Internet. At present, the percentage of computers connected to the Internet amounts to 85.0 per cent. This is much more than in the past years. Not until two years ago was the Internet present in 73.0 per cent, and four years ago merely in 57.0 per cent of households with computers. Six years ago only half of the households equipped with a computer had Internet access.

As in the case of computers, not all household members take advantage of access to the Internet. As much as 13.1 per cent of Poles live in households equipped with the access to Internet and do not use it at all. What is more, in comparison with 2007, the number of such persons has increased by 2 per cent. On the one hand, this situation is related with an important growth of households with the access to Internet and on the other hand, with a quite widespread lack of appropriate skills and motivation, resulting from insufficient knowledge of the purposes and advantages of using the Internet.

In 2007-2009, not only the number of households with the Internet access increased, but also the mode of access. A substantial majority of households accesses the Internet by means of broadband (Figure 6.1.2). At present, only 1 per cent of households with the access to Internet use traditional modems or regular stationary telephone lines (in comparison with 5 per cent in two years ago). Almost all households with access to the Internet connect by means of broadband, whereas in 2003 such a mode of access was used only by several per cent of households connected to the Internet. The broadband connection provided by a stationary telephones provider (above all, *Neostrada* by Telekomunikacja Polska) prevails, but a great deal of households have their broadband connection provided by cable television providers, local area networks or other providers. The share of *Neostrada* in households with access to the Internet was in 2009 significantly lower than two years ago.

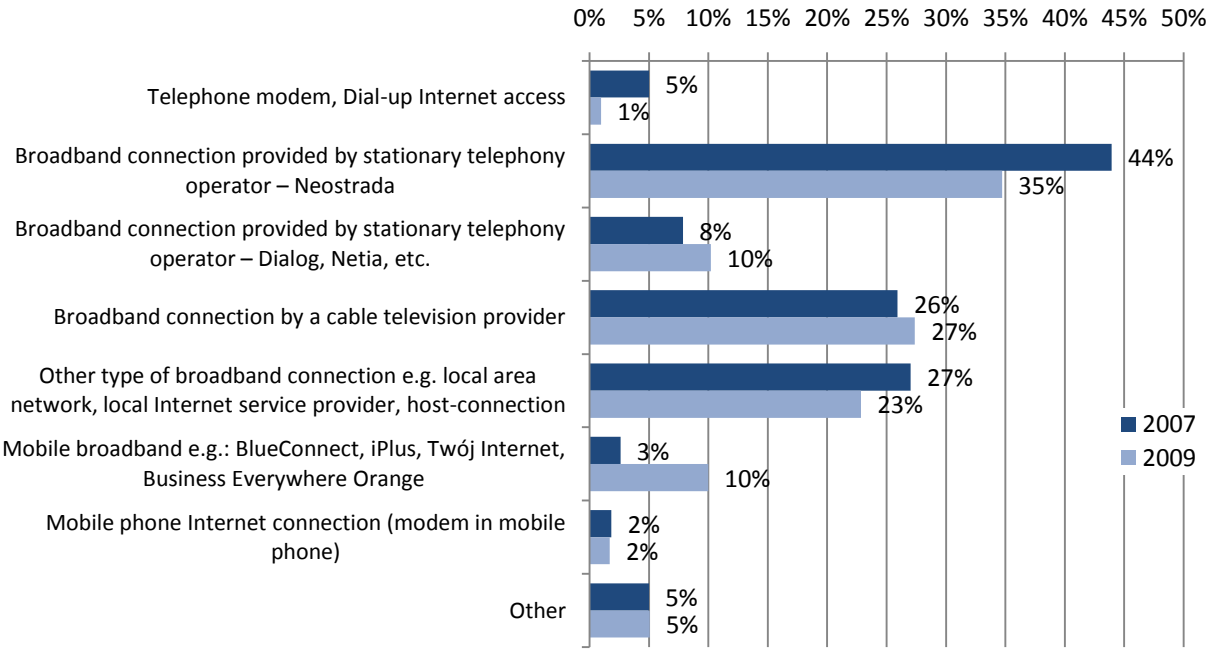


Figure 6.1.2. Types of Internet connection in specific households in 2007 and 2009

The number of households which connect to the Internet through mobile networks is increasing. As much as 10 per cent of households have broadband connection provided by mobile network operators. In the past two years the increase of such households has been very high. However, this fact does not indicate any substantial trend in this regard. For over 80 per cent of households it is the sole way of connecting to the Internet. Probably, the reason is the limited possibilities of having broadband access rather than a need of the mobile use. Therefore, a high number of such households indicates rather poor access to the Internet in a great deal of areas than to a widespread use of the mobile Internet.

Figure 6.1.3 illustrates broadband bandwidth. The prevailing speed is 1Mb/s, although there is still a great deal of 512kb/s broadband connections. In the last two years a significant growth in broadband speed has been observed. However, only a small part of households with access the Internet enjoy decent speeds and only 7 per cent of households have a capacity of 6Mb/s. In this respect Finland is planning to implement broadband Internet of 100Mb/s speed as a common service by 2015, whereas Germany is planning the minimum bandwidth of 50Mb/s in 75.0 of households by 2014. The type of access is significant, as it influences to some extent the forms of Internet use. Poland in this respect falls far behind the leading EU countries.

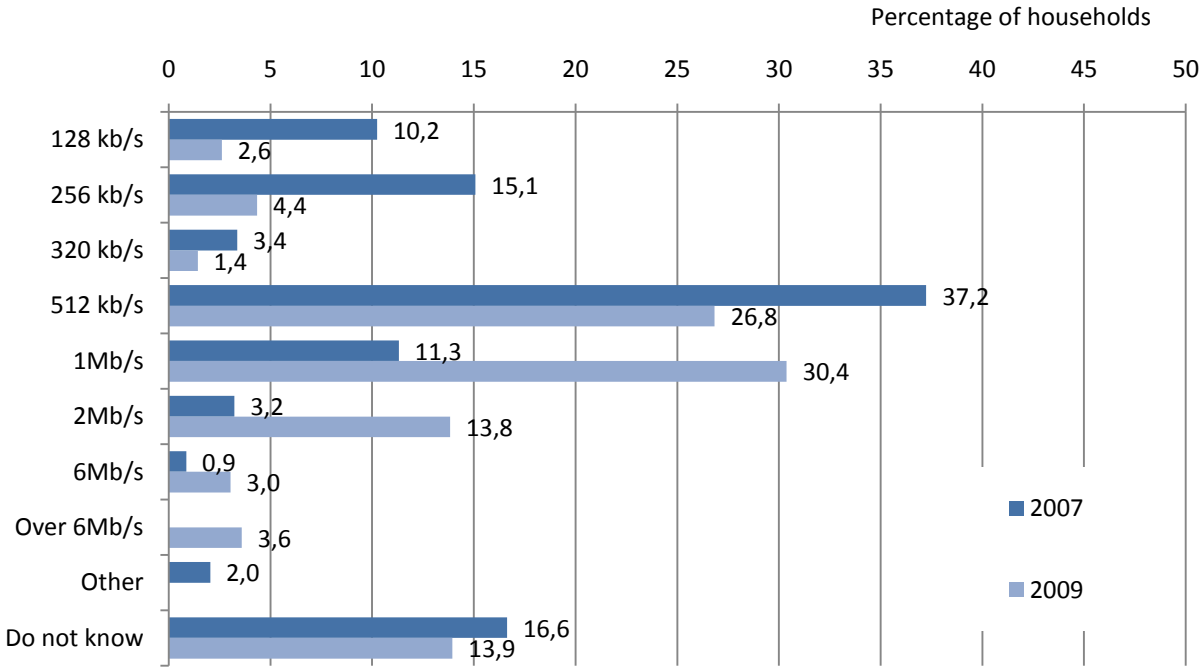


Figure 6.1.3. Broadband Internet access in households between 2007 and 2009

6.1.2. Other technologies in households

The number of households with Internet access is higher than the number of households with cable or satellite television (Figure 6.1.4), which is a very interesting fact. Also a similar number of households has a DVD player. In the last two years, there was a rapid increase not only of computers (above all portable ones, as the percentage of households with a stationary computer remained at a similar level) and the access to Internet (from 39.0 to 51.0 per cent), but only of LCD and plasma television sets. In 2007, such a television set was owned by every fifth household and at present it can be found in every third house.

The number of households with a stationary telephone is still falling. In March 2009 they constituted 62.6 per cent while in 2007 and 2005, 71.4 and 80.0 per cent respectively. Thus the accessibility decrease of stationary telephones which took place in the past two years was still very rapid and comparable with 2005-2007. This falling trend is to a large extent an effect of the propagation of a cellular network; currently 81.8 per cent of households own a mobile phone, which are present in a much higher number of households than stationary telephones. The percentage of households which do not have a stationary telephone because they cannot afford it amounts to 9 per cent. It is about one fourth of all the households which do not have a stationary telephone. Moreover, in the last two years the percentage of households which own at least one mobile telephone increased only slightly, that is by about 3 per cent.

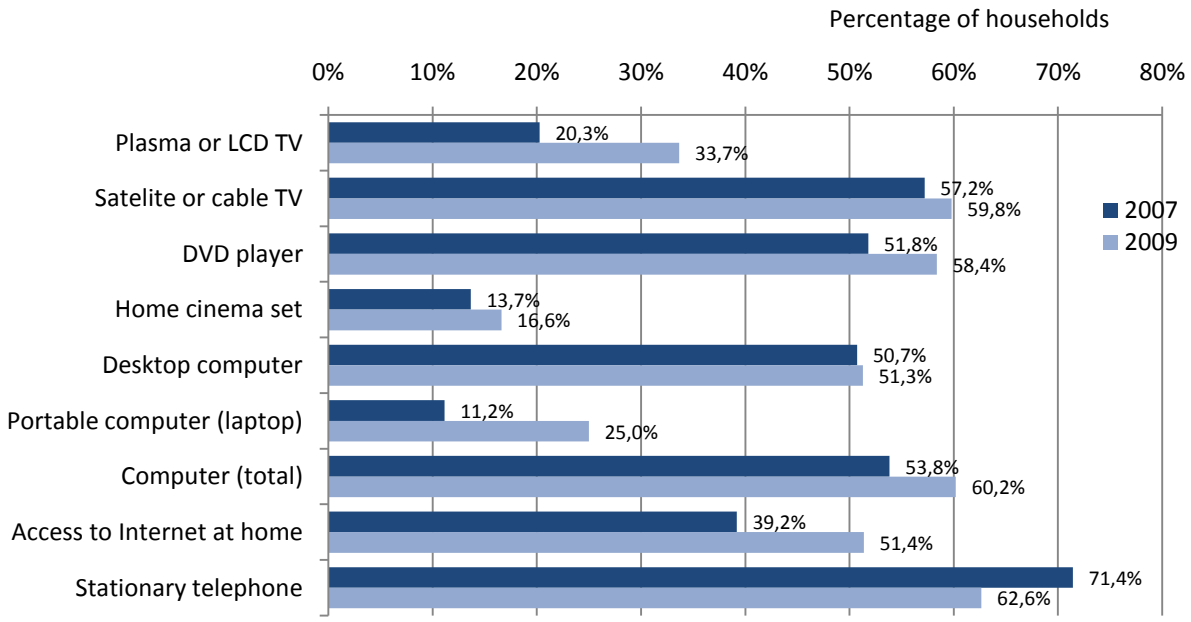


Figure 6.1.4. Household equipment in 2007 and 2009

6.2. The "Two Polands"; internet users and non-users

6.2.1. The Poles and new technologies

Half of the Poles aged 16 or over use already the internet (50.9 per cent in March 2009). Throughout recent years the increase of internet users has been regular and has reached about 8.5-9 per cent in the last two years. However, in this regard Poland falls behind the countries of Western Europe, in particular of Scandinavia where almost everybody is a user of the internet.

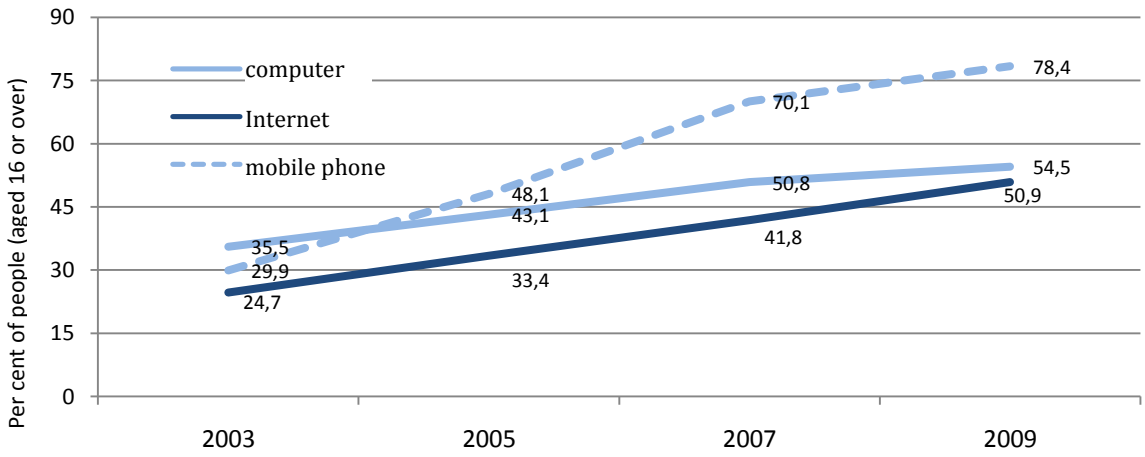


Figure 6.2.1. The use of information and communication technologies between 2003 and 2009

Between March 2007 and March 2009, the increase of persons using computers as well as mobile phones was slightly slower. At present, almost 55 per cent of Poles aged 16 or over use computers and 78 per cent use mobile phones. The growth in mobile phone users is still faster than that of those using computers. It is worth noting that the use of computers not related with the use of Internet is becoming less frequent. Until two years ago, a substantial part of computer users did not use the internet. Currently, such persons are few.

It has to be emphasised that the actual increase of users is higher because the changes presented in Figure 6.2.1 do not show the phenomenon of abandonment of use. In fact we have observed not only a phenomenon of the increase in the number new users, but also of the abandonment of use. From March 2007, 10 per cent of users at that time ceased to use computers. This situation also applies to the internet; 7.5 per cent of internauts in year 2007 have

stopped using it. It is worth emphasising however that the scale of abandonment is becoming ever smaller. Between 2003-2005, over 15 per cent of internet users abandoned it, in the following years 13 per cent and currently this percentage is even lower. There are several reasons for this. In numerous cases it is not just the abandonment but simply loss of access due to a life situation change such as job loss, graduation from school, moving home or children users and owners of computers moving out from the household.

The percentage of people with access to the internet at home has been increasing; at present 91.0 per cent in comparison with 80.0 per cent two years ago. On the other hand, the number of persons with a computer and the Internet who do not use the internet has been growing (Figure 6.2.2). At present, as many as 22 per cent of persons who have access to the internet at home do not use it. This is over 13 per cent of adult Poles, which is an increase of 2 per cent in comparison with 2007.

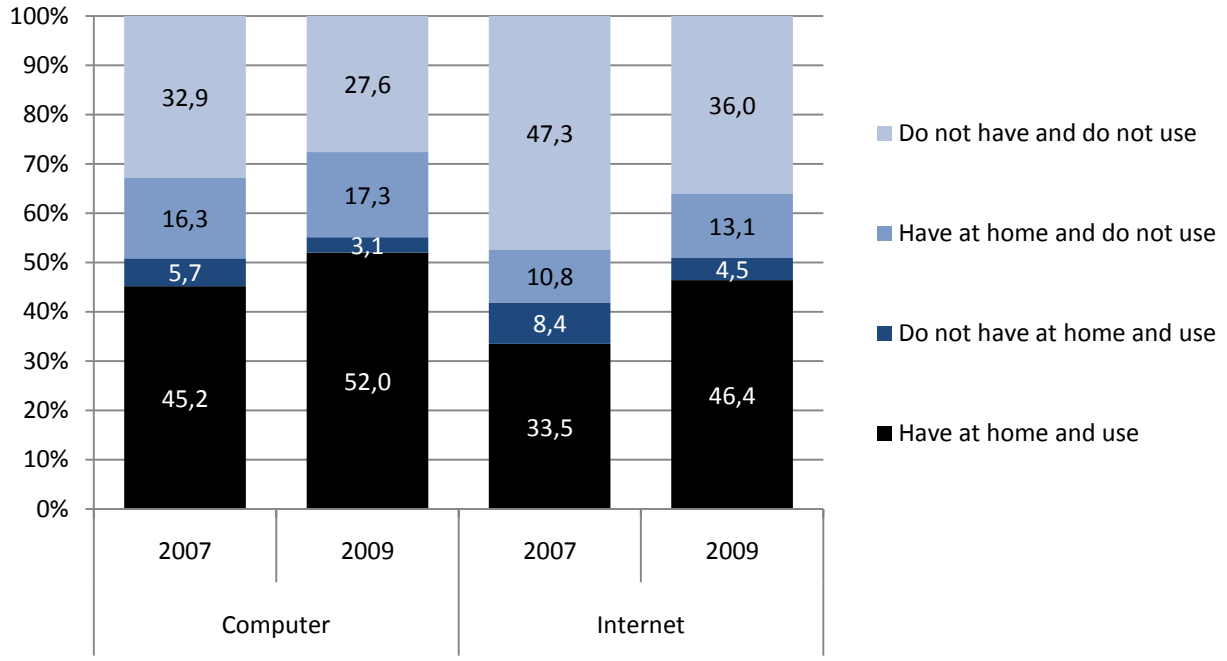


Figure 6.2.2. The use vs. ownership of computers and the Internet access in households between 2007 and 2009

Similarly, as many as 17.3 per cent of Poles aged 16 and more do not use a computer despite having one in their households. This proves that one of the most important barriers to the use is a lack of appropriate motivation or skills to use computers and the internet. The access itself does not guarantee the use of internet. This proves the already signalled inadequacy of numerous activities aimed at the propagation of the use of Internet conducted in Poland. The equipment along with broadband connection will not be enough to provide the common use of ICT in Poland.

6.2.2. Who uses the Internet?

A time when over half of Poles use the internet offers an appropriate opportunity for comparison. The differences between the persons who use computers and the internet and those who do not are enormous. Actually, it can be stated that currently there are "two Polands". One is modern, young and well-educated, while the other is traditional in its views, poorly-educated and not doing very well.. Let us have a closer look at the differences. Comparing these two groups, the factors determining the use of new technologies and the number of users within subgroups selected by the most important social and demographic variables are worth analysing (Table 6.2.1).

Men use information and communication technologies more frequently than women (although two years ago no differences with regard to the use of computers were observed). Among men 57.0 per cent use computers and 53.0 are Internet users, whereas among women these percentages are lower by 4 per cent. The use of mobile telephones shows a slightly wider difference. Interestingly enough, due to the higher number of females in the population, the number of women using the internet is slightly higher.

The most significant differences between users and non-users of the internet concern age and the level of education. The Internet is used by a majority of young people (87.0 per cent of persons aged 16-24) and by very few elderly people (6.0 per cent of persons aged 65 or over). As a consequence, most of the internauts are young people ─ 16-34 year olds constitute 56.0 per cent of the users. In turn, the age of 73.0 per cent of non-users is 45 or more (Figure 6.2.3).

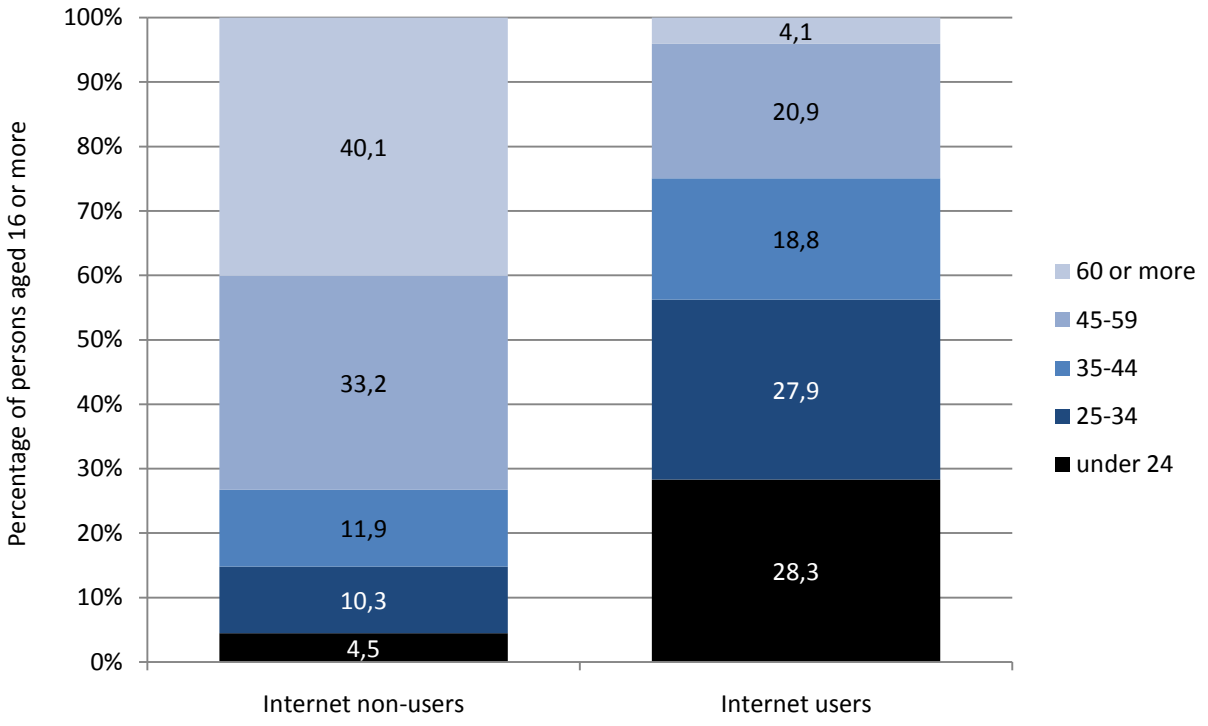


Figure 6.2.3. Age structure of internet users and nonusers.

The age differences for the use of computers and internet are huge. As results from Table 6.2.1 show, almost all the young people as well as a large majority of persons aged 25-34 use the new technologies. At the same time, almost none of the persons at retirement age use them. The generational digital division is very strong and there are no prospects for its reduction. This can lead to negative social phenomena as, like with the propagation of ICT in different areas of life, people who do not use these technologies will become ever more excluded. Intergenerational understanding is becoming more difficult, as it appears that in terms of technology, the two groups live in two different worlds. It is also worth noting that among people aged under 44 there are almost no cases of persons who have never used one of the technologies discussed in this chapter, whereas the percentage of people aged under 30 who have used all of them is very high. In the case of the elderly people the reverse is true; a substantial majority of them do not use any of the technologies, and those who do use them do so very rarely.

The level of education has an enormous influence on the use of computers and the internet. Above all, students (94 per cent) and more educated persons (83 per cent with a tertiary education) are internauts. Only 7 per cent of people with elementary education use the internet. Also as in the case of age differences, in terms of the level of education and the use of internet, there is a huge gap between the less educated and the more educated including students. That is why over half of the Internet users are students or persons with a tertiary education, whereas two thirds of non-users constitute persons with an elementary or vocational education.

The significance of education with respect to the use of cellular phones is visibly smaller than for the use of computers and internet, although it is still quite high. Obviously, this fact is related to the faster propagation of mobile phones (cf. Figure 6.2.1). Faster diffusion of mobile telephones than computers and the internet is connected with different characteristics of this innovation. Mobile telephones are more closely related to the experiences already gained by the persons who have just started using them. A mobile telephone is simply a wireless telephone that is a technology which is well-known to everybody. This does not apply to computers and the internet. Adults who remember the world from before the computer and internet era and who until now have not used these technologies have virtually no experiences which would help them get know the new technology. Experiences which might possibly refer to the use of computers and the internet include typing, newspaper reading and traditional mail. However, all of this is far less than what the computers and the internet actually can offer. As a result, elderly people who do not have contact with new technologies have greater difficulties realising their purposes of use as well as acquiring the necessary skills. As keyboard typing is not very complicated (due to the above-mentioned experiences of machine typing), mastering the skill of using of a computer mouse, which cannot be referred to some previous experiences, poses a serious barrier for the elderly.

Also social and professional status has an enormous influence on the use of computers and internet. A huge part of students and most employed persons use the internet (cf. Table 6.2.1). Above all this refers to private entrepreneurs and people working in the public sector. Persons employed in private companies make use of the new technologies slightly more rarely. The lowest number of internauts constitute of retirees, pensioners and farmers. As

much as three fourths of the users of the internet are students or employed persons (excluding the agriculture sector) of which only 25.0 per cent are non-users. (Figure 6.2.5).

Table 6.2.1. The use of new technologies by different groups

	Group	Computer	Internet	Mobile telephone	Nonuser	User of all the technologies
Total		55.1	50.9	79.1	19.2	46.6
Gender	Men	57.1	52.8	81.6	16.8	48.2
	Women	53.3	49.2	76.9	21.3	45.1
Age	16-24	90.2	86.8	96.1	1.0	80.8
	25-34	79.8	73.7	96.8	1.8	69.2
	35-44	67.7	62.1	91.4	5.3	57.2
	45-59	43.5	39.5	78.2	19.1	34.6
	60-64	23.6	20.6	63.4	35.1	17.8
	65 or over	7.5	5.8	35.7	66.2	4.6
Social and professional status	Employees of the public sector	80.6	76.4	94.1	3.2	70.6
	Employees of the private sector	71.6	66.3	94.4	4.3	61.4
	Private entrepreneurs	83.3	80.5	97.5	1.8	75.5
	Farmers	30.5	25.3	68.0	28.2	20.7
	Disability pensioners	22.5	20.3	56.9	42.9	17.3
	Retirees	15.9	13.3	47.9	52.5	11.0
	Students	95.2	93.7	96.0	0.4	88.2
	The unemployed	49.7	40.9	81.8	14.4	36.7
	Other professionally inactive groups	46.8	40.9	81.6	14.5	36.3
Education level excluding students	Elementary/ lower	9.6	7.2	41.2	59.2	5.7
	Vocational/ grammar	37.1	31.3	78.2	20.4	27.1
	Secondary	62.6	56.4	86.0	11.6	51.6
	Tertiary	85.2	83.4	93.2	4.6	78.1
	Students	95.2	93.7	96.0	0.4	88.2
Class of the place of residence	Cities over 500k	70.9	67.3	88.1	11.4	63.3
	Towns 200-500k	66.2	64.3	86.4	12.1	59.5
	Towns 100-20k	63.9	60.6	83.2	14.7	54.9
	Towns 20-100k	58.5	54.9	81.9	16.3	50.6
	Towns under 20k	53.5	50.2	80.3	18.8	45.7
	Rural areas	43.8	38.0	71.4	26.2	34.0
Income in household per capita	First quartile	40.6	34.6	70.2	26.7	30.7
	Second quartile	45.7	41.1	73.3	25.3	36.9
	Third quartile	56.6	52.9	81.1	17.8	48.4
	Fourth quartile	74.7	72.4	90.1	8.4	67.7
Voivodship	Dolnośląskie	58.5	53.9	82.5	16.3	49.5
	Kujawsko-pomorskie	54.9	50.2	81.6	16.9	45.0
	Lubelskie	50.4	43.8	73.4	24.2	40.1
	Lubuskie	59.7	53.9	80.8	18.2	49.3
	Łódzkie	51.6	47.8	80.9	19.6	44.2
	Małopolskie	55.8	53.0	77.0	21.1	47.8
	Mazowieckie	56.4	52.5	81.3	18.0	48.5
	Opolskie	53.4	48.9	73.2	25.0	45.2
	Podkarpackie	50.6	44.4	69.6	25.3	41.3
	Podlaskie	52.4	50.2	71.2	24.4	44.9
	Pomorskie	59.1	58.3	86.4	13.8	53.5
	Śląskie	58.6	54.0	80.4	16.6	49.6
	Świętokrzyskie	45.8	39.3	71.3	26.3	35.4
	Warmińsko-mazurskie	49.7	44.8	80.1	19.0	40.6
	Wielkopolskie	56.3	52.1	81.6	17.1	47.8
	Zachodnio-pomorskie	54.8	52.7	79.1	18.1	48.2

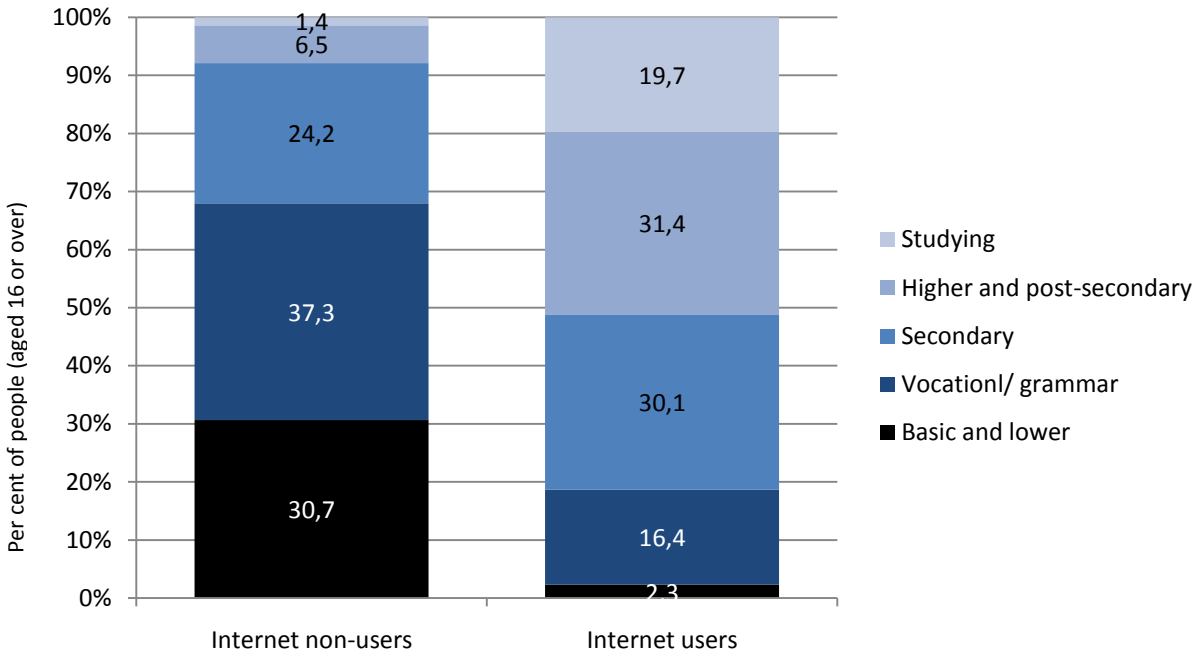


Figure 6.2.4. Age structure of internet users and nonusers

The use of computers and internet is also connected with the level of wealth. However, this correlation is not so strong as the ones discussed above. The differences between one fourth of Poles of the highest income level in household per capita and one fourth of the lowest income are not as substantial as the differences with respect to age and education. In the least and most affluent groups, the percentage of persons using computers amounts to 41 and 75 per cent respectively. As regards the use of the Internet, these percentages are slightly lower. In terms of the use of mobile telephones, even smaller differences have been observed, with 70 per cent of the persons with the lowest income and 90 per cent of the persons belonging to the highest income group owning phones.

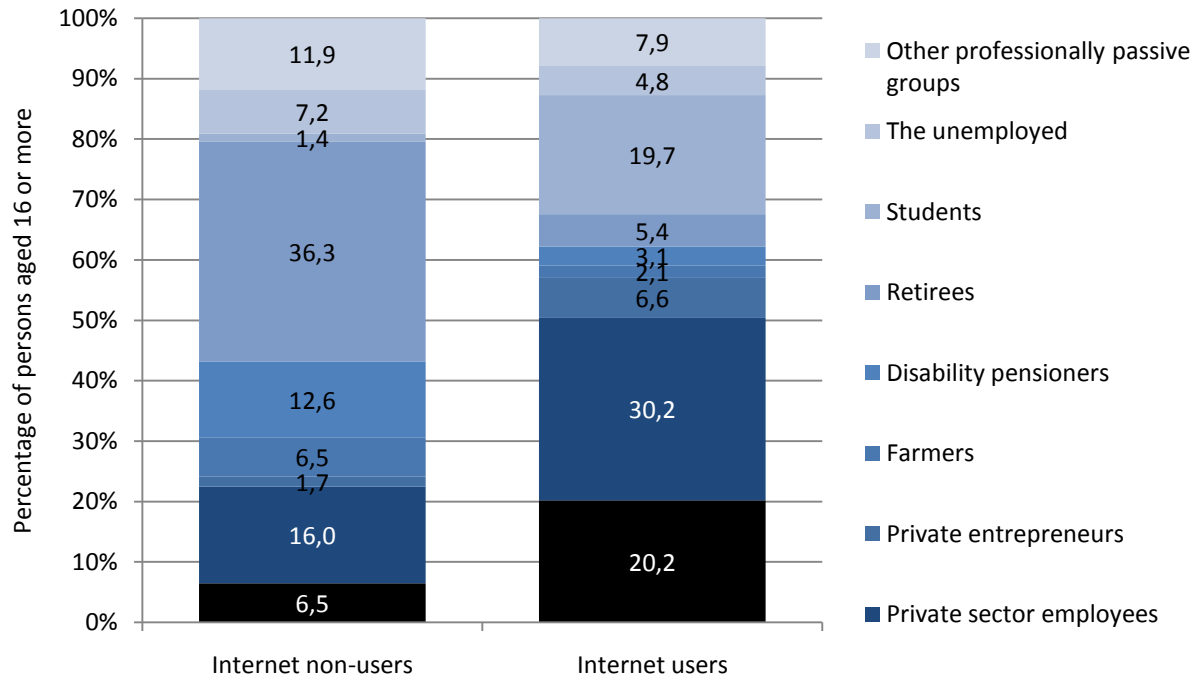


Figure 6.2.5. Social and professional structure of internet users and nonusers

The use of internet also depends on the place of residence. The larger the place of residence the higher the number of users. The use of computers, internet and mobile telephones is much less frequent in rural areas. It has to be emphasised though that the importance of the size of the place of residence is much lower than of other factors and it is getting ever less significant. This is the effect of a substantial increase in the number of users in rural areas from 26 per cent in 2007 to 38 per cent in 2009 (Table 6.1.1). As regards the number of internet users, persons living in larger cities constitute a majority in comparison with those living in rural areas (Figure 6.2.6).

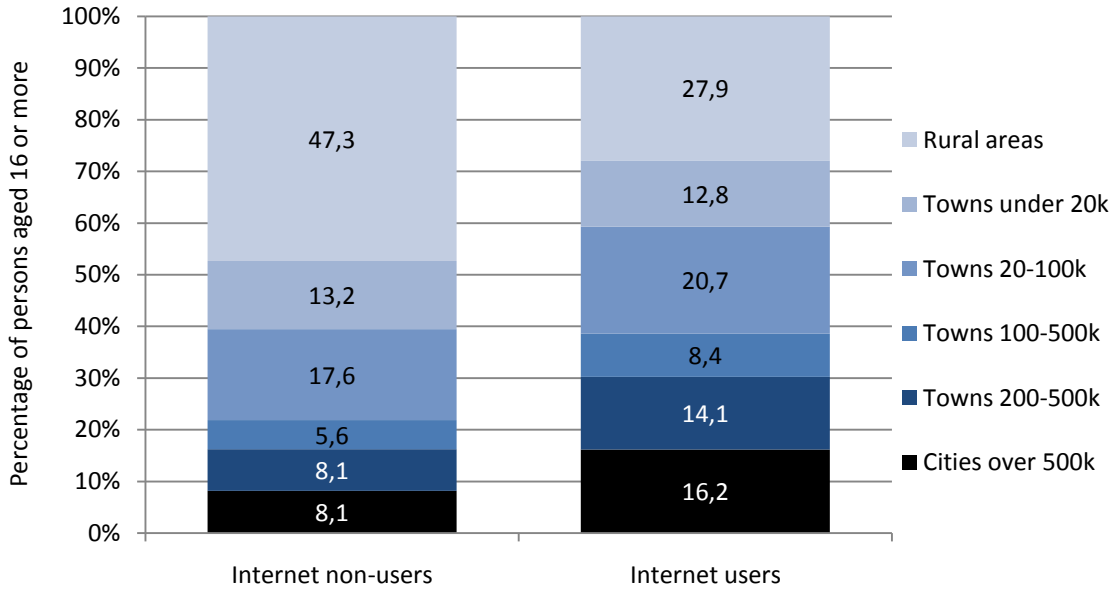


Figure 6.2.6. The structure of Internet users and nonusers by place of residence

The use of computers and the internet is determined not only by the place of residence but also by the region, with use more rare in the voivodships of Eastern Poland. Figure 6.2.7 illustrates in detail the use of computers and internet by voivodships. Regional diversification in the access to internet is still significant (cf. Table 6.2.1) although smaller than in previous years. The present *Social Diagnosis* measurements have been conducted on a very large sample and thus the results for particular voivodships are not encumbered with a large error.

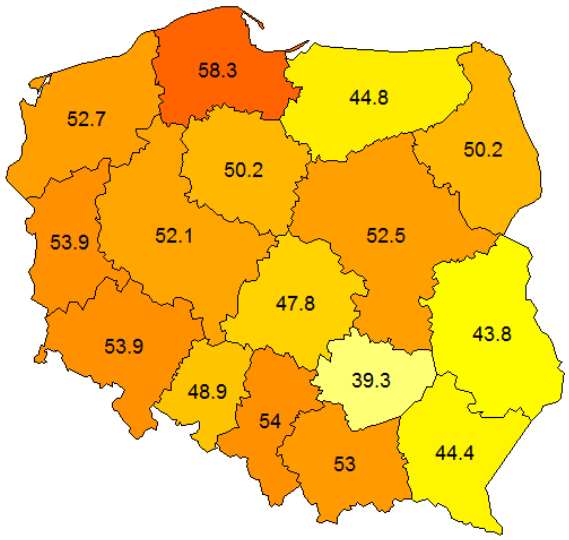


Figure 6.2.7. The use of Internet by particular voivodships (in per cent)

6.3. Skills and modes of computer and internet use

6.3.1. Computer skills

Computer skills are quite diverse (Figure 6.3.1). Generally, most users claim to know how to navigate websites and use a web browser (88 per cent). The use of electronic mail and sending of e-mails with attachments is a more complex activity which is declared by at least two thirds of computer users. Part of the reason is that not all the persons of this group use the internet and if so, they do not necessarily use the electronic mail (about 90 per cent of internauts use it)

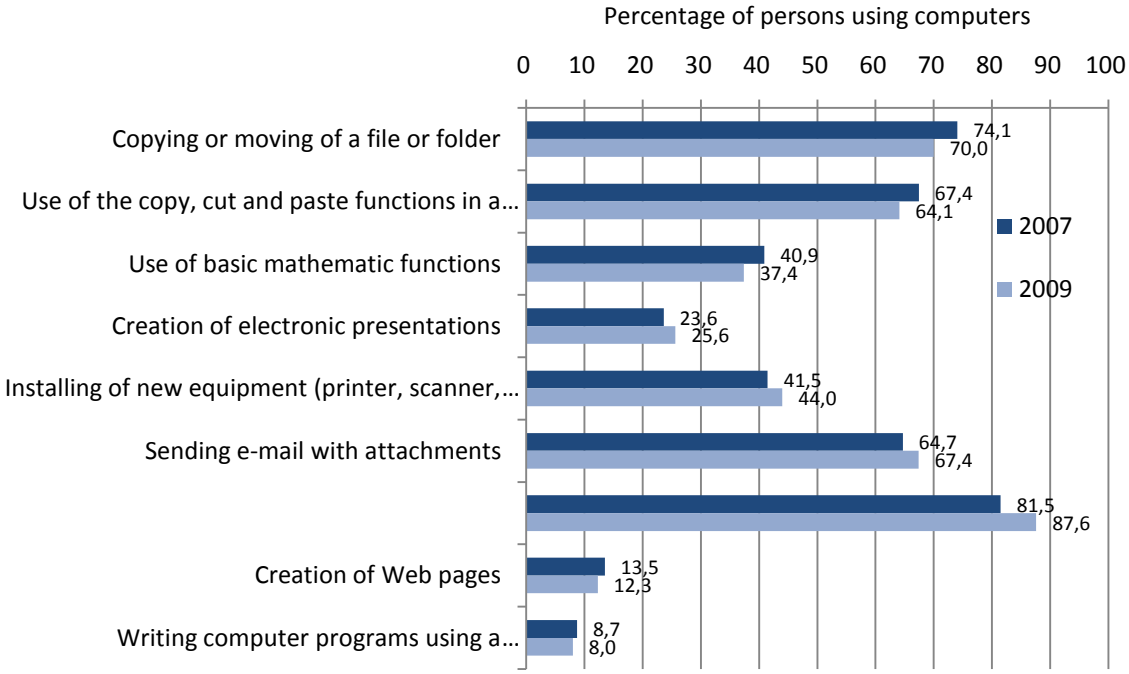


Figure 6.3.1 Computer skills between 2007 and 2009

About 30 per cent of the users are not able to copy or send a file as a folder, which are considered basic skills. On the other hand, 44 per cent claim to be able to install a printer, a modem, a scanner or other devices which can be considered a very good result. The knowledge of office software is also at a relatively low level. Almost two thirds of the users claim to be able to copy and paste fragments of text and it can be assumed that they have some experience with text editors. Only 37 per cent of the users can use spreadsheets and 26 per cent can prepare an electronic presentation.

Generally, the level of computer skills among users today is similar to that two years ago. Skills related to the Internet use are slightly higher, which above all is the result of a higher number of internauts. On the other hand, the increase of new users means that the basic skills such as the use of a text editor or a spreadsheet is less widespread among the current users. Thus, the increase of new users who do not have high computer skills is faster than the improvement of competences of the present users.

The percentage of highly-skilled users is growing very slowly. In the last two years, the part of users who had mastered 7 or more out of 9 skills increased from 15.8 to 16.3 per cent. The number of users who had acquired 6 or more skills currently amounts to 29.1 per cent in comparison with 28 per cent in 2007. The average number of computer skills mastered by users in 2009 is as equal to 2007. The level of skills of the average user is more or less the same. Generally, an increase of the level of computer skills in Polish society is exclusively due the growth of users.

In sum, it can be stated that computer skills are low. The percentage of Poles who can use basic office software and the internet amounts to only 7.5 per cent. However, it is concerning that we are not observing an increase in the level of these competences. This fact can indicate that the pressure and the requirements for employees concerning the use of computers exerted by the employment market are insufficient, especially if the results on the office software competences are considered.

As Table 6.3.1 illustrates, computer skills and the use of computers and the internet depend on the same factors. Groups consisting of a higher number of users have also better computer skills. If we take into account only computer users (these data are included in the table), it appears that persons belonging to lower age groups, with higher education or students whose incomes are higher and who live in larger places of residence (although in this last case the differences are not significant) have better computer skills. For instance, 16-24 olds clame to have mastered on average 70 per cent of skills (out of 9), whereas people aged 60 or over were twice as few. Students have acquired on average 75 per cent and employees 60 per cent of the skills and in the case of the unemployed or

professionally inactive persons this percentage amounts to 44.0 per cent. Even wider differences are related to the level of education. Men are better skilled than women although the differences in this respect are not significant.

Table 6.3.1. Computer skills and modes of Internet use among different groups (per cent)

Group		Computer skills[45]	Ways of using the Internet
Total		56.3	57.2
Gender	Men	59.8	59.8
	Women	53.0	54.7
Age	16-24	70.7	67.9
	25-34	60.5	64.8
	35-44	49.7	52.2
	45-59	43.3	42.0
	60-64	37.8	35.0
	65 or over	28.6	30.2
Social and professional status	Employees of the public sector	57.5	54.4
	Employees of the private sector	57.0	59.6
	Private entrepreneurs	60.7	58.1
	Farmers	29.4	36.5
	Pensioners	46.3	50.0
	Retirees	30.4	32.5
	Students	75.1	67.8
	The unemployed	45.4	58.0
	Other professionally inactive groups	43.1	53.2
Education level excluding students	Elementary/ lower	27.6	44.5
	Vocational/ grammar	33.7	45.3
	Secondary	49.6	53.6
	Tertiary	67.8	61.2
	Students	75.1	67.8
Class of the place of residence	Cities over 500k	66.6	64.7
	Towns 200-500k	63.2	64.3
	Towns 100-20k	57.2	58.7
	Towns 20-100k	55.2	56.0
	Towns under 20k	53.5	54.1
	Rural areas	49.5	51.4
Income in household per capita	First quartile	46.1	53.4
	Second quartile	51.7	56.2
	Third quartile	55.5	56.4
	Fourth quartile	64.3	60.3
Voivodship	Dolnośląskie	57.1	56.8
	Kujawsko-pomorskie	53.0	58.2
	Lubelskie	53.9	61.8
	Lubuskie	53.6	62.7
	Łódzkie	54.6	52.9
	Małopolskie	56.6	57.6
	Mazowieckie	61.1	58.9
	Opolskie	56.9	61.0
	Podkarpackie	52.1	52.9
	Podlaskie	54.7	58.6
	Pomorskie	61.5	57.8
	Śląskie	55.9	59.8
	Świętokrzyskie	52.4	54.4
	Warmińsko-mazurskie	51.1	51.1
	Wielkopolskie	55.8	53.3
	Zachodnio-pomorskie	56.9	56.2

6.3.2. The purposes of computer use

The use of computers covers several activities which for various users can mean something completely different. The computer can be a tool for work, study and entertainment and through the internet, it can also become a communication and information tool. As a result, the significance of use as well as its effects on the users' lives will

[45] Average percentage of skills from among 9 activities.

differ according to the modes of use. That is why it is essential to analyse not only the use of new technologies but also the purposes and forms of their use.

At present, about 40 per cent of the users state that one of their main purposes of use is for work (Figure 6.3.2). For almost 30 per cent a computer is a tool for study, whereas for over half the aim is entertainment. Almost 60 per cent state they use computers as a source of information provided through the internet. Moreover, for over 30 per cent one of the two main purposes is the possibility of staying in touch with each other provided by the internet.

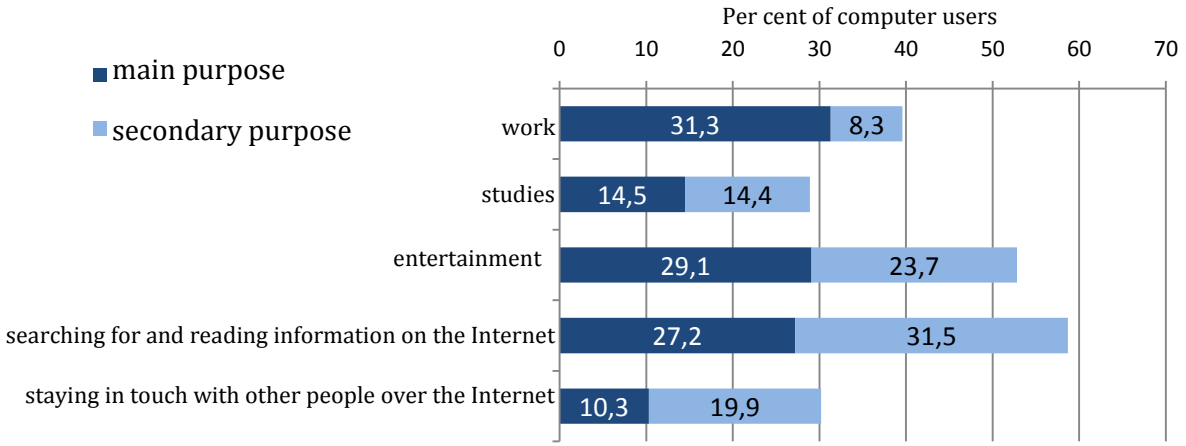


Figure 6.3.2. Purposes of computer use in 2009

In comparison with the situation of two years ago, the percentage for whom the basic aim of computers is work or studies has decreased. Internet use for the purpose of entertainment was mentioned slightly more frequently. In turn, both aims of the internet use are indicated much more often. This is also the most significance change in the form of computer use; above all they are a tool for the internet access which is constantly becoming a more important form and purpose for the use of computers.

Table 6.3.2 presents the main purposes of use by different groups. There are significant differences for men and women. Women much more frequently than man use computers for work and studies. They also indicate more often communication and staying in touch with others through the Internet as the basic form of use. Men in turn more frequently search for entertainment and information on the internet.

The aspect of age is of enormous significance. The computer for those aged under 24 is mostly a tool for study and entertainment (two years ago it was more frequently used for study than entertainment). For 25-29 olds, computers are above all a tool for work and in addition, the percentage of persons declaring that work is the main purpose of the use of computer is increasing. Internet use and searching for information are in the second place, whereas the purpose of entertainment is indicated slightly more rarely (in this group the growing importance of the Internet is noticeable). Generally, the number of persons using computers for entertainment is decreasing with age, whereas the number of those searching for information is increasing. The main purpose of the use of computers for persons aged 65 or over is the use of the internet including mostly Web browsing, information searching and communication.

Social and professional status is also of great importance. It is not surprising that employees use computers at work. We have also observed differences between employees of the public sector, entrepreneurs and employees of the private sector. The latter not only use computers and the Internet more rarely but also if they do their main purpose is professional. Their second aim is entertainment which is mentioned more often. It is interesting that the unemployed and professionally inactive persons indicate entertainment as the main purpose of the use of computers, although in comparison to 2007 an increase in the use of the internet as a tool for gathering information has been observed. A significant change has occured among farmers. Only two years ago half of them stated that they used computers mainly for entertainment, whereas at present only one third of them indicate this purpose. The percentage of persons declaring information gathering on the internet has increased from 25.0 to 47.0 per cent. Such an enormous change is probably the effect of the above-mentioned rapid propagation of the access to Internet in rural areas in the recent period. Retirees are also worth considering due to the fact that the internet is for them the main purpose of computer use, although few persons in this group declare use of computers and the internet.

The place of residence is of importance in that the larger the place the more persons use computers for work. 46 per cent of inhabitants of the largest cities and only 20 per cent of the population living in rural areas indicate this reason as the main purpose of use. On the other hand, the smaller the place of residence, the more frequent is the use of computers as a source of entertainment. It is worth emphasising that the use of computers for study is more frequent in the rural areas than in the cities. It is at least a partial argument to support the thesis that computers and the Internet can be tools for equalising opportunities and levelling differences between the cities and rural areas. However, this might be a simple effect of the fact that an average rural user of the Internet is much younger and thus in the school/study age than one living in the city.

The correlations regarding the level of education are similar. The higher the education level, the more frequent the use of computers for work and more rare as a source of entertainment. Students constitute a separate group. One third of them use computers mostly for entertainment and almost half of them for studies. The use of internet as a source of information is less important for these persons.

Table 6.3.2. Modes of computer use among different groups (the percentage of users indicating a given purpose as the main one may not add up to 100 as one respondent can mention two equivalent purposes of use)

Group	Work	Studies	Entertainment	Information	Staying in touch
Total	31.3	14.5	29.1	27.2	10.3
Gender					
Men	29.4	12.4	34.7	28.2	8.5
Women	33.1	16.5	23.6	26.2	12.2
Class of the place of residence					
Cities over 500k	45.9	12.6	21.0	26.9	10.2
Towns 200-500k	37.3	13.1	24.5	25.9	12.6
Towns 100-100k	37.7	13.1	27.8	27.3	7.1
Towns 20-100k	31.0	12.6	28.1	28.7	10.4
Towns under 20k	28.5	14.4	31.0	26.9	10.4
Rural areas	20.3	17.8	35.7	27.0	10.2
Education					
Elementary/ lower	10.7	4.6	53.6	26.3	13.2
Vocational/ grammar	13.1	6.3	44.5	34.1	11.1
Secondary	32.2	7.8	29.6	31.5	10.5
Tertiary	59.8	6.6	13.3	26.3	7.1
Students	3.8	46.4	35.7	15.2	14.2
Social and professional status					
Employees of the public sector	56.2	6.8	16.3	24.8	6.7
Employees of the private sector	42.9	5.8	29.7	26.1	8.6
Private entrepreneurs	60.1	3.8	16.3	24.9	5.9
Farmers	14.1	4.4	33.3	46.9	5.9
Pensioners	4.0	19.4	40.4	34.9	12.2
Retirees	14.7	2.7	29.2	47.6	13.9
Students	3.8	46.4	35.7	15.2	14.2
The unemployed	9.2	12.4	40.3	34.6	15.9
Other professionally inactive groups	8.3	8.8	39.5	39.5	14.9
Age					
under 24	7.4	36.5	39.0	16.8	14.8
25-34	38.0	8.9	29.8	26.3	9.8
35-44	42.4	4.8	24.4	32.6	7.3
45-59	45.3	3.3	20.5	33.7	7.2
60-64	29.4	3.3	24.2	43.2	9.7
65 and more	21.5	2.6	20.1	47.0	16.4
Income per capita					
under the first quartile	12.0	22.0	41.4	25.0	12.9
between the first and the second quartile	19.1	17.8	35.6	29.5	11.5
between the second and the third quartile	29.4	13.1	29.4	29.2	10.3
Over the third quartile	48.4	9.7	19.2	26.0	8.4

6.3.3. Ways of using the Internet

The higher accessibility of computers and the internet (mostly in households), the development of the internet itself, an increase in contents and forms of use and the appearance of new services (e.g. social network services) also entail changes in how the internet is used. These changes involve both the activities performed and an increase in the amount of time spent on the web.

An average user spends 10 hours a week on the computer. Persons who spend up to 2 hours a week constitute 18 per cent of the users. 41 per cent of them use the computer for 7 hours. The average amount of hours spent at the computer is 16 (slightly less than in 2007). Every fourth person uses the computer for at least 21 hours a week. People spending over 40 hours or more constitute about 14.0 per cent of the users. The percentages are almost the same as in 2007. The amount of time spent on the computer has changed to a small extent although it is slightly lower than in 2007 but more than in 2005.

The average amount of hours spent on navigating the internet is almost 11.5. 49 per cent of the users spend 7 hours navigating the Internet (6 per cent less than in 2007). 20 per cent of persons use the internet for up to two hours. People navigating the internet for at least 21 hours a week constitute 13 per cent of users. In the recent years the time dedicated to using the internet has increased more than the amount of time of using computers. In particular, in the last two years we observed an increase in time spent on navigating the Internet and at the same

time, a slight decrease in time the users spend on the computer. In March 2003, the average user spent slightly over 6 hours a week navigating the internet and in 2005 this amount of time was on average 8.5 hours. In 2007 and 2009 the number of hours reached 10.5 and 11.5 hours respectively. This indicates the constantly growing importance of the internet in recent years. The percentage of time spent on navigating the internet has become a larger part of the total time spent at the computer[46]. This increase stems among other things from the fact that at present more persons use the Internet at home and more employ a broadband connection. Higher accessibility to the Internet favours its more intensive use by new users. Moreover, the ways of navigating the internet have become more diverse and thus users spend more time online.

The diversification of the formes of internet use can be observed on the basis of actions performed by Poles on the Web. Currently internauts use almost 14 out of 25 ways of using the internet. If we consider only 22 ways of using the internet about which we also asked in 2005 and 2007, at present the users claim to perform on average 12.5. Two years ago they stated on average 11 and four years ago 9 . The increase in diversification of internet use is thus very noticeable and in fact is even higher if we take into consideration new forms of use which we have not yet analysed. The diversification of internet use among different user groups is illustrated in Table 6.3.1.

Let us move on to the key issue, which is the different forms of Internet use. Table 6.3.3. contains a comparison of the use of internet between 2005-2009 as well as actions ever performed by the users which can be a general indicator of forms of use and also the actions of a relatively short one-week period, which may be regarded as a good indicator of the intensity of use.

In most of the cases, internet functions have remained on the same level as in 2007, although between 2005 and 2007 a rapid increase in diversification of forms of Internet use took place. At present, positive changes include online shopping and online banking services. However, one may get the impression that the development of Polish internet has almost stopped in the last two years. With regard to this, there is one significant exception for which unfortunately we do not have any comparable data. However, the enormous popularity of social network services about which we asked for the first time show numerous changes which have taken place since the appearance of *Nasza Klasa* [*Our Class*]. The popularity of social network services was the greatest change observed in the past two years. A substantial change was also an increase in the amount of persons who had not used various forms of web browsing although the percentage of users performing particular actions during the week had remained unchanged, the variety of actions performed at any time in 2009 was generally wider than two years ago.

Table 6.3.3. Forms of Internet use between 2005 and 2009 (the percentage of Internet users performing a given task at any time within one week of being surveyed)

Ways of using the Internet	Tasks performed within 7 days prior to the study			Tasks performed at any time		
	2005	2007	2009	2005	2007	2009
Checking and sending electronic mail (e-mail)	52	68	66	83	91	89
The use of instant messengers (such as ICQ, gadu-gadu etc.)	36	51	49	63	77	79
Participation in chats	13	14	14	55	54	60
Participation in discussion groups or forums	8	15	16	36	46	53
Internet telephony (VoIP, Skype)	10	24	24	32	54	63
Participation in videoconferences	3	10	10	18	31	40
Web browsing	60	73	71	92	95	91
Gathering materials necessary for work or school	46	55	50	78	80	75
E-learning – e.g. participation in Internet trainings or courses	4	7	7	20	27	37
Looking for a job, sending job offers	10	14	13	34	42	48
Buying products on the Internet (except for auctions)	9	16	18	35	46	57
Using Internet banking services	13	30	34	27	46	56
Participation in Internet auctions	7	17	17	25	39	49
Playing network games using the Internet	12	18	19	35	45	52
Downloading free software	14	19	19	39	47	52
Downloading free music, movies	18	22	22	44	50	56
Creation or modification of one‘s own Web page or blog	6	8	8	22	26	34
Creation and publishing of one’s own text, graphics, music or other kinds of art on the Internet	4	8	7	17	23	31
Obtaining information from the Web pages of public institutions	19	25	25	50	57	59
Downloading or filling out official forms	9	14	15	35	45	52
Listening to music or radio on the Internet	20	30	34	50	61	67
Watching TV and video files on the Internet	6	12	13	27	36	45
Booking tickets (e.g. plane, cinema, theatre)	nd	10	10	nd	35	46
Reading newspapers on the Internet	nd	31	29	nd	62	65
Visiting social network services	nd	nd	51	nd	nd	81

[46] However, it is difficult to discuss the issue of time spent on the Internet while a significant majority of the computers is equipped with a broadband connection and users at this time can perform other actions such as using the electronic mail or communicators.

The use of communication tools such as internet telephony, chats, forums and discussion groups has become more widespread. The same percentage of the Internet users as two years ago use the most popular forms of communication: electronic mail and instant messengers. However, if we take into account the frequency of use of these various tools, it appears that over the period of one week they are practically used by the same percentage of users as in 2007. Internet use over one week also indicates that tools for maintaining the existing connections (e-mail, instant messengers, telephony) are much more frequently used than chats or forums.

It is worth emphasising that a substantial percentage of communication through the Internet included contacts with persons known from everyday life. A very low percentage of internet users stay in touch with persons met on the web (12 per cent of users in the period of one week in 2007). There were also very few people who actually met anyone they got to know on the internet. In 2009, this was 17 per cent of users, slightly less than in 2005 and 2007 when they amounted to 17.3 and 19.4 per cent respectively. We do not have any knowledge about the type and durability of relations established in this way. It is difficult to define the number of social, professional or other type of contacts. We also do not know how many connections Internet users establish.

The forms of internet use which have been gaining regular users rapidly are mostly Internet shopping and online banking services. There are also more users who have purchased a product on the Internet auctions, although their use frequency is similar to the one of 2007. The internet is used slightly less frequently for gathering materials necessary for work or school which probably results from the changing structure of users, who include a decreasing percentage of those in education. It correlates with the above-mentioned changes in purposes of using computers which are more rarely a tool for work and school

Listening to music or radio on the internet has become more frequent, whereas downloading music or video files has remained on the level of 2007. Network games have been gathering interest relatively slowly. Virtually no changes have been observed in the use of public institution websites. However, the number of persons who have ever downloaded forms or filled them out on the websites of public institutions has been increasing slightly. This can be a sign of a gradual and slow growth in the number of issues which can be resolved with institutions via the Internet.

The percentage of Poles who are not only passive, but also active users creating content on the internet has been changing relatively slowly. Although there are many more persons who have had such experiences, the percentages of users who do it regularly are not changing at all. There are few persons who actively create or modify their own web page or blog or publish graphics, music or other kinds of art on the Internet. On the other hand, over half of internet users regularly visit social network portals to upload not only information but also creating photo galleries of themselves.

7. SOCIAL EXCLUSION

7.1. Poverty and income inequalities

Tomasz Panek

7.1.1. The method of measuring and analysing poverty

The definition of poverty as a category is the first and key step to measuring its incidence and depth. The choice of a particular definition of poverty is of fundamental importance to what results of measurement are gained (Hagenaars, 1986). Which group of a society is identified as the poor may depend on the definition. It is also the definition of poverty and the measurement methods that influence programs formed by social policy aimed at combacting poverty.

The actual differences in evaluating the incidence and depth of poverty and the resulting divergences in social policy are caused by the lack of a precise and generally accepted definition of the phenomenon. Besides, the category varies in relation to time and region (Sen,1983).

All the definitions in literature on the subject of poverty commonly accept the fact that basic needs are not satisfied to a demanded degree (Drewnowski, 1977). Definitions formed in the literature on the subject are so general that they do not raise controversy and are generally accepted. However, this acceptance results from the fact that they omit the most controversial issues; e.g. which needs should be regarded as basic and what degree of their satisfaction should be regarded as sufficient.

This analysis uses the so-called economic definition of poverty (Panek, 2007). Poverty is defined here as the situation in which a household does not possess enough money to satisfy its needs. Thus, the analysis does not include problems connected with the deprivation of opportunities for the satisfaction of household needs caused by the lack of resources available, and it does not include sociological and cultural aspects causing social exclusion.

On the basis of the poverty definition accepted here, it was assumed that the basic measure of the material standing of a household is its current available monthly income divided by the equivalence scale calculated for the household. The income estimated in this way is called available equivalent income.

Equivalence scales are the parameters that enable us to compare the income of households of various characteristics with the poverty line estimated for the household, which is the reference point here. A household (along with all its members) is considered poor if its equivalent income is below the poverty line.

There were two complementary approaches used in the analysis; the objective and the subjective (Panek, 2007). The terms "subjective" and "objective" should not be connected with the degree of arbitrariness of the criteria used for the measurement of poverty incidence and depth. In both of the measurement methods there are certain arbitrary assumptions. In the case of the objective approach, the poverty line is determined by experts, independent of the personal evaluation of the household members. In the subjective approach the poverty line is determined also with regard to the opinion of the household.

7.1.2. Results of analysis of poverty and inequality

7.1.2.1. The range and depth of poverty

The poverty indices used in research contain the basic information which is the objective of every study of poverty. Due to the abstract character of the term "poverty line", the significance of the information provided by these indices should not be overestimated. Much more significant from the perspective of study objectives are the changes in their values and distributions according to typological groups of households.

The value of minimum income estimated by the Institute of Labour and Social Affairs which serves as the poverty line for single-person households of employees in 2009 was PLN 413. On the other hand, the subjective poverty line was estimated for single-person households to be at the level of PLN 1544. This is more than 3.5 times higher than the objective one, which means that the aspirations of households with regard to their income situation allowing for satisfaction of needs at an acceptable minimum level are much higher than the minimum standards established in this regard by experts. Households simply compare their material situation with that of other households in a better financial situation[47].

In March 2009, 3.3 per cent of households in Poland lived below the objective poverty line and 51.4 per cent below the subjective poverty line (Table 7.1.1 and 7.1.4). However, these values should be considered overestimated as the households tend to underestimate their income in the statements made. On the other hand, the poverty depth indices reached almost 25.8 per cent in the objestive approach and 32.4 per cent from the subjective

[47] In the case of the subjective approach, we should in fact use the term "deficiency line", since when households consider the lowest level of income necessary to make ends meet, they take into account the higher level of income than that necessary for securing only the minimum existence. However, in order to ensure uniform terminology both in the objective and the subjective approach, we use the term "poverty line".

approach, which means that poverty is not very deep in Poland (Tables 7.1.1 and 7.1.4). The percentage of households living in poverty decreased on the national scale from March 2007 to March 2009 by more than 4 percentage points both from the objective and subjective approach (Tables 7.1.3 and 7.1.10).

Considering two perspectives together, the highest percentage of households living in poverty were the group of households living on passive sources of income (25.4 per cent in the objestive approach and 89.3 per cent in the subjective approach, Table 7.1.1 and 7.1.4). The poverty gap indices in the objestive approach reached the highest values in the group of self-employed households and those living on the passive sources of income. They amounted to 35.8 per cent in the first group and 32.3 per cent in the other. In the group of self-employed households, poverty is related to the present economic crisis as a result of which numerous family businesses failed or significantly lost income.

The deepest poverty in the subjective approach in 2009 was observed in households living on passive sources of income as well as among pensioners. The poverty gap indices in these groups reached 48.4 and 41.2 per cent respectively.

In the objestive approach, as much as 11.1 per cent of households with unemployed members lived in poverty in March 2009, whereas in the group of households without unemployed members it only amounted to 2.3 per cent in the objestive approach and 49.1 per cent in the subjective approach (Table 7.1.1 and 7.14). Also the poverty gap in the subjective approach in the first group of households was higher than in the other (the income gap index in these groups amounts to 37.7 and 31.4 per cent respectively). In the objestive approach in turn, the poverty gap was higher in the group of households without the unemployed than in those with the unemployed (the poverty gap indices in these groups amounted to 27.9 and 22.5 per cent respectively).

From both perspectives, in the group of households with disabled members the percentage of households living in poverty is higher than in households without disabled members (in the subjective approach it was 4.8 and 2.8 per cent respectively). As far as the poverty gap is concerned, the situation is more ambiguous. The income gap index in the objestive approach is higher in households without disabled members than in households with (33.7 and 26.6 per cent respectively). In the case of the subjective approach these relations are reversed (the income gap index in households with the disabled amounts to 34.5 per cent and in households without the disabled 37.7 per cent).

Among the types of households, the widest incidence of the poverty sphere was present among the groups of numerous and single-parent families in the objestive approach (the percentage of households in these groups living in poverty amounted to 7.7 and 6 per cent, respectively) and non-family households and single-parent families in the subjective approach (the percentage of households in these groups living in poverty amounted to 77.4 and 63 per cent respectively. The poverty gap is much more diverse within types of households than its incidence. The highest poverty gap indices were in non-family households (52.2 per cent in the objective approach and 41.2 in the subjective). Moreover, in the group of single-parent households the poverty gap index from the subjective approach also exceeds 41 per cent.

The obtained results indicate the influence of the place of residence on the incidence of poverty (Table 7.1.3 and 7.1.6). The smaller the place of residence, the higher the percentage of households living in poverty in March 2009. Among households rural areas, 5.2 per cent had incomes below the poverty line in the objective approach and 72.1 per cent from the subjective approach.

Table 7.1.1. Poverty indices by social and economic groups, economic activity and disability in March 2009; objective approach

Socio-economic group, economic activity and disability	Poverty incidence (the percentage in poverty)	Poverty gap (per cent)
Employees	1.59	29.92
Farmers	10.66	31.42
Retirees	1.98	35.77
Pensioners	0.94	9.74
Self-employed	5.60	1.11
Living on unearned sources	25.35	32.32
without the unemployed	2.25	27.94
with the unemployed	11.08	22.50
without the disabled	2.78	28.78
with the disabled	4.72	20.76
Total	3.29	25.79

Table 7.1.2. Poverty indices by household type in March 2009; objective approach

Household type	Poverty incidence (the percentage in poverty)	Poverty gap (per cent)
Single-family :		
Married without children	1.65	12.98
Married with 1 child	2.12	19.06
Married with 2 children	3.19	34.29
Married with 3 and more children	7.68	9.88
Single-parent families	5.97	13.46
Multi-family	4.33	29.51
Non-family:		
Single-person	2.86	48.35
Multi-person	2.56	48.58
Total	3.29	25.79

Table 7.1.3. Poverty indices by the class of the place of residence in March 2009; objective approach

Class of the place of residence	Poverty incidence (the percentage in poverty)	Poverty gap (per cent)
Cities over 500k	1.29	47.76
Towns 200-500k	2.63	39.50
Towns 100-20k	2.24	46.02
Towns 20-100k	2.80	23.94
Towns under 20k	2.66	21.74
Rural areas	5.15	20.41
Total	3.29	25.79

Table 7.1.4. Poverty indices by social and economic groups, economic activity and disability in March 2009; subjective approach

Socio-economic group, economic activity and disability	Poverty incidence (the percentage in poverty)	Poverty gap (per cent)
Employees	37.92	27.78
Farmers	65.18	37.83
Retirees	26.27	27.58
Pensioners	62.28	29.91
Self-employed	82.94	41.21
Living on unearned sources	89.27	48.36
without the unemployed	49.11	31.41
with the unemployed	68.47	37.73
without the disabled	47.33	31.65
with the disabled	62.93	34.01
Total	51.38	32.40

Diversification of the poverty gap between the place of residence was slightly too wide in particular from the subjective approach. We observed the deepest poverty gap from the subjective approach in the rural areas where the poverty gap index reached 34.5 per cent. In turn the deepest poverty gap in the objestive approach referred to the households in larger cities with over 500k (the poverty gap index amounted to 53.3 per cent).

Table 7.1.5. Poverty indices by household type in March 2009; subjective approach

Household type	Poverty incidence (the percentage in poverty)	Poverty gap (per cent)
Single-family :		
Married without children	39.85	26.24
Married with 1 child	31.43	32.11
Married with 2 children	44.91	27.42
Married with 3 and more children	57.54	34.60
Single-parent families	62.98	36.38
Multi-family	41.78	29.61
Non-family:		
Single-person	71.43	35.02
Multi-person	59.10	31.99
Total	51.38	32.40

Table 7.1.6. Poverty indices by the place of residence class in March 2009; subjective approach

Class of the place of residence	Poverty incidence (the percentage in poverty)	Poverty gap (per cent)
Cities over 500k	32.43	26.17
Towns 200-500k	43.15	31.28
Towns 100-20k	48.21	30.41
Towns 20-100k	49.85	31.09
Towns under 20k	53.56	31.06
Rural areas	63.28	35.43
Total	51.38	32.40

In all the socio-economic groups the incidence of poverty in the objective perspective diminished between 2007-2009 (Table 7.1.7). In turn we observed a slight increase in the incidence of poverty in the subjective approach only in the groups of households of retirees and pensioners. From 2007 to 2009, the percentage of households with income below the poverty line in the objestive approach in the group of households with unemployed members decreased by almost 6 per cent, whereas in the same period, in the group of households without unemployed members it decreased by almost 4 per cent. From the subjective approach, we observed a significant decrease of the percentage of the poor households without unemployed members (by almost 5 per cent points) and at the same time, in the group of households with unemployed members(by almost 3 per cent points). In the last two years, there was also a decrease in the poverty incidence from both perspectives in the group of households without the disabled as well as in the group of households with the disabled (Table 7.1.7 and 7.1.10).

Table 7.1.7. Changes of the poverty indices by socio-economic groups, economic activity and disability in the period of March 2007 - March 2009; Objective approach

Socio-economic group, economic activity and disability	The percentage of households below the poverty line *	Poverty gap
	March 2009-March 2007	March 2009-March 2007
Employees	-3.53	-2.59
Farmers	-7.60	-10.07
Retirees	-2.53	12.58
Pensioners	-3.30	-7.29
Self-employed	-5.85	-2.46
Living on unearned sources	-6.16	-5.68
without the unemployed	-3.61	-1.00
with the unemployed	-6.10	-8.48
without the disabled	-3.87	-0.66
with the disabled	-3.91	-6.16
Total	-3.88	-3.34

* differences in percentage points; positive values stand for an increase and negative ones for a decrease in comparison with 2007.

In the last two years the percentage of poor households in the objective approach decreased in all the analysed groups of households (Table 7.1.8). We observed the most significant fall in the groups of households of large families and of multi-person and non-family ones (by over 11.0 and 8.0 percentage points, respectively). Also changes in the poverty gap from the subjective approach were generally positive (Table 7.1.11). The most important decrease was noted in the group of single-person non-family households and multi-person households (by over 10 and 7 percentage points respectively).

Between 2007 and 2009, a decrease in the poverty gap from both the objective and the subjective approach was observed in all the classes of residence (Tables 7.1.9 and 7.1.12). The most noticeable decrease in the objestive approach was noted in households in rural areas and the smallest towns (by almost 7 and over 4 percentage points, respectively) and from the subjective approach in the largest cities (by over 8 percentage points).

The poverty gap in the objestive approach decreased from 2007 to 2009 (by over 3 percentage points, Table 7.1.7). In the same period, we observed a significant increase of the income gap in the group of households of retirees (by almost 13 percentage points) living in the largest cities and the smallest towns (by almost 20 and over 8 percentage points respectively) and the group of households of multi-family households with children and non-family multi-person homes (by over 7 and 5 per cent points, respectively).

Table 7.1.8. Changes of the poverty indices by the type of household in the period of March 2007 to March 2009; objective approach

Household type	The percentage of households below the poverty line	Poverty gap
	March 2009-March 2007	March 2009-March 2007
Single-family :		
Married without children	-2.68	-7.79
Married with 1 child	-0.86	-15.63
Married with 2 children	-3.13	-1.72
Married with 3 and more children	-11.42	5.09
Single-parent families	-3.45	-0.75
Multi-family	-3.47	7.44
Non-family:		
Single-person	-5.66	-8.03
Multi-person	-8.45	4.17
Total	-3.88	-3.34

* differences in percentage points; positive values stand for an increase and negative ones for a decrease in comparison with 2007.

Table 7.1.9. Changes of the poverty indices by the class of the place of residence in the period of March 2007 to March 2009; objective approach

Class of the place of residence	The percentage of households below the poverty line	Poverty gap
	March 2009-March 2007	March 2009-March 2007
Cities over 500k	-2.12	19.89
Towns 200-500k	-0.50	-7.16
Towns 100-20k	-2.93	-21.00
Towns 20-100k	-2.45	-2.63
Towns under 20k	-4.06	2.45
Rural areas	-6.84	-2.70
Total	-3.88	-3.34

* differences in percentage points; positive values stand for an increase and negative ones for a decrease in comparison with 2007.

Table 7.1.10. Changes of the poverty indices by socio-economic groups, economic activity and disability in the period of March 2007 to March 2009; subjective approach

Socio-economic group, economic activity and disability	The percentage of households below the poverty line	Poverty gap
	March 2009-March 2007	March 2009-March 2007
Employees	-7.36	-3.82
Farmers	-2.12	-2.53
Retirees	1.11	1.00
Pensioners	1.25	-1.71
Self-employed	-6.11	4.47
Living on unearned sources	-4.76	0.86
without the unemployed	-4.59	-0.76
with the unemployed	3.26	-5.02
without the disabled	-3.16	-2.13
with the disabled	-5.27	0.35
Total	-3.74	-1.29

* differences in percentage points; positive values stand for an increase and negative ones for a decrease in comparison with 2007.

The poverty gap from the subjective approach also decreased in the last two years (by over 1 per cent Table 7.1.10). In this period, a significant income gap of households in poverty was noted only in the group of self-employed households (by over 4.0 per cent points), non-family multi-person ones (by almost 12 per cent) and also married families with 1 child and also single-parent families (by almost 2 percentage points, Tables 7.1.11 and 7.1.12).

Table 7.1.11. Changes of the poverty indices by the type of household in the period of March 2007 to March 2009; subjective approach

Household type	The percentage of households below the poverty line	Poverty gap
	March 2009-March 2007	March 2009-March 2007
Single-family :		
Married without children	-0.16	-3.67
Married with 1 child	-5.19	1.87
Married with 2 children	-3.81	-5.45
Married with 3 and more children	-5.01	-1.16
Single-parent families	-1.62	1.61
Multi-family	-0.55	1.34
Non-family:		
Single-person	-6.71	-1.75
Multi-person	-10.46	11.64
Total	-3.74	-1.29

* differences in percentage points; positive values stand for an increase and negative ones for a decrease in comparison with 2007.

Table 7.1.12. Changes of the poverty indices by the class of the place of residence in the period of March 2007 to March 2009; subjective approach

Class of the place of residence	The percentage of households below the poverty line	Poverty gap
	March 2009-March 2007	March 2009-March 2007
Cities over 500k	-8.28	-0.78
Towns 200-500k	-4.91	-0.88
Towns 100-20k	-0.61	-1.26
Towns 20-100k	-0.83	-0.63
Towns under 20k	-3.44	-2.00
Rural areas	-4.07	-1.67
Total	-3.74	-1.29

* differences in percentage points; positive values stand for an increase and negative ones for a decrease in comparison with 2007.

7.1.2.2. The permanent character of poverty

For most households participating in the last two research waves, poverty was not of permanent character in the objective approach. Of the 6.4 per cent of households in poverty according to the objective approach in March 2007, less than one fourth (23 per cent) were still in the poverty sphere in March 2009 (Table 7.1.13). Households in permanent poverty according to the subjective approach constituted as many as 76.3 per cent of the households in poverty in March 2007 (Table 7.1.14), which means that subjective poverty was of a permanent character.

Table 7.1.13. The mobility of the households in relation to their presence in the poverty sphere in the period of March 2007 to March 2009; objective perspective

Specification	Poor households in March 2009 (per cent)	Non-poor households in March 2009 (per cent)	Total
Poor households in March 2007 (per cent)	1.47	4.93	6.40
Non-poor households in March 2007 (per cent)	1.05	92.56	93.60
Total	2.51	97.49	100.00

Almost 8.0 per cent of the households changed their poverty status between March 2007 and March 2009 in the objective approach (Table 7.1.15). The number of households which have left the poverty sphere in the last two years was much greater than the number of those which entered this sphere (more than four times as many households left the poverty sphere as entered it).

Table 7.1.14. The mobility of the households in relation to their presence in the poverty sphere in the period of March 2007 to March 2009; subjective approach

Specification	Poor households in March 2009 (per cent)	Non-poor households in March 2009 (per cent)	Total
Poor households in March 2007 (per cent)	39.19	12.15	51.34
Non-poor households in March 2007 (per cent)	8.41	40.25	48.66
Total	47.60	52.40	100.00

A similar tendency of the mobility of the poverty status of households to the poverty sphere can be observed from the subjective approache (Table 7.1.15). 21 per cent of households changed their poverty status. The income situation in more than 12 per cent of households improved in March 2007 in comparison with March 2009 so much that they left the poverty sphere. The income situation worsened significantly in this period and concerned as many as 8 per cent of households which entered in the poverty sphere.

Table 7.1.15. The mobility of the households in relation to their presence in the poverty sphere in the period of March 2007 to March 2009;

Perspective	Mobility indices (per cent)			
	S	SU^+	SU^+	CM
Objective	5.98	4.93	1.05	3.88
Subjective	20.56	12.15	8.41	3.74

NOTES: S- index of mobility of households is a total of SU+ and SU-, SU+ -percentage of households, which left the deficiency sphere, SU – percentage of households, which entered the deficiency zone, CM – balance of changes (SU+ - SU-)

7.1.2.3. The determinants of poverty

Tables 7.1.16 and 7.1.17 show the results of the probit analyses of poverty risk in the objective and subjective approaches. The comparison of the empirical values of χ^2 statistics, amounting to 817.5 in the objective approach and 3617.2 in the subjective approach (at 37 degrees of freedom) with the corresponding critical values equal to 0.000, indicates high goodness-of-fit of both models and the significance of all their independent variables (variants of the attributes) examined jointly. The level of significance assumed for the analysis of the significance of particular independent variables chosen for the model equals 0.05. This means that a given variable (variant of the attributes) is significant when the corresponding critical level of significance (p-value) is lower than 0.05.

Socio-economic group (source of income of the household head)

The reference point assumed for the estimation of the influence a household being assigned to a socio-economic category was self-employed households poverty risk. This means that the degree of poverty risk relating to a group of households, divided by the socio-economic type they belong to, will be regarded in relation to the degree established for the self-employed households. In the objective approach, it is only the employee-households and employee-farmers households that do not differ statistically from the self-employed households (Table 7.1.16). However, in the subjective approach, all the socio-economic groups are significantly more threatened by poverty than the self-employed households (Table 7.1.17).

In the objective approach the groups of households most seriously threatened by poverty are the households living on unearned sources other than pension or retirement pay and the households of farmers. This is confirmed by the highest positive values of the parameters behind these categories. Members of the former group of households are often unemployed and so they have the lowest income. It is quite surprising that a lower risk of falling into the poverty sphere is associated with the households of retirees than the self-employed households. This is the effect of the income stability of the households of retirees during the current economic crisis in Poland. At the same time, the crisis has led to the failure of numerous family businesses in that the incomes of a wide group of self-employed households has fallen drastically.

From the subjective approach, the highest risk of falling into the poverty sphere is associated, apart from households living on unearned sources, with households of retirees.

The influence of variables determining which socio-economic group a household belongs to is much bigger from the subjective approach than it is from the objective.

Table 7.1.16. Probit model estimates of poverty risk in the objective approach in March 2009

Predicators	Estimation of parameter	Standard error	t-Student statistic	Significance level
(Constant)	-2.354	0.286	-8.221	0.000
Socio-economic group:				
Employees	-0.168	0.131	-1.283	0.200
Farmers	0.479	0.150	3.198	0.001
Self-employed	Ref.			
Retirees	-0.448	0.151	-2.972	0.003
Pensioners	0.202	0.154	1.309	0.191
Living on passive incomes	1.184	0.147	8.059	0.000
Number of persons in household				
1	Ref.			
2	-0.008	0.109	-0.070	0.944
3	0.109	0.098	1.116	0.264
4	0.197	0.102	1.934	0.053
5	0.115	0.123	0.936	0.350
6 or more	0.305	0.118	2.595	0.009
Class of the place of residence:				
Cities over 500k	Ref.			
Towns 200-500k	0.133	0.152	0.872	0.383
Towns 100-20k	0.088	0.176	0.500	0.617
Towns 20-100k	0.192	0.133	1.447	0.148
Towns under 20k	0.037	0.142	0.263	0.792
Rural areas	0.208	0.127	1.639	0.101
Education of the household head:				
Elementary/ lower	1.087	0.176	6.179	0.000
Vocational	0.904	0.171	5.276	0.000
Secondary	0.524	0.175	2.993	0.003
Tertiary	Ref.			
Voivodship				
Dolnośląskie	-0.654	0.149	-0.438	0.661
Kujawsko-pomorskie	-0.007	0.176	-0.040	0.968
Lubelskie	0.023	0.150	0.150	0.881
Lubuskie	-0.465	0.230	-2.019	0.044
Łódzkie	-0.280	0.164	-1.710	0.087
Małopolskie	-0.278	0.160	-1.738	0.082
Mazowieckie	-0.157	0.141	-1.111	0.267
Opolskie	-0.432	0.249	-1.737	0.082
Podkarpackie	Ref.			
Podlaskie	-0.033	0.178	-0.183	0.854
Pomorskie	-0.085	0.163	-0.525	0.599
Śląskie	-0.149	0.149	-1.003	0.316
Świętokrzyskie	-0.097	0.184	-0.529	0.597
Warmińsko-mazurskie	-0.500	0.205	-2.437	0.015
Wielkopolskie	-0.320	0.161	-1.989	0.047
Zachodniopomorskie	-0.382	0.187	-2.042	0.041
Age of the household head:				
under 25	-0.308	0.206	-1.491	0.136
25-34	0.017	0.090	0.187	0.851
35 or over	Ref.			
Household status on labour market:				
At least one unemployed person	Ref.			
No unemployed persons	-0.444	0.069	-6.408	0.000
Household disability status:				
At least one disabled person	Ref.			
No disabled persons	-0.127	0.064	-1.983	0.047

The number of people per household

The reference point for estimating the influence of the number of people on the risk of entering the poverty sphere was the one-person household. In the objestive approach, only in households consisting of 6 or more members does the number of people per household significantly affect the risk of entering the poverty sphere (Table 7.1.16). Generally, the more numerous the household, the higher the risk of entering the poverty sphere. In this case this threat is much higher than that of the groups of single-person households. Most probably, this it is caused by the fact that most of the numerous households are households with many children where most of household members do not work.

All the variable parameters defining the number of persons in households from the subjective approach are significant and negative. From the subjective approach, the highest level of poverty risk occurs in one-person

households (Table 7.1.17). This means that the determinants of poverty from the subjective approach differ significantly from the determinants in the objestive approach.

Table 7.1.17. Probit model estimates of poverty risk from the subjective approach in March 2009

Predicators	Estimation of parameter	Standard error	t-Student statistic	Significance level
(Constant)	-0.157	0.109	-1.442	0.149
Socio-economic group:				
Employees	0.267	0.058	4.565	0.000
Farmers	0.530	0.083	6.413	0.000
Self-employed	Ref.			
Retirees	0.555	0.064	8.630	0.000
Pensioners	0.927	0.082	11.262	0.000
Living on passive incomes	1.422	0.100	14.178	0.000
Number of persons in household				
1	Ref.			
2	-0.721	0.039	-18.602	0.000
3	-0.973	0.044	-22.045	0.000
4	-0.607	0.046	-13.076	0.000
5	-0.813	0.061	-13.401	0.000
6 or more	-0.818	0.067	-12.250	0.000
Class of the place of residence:				
Cities over 500k	Ref.			
Towns 200-500k	0.347	0.061	5.718	0.000
Towns 100-20k	0.424	0.066	6.397	0.000
Towns 20-100k	0.356	0.050	7.147	0.000
Towns under 20k	0.383	0.055	7.001	0.000
Rural areas	0.580	0.049	11.819	0.000
Education of the household head:				
Elementary/ lower	1.237	0.050	24.467	0.000
Vocational	0.999	0.043	22.995	0.000
Secondary	0.559	0.042	13.481	0.000
Tertiary	Ref.			
Voivodship				
Dolnośląskie	-0.261	0.072	-3.625	0.000
Kujawsko-pomorskie	-0.125	0.081	-1.539	0.124
Lubelskie	0.117	0.082	1.435	0.151
Lubuskie	-0.402	0.098	-4.118	0.000
Łódzkie	0.006	0.066	0.085	0.932
Małopolskie	-0.406	0.073	-5.539	0.000
Mazowieckie	-0.388	0.066	-5.868	0.000
Opolskie	-0.444	0.102	-4.350	0.000
Podkarpackie	Ref.			
Podlaskie	-0.253	0.096	-2.638	0.008
Pomorskie	-0.419	0.079	-5.286	0.000
Śląskie	-0.440	0.068	-6.439	0.000
Świętokrzyskie	-0.055	0.096	-0.569	0.569
Warmińsko-mazurskie	-0.246	0.090	-2.738	0.006
Wielkopolskie	-0.272	0.072	-3.772	0.000
Zachodniopomorskie	-0.501	0.083	-6.017	0.000
Age of the household head:				
under 25	0.125	0.102	1.223	0.221
25-34	0.127	0.041	3.115	0.002
35 or over	Ref.			
Household disability status:				
At least one unemployed person	Ref.			
No disabled persons	-0.455	0.044	-10.379	0.000
Household disability status:				
At least one unemployed person	Ref.			
No disabled persons	-0.161	0.032	-4.985	0.000

Place of residence class

The reference point assumed for estimating the influence of the place of living class has on the poverty risk is the household living in the largest cities. All the values of parameters of the model from the objective approach representing the place of residence class are not significant (Table 7.1.16). The estimations of parameters for all groups of households according to the place of residence are negative from the subjective approach, which means that all the households apart from the urban ones are threatened by a higher poverty risk than households living in the largest cities (Table 7.1.17). The households living in the rural areas are exposed to the highest poverty risk.

The education level of the household head

The education level of a household determines, unquestionably, the risk of entering the poverty sphere, both in the objective and subjective approach (Tables 7.1.16 and 7.1.17).

The reference point assumed for estimating the influence that the education level of the household has on the poverty risk was the group of households where the head of the household had a university degree.

All the values of the parameters are positive and statistically significant. This means that from both of the perspectives, the lowest risk of entering the poverty sphere is for the households where the head has a university degree. The lower the education level, the higher the poverty risk.

Voivodship

The results of the survey in relation to voivodship classification are not definite. Many parameter values turned out to be statistically insignificant, particularly from the subjective approach (Tables 7.1.16 and 7.1.17). The voivodship assumed here as the reference point was Podkarpackie voivodship.

All the significant parameters values both from the objective and the subjective approach are negative, which indicates that the relatively highest risk of entering the poverty sphere occurs in the households living in the voivodship of Podkarpackie. Relatively the lowest risk of poverty from the subjective approach was observed in the group of households living in Śląskie and Warmińsko-Mazurskie voivodships and in the objestive approach the Lubuskie and Opolskie voivodships.

Age of household head

The reference point assumed here was a household whose head is 35 or over. The differences in the level of poverty risk between the group of households constituting the reference point and all the other groups of households turned out to be significant only in the subjective model for the household whose head is between 25 and 34 (Table 7.1.16 and 7.1.17). The risk of poverty decreased visibly along with the age of the household head.

The household status on the labour market

Households surveyed in relation to their status on the labour market were divided into the households without unemployed members and those where at least one person was unemployed. The former of the groups was assumed as the reference point. The results of the analysis show that both from the objective and from the subjective approach the poverty risk is considerably higher in the households with unemployed members (Tables 7.1.16 and 7.1.17).

The disability status

The reference point assumed here was a household with at least one disabled person. From both perspectives, the poverty risk considerably increases in households with disabled people. However, this influence is relatively lower than in the case of the unemployment (Table 7.1.16 and 7.1.17).

7.2. Unemployment

Janusz Czapiński

The analysis of exclusion from the labour market can be found in Chapter 3.10. Here we will concentrate on the social and psychological characteristics of the unemployed.

The registered unemployment rate in the sample of individual respondents within the professionally active age group was 9.9 per cent (slightly less than estimated by the Central Statistical Office in the month of the study). All persons registered at the labour offices can be divided into two large groups: the real and the fake. The fake unemployed can be divided into those who are not interested in working (they are not seeking and/ or not ready to get a job) and those working illegally or otherwise earning an income not lower than PLN 950 per month. Like in the previous waves of the study the fake unemployed constituted a significant part of all persons registered (in 2003 and 2005 about 1/3 and this year already one half[48]) (Table 7.2.1).

For the majority of the registered unemployed women the main reason for not being interested in getting a job is childcare (37.7 per cent) and generally household duties (15.2 per cent including housework and care of disabled or elderly members of the household). Men do not seek a job mostly due to the loss of hope in finding work (24.2 per cent) and in the second place due to their health condition (13.6 per cent). It is symptomatic that often mainly for men the reason for not seeking a job is the desire to keep the right to receive social benefits (18.9 per cent in comparison with 8.1 per cent in the group of the unemployed women). This suggests that almost every fifth unemployed man is satisfied with the standard of living provided by the received low social benefits. Also men, more frequently than women, explicitly admit that they do not feel like getting a job (5.2 and 0.6 per cent, respectively; Table 7.2.2).

[48] An increase in the share of the fake unemployed results from a decrease in the rate of registered unemployment while the size of this group remained unchanged.

What are the differences between three groups of unemployed people; that is the real unemployed, the unemployed not interested in getting a job and the unofficially employed with a monthly income of at least PLN 950? The highest percentage of people receiving unemployment benefit is among the unemployed working illegally and the lowest among the unemployed not interested in getting a job. This is strictly correlated with the time of being listed in the unemployed register. Among the working unemployed there is a higher percentage (almost twice as high as among the unemployed not interested in getting a job) of people registering at labour offices more than once (Table 7.2.3). Generally, the working unemployed are more similar to the really unemployed than to the unemployed not interested in getting a job.

These differences are slightly different with regard to gender, age and education (Table 7.2.4). Women prevail in the group of uninterested in getting a job (72 per cent), and men among the working unemployed (61 per cent). The proportion in population that is the percentage of men and women is similar among the real unemployed. This proves that the group of unemployed people who are not interested in getting a job constitute persons performing household duties. These unemployed (mainly women) would surely not get a job even if the market wanted them to. Thanks to being registered at the labour office they receive, like those working illegally, an "extra bonus" from the state, free healthcare insurance and a certain sum of money for a certain period of time.

*Table 7.2.1. The percentage of people of working age (18 -60 for women, 18-65 for men) excluding the retired, pensioners and students according to various criteria of unemployment**

Unemployment criterion	Unemployment rate among persons in the professionally active age group			
	2003	2005	2007	2009
Registration in a labour office	19.6	17.6	12.5	9.9
Registration + readiness to start working	16.6	14.7	8.9	7.2
Registration + readiness to start working + looking for a job	14.8	13.4	7.6	6.6
Registration + readiness to start working + looking for a job + not working or part time working + monthly personal net income lower than PLN 950 (PLN 800 in 2003, 850 in 2005 and PLN 900 in 2007)	13.5	11.9	6.5	5.1

* The table takes into account only people who completed the individual questionnaire,as one of the unemployment criteria was personal net income and such an item was not present in the household questionnaire. This is why younger members of households are omitted in the table.

Table 7.2.2. The percentage of women and men among the registered unemployed not interested in working and who provide various reasons for abstaining from seeking work in 2009

Reason for abstaining from seeking work	Women	Men	Total
Studying, raising qualifications	5.2	7.0	5.8
Taking care of house duties	12.3	1.4	8.8
Taking care of the children	37.7	1.9	26.3
Taking care of disabled or elderly household members	2.9	1.6	2.5
Due to bad health condition	11.2	13.6	12.0
Due to inappropriate age	1.7	9.9	4.3
Due to lack of proper qualifications	2.8	1.0	2.2
Due to belief he/she won't find a job	5.4	24.3	11.6
Does not want to lose the right to benefit	8.1	18.9	11.6
Does not want to work	0.6	5.2	2.1
Other reasons	10.2	11.9	10.7

Most of the real unemployed are young persons (up to 30 years - 40 per cent) and the group of those uninterested in work consists mainly of older persons (more than half are above 44 years of age). The rate of unemployment is disproportionately high among persons with elementary and vocational education and disproportionately low in the groups with a university degree. The most significant disproportions appear among the real unemployed (higher in the groups with elementary education and lower in the groups with a tertiary education degree) (Table 7.2.4). The level of education of the working unemployed in comparison with other categories of the unemployed is more frequently tertiary rather than secondary.

Table 7.2.3. The percentage of various categories of unemployed receiving unemployment benefit, registered more than once at the labour office and remaining unemployed for less than six months and more than two years

Unemployment category	Receiving benefit	Registered at the labour office more than once in the last 2 years	Remaining unemployed for less than 6 months	Remaining unemployed for more than 6 months
Real	22	27	44	27
Not interested in working	12	13	19	52
Employed with income PLN 950 or higher	27	23	54	25
Total number of registered unemployed	21	24	37	34

Table 7.2.4. The percentage of unemployed women, persons in three age groups and the percentage over or under representation of different unemployment categories in comparison with the professionally active population

Unemployment category	Women	aged 44 or over	Difference between the percentage of the unemployed and a given education in comparison with professionally active people with a given education.			
			elementary	vocational	secondary	tertiary
Real	52	41	+9.4	+3.2	+1.1	-13.6
Not interested in working	72	47	+6.7	+11.0	-0.6	-16.3
Employed with income PLN 950 or higher	39	32	+4.8	+7.3	-4.0	-8.1
Total number of registered unemployed	56	36	+7.8	+6.3	-0.5	-13.5

7.3. Social discrimination

Janusz Czapiński

One of the important risks for social integration is the discrimination which occurs when a certain category of citizens is denied equal rights and access to various aspects of life due to their particular features.

In order to define the type and dimensions of risk for social order which can entail discrimination, it is first necessary to assess their incidence and check the extent of intolerance in our society. We did not ask our respondents about nationality, ethnicity and race and households of foreigners were excluded from the study. Therefore, we are unable to estimate the level of discrimination with regard to these attributes. The Third Republic is a very homogeneous country in terms of race, ethnicity and religion. Contrary to numerous Western countries, we have not experienced racial, religious or national conflicts. Thus omitting these attributes should not significantly distort our estimates. In Poland we witness other signs of discrimination, both "hot" or emotive (e.g. towards homosexuals and HIV positive people), and "cold" which are inextricably linked with culture and mechanisms of social stratification including gender, disability and the place of residence.

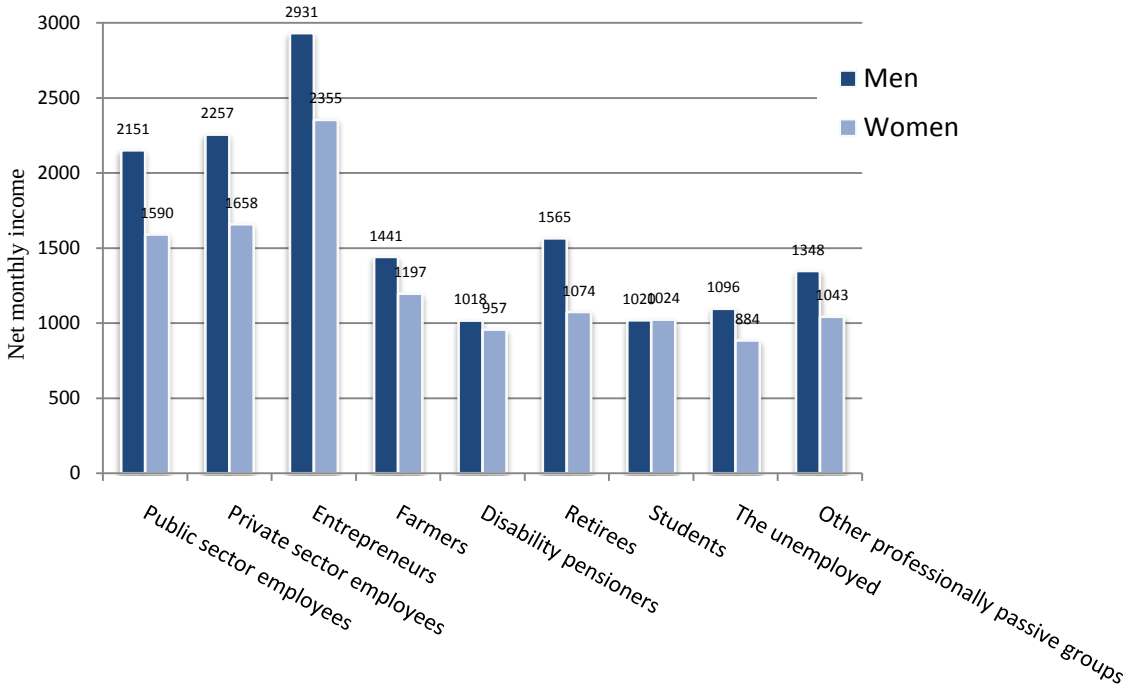
Generally, the level of the sense of discrimination in Poland is still low, although it is three times higher than in 1990s (Table 7.3.1).

Table. 7.3.1. The percentage of persons who felt they had been discriminated against between 1992 and 2009

1992 r. N=3396	1993 r. N=2307	1994 r. N=2298	1995 r. N=3024	1996 r. N=2329	1997 r. 2100	2000 r. 5431	2003 r. N=9620	2005 r. N=8609	2007 r. N=12638	2009 r. N=26122
0,8	1,0	0,7	0,9	0,5	0,6	1,2	1,6	1,8	1,9	1,8

Źródło danych: lata 1992-1997 — Czapiński, 1998; lata 2000-2009 — *Diagnoza Społeczna.*

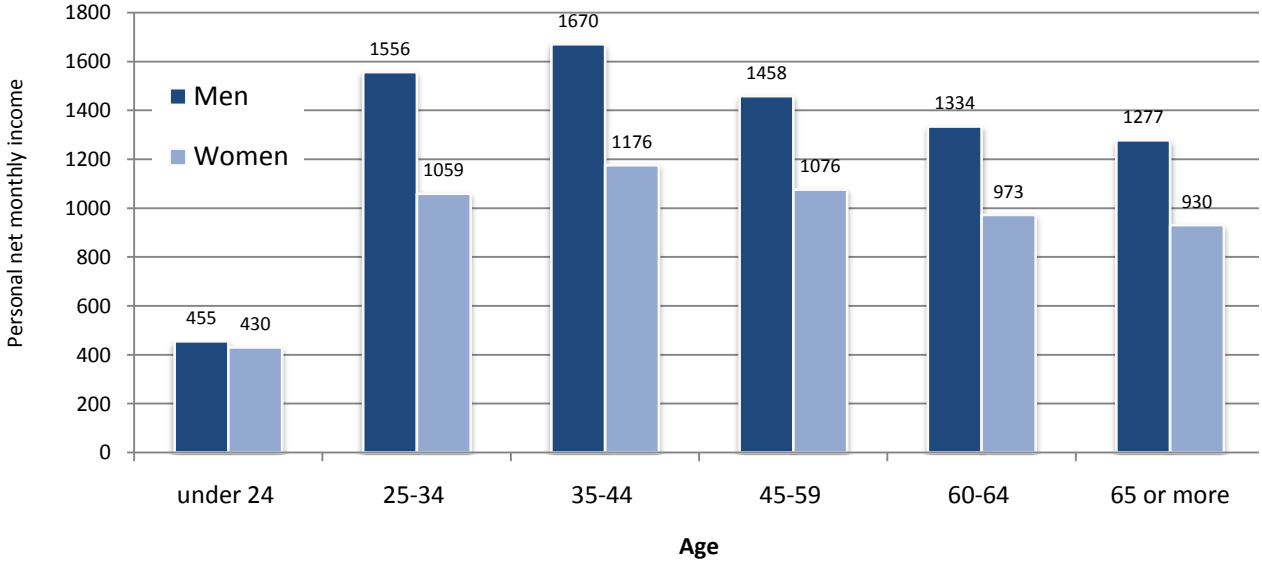
Let us discuss the issue of discrimination on the basis of gender. We have already mentioned income disproportions between men and women (Chapter 4.5.1). The average personal income declared by women is over one fifth lower than that declared by men. The reason for this discrepancy is differing social and professional status. In all the social and professional groups, except for pensioners and students, the income is either equal or similar (Figure 7.3.1).



NOTES: main effect of gender F(1, 18964)=49,022, p<0,000, η^2=0,003; main effect of status F(8, 18964)=101,326, p<0,000, η^2= 0,41; effect of gender and status interaction F(8, 18964)=4,765, p<0,000, η^2= 0,002; age and education were used as co-variants.

Figure 7.3.1. Average net monthly income (disposable income) of men and women by social and professional status

The difference is on the same level in all age groups except for the youngest (under 24) where students with low income (e.g. from scholarships) prevail. Similarly to the group of pensioners and retirees receiving social benefits, they are "insensitive" to income discrepancies on the basis of gender (Figure 7.3.2).

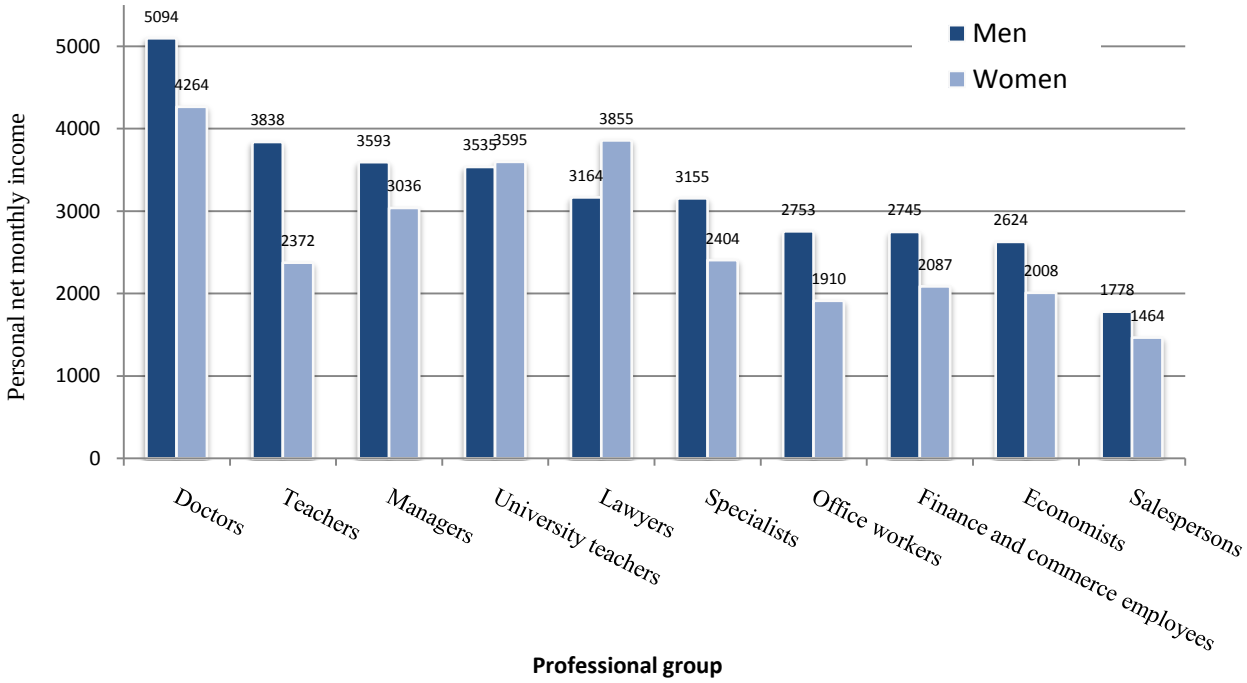


NOTES: main effect of gender F(1, 11272) = 271,369, p < 0,000, η^2= 0,024; main effect of age F(5, 11272) = 188,0322, p < 0,000, η^2= 0,077; effect of gender and status interaction F(5, 11272) =11,524, p < 0,000, η^2= 0,005.

Figure 7.3.2. Average net monthly income (disposable income) of men and women by age groups

One can question these results by saying that the differences in income depend on the type of profession and position rather than gender. Also however, within specific professional groups representing relatively equal competences the income gender gap not only fails to disappear, it even becomes wider in that the average income of

men is by 28 per cent higher than that of women (Figure 7.3.3). University teachers, whose incomes are balanced and lawyers, the group where women earn more than men, constitute an exception.



NOTES: main gender effect F(1, 3455)=20,659, p<0,000, η^2= 0,006; main group effect F(9, 3455)=32,442, p<0,000, η^2= 0,078; interaction effect of gender and group F(9, 3455)=2,462, p<0,01, η^2= 0,006.

Figure 7.3.3. Average monthly personal net income of men and women by professional groups

Let us consider if such a visible income discrimination translates into a wider sense of being discriminated against. In the individual questionnaire, we asked our respondents whether they had experienced discrimination and on which basis. It appears that women feel discriminated against more frequently than men (Figure 7.3.4). However, it is worth noticing that until four years ago, this difference was reversed and statistically significant; 2.1 per cent of men and 1.6 per cent of women felt they had been discriminated against. This indicates that women are becoming more aware of barriers to the access to different resources and sensitive about how they are treated in the labour market and in more general social relations.

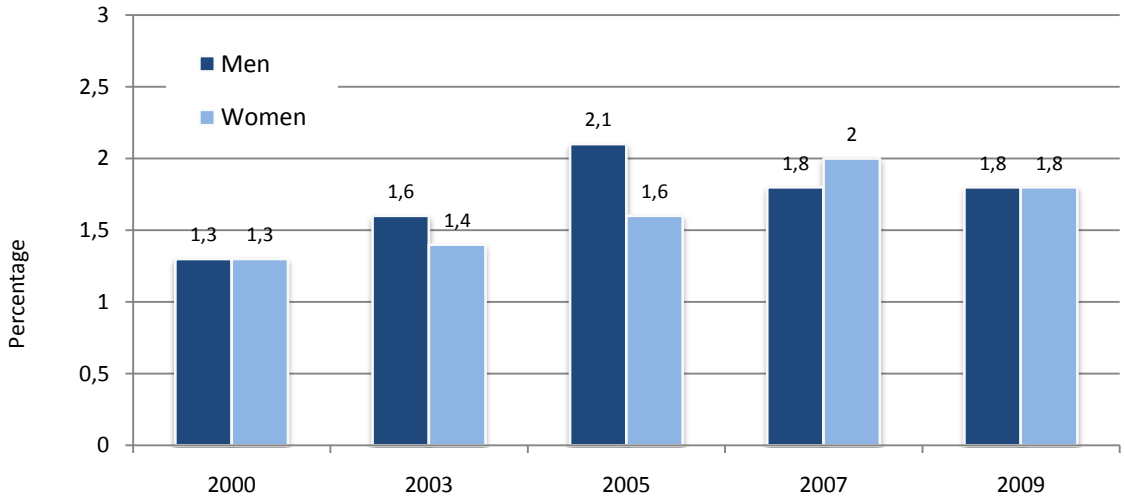


Figure 7.3.4. The percentage of men and women who felt they had been discriminated against between 2000 and 2009

7.4. Types of social exclusion

Janusz Czapiński

The correlations between specific exclusion criteria such as the ones mentioned above (poverty, unemployment and social discrimination) are relatively weak. Therefore, it is difficult to indicate a single and coherent exclusion syndrome. This has also been proved in a factor analysis involving eleven quite obvious barriers to complete participation in the mainstream of society such as old age, loneliness, poverty, living in rural areas, father's low education level, alcohol or drug abuse, infringement of the law, sense of discrimination, disability and unemployment. In the first four waves of measurement in 2000, 2003, 2005 and 2007, these eleven criteria coherently formed three orthogonal factors together explaining over 40 per cent of the variations (Table 7.4.1). The first can be called structural exclusion which is defined mostly by the place of residence (rural areas), one's own and one's father's low education level which is also correlated and probably dependant on the variables of income per capita in households below the poverty line. The second factor, that is of physical exclusion, is defined above all by old age and disability as well as the lower extent of the father's low education level (elderly people's parents were usually less well educated than they were). Until 2005, unemployment status was negatively correlated with physical exclusion related to physical fitness; for the unemployed, the probability of belonging to a group which was not defined by physical exclusion was higher. However, due to the decrease in the unemployment rate, unemployment status ceased to refer to physically excluded persons and began to include the structurally excluded. Until 2003, physical exclusion reduced the risk of being poor. This probably resulted from the fact that retirees and generally elderly people apart from pensioners have on average a higher income per capita than other social groups (see Chapter 3.1.1). Since 2005, the negative correlation between physical exclusion and poverty has disappeared which can indicate that old people have become poorer. The third factor which can be referred to as normative exclusion, includes the criteria of alcohol and drug abuse, infringement of the law, loneliness, being a victim of discrimination on the basis of nationality, appearance, beliefs or other reasons.

Table 7.4.1. The results of factor analysis (factor loadings) of selected exclusion criteria with varimax rotation between 2003 and 2007

Criteria	Factors											
	Structural exclusion				Physical exclusion				Normative exclusion			
	2000.	2003	2005	2007	2000	2003	2005	2007	2000	2003	2005	2007
Age: 50 or over					0.75	0.78	0.79	0.78				
Loneliness									0.33	0.43	0.53	0.50
Poverty	0.47	0.50	0.69	0.72	-0.51	-0.47						
Living in the rural area	0.68	0.65	0.61	0.63								
Lower than secondary education	0.71	0.71	0.68	0.62				0.38				
Father's education – basic or lower	0.66	0.60	0.40	0.31	0.33	0.44	0.61	0.69				
Addiction (alcohol, drugs)									0.53	0.65	0.67	0.64
Infringement of the law									0.71	0.67	0.60	0.63
Sense of discrimination									0.62	0.48	0.45	0.49
Disability					0.60	0.60	0.61	0.62				
Unemployment			0.35	0.36	-0.57	-0.48	-0.40			0.32		
Percentage of the explained variance	16.0	15.1	14.4	14.3	14.6	15.2	16.5	16.0	11.4	12.1	11.9	12.5

NOTES: only factor loadings higher than 0.3 are presented; physical exclusion which explained the majority of variance was the main factor after 2000.

In the 2009 edition of *Social Diagnosis* a certain change in the factoral structure was observed (Table 7.4.2). Apart from the three factors mentioned above, we indicated a fourth which is strictly linked with unemployment and poverty. It can be referred to as material exclusion resulting from the lack of permanent income from work. The most significant percentage of households threatened by this type of exclusion (over 50 per cent in comparison with the population average of 9 per cent) and the excluded for this reason (almost 50 per cent vs. the population average of 8 per cent) belong to the group of households living on unearned sources (Table 7.4.4)). Since the beginnings of study of social exclusion, the issues of poverty and unemployment have been regarded as chief barriers to full participation in social life. Most attention has been paid to these problems, as it has been assumed that prevention of unemployment and poverty should constitute the principal aim of the policy of social reintegration. The fact that material exclusion is presently one of four types of exclusion in Poland entails the need to modify the policy of reintegration so that it could include other reasons for exclusion which are independent of the labour market situation and material living standards. The policy requires different instruments addressed to the disabled, alcohol and drug addicts as well as those who are less well educated, live in rural areas and infringe the law.

Therefore, full employment and elimination of poverty is not the only means of resolving the problem of social exclusion. Let us see the extent of exclusion and the threat of exclusion for other reasons than unemployment and poverty in the entire society and different social groups.

Table 7.4.2. The results of factor analysis (factor loadings) of the selected exclusion criteria with varimax rotation in 2009

Criteria	Factors			
	Physical exclusion	Structural exclusion	Normative exclusion	Material exclusion
Age: 50 or over	0.75			
Loneliness	0.47		0.31	
Poverty				0.66
Living in the rural area		0.76		
Lower than secondary education		0.70		
Father's education – basic or lower	0.53	0.55		
Addiction (alcohol, drugs)			0.72	
Infringement of the law			0.71	
Sense of discrimination			0.46	
Disability	0.68			
Unemployment				0.73
Percentage of the explained variance	15.57	12.82	10.34	9.67

NOTES: only factor loadings higher than 0.3 are presented.

7.4.1. The extent of exclusion in different social groups

Defining an objective limit of exclusion poses similar difficulties to setting an unequivocal and universal poverty line (obviously except for the criterion of biological survival). Both phenomena are relative. One can be more or less poor in comparison with the general living standard of society and be more socially excluded. The poverty sphere is defined by a certain level of income (see Chapter 7.1), whereas the principal criterion for exclusion is the level of barriers and risk factors in relation to social diversity. The operational measurement of differentiation is standard deviation. We applied this measurement to four types of exclusion to establish two limit values for exclusion and the threat of exclusion. The limit value of the exclusion threat was constituted by two values of standard deviations of the mean of a factor defining a given exclusion type. The exclusion limit value corresponded to the value of one of the standard deviations. As these criteria are relative and it is difficult to estimate the number of Poles who are actually excluded or at risk of exclusion. It can be indicated though which groups in different socio-demographic sections present higher or lower extent of exclusion and threat of exclusion (Tables 7.4.3 ─ 7.4.6).

The highest percentage of Poles at risk of structural and physical exclusion is 16 or over (almost 18 and 16 per cent respectively; Table 7.4.3). However, the majority is excluded for material reasons (8 per cent). As regards this type of exclusion, the gap between the excluded and those threatened by the exclusion is the narrowest. Nearly 90 per cent of persons in the risk group exceed the limit value of two standard deviations and thus belong to the excluded. In terms of the structural exclusion, the relation of the excluded persons to the group at risk amounts only to 6 per cent, whereas for physical and normative exclusion it is 30 per cent and 36 per cent respectively. These results indicate that prevention of unemployment and poverty related to this phenomenon should take priority in the policy of reintegration due to the fact that in this type of exclusion nearly the entire group at risk of exclusion is actually excluded.

The threat of various exclusion types is slightly different for men and women (Table 7.4.3). Men face the highest risk of normative exclusion, whereas women of physical exclusion.

Table 7.4.3. The percentage of excluded and at risk of exclusion by the exclusion type and gender

Gender	Exclusion type									
	Physical		Structural		Normative		Material		Total	
	At risk	Excluded	At risk	Excluded	At risk	Excluded	At risk	Excluded	At risk	Excluded
Men	14.2	4.0	19.7	1.6	18.7	6.5	8.9	7.6	24.7	16.5
Women	17.8	5.5	15.9	0.6	6.4	2.5	9.7	8.8	22.3	13.4
Total	16.1	4.8	17.7	1.1	12.3	4.4	9.3	8.2	23.4	14.9
Chi square	57	30	59	56	841	225	3	11	19	43
df	1	1	1	1	1	1	1	1	1	1
p	0.000	0.000	0.000	0.000	0.000	0.000	ns	0.001	0.000	0.000

As regards socio-economic groups, as we have already mentioned in the majority of cases material exclusion is encountered in households living on passive sources of income (47 per cent of the excluded and 53 per cent at risk of exclusion) (Table 7.4.4). Normative exclusion in turn is a major threat to households living on passive sources of income and self-employed persons. Most at risk of structural exclusion are households of farmers. Most at risk of physical exclusion are households of pensioners and retirees. Generally, households of pensioners (54 per cent) and persons living on passive sources of income (56 per cent) face the highest risk of any type of exclusion. The lowest threat is encountered among employees and self-employed persons (16 and 14 per cent respectively). Similar differences apply to the exclusion indicator in socio-economic groups.

Table 7.4.4. The percentage of excluded and at risk of exclusion by the exclusion type and socio-economic household group

Socio-economic group	Exclusion type									
	Physical		Structural		Normative		Material		Total	
	At risk	Excluded	At risk	Excluded	At risk	Excluded	At risk	Excluded	At risk	Excluded
Employees	7.8	1.9	12.1	0.6	13.5	4.6	7.4	6.4	16.1	9.4
Farmers	8.9	1.9	49.8	5.8	11.8	4.8	12.6	12.2	30.1	21.4
Self-employed	6.3	1.2	9.8	0.3	15.8	5.6	6.7	5.9	14.0	7.8
Retirees	32.2	9.7	20.8	0.7	7.8	2.1	5.5	4.8	29.0	17.6
Pensioners	51.3	20.9	26.6	1.3	10.5	4.7	15.4	13.8	54.3	37.6
living on unearned sources	16.8	4.7	19.9	2.9	20.2	12.4	52.8	47.3	56.5	46.6
Chi square	3111	1360	1633	403	188	199	2104	1920	1824	1666
Df	5	5	5	5	5	5	5	5	5	5
P	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

As regards type of household (Table 7.4.5), the highest absolute threat of physical exclusion is faced by non-family single-person households (mainly retirees) and married persons without children (and to a large extent pensioners). Multi-family households and married persons with 3 or more children are at the highest risk of structural exclusion. The greatest risk of normative exclusion concerns non-family multi-person households and married persons with 3 or more children. In most of the cases, married persons with 3 or more children, non-family multi-person households, single-parent families and multi-family households face the highest risk of material exclusion. Generally, exclusion affects non-family single-person households and single-parent families. This phenomenon is rarely present in the case of married persons with 1 or 2 children.

Table 7.4.5. The percentage of excluded and at risk of exclusion by the exclusion and household type

Household type	Exclusion type									
	Physical		Structural		Normative		Material		Total	
	At risk	Excluded	At risk	Excluded	At risk	Excluded	At risk	Excluded	At risk	Excluded
Single-family :										
Married without children	25.1	7.6	18.0	0.8	9.7	2.4	5.3	4.8	22.5	13.9
Married with 1 child	9.1	2.3	12.4	0.8	12.1	3.9	8.6	7.7	15.6	9.9
Married with 2 children	5.8	1.0	14.2	1.0	13.2	4.3	8.6	7.8	15.7	9.0
Married with 3 or more children	5.0	0.9	24.4	2.8	15.1	6.0	14.4	13.0	23.9	16.1
Single-parent families	19.4	5.4	18.3	0.8	13.9	6.7	14.4	12.0	32.4	22.0
Multi-family	12.4	3.0	27.6	1.4	11.5	3.6	11.8	11.0	26.5	17.8
Non-family										
Single-person	41.8	15.4	15.7	0.6	10.9	5.3	6.1	4.6	38.3	23.8
Multi-person	15.9	5.1	16.7	.9	16.7	7.5	13.1	10.3	29.9	19.5
Chi square	2490	1109	398	82	64	98	286	263	794	524
Df	7	7	7	7	7	7	7	7	7	7
P	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

As far as geographical distribution is concerned, physical exclusion is most frequently encountered in the eastern part of Poland (Table 7.4.6). Structural exclusion is most widespread in eastern regions in particular in Lubelskie, Podkarpackie, Świętokrzyskie and Podlaskie voivodships. The highest percentage of the normatively excluded refers to Lubuskie, Podlaskie, Zachodniopomorskie and Mazowieckie voivodships. The majority of materially excluded persons live in eastern voivodships and the Lubuskie region. As regards the general exclusion indicator, the most threatened by exclusion are Lubuskie, Podkarpackie, Lubelskie, Podlaskie and Warmińsko-mazurskie voivodships, whereas the least threatened are Opolskie and Śląskie voivodships. Except for eastern

voivodships and the Lubuskie region the level of exclusion risk in different voivodships is relatively similar. The factors of socio-economic group and household type exert a far stronger influence on the occurrence of this phenomenon.

Table 7.4.6. The percentage of excluded and persons at risk of exclusion by the exclusion type and voivodships

Voivodship	Exclusion type									
	Physical		Structural		Normative		Material		Total	
	At risk	Excluded	At risk	Excluded	At risk	At risk	Excluded	At risk	Excluded	At risk
Dolnośląskie	15.8	5.1	10.8	0.5	12.5	4.3	9.6	8.6	21.6	12.4
Kujawsko-pomorskie	17.2	5.0	18.8	1.1	11.4	3.7	11.9	10.8	24.4	15.6
Lubelskie	20.2	6.7	28.7	2.8	12.4	4.0	11.6	11.0	30.0	22.0
Lubuskie	22.2	8.6	15.1	0.3	18.4	7.4	15.3	12.3	31.9	20.6
Łódzkie	17.7	5.2	17.6	0.8	11.4	4.8	8.8	7.8	24.6	14.2
Małopolskie	17.3	6.0	20.0	1.3	9.7	3.2	6.6	5.8	23.2	14.9
Mazowieckie	14.3	3.4	18.3	1.3	14.5	5.1	7.4	6.3	21.9	14.0
Opolskie	11.3	2.2	18.7	0.9	10.7	4.7	6.6	6.1	18.6	12.1
Podkarpackie	17.3	4.1	26.5	1.8	9.3	3.5	16.8	15.2	30.4	22.1
Podlaskie	17.4	4.2	25.3	1.8	15.3	5.6	11.0	8.9	27.2	18.3
Pomorskie	14.6	4.4	14.1	0.7	13.2	4.9	8.4	7.2	20.5	12.7
Śląskie	14.0	4.3	7.6	0.3	12.2	4.9	8.1	6.9	19.0	11.2
Świętokrzyskie	18.1	4.9	25.7	1.4	10.4	2.8	9.9	9.2	24.8	16.7
Warmińsko-mazurskie	16.1	6.4	19.4	0.9	9.7	3.4	10.8	10.0	26.5	15.7
Wielkopolskie	15.1	4.5	17.1	1.1	12.6	3.7	7.1	6.3	20.5	12.7
Zachodniopomorskie	15.2	4.7	17.5	1.1	13.0	5.2	10.0	8.7	25.3	14.8
Chi square	76	71	535	75	77	45	196	185	171	192
Df	15	15	15	15	15	15	15	15	15	15
P	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

7.4.2. Social exclusion and psychological well-being

Exclusion risk factors pose a potential threat to social order. Responsible politicians cannot stay indifferent to such phenomena as high unemployment, a significant percentage of disabled people, high crime indicators and widespread poverty. It does not mean though that social exclusion defined by these factors directly exerts a negative influence on the quality of life in the subjective approach (psychological well-being). The unemployed, the poor, the disabled and criminals are not necessarily less happy, more depressive or less motivated to live than working, well-off, able and honest citizens. In fact, international studies prove that objective standards of life have a negligible impact on psychological well-being (Andrews, Withey, 1976, Campbell, Converse, Rodgers, 1976; Czapiński, 1992, 2001a, 2004a; Myers, 1993). The poor tend to be only slightly less happy than the rich, old people seem to be as happy as the young ones and adults with an average education are just a little bit happier than the uneducated ones. Only the civil status and health (in the subjective approach, not as an objective medical diagnosis) continuously and significantly affect the level of psychological well-being. Persons who live alone, in particular the widowed and the divorced as well as people considering themselves to be ailing, are much less happy than married couples who feel healthy. Although national authorities are able to improve the citizens' satisfaction with their condition by improving the state of health security, they have a marginal influence on interpersonal relationships and the civil status. Therefore, the impact of the authorities on the citizen's sense of happiness is inconsiderable.

Moreover, a change in the life situation usually does not entail a durable change in psychological well-being. For instance in the US, Great Britain, Japan and the majority of other developed countries, the sense of happiness has not changed for decades, despite continuous economic growth.

However, the relation between objective standards of life and psychological well-being in Poland is much stronger than in other, more affluent countries (Czapiński, 1996, 2001b). Thus it can be assumed that social exclusion will have a significant influence on the quality of life in the subjective approach. In order to prove it, a predicative value of factors defining three types of exclusion for different dimensions of psychological well-being were calculated by means of multiple regression equations.

In the scope of general subjective psychological well-being all three factors indicate quite high significance in all five wave-studies (in 2000, 2003, 2005, 2007 and 2009) and they together explain in 2009, depending upon the factor of psychological well-being, from 15.0 to 40.0 per cent of variance (Table 7.4.7). The structurally, physically, materially and normatively excluded persons reveal a much lower level of psychological well-being as compared with the non-excluded ones. As regards the will-to-live (suicidal tendencies and the desire to live), the physical and normative exclusion are the main predicators, whereas the structural exclusion is the least important factor. A strong relation between psychological depression and the physical exclusion results from a high correlation of depression

indicator with age (see Chapter 4.3) which constitutes the core determinant of the physical exclusion. However, the material exclusion is insignificant for depression.

Table 7.4.7. Results of multiple regression analysis of four types of exclusion type for three indicators of psychological well-being

Predicator	Will-to-live			General subjective psychological well-being			Depression		
	Beta	p	R^2	Beta	p	R^2	Beta	p	R^2
Physical exclusion	-0.258	0.000		-0.388	0.000		0.619	0.000.	
Structural exclusion	-0.037	0.000		-0.097	0.000		0.138	0.000	
Normative exclusion	-0.222	0.000		-0.190	0.000		0.039	0.000	
Material exclusion	-0.171	0.000	0.147	-0.216	0.000	0.242	-0.003	ni.	0.404

7.4.3. Social functioning of excluded groups

Apart from the fact that exclusion or a risk of being excluded entails suffering and decrease on the level of psychological well-being, a low number of the excluded always brings advantages to the community in that it provides its higher cohesion, better standard of living and more opportunities for development. It is almost taken for granted that better social integration creates a stronger community. As we have already proved in Chapter 5.2, the level of attitudes and behaviours which constitute social capital determining the strength of civil society in Poland is still low. The questions arise as to whether the situation of excluded groups can be even worse, whether they can show a more negative attitude to democracy as compared with the entire society, if they can reveal even lower level of trust in other people and less appreciation for public goods. Are the excluded groups a worse category of citizens?

It appears that exclusion, especially the structural variety, related with a low education level and living in the rural areas translates into a lower than average level of social capital (Table 7.4.8). All the partial social capital indicators selected for the analysis (participation in the parliamentary elections, organisation membership, positive attitude to democracy, sensitivity to the common good and participation in the activities of local community) indicate a negative correlation with the majority of exclusion indicators. A negative attitude to democracy reveals the strongest link with the structural and physical exclusion which probably results from the sense of wrong ascribed to the systemic transformation after 1989. Actually, the correlation between the structural and physical exclusion with the respondents' opinion that life was easier before 1989 is relatively strong (correlation indicators amount to, respectively 0.177 and 0.291).

Structural and physical exclusion correlate moderately with social dominance orientation, egalitarianism and prejudice. The structurally and physically excluded groups rarely express the intention of living abroad which is more frequently revealed among the normatively and materially excluded. Only the normatively excluded go to the cinema, theatre, concerts and participate in social meetings and parties more often than the average population. Other excluded groups are less active in this field than the non-excluded category.

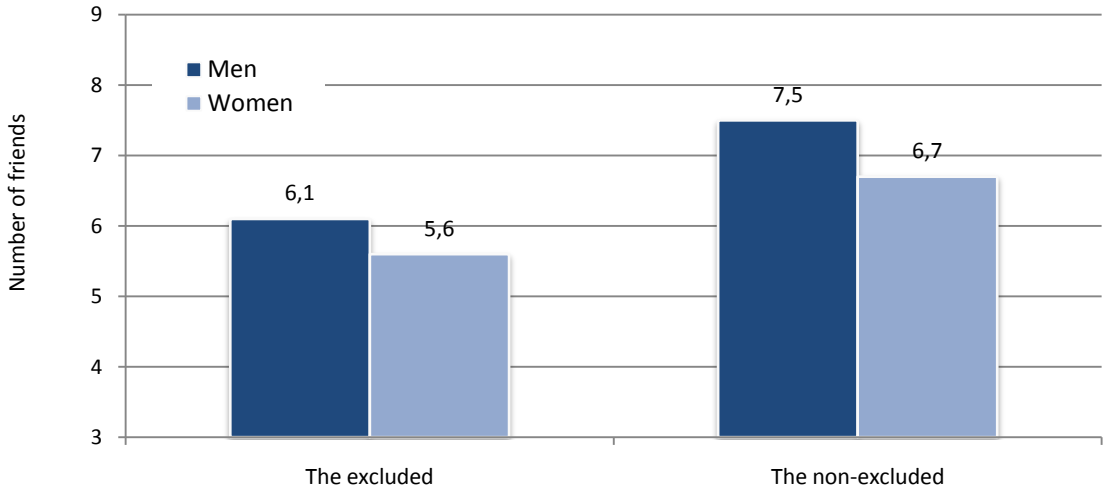
Persons excluded for any reasons have fewer friends (Figure 7.4.1), more frequently experience loneliness, in particular women (Figure 7.4.2) and more rarely feel loved and trusted than the non-excluded ones (Figure 7.4.3).

The above-mentioned differences in social functioning prove the accuracy of social exclusion criteria adopted for the purposes of this analysis. In fact, Poles who we classified to the group of excluded on the basis of these criteria do not comply with the norm of social functioning.

Different reasons for exclusion require various social integration programmes. In order to limit the scope of physical exclusion (mainly the disabled and elderly persons) and the normative exclusion linked with crime and addiction, different steps need to be taken. Prevention against structural exclusion requires focusing on the rural population, whereas the elimination of material exclusion includes significant expenditure to reduce poverty and professional activisation of the unemployed and professionally inactive groups. There is no formula for an efficient social integration programme. Fortunately, some exclusion factors, mainly poverty and low level of education, have been decreasing at a fast pace.Poles become more well-off and better educated. Crime indicators have been falling, though unfortunately addiction rates have been increasing. We are going to face a significant demographic threat due to an aging society and a higher rate of biologically disabled persons in the population. Therefore, integration programmes should be aimed above all at physical exclusion. The most forceful steps in this field appear to be pro-family policies favouring having children and generational solidarity as well as effective rehabilitation and activisation of the disabled.

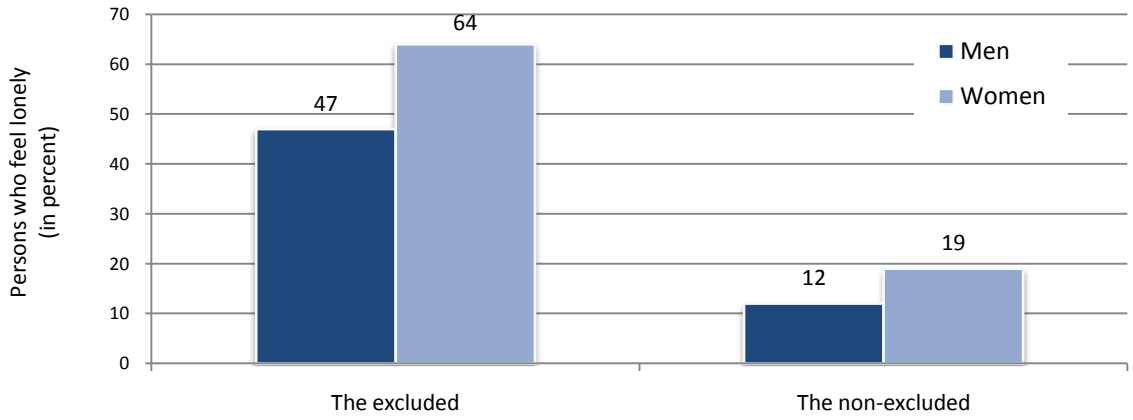
Table 7.4.8. Correlations of four types of social exclusion with the indicators of social capital, social attitudes and behaviours, sensitivity to the common good and the intention to emigrate

		Physical exclusion	Structural exclusion	Normative exclusion	Material exclusion
Social capital	Pearson correlation	-0.054	-0.159	0.015	-0.096
	Significance (bilateral)	0.000	0.000	0.025	0.000
	N	22761	22761	22761	22761
Participation in the parliamentary elections of 2007	Pearson correlation	0.054	-0.133	-0.098	-0.121
	Significance (bilateral)	0.000	0.000	0.000	0.000
	N	23699	23699	23699	23699
Organisation membership	Pearson correlation	-0.003	-0.100	0.050	-0.054
	Significance (bilateral)	0.659	0.000	0.000	0.000
	N	23672	23672	23672	23672
Attitude to democracy	Pearson correlation	-0.114	-0.182	-0.013	-0.051
	Significance (bilateral)	0.000	0.000	0.053	0.000
	N	23753	23753	23753	23753
Interpersonal trust	Pearson correlation	-0.052	-0.056	-0.020	-0.031
	Significance (bilateral)	0.000	0.000	0.002	0.000
	N	23685	23685	23685	23685
Sensitivity to the common good	Pearson correlation	0.057	-0.142	-0.003	-0.053
	Significance (bilateral)	0.000	0.057	0.673	0.000
	N	19144	19144	19144	19144
Participation in social activities	Pearson correlation	-0.050	-0.037	0.040	-0.027
	Significance (bilateral)	0.000	0.000	0.000	0.000
	N	23319	23319	23319	23319
Domination	Pearson correlation	0.088	0.037	0.029	-0.003
	Significance (bilateral)	0.000	0.000	0.000	0.654
	N	23686	23686	23686	23686
Egalitarianism	Pearson correlation	0.023	0.135	-0.029	0.076
	Significance (bilateral)	0.000	0.000	0.000	0.000
	N	23709	23709	23709	23709
Prejudice	Pearson correlation	0.096	0.211	0.017	0.022
	Significance (bilateral)	0.000	0.000	0.009	0.001
	N	23670	23670	23670	23670
Intention to emigrate	Pearson correlation	-0.121	-0.028	0.167	0.091
	Significance (bilateral)	0.000	0.000	0.000	0.000
	N	23765	23765	23765	23765
Going to the cinema, theatre, concerts	Pearson correlation	-0.189	-0.205	0.035	-0.053
	Significance (bilateral)	0.000	0.000	0.000	0.000
	N	22411	22411	22411	22411
Going to restaurants, cafés, pubs	Pearson correlation	-0.242	-0.197	0.179	-0.022
	Significance (bilateral)	0.000	0.000	0.000	0.001
	N	22520	22520	22520	22520
Participation in social meetings	Pearson correlation	-0.225	-0.146	0.150	0.003
	Significance (bilateral)	0.000	0.000	0.000	0.622
	N	22890	22890	22890	22890
Participation in name-day and birthday parties, etc.	Pearson correlation	-0.133	-0.060	0.023	-0.038
	Significance (bilateral)	0.000	0.000	0.001	0.000
	N	23096	23096	23096	23096



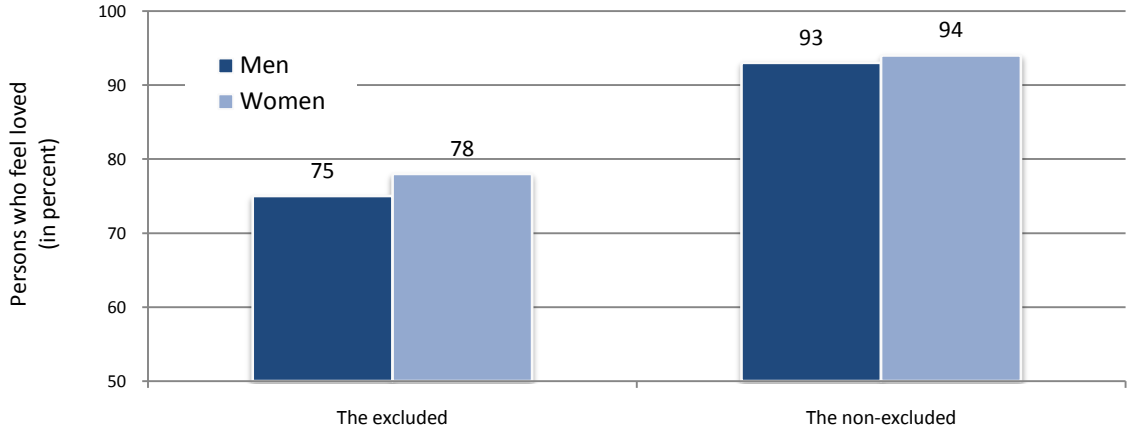
NOTES: main effect of exclusion F(1.23265)=101.701, p < 0.000, η^2= 0.004; interaction effect of gender and exclusion F(1. 23265)<1, ns.

Figure 7.4.1. The number of friends of excluded and non-excluded men and women



NOTES: main effect of exclusion F(1, 23635)=3219,701, p < 0,000, η^2= 0,120; interaction effect of gender and exclusion F(1, 23635)=50,962, ,p<0,000, η^2= 0,002.

Figure 7.4.2. The percentage of persons who feel lonely among excluded and non-excluded men and women



NOTES: main effect of exclusion F(1, 23427)=1042,413, p<0,000, η^2= 0,043; interaction effect of gender and exclusion F(1, 23427)=8,811, , p<0,01, η^2= 0,000.

Figure 7.4.3. The percentage of persons who feel loved and trusted among excluded and non-excluded men and women

8. CONCLUSION

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We still live in a culture of envy and distrust. Our journey towards civil society has yet to begin. However, we are developing economically quite fast although individually it takes much less time than as a team. The increase of the level of personal income is two times higher than GDP growth. The Poles have learned how to play the state to their own advantage quite well, and thus the correlation between the activities of the state (that is, the authorities) and their own lives is perceived as increasingly weak.

Thanks to their resourcefulness, Poles are able to improve their own situation without searching for the support of others and regardless of the condition of the community. An illustration of the progressing parting of citizens with state is the comparison of the situation in the country with the percentage of respondents living in households in which the permanent income is not sufficient to meet current needs (Table 8.1.1). Despite the systematic improvement of individual conditions (the number of poor households decreased more than twice in the last decade), we are still dissatisfied with the situation in the country, and although the number of satisfied respondents has increased after the last wave, we have not reached the level prior to the last decrease of 2000, not to mention 1997 the period of the highest, although still very modest satisfaction of citizens with their country (consistently, since the beginning of the transformation period, this has been the lowest satisfaction indicator among the set of more than twenty various aspects of life cf. Chapter 4.2). This illustrates very well the achievements of the Poles in terms of the improvement of the quality of their lives and the experiences of Poland in the opinion of its citizens. We are still developing at the molecular level, not at the team level. The basic reason for this is probably the low level of social capital.

Table 8.1.1. The percentage of households declaring that their regular income does not allow them to fulfil their current needs and the percentage of adult Poles satisfied with the situation in the country from 1992 to 2009

Indicator	1992 N=3402	1993 N=2306	1994 N=2302	1995 N=3020	1996 N=2333	1997 N=2094	2000 N=6634	2003 N=9541	2005 N=8773	2007 N=12637	2009 N=25729
The percentage of respondents in households, in which the regular income does not satisfy the needs	70.6	74.2	68.8	64.5	64.8	66.2	46.7	42.3	37.0	30.2	28.0
The percentage of persons satisfied with the situation in the country	9.4	8.2	11.2	16.4	20.1	25.7	19.7	14.1	12.6	19.3	27.0

Source of data: years 1991-1997 — Czapiński, 1998; years 2000-2009 — *Social Diagnosis.*

This growing individual resourcefulness has not been accompanied by an increase of cooperation skills (Chapter 5.2). We do not learn to cooperate because we do not trust each other. Neither do we trust the institutions. Poland is a member of the European Union where the difference between the trust to the European Parliament and to the national one is, following Bulgaria, the widest in favour of the European Parliament.[49] The fact that the discrepancy between the European and national authority is most noticeable among the social groups which play or will play a decisive role in the country development, such as inhabitants of large agglomerations, young and educated people, is particularly concerning. If we want, and in our opinion we should, develop on the team level, it is necessary to introduce in schools or even in kindergartens a special subject, let us call it "civil skills". In Poland young people have a good civil knowledge, in this regard they are on top positions in the international rankings but at the same time they occupy the lowest places in the practical application of the civil knowledge; young people are not able to self-organise, cooperate or work as volunteers, they are as "molecular" as their parents (see www.szkolabezprzemocy.pl). Therefore, it is not classic textbook lessons that are needed here but such forms of education, or rather upbringing, which will show young Poles the specific benefits of "taking the risk" to cooperate. Without a serious investment in social capital, we can only dream of thousands of kilometres of motorways.

Public offices and companies are apart from schools, the places where Poles could be convinced to trust each other more and be encouraged to cooperate. As regards public institutions, the problem boils down to legal regulations and the culture of public officials. The regulations enforced by the officials are tailored to combat potential fraud and therefor prevent the breaking of the vicious circle. Companies appreciate the obvious importance of social capital but most of them do not know how to build it. That is why there is a dire need for training of consultants and trainers in this field as Human Resources alone are not enough.

[49] Contrary to the "old" EU countries, the citizens of all the new Member States trust the European Parliament more than national parliaments.

8.1. Quality of life of various socio-demographic groups

To sum up it is worth asking the following questions; how diverse are the living conditions and the life quality of the Poles and how much did this diversification change in the last two years? Is social stratification growing or falling? Are the weak getting weaker? Are the already strong becoming even more strong?

Let us examine how the multidimensional quality of life is stratifying Polish society today. We can do this by taking into account the most important indicators discussed separately in the particular Chapters above. Can we speak of clear winners and clear losers? How big are the differences between the former and the latter? Are these differences growing or diminishing in the various aspects of quality of life?

In creating synthetic measures of the quality of life we have tried as far as possible to keep a balance between objective and subjective variables, and also to include various aspects of life. We have distinguished 8 quality of life indicators, which we consider to be relatively independent, and we used them to create a synthetic, general indicator of quality of life:

- **social capital** – activity on behalf of the local community, participation in the local election of 2006 (in 2005, participation in the referendum on joining the EU), participation in voluntary meetings and speaking during those meetings, a positive attitude towards democracy, membership and functions in organizations, the belief that most people can be trusted
- **psychological well-being** - sense of happiness, satisfaction with life so far, symptoms of psychological depression, assessment of the previous year
- **physical well-being** - the sum of standardized measures of health - psychosomatic symptoms observed for at least two weeks, a serious illness in the previous year, disability
- **social well-being** – the lack of feeling of loneliness, the sense of being loved and trusted, the number of friends
- **civilization level** – the level of education, owning of modern communication devices and the ability to use them (satellite or cable TV, a laptop, a stationary computer, a mobile phone, Internet access, computer skills, using the Internet, active knowledge of foreign languages, driving license, etc)
- **material well-being** – per capita income of the household, number of goods and appliances owned by the household from a washing machine to a motor boat and a summer cottage (excluding the devices taken into account in the civilization level indicator)
- **life stress** – the sum of 6 stress categories measured by experience with regard to: employment, contacts with offices, taking care of the elderly, raising children, relations in marriage, and environmental conditions (house, community)
- **pathologies** – alcohol abuse, drugs, visits to a psychologist or psychiatrist, being the victim or criminals (break-ins, mugging, thefts)

All above indicators, which included the variables measured on various scales, constituted a sum of standardized unit variables. Then they were standardized themselves, and the sum of their standardized values constituted the general indicator of the quality of life, which was finally standardized as well. In this form, the measures are of a relative character and they only show the location of persons and groups with reference to the sample average.

Before we go on to discuss social differences with regard to the general index of life quality, let us see how much the unit indices are correlated with each other and if they constitute one coherent syndrome or, similarly to the exclusion indices, create several relatively independent factors which enable different people and social groups to compensate deficiencies in one field by a better position in the other one. Let us also compare correlations of 8 unit indices in three waves of study, that is of 2005, 2007 and this year's.

Table 8.1.1. Results of factor analysis of life quality dimensions with a varimax rotation

Life quality dimensions	Factor loadings								
	Health			Lifestyle			Social relationships		
	2005	2007	2009	2005	2007	2009	2005	2007	2009
Material well-being	0.351	0.569	0.392	0.630	0.402	0.608			
Social capital				0.768	0.818	0.811			
Civilization level	0.629	0.749	0.539	0.510	0.359	0.601			
Social well-being						0.318	0.711	0.711	0.618
Physical well-being	0.861	0.789	0.843						
Psychological well-being	0.715	0.740	0.759				0.423	0.434	0.307
Life stress				0.508	0.535		-0.504	-0.506	-0.647
Pathologies							-0.680	-0.630	-0.627
Percentage of the explained variances	29.2	30.1	30.5	19.2	12.4	18.0	12.5	18.4	11.8

NOTES: only factor loadings higher than 0.3 are presented.

The factor analysis with a *varimax* rotation reveals in all three waves three orthogonal factors each of which explaining together 60 variances of partial indicators (Table 8.1.1). The first one, which explains the highest portion of variances (about 30.0 per cent), can be defined as *Health*. It is determined mainly by physical well-being (health condition), civilisational level, psychological well-being and material welfare. The second factor (in 2007 it was the third factor in terms of the percentage of the explained variation), explaining from 12.0 to 19.0 per cent of variances defines mainly social capital, material welfare, civilisational level, life stress and social welfare (only in 2009). It can be referred as to *Lifestyle* (more or less open to the outside environment). The third factor (*Social Relationships*) explains from 12.0 to 18.0 per cent of variances and relates social welfare with a low level of life stress and pathologies and, to a lesser extent, with psychological well-being. The first two factors share the dimension of civilisational level (defines both *Health* and *Lifestyle*). *Lifestyle* and *Social Relationships* in turn have a common dimension of life stress. Yet these factors are opposite to the factor loadings in that a more civilised and lifestyle is related with a higher level of stress and better social relationships entail a lower level of stress. In 2009 a more open and civilised lifestyle favoured better social relationships.

The structure of results confirms the thesis of the absence of a single life quality dimension in Poland. As a consequence, materially disadvantaged persons who are not very modern in their attitudes and reveal a low level of social activity can nonetheless be free from pathologies and enjoy extensive social support.

The above-indicated relative independence of three factors of life quality at the individual level, that is in the case of particular persons, can disappear or diminish radically in the social group dimension. It cannot be excluded that some segments of society are afflicted with the misfortune of the biblical figure of Job, whereas others cherish a good life in every respect. In order to prove, whether this assumption is correct, we quantified the position of 147 groups defined by 11 not completely exclusive socio-demographic criteria (age, gender, education level, income per capita in household, class of the place of residence, voivodship, family model, social and professional status, currently practiced profession, city and civil status) in a general and eight detailed dimensions of life quality. The results are shown in Table 8.1.2 (general indicator of life quality in years 2009, 2007 and 2005) as well as in Tables 1-8 in Annex 6 (partial indicators of life quality in 2009). Despite the variance of positions of the selected groups in the individual dimensions, the general indicator of the quality of life shows clearly who enjoys a good quality of life in Poland and who does not (Table 8.1.2). The beneficiaries of the Third Republic of Poland include undoubtedly persons with tertiary or at least secondary education, a high income, young people and those who work as academic teachers, lawyers, IT specialists, managers of large and medium organisations, teachers, doctors, engineers, economists, managers of small enterprises, policemen, public administration specialists, soldiers and social sciences specialists, the inhabitants of Opole, Warsaw, Koszalin, Toruń and Gdynia as well as of Opolskie, Wielkopolskie and Pomorskie voivodships. The poorest is the quality of life of pensioners, retirees, spouses living in separation, widowers, divorced, elderly, unemployed and poor persons with low education, the inhabitants of Lubuskie and the eastern voivodships and of the cities of Tychy, Radom, Tczew, Kętrzyn, Białystok, Sosnowiec, Zabrze and Kielce and finally of unskilled workers, farmers, porters and house painters.

A question arises of how permanent these differences are; is their level maintained, are they growing or diminishing? A comparison of data from the last two waves proves the general steadiness of the life quality ranking. Only several groups changed their positions to a degree which could be considered statistically significant. Managers joined the lead (managers of large companies from the 11^{th} to the 4^{th} position, and managers of small companies from the 18^{th} to the 8^{th} position). The inhabitants of Warsaw improved their position, exceeding the position of Gdańsk, which in the past years was the absolute leader in terms of the quality of life among the 10 largest Polish cities. At present, the city of the highest life is Opole, which was not ranked before, followed by Warsaw. The position of Poznań (from the 46^{th} in 2005 to the 27^{th} position in 2009) and Szczecin (from the 49^{th} in 2005 to the 38^{th} position in 2009). On the other hand, the position of Łódź dropped from the 43^{th} to the 62^{nd} position, and that of Białystok and Bydgoszcz fell from the 48^{th} to 75^{th} and from the 27^{th} to 55^{th} position respectively. Moreover, the regions marked by the highest improvement were Dolnośląskie (from the 72^{th} to the 48^{th} position), Zachodniopomorskie (from the 76^{th} to the 58^{th} position) and Warmińsko-mazurskie (from the 87^{th} to the 60^{th} position). In the same time, the position of inhabitants of Lubuskie voivodship descended (fall from the 52^{nd} to the 83^{th} position). Nurses, sales representatives, married couples with children, especially with more children and persons aged 25-44 moved up in the ranking.

Chapter 3.8 presents a ranking of voivodships according to the taxonomic measure of household living conditions in 2009. The results of the comparison of the two rankings are quite surprising. In general, they can be considered to be statistically consistent (Kendall's *Tau b* = 0.567, $p < 0.01$ and 5.500 in 2007) and in most cases, the rank differences are not greater than 2; however, two very large and two medium-sized discrepancies can be observed (Table 8.1.3). The position of Warmińsko-mazurskie voivodship, when it comes to the material standards of living of households, is lower by 7 ranks than the quality of life of members of these households, and the position of Lubuskie voivodship is as much as 7 ranks higher than in terms of the quality of life. Podlaskie as well as Dolnośląskie voivodships are located 5 positions lower in terms of conditions than in terms of the quality of life. The highest conformity between the material standards of living of households and the quality of life of their members includes Opolskie, Wielkopolskie, Mazowieckie and Małopolskie voivodships.

Table 8.1.2. The quality of life of 147 socio-demographic and professional groups in Poland in 2009 according to the general indicator value compared with the data on 96 groups from the period of March 2005 - March 2007

Place				Social and demographic group	Quality of life		
2009	2009	2007	2005		2009	2007	2005
1.	1	2	1	Academic teacher	1.31	1.12	1.43
2.	2	1	2	Lawyer	0.99	1.29	1.32
3.	3	3	4	IT specialist	0.97	0.90	0.84
4.	4	4	11	Manager in a large company	0.97	0.87	0.58
5.	5	6	3	Teacher	0.88	0.78	0.88
6.				Engineer	0.82		
7.	6	7	7	Doctor	0.81	0.72	0.62
8.	7	5	6	Economist	0.76	0.81	0.65
9.				Opole	0.74		
10.	8	11	18	Manager in a small company	0.70	0.55	0.42
11.	9	10	5	Policeman	0.68	0.56	0.84
12.				Public administration specialist	0.68		
13.	10	8	10	Tertiary and post-secondary education	0.68	0.67	0.59
14.				Other specialist in the education sector	0.67		
15.				Soldier	0.67		
16.				Social sciences specialist	0.64		
17.	11	15	15	Financial specialist/ sales representative	0.60	0.50	0.52
18.	12	13	8	Income per capita above 3rd quartile	0.59	0.53	0.62
19.	13	14	13	Medium-level office worker	0.55	0.52	0.56
20.	14	12	23	Private entrepreneur	0.51	0.53	0.34
21.	15	17	25	Nurse	0.48	0.40	0.25
22.	16	9	12	Student	0.46	0.58	0.58
23.	17	16	20	Public sector employee	0.44	0.43	0.40
24.	18	24	24	Warsaw	0.43	0.32	0.33
25.	19	19	9	Medium-level technician	0.41	0.39	0.60
26.				Other workers in the personal care sector	0.38		
27.	20	21	36	Age 25-34	0.36	0.34	0.15
28.	21	18	16	Office worker	0.34	0.40	0.46
29.	22	20	17	Age 16-24	0.33	0.37	0.45
30.				Koszalin	0.33		
31.				Toruń	0.33		
32.				Gdynia	0.32		
33.				Medium-level personnel in the biology and health protection sector	0.31		
34.				Olsztyn	0.30		
35.				Kalisz	0.29		
36.	23	38	22	Kraków	0.28	0.12	0.38
37.				Electrician	0.28		
38.	24	33	31	Inhabitant of a city 500 k	0.27	0.18	0.21
39.				Receptionist/ informant	0.27		
40.	25	23	14	Rzeszów	0.25	0.33	0.54
41.	27	32	46	Poznań	0.25	0.19	0.09
42.	26	34	32	Wrocław	0.25	0.18	0.20
43.	28	39	42	Private sector employee	0.24	0.12	0.12
44.	29	27	27	Cash-register operator	0.22	0.22	0.24
45.	30	30	38	Married couple with 2 children	0.22	0.20	0.14
46.				Gardener	0.22		
47.	31	35	44	Married couple with 1 child	0.21	0.16	0.11
48.	33	22	21	Gdańsk	0.20	0.34	0.38

Tabel 8.1.2. (continued).

Place				Social and demographic group	Quality of life		
2009	2009	2007	2005		2009	2007	2005
49.	34	25	26	Single persons	0.20	0.24	0.25
50.	32	40	19	Szczecin	0.20	0.11	0.41
51.	35	31	29	Secondary education	0.19	0.20	0.24
52.	36	50	33	Miner	0.19	0.03	0.19
53.				Machine repair mechanic	0.17		
54.	37	43	47	Opolskie voivodship	0.16	0.08	0.09
55.	38	53	55	Age 35-44	0.15	0.02	0.06
56.				Kędzierzyn Koźle	0.15		
57.				Legnica	0.15		
58.				Jaworzno	0.14		
59.	39	37	53	Salesperson	0.13	0.14	0.06
60.				Częstochowa	0.13		
61.				Ostrowiec Świętokrzyski	0.13		
62.				Grudziądz	0.12		
63.	40	65	40	Lublin	0.11	-0.05	0.14
64.				Farmer in the plant production sector	0.11		
65.	42	26	30	Pomorskie voivodship	0.09	0.24	0.21
66.	41	28	28	Drivers	0.09	0.22	0.24
67.	43	36	34	Wielkopolskie voivodship	0.09	0.15	0.17
68.	44	41	35	Inhabitant of a town100–200 k	0.08	0.10	0.17
69.	45	51	62	Married	0.08	0.03	0.00
70.				Gliwice	0.08		
71.				Security service worker	0.08		
72.	46	47	51	Man	0.07	0.06	0.07
73.	48	57	72	Dolnośląskie voivodship	0.07	0.00	-0.07
74.	47	58	66	Married couple with 3or more children	0.07	-0.01	-0.04
75.				Operator of low speed vehicles	0.07		
76.				Słupsk	0.07		
77.				Worker in the sector of precise products	0.06		
78.	49	42	39	Inhabitant of a city between 200 and 500 k	0.05	0.10	0.14
79.	51	48	54	Mazowieckie voivodship	0.05	0.06	0.06
80.	50	49	41	Income per capita between 2nd and 3rd quartile	0.05	0.04	0.13
81.	52	54	70	Inhabitant of a town between 20 and 100 k	0.05	0.01	-0.06
82.				Zielona Góra	0.05		
83.	53	45	50	Śląskie voivodship	0.04	0.07	0.07
84.	54	52	63	Młopolskie voivodship	0.04	0.03	0.00
85.	55	66	37	Bydgoszcz	0.03	-0.05	0.15
86.	56	63	60	Wood processing worker	0.03	-0.03	0.01
87.	58	69	76	Zachodniopomorskie voivodship	0.02	-0.08	-0.09
88.	57	59	49	Married couple no children	0.02	-0.01	0.08
89.				Wałbrzych	0.02		
90.	59	44	65	Machine operator	0.01	0.08	-0.04
91.	60	74	87	Warmińsko-mazurskie voivodship	0.01	-0.16	-0.30
92.				Bielsko Biała	0.00		
93.	61	79	64	Construction worker	0.00	-0.18	-0.01
94.	62	55	43	Łódź	-0.02	0.01	0.12
95.	63	64	69	Metal processing worker	-0.02	-0.04	-0.05
96.	64	61	68	Farmer	-0.03	-0.02	-0.05
97.	65	56	58	Inhabitant of a town < 20 k	-0.04	0.01	0.02

Table 8.1.2. (continued)

Place				Social and demographic group	Quality of life		
2009	2009	2007	2005		2009	2007	2005
98.				Katowice	-0.04		
99.	66	46	45	Worker in the food and hotel sector	-0.05	0.07	0.10
100	69	72	79	Kujawsko-pomorskie voivodship	-0.06	-0.12	-0.11
101	68	67	74	Women	-0.06	-0.05	-0.07
102	67	62	73	Multi-family household	-0.06	-0.02	-0.07
103				Fitter	-0.06		
104				Locksmith	-0.07		
105	71	68	59	Podkarpackie	-0.08	-0.07	0.02
106	72	76	61	Kielce	-0.08	-0.16	0.01
107				Personal care workers	-0.08		
108	70	75	57	Workers in the food processing sector	-0.08	-0.16	0.03
109	73	70	82	Łódzkie voivodship	-0.09	-0.08	-0.20
110				Zabrze	-0.09		
111				Farmers (plants and animals)	-0.10		
112				Engine-driver, railwayman	-0.11		
113	74	73	78	Rural area	-0.12	-0.12	-0.10
114				Sosnowiec	-0.12		
115	75	29	48	Białystok	-0.13	0.22	0.08
116				House painter	-0.13		
117	77	84	90	Textile industry worker	-0.13	-0.25	-0.34
118	76	77	81	Age 45-59	-0.13	-0.16	-0.16
119	78	60	67	Podlaskie voivodship	-0.14	-0.01	-0.05
120				Kętrzyn	-0.14		
121				Unskilled workers in the industry	-0.16		
122				Tczew	-0.16		
123	79	82	71	Świętokrzyskie voivodship	-0.17	-0.20	-0.06
124	81	83	84	Lubelskie voivodship	-0.18	-0.23	-0.25
125	80	80	75	Vocational/ grammar education	-0.18	-0.19	-0.08
126	82	81	85	Other professionally inactive	-0.19	-0.19	-0.27
127				Auixliary worker in the mining and construction sectors	-0.20		
128	83	71	52	Lubuskie voivodship	-0.21	-0.08	0.07
129				Radom	-0.21		
130				Courier, porter, doorman	-0.23		
131	84	78	56	Age 60-64	-0.23	-0.16	0.04
132	85	85	80	Income per capita between 1st and 2nd quartile	-0.25	-0.26	-0.14
133				Tychy	-0.27		
134	86	88	92	Unemployed	-0.31	-0.38	-0.46
135	87	86	77	Retiree	-0.35	-0.27	-0.09
136	88	87	83	Single-parent family	-0.35	-0.29	-0.21
137				Auxiliary workers in agriculture	-0.40		
138				Home help, cleaner	-0.41		
139	89	89	89	Non-family single-person household	-0.43	-0.45	-0.32
140	90	90	88	Divorced	-0.45	-0.46	-0.31
141				Farmer working for their own needs	-0.55		
142	91	93	94	Income per capita below 1st quartile	-0.56	-0.55	-0.55
143	92	91	86	Age 65 or more	-0.58	-0.46	-0.29
144	93	94	91	Widow/widower	-0.67	-0.63	-0.43
145	94	92	96	Spouse in separation	-0.70	-0.53	-0.75
146	95	95	93	Pensioner	-0.86	-0.72	-0.54
147	96	96	95	Elementary or lower education	-0.87	-0.75	-0.67

On the basis of this obviously imperfect pairing of rankings, several conclusions can be drawn. First of all, money, or rather the lack of it (most of the variables constituting the living conditions indicator was based on the financial difficulties reported by households with regard to the satisfaction with various kinds of needs), is not everything and in the general depiction of life quality it is not always the decisive factor. Apart from money, important are also social relations, life stress, the threat of pathologies, etc. Secondly, the position in the life quality ranking may be influenced not only by the set of indicators, but also by the way they are constructed and weighed. We are far from concluding which of the two methodologies applied is better, that is closer to reality. The question of what would be true when it comes to the quality of life remains open. In fact, it is a matter of long-lasting controversies among researchers of different knowledge domains (cf. Czapiński, 2002b, 2004b; Lewicka, 2005)

Table 8.1.3. Life quality of citizens and standards of living of households by voivodships in 2009 [a]

Voivodship	General indicator of life quality	Range of life quality	General indicator of living standards[b]	Range of living standards	Absolute value of the range difference
Opolskie	0.16	1	0.280	1	0
Pomorskie	0.09	2	0.340	4	2
Wielkopolskie	0.09	3	0.335	3	0
Dolnośląskie	0.07	4	0.480	7	3
Mazowieckie	0.05	5	0.390	5	0
Małopolskie	0.04	6	0.440	6	0
Śląskie	0.04	7	0.289	2	5
Zachodniopomorskie	0.02	8	0.570	10	2
Warmińsko-mazurskie	0.01	9	0.741	16	7
Kujawsko-pomorskie	-0.06	10	0.642	11	1
Podkarpackie	-0.08	11	0.645	12	1
Łódzkie	-0.09	12	0.726	14	2
Podlaskie	-0.14	13	0.535	8	5
Świętokrzyskie	-0.17	14	0.740	15	1
Lubelskie	-0.18	15	0.681	13	2
Lubuskie	-0.21	16	0.553	9	7

[a] The examined units for the living conditions were households, and for quality of life – members of these households, filling out the individual questionnaire.
[b] See chapter 3.8.

8.2. Is Polish society becoming more economically stratified?

According to numerous economists, fast economic growth in a relatively poor country should result in greater stratification in society. In fact the ratio of the 20 per cent richest household income to 20 per cent of the poorest grew during the period of the present study (Table 8.2.1). However, it is worth emphasizing that higher pace of increase of incomes from the upper quartiles was mainly the reason for the increased stratification (Figure 8.2.1). The value of the nineth decile of income in households per equivalent unit at firm prices from 2005 increased in years 2000-2009 by 52 per cent. Similar data was obtained for the total income of households and for income per capita. (49 per cent). At the same time, the value of the first decile increased by 35 per cent.

The growing wealth of the Poles was thus not uniform. Yet, it does not mean that the poor stood a worse chance than the rich to improve their economic conditions. In reality, the increase in the income scale was coupled with a faster income growth of poorer households than more affluent ones. The income of the poorest 20 per cent of households grew faster than the income of the richest 20 per cent of households both at the beginning and at the end of the decade (Figures 8.2.2 and 8.2.3). The comparisons of data in the panel samples of three waves (2005 to 2009) indicate a decrease in the equivalent income in the group of the most affluent 20 per cent in 2005 and 2007 (Figure 8.2.4).

Table 8.2.1 The differentiation of net income of households in the entire samples in 2005 to 2007

Wave	Ratio of the fourth decile to the first household income	
	Total	Per equivalent unit
2000	2.67	2.19
2003	2.84	2.32
2005	2.80	2.35
2007	3.00	2.41
2009	3.25	2.45
Difference between 2009 and 2000	0.58	0.26

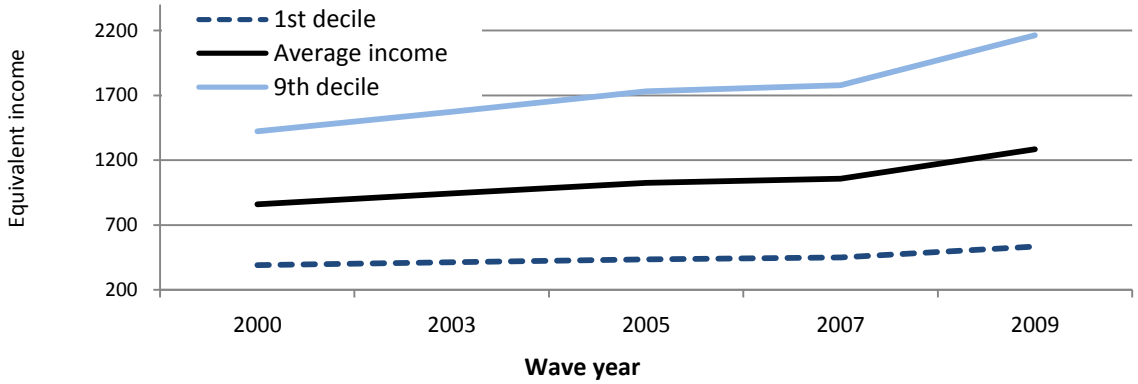
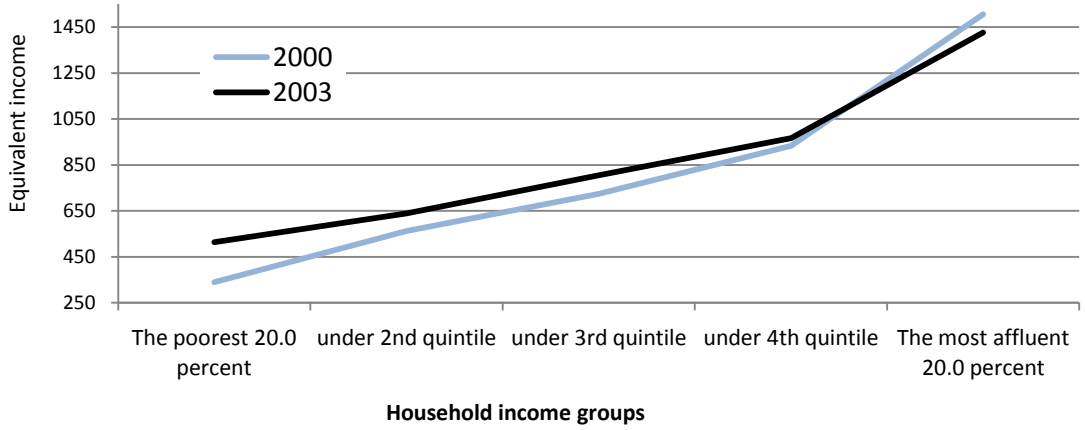
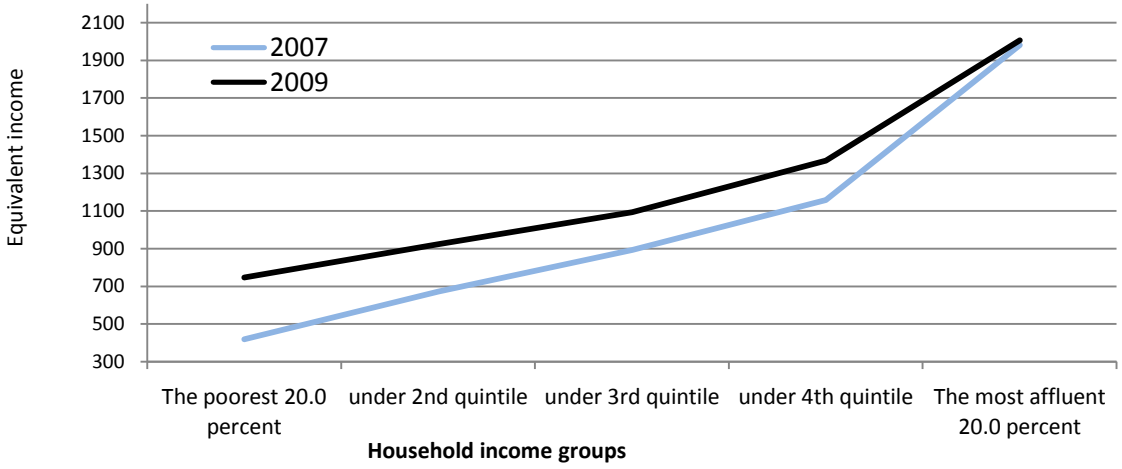


Figure 8.2.1. Income of households per equivalent unit at fixed 2005 prices in 2000 to 2009 (average income in a panel sample, the 1st and the 9th decile)



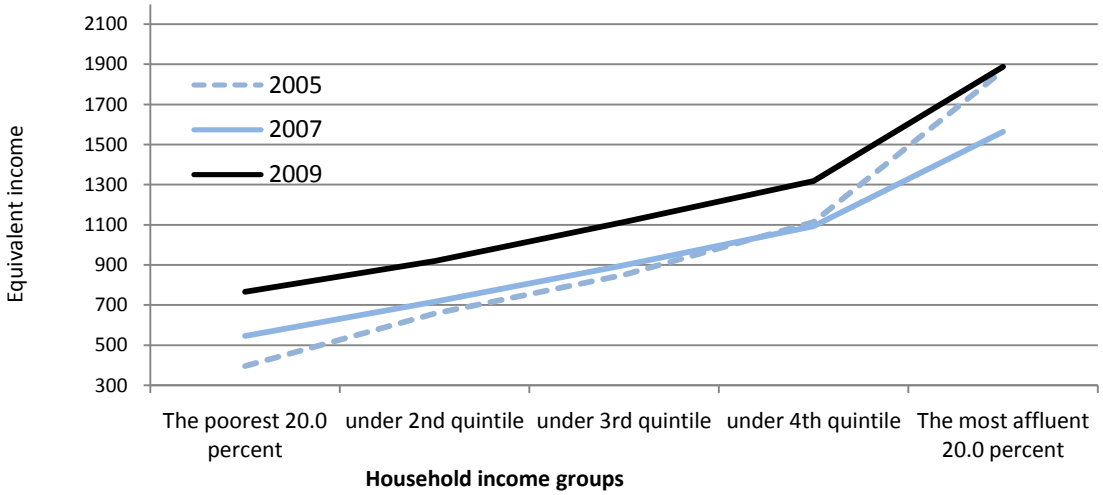
NOTES: group effect F(4. 2170)=972.060, p<0.000, η^2= 0.642; wave effect F(1. 2170)=51.164, p<0.000, η^2= 0.023; effect of interaction of group and wave F(4.2170)=25.887; p<0,000, η^2= 0.046.

Figure 8.2.2. Income of households per equivalent unit at fixed 2005 prices in 2000 to 2003 in household groups by equivalent income quintile per capita in a panel sample in 2000



NOTES: group effect F(4, 3316)=1001,126, p<0,000, η^2= 0,547; wave effect F(1, 3316)=380,278, p<0,000, η^2= 0,103; effect of interaction of group and wave F(4.3316)=22.475; p<0.000, η^2= 0.026.

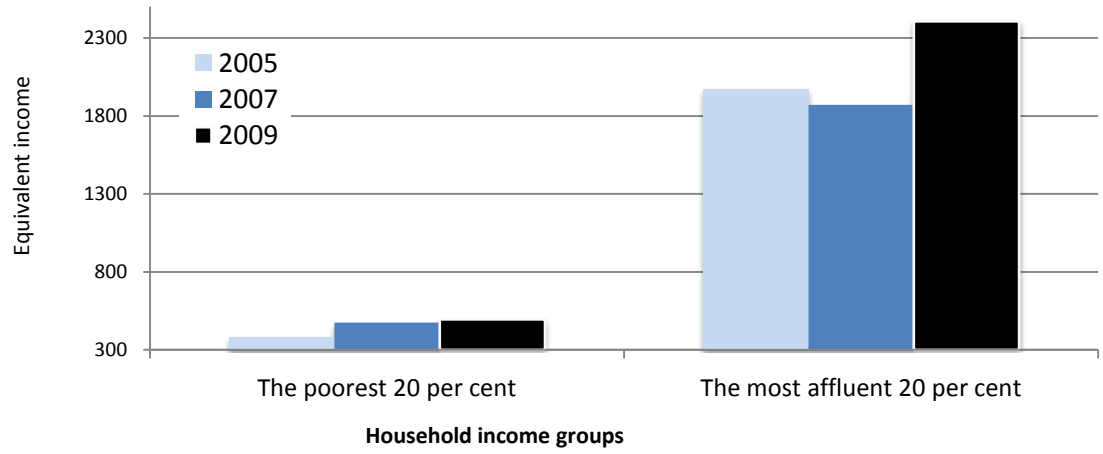
Figure 8.2.3. Income of households per equivalent unit at fix 2005 prices in 2007 to 2009 in household groups by equivalent income quintile per capita in a panel sample in 2009



NOTES: group effect F(4, 1665)=416.010, p<0.000, η^2= 0.500; wave effect F(1.1665)=285.079, p<0.000, η^2= 0.146; effect of interaction of group and wave F(4, 1665)=17,703; p<0,000, η^2= 0,041.

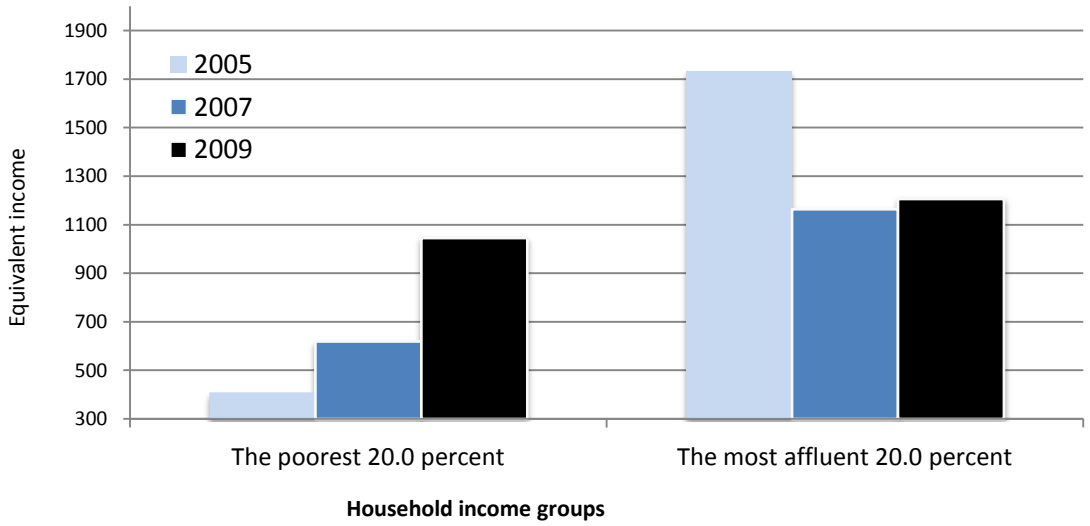
Figure 8.2.4. Income of households per equivalent unit in 2005, 2007 and 2009 in household groups by equivalent income quintile per capita in a panel sample in 2005

A paradox between the increase in the income stratification of society and the faster pace of economic improvement of poorer groups is explained by the income mobility of households. Growing differences between the 20 per cent of the poorest and the 20 per cent of the most affluent households observed in the following waves are accompanied by significant changes in the income scale of households pertaining to these groups. Merely half of the poorest households in 2005 remained poor four years later and nearly 56 per cent of the richest ones remained in the most affluent group in 2009. Therefore, 50 per cent of the poorest households ascended to higher income groups in this period. In the same time, almost 4 per cent of households exceeded the highest quintile, 44 per cent of households descended to lower quintile groups, 3 per cent of which reached the group below the lowest quintile. The distance between 20 per cent of the poorest and 20 per cent of the most affluent households which remained in their income groups slightly diminished (the ratio of the amount of income between the first and the fourth quintile decreased from 5.15 to 4.86) (Figure 8.2.5). As regards the households which changed their income group, the differences in the equivalent income between the poorest and the most affluent households in 2005 had almost entirely disappeared within four years (the ratio of the amount of income between both of the groups fell from 4.23 to 1.15) (Figure 8.2.6).



NOTES: group effect F(1. 343)=511.487, p<0.000, η^2= 0.599; wave effect F(1.343)=86.816, p<0.000, η^2= 0.202; effect of interaction of group and wave F(1.343)=30.434; p<0.000, η^2= 0.081.

Figure 8.2.5. Income of households per equivalent unit at fixed 2005 prices in 2005, 2007 and 2009 in the groups of 20 per cent of the most affluent and the poorest households by equivalent income quintile per capita in 2005 which remained in their quintile group in 2009 in a panel sample



NOTES: group effect F(1.299)=718.687, p<0.000, η^2= 0.706; wave effect F(1.299)=3.875, p=0.05, η^2= 0.013; effect of interaction of group and wave F(1.299)=445.361; p<0.000, η^2= 0.598.

Figure 8.2.6. Income of households per equivalent unit at fix 2005 prices in 2005, 2007 and 2009 in the groups of 20 per cent of the most affluent and poorest households by equivalent income quintile per capita which changed the quintile group in 2009 in a panel sample

The analysis of poverty confirms the substantial level of mobility of Poles in terms of material living conditions, dominated by rises rather than by falls. The balance of shifts to and from the poverty sphere measured objectively in the last two years is clearly positive (a difference of three percentage points, Chapter 7.1). Similar results were observed in the earlier periods. Between 2000 and 2005, the balance of shifts to and from the poverty sphere was more than 9 percentage points (Czapiński, Panek, 2007).

It can also be added that the difference between the extreme groups with regard to the standardised life quality indicator in 2009 is almost identical to that recorded two years ago (2.1 and 2.07 standard deviations, respectively) and in 2005 and 2009 this difference decreased by 0.3 standard deviation (Table 8.2.1). This proves that the distance between social groups of the highest and the lowest quality of life is not growing. Poles are improving their quality of life not at the expense of others, but along with others.

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ANNEX 1 QUESTIONNAIRES AND INSTRUCTIONS FOR INTERVIEWERS

1. Household questionnaire

Subsequent number of questionnaire in voivodship ☐☐☐☐

COUNCIL FOR SOCIAL MONITORING
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SOCIAL DIAGNOSIS 2009

An independent study of the conditions and quality of life in Poland

PART I

A. HOUSEHOLD CHARACTERISTICS

0. Household status in the study ☐

	voivodship	district	commune
1. Territorial symbol	☐☐	☐☐	☐☐☐

3. Symbol of class of place of residence ☐
4. Household identification number ☐☐☐☐☐
4b. Number of households at a given address ☐
5. Number of all household members ☐

6. Number of all household members ☐☐

7. Number of household members aged 15 or older prior to 1st March ☐☐

B. INFORMATION ON THE INTERVIEW CONDUCTED

1. Course of visits to the household dwelling

Subsequent visit number	Date of visit day/month	Beginning hour of visit	Duration of visit in minutes	Remarks
1				
2				
3				

2. Completion of interview with household:
1. ☐ interview completed
2. ☐ interview not completed

If the interview was not completed (answer no. 2), we move on to providing reasons (item 3), and if it was completed, we move on to the collective information on individual interviews (item 4).

3. ☐☐ Reason for failing to complete the interview

Choose one answer by circling the appropriate number.

The interview was not completed, although the household was contacted, because:
1. the household cannot participate in research (old age, illness, alcohol abuse)
2. it is a household of foreigners (beyond the scope of research)
3. the household initially refused to participate in research (perhaps they will agree to participate in subsequent years)
4. the household refuses to participate in research now and in the future

It was not possible to contact the household, although its location was determined,, because:
5. the whole household was temporarily absent due to a stay abroad
6. the whole household was temporarily absent due to vacation
7. the whole household was temporarily absent for unknown reasons
8. there was nobody home

The location of the household was not determined because:

9. the address provided on the list could not be found (e.g. there is no such address, no inhabitants, liquidation of dwelling)
10. the household changed the place of residence and its new address could not be established
11. the interview was not completed due to other reasons (e.g. the household moved abroad, all household members moved to a collective accommodation facility)

4. Collective information regarding individual interviews (all household members who turned 16 prior to January 1st 2007 are subject to an individual interview)
   4.1. Number of persons in household subject to individual interview ☐☐
   4.2. Number of individual interviews conducted ☐☐
   4.3. Number of individual questionnaires considered to be filled out improperly ☐☐

5. Does the household agree to participate in research in the subsequent years? (*Choose one answer by circling the appropriate number)*
   1☐ YES 2☐ NO 3☐ DO NOT KNOW YET

I hereby confirm that the information presented in the questionnaire was gathered in accordance with the provided research procedure

Day month year						Name of interviewer:
				0	9	
Signature of interviewer						Checked by (name):

C. HOUSEHOLD COMPOSITION Household reference number ☐☐☐☐☐

1 Person reference number[50]	2 Fixed reference number[51]	3 First name of the household member
1		
2		
3		
4		
5		
6		
7		
8		
9 (Additional Sheet 'C')		
10 (Additional Sheet 'C')		
11 (Additional Sheet 'C')		
12 (Additional Sheet 'C')		

1	Person reference number		1	2	3	4	5	6	7	8
4	Relationship to household head									
5	Family number									
6	Relationship to family head									
7	Date of birth	Day								
8		Month								
9		Year *(last two digits)*								
10	Gender (1-*man*, 2-*woman*)									
11	Marital status									
12	Education level completed *(if 99 go to 15)*									
13	Number of study years									
14	Specialization of completed education									
15	Education status *(if 8 go to18)*									
16	Type of education services									
17										
18	Driving licence *1 YES, 2 NO; 8 – not applicable*									

[50] The same numbers were attributed to the households interviewed in 2007; the following numbers were ascribed to persons who were not on the list.

[51] Fixed numbers refer only to households interviewed in 2007. The interviewed persons are to be attributed numbers from the first column. In the case of persons not on the list a blank space should be left.

19 20 21 22 23 24	Knowledge of foreign languages *actively* *passively* *none*	English									
		German									
		French									
		Russian									
		Spanish									
		Other									
25	Does he/she have a mobile phone, a smartphone or a PDA? *(1 YES a mobile phone, 2 YES a smartphone or a PDA, 3 has both devices, 4 NO, does not have any of these devices)*										
26	Does he/she have a payment card? *(1 YES, 2 NO)*										
27	Disability *0, 1, 2, 3, 4, 5 go to 28; 8 go to39*										
28 29 30	Type of illness *(indicate max 3 diseases)*										
31	Does he/she receive a disability living allowance? *(ask if 1, 2 or 3 in q. 27, in other cases go to34)*										
32	Which illness is a basis for receiving the disability living allowance? *(indicate one)*										
33	How long has the illness, which is the basis for receiving the disability leaving allowance, lasted? *(0 – inborn, in other cases, indicate the number of years)*										
34	Does the disabled member of household require care?										
35	Who helps/ cares for the disabled member of household? *(mark X in columns of carers; if the carer does not belong to the household – see the instruction)*										
36	Which school does/has the disabled member of household attend/attended? *(1 – comprehensive, 2 – special, 3 – mixed abilities or a mixed-abilities class, 8 – has never attended school)*										
37	Does the disabled member of household receive attendance allowance? *1 – YES, 2 – NO*										
38	Does the disabled member of household receive social insurance benefit? *1 – YES, 2 – NO*										
39 40 41	Source of income	Main									
		Additional	1								
			2								
42	Being present in the household (or not)										
43	Reasons for temporary absence										
44	Being a household member (or not)										
45 46 47 48 49 50	Movement of persons in household	Date of arrival	Month								
			Year								
		Date of leave	Month								
			Year								
		Reason for arrival									
		Reason for leave									
51	Status of being subject to an individual interview										
52	Result of the individual interview										

53. Reference number of person providing answers in the name of the household ☐☐

D. ECONOMIC ACTIVITY OF HOUSEHOLD MEMBERS AGED 15 OR MORE

(definition of economic activity according to the BAEL; person reference number as in Part C)

1	**Person reference number (the same as in PART C)**							
2	Has this person performed any work, earned income, or helped without pay in any family business activity within the last 7 days? *1 YES go to 4, if 2 NO go to 3*							
3	Has this person been an employee, been a self-employed or worked without pay in any family business activity within the last 7 days, but was temporarily not involved in this work during this period? *1 YES go to 5; if 2 NO go to 8*							
4	How many hours did this person work during the last 7 days?							
5	What kind of work does this person perform in her/his main workplace?							
6	Is this person employed full-time? *1 YES go to 8; if 2 NO go to 7*							
7	Why does this person work part-time?							
8	Is this person registered in the Labour Office? ? *1 YES go to 9, 2 NO go to 10*							
9	Does this person receive unemployment benefit? *1 YES, 2 NO*							
10	Has this person been seeking employment in the last 4 weeks? *1 YES (currently unemployed) go to 12; 2 YES (currently employed) or 5 NO (currently unemployed) go to15; 3 NO (but she has already found one) go to 13; 4 NO (currently unemployed) go to11*							
11	Why is he/she not looking for a job?							
12	Is he/she ready to start working this or next week? *1 YES, 2 NO*							
13	How long has this person been unemployed? *(concerns also retirees and disability pensioners; if less than 2 years go to19; if 2 years or longer go to22; persons who have never worked in the "Years" row enter 97and go to 23)* (in months) — Years							
14	Months							
15	Ownership of the institution that employs this person *(professionally active persons)*							
16	Ownership of institution that is the additional employer of this person *(professionally active persons)*							
17	Is the main place of employment located in the city/town of residence? *(professionally active persons) 1 YES, 2 NO*							
18	Presently performed occupation							
19	Was this person registered in the Labour Office in the last 2 years? *1 YES, 2 NO go to 23*							
20	How many times was this person registered in the Labour Office in the last 2 years?							
21	For how long, in total, was this person unemployed during the last 2 years *(in months)*?							
22	Occupation in the most recent place of employment (*for the unemployed and the professionally inactive persons)*							
23	Has this person participated in any activity associated with the raising of her/his professional qualifications or other skills in the last 2 years? *1 YES, 2 NO – go to 27*							
24	Provide the type(s) (*max three*) of educational activity							
25								
26								
27	Did this person work abroad in the period of 2005–2009? *1 YES, 2 NO*							
28	Did this person study abroad in the period of 2005–2009? *1 YES, 2 NO (if both 27 and 28 NO – go to 35)*							
29	How many times did this person go abroad to work or study in the period of 2005 – 2009?							
30	In which countries did this person work or study? *(if more than two,*							
31	*enter the two in which this person spent the longest time)*							
32	Provide the total time of working/ studying abroad — Working							
33	2005 – 2009 (*in months*) — Studying							
34	The reasons for this person's coming back from abroad after a stay in 2005-2009 longer than 6 months? *(if this condition is not fulfilled, then leave a blank space)*							
35	How long has this person worked in total (number of years)?							
36	How long has this person worked for their current employer *(number of years; if less than a year, enter 1 year)*							

37	In how many places (including temporary jobs) did this person work in years 2000 – 2009?						

E. NUTRITION

I would like to ask about your household's ability to satisfy nutrition needs.

1. Is your household able to afford sufficient quantities of the following food items?
Answers are to be provided separately for each of the food listed below, circling the appropriate word.

1.1. vegetables and vegetable preserves	1☐ YES	2☐ NO
1.2. fruit and fruit preserves	1☐ YES	2☐ NO
1.3. meat (including poultry)	1☐ YES	2☐ NO
1.4. meat and poultry preserves	1☐ YES	2☐ NO
1.5. fish and fish preserves	1☐ YES	2☐ NO
1.6. butter and other edible fats	1☐ YES	2☐ NO
1.7. milk	1☐ YES	2☐ NO
1.8. dairy products	1☐ YES	2☐ NO
1.9. sugar	1☐ YES	2☐ NO
1.10. confectionery (sweets, chocolate etc.)	1☐ YES	2☐ NO
1.11. tobacco and alcohol products	1☐ YES	2☐ NO

2. In comparison with 2007, did the level of satisfaction of nutrition needs of your household:
Choose one answer by circling the appropriate answer.
1. ☐ worsen
2. ☐ improve
3. ☐ remain unchanged

F. AFFLUENCE OF HOUSEHOLD

Now I would like to ask whether you possess any property and/or savings and whether you take advantage of loans or financing.

1. Does your household have any savings? ☐ YES ☐ NO

If the household has savings, go to question 2, if not, go to question 5.

2. What is the approximate amount of savings of your household?
Show CARD No. 1, ask for the selection of one variant and put a check mark in the square next to it.
1 ☐ up to the equivalent of the monthly income of the household
2 ☐ above the monthly – up to the equivalent of the 3-month income of the household
3 ☐ above the 3-month – up to the equivalent of the 6-month income of the household
4 ☐ above the 6-month – up to the equivalent of the 12-month income of the household
5 ☐ above the 12-month income of the household
6 ☐ hard to say

3. What is the form of your household savings
Provide separate answers for each the forms of savings and put a check mark in the square next to it.

3.1. bank deposits in PLN	1☐ YES 2☐ NO
3.2. bank deposits in foreign currencies	1☐ YES 2☐ NO
3.3. bonds	1☐ YES 2☐ NO
3.4. investment funds	1☐ YES 2☐ NO
3.5. Individual Pension Fund	1☐ YES 2☐ NO
3.6. securities quoted on the stock exchange	1☐ YES 2☐ NO
3.7. shares and stocks in private joint-stock companies	1☐ YES 2☐ NO
3.8. investment in real estate property	1☐ YES 2☐ NO
3.9. investment in goods other than real estate	1☐ YES 2☐ NO
3.10. cash	1☐ YES 2☐ NO
3.11. other	1☐ YES 2☐ NO

4. What is the purpose of your household savings?
Provide separate answers for each form of savings and put a check mark in the square next to it.

4.1. a reserve for current consumer needs (such as food, clothes, shoes, etc)	1☐ YES 2☐ NO
4.2. regular charges (such as rent)	1☐ YES 2☐ NO
4.3. the purchase of durable goods	1☐ YES 2☐ NO
4.4. the purchase of a house, apartment, payment made to housing association	1☐ YES 2☐ NO
4.5. the renovation of your house/ apartment	1☐ YES 2☐ NO
4.6. medical treatment	1☐ YES 2☐ NO
4.7. the purchase, or lease of work tools (machines, rental charges, etc)	1☐ YES 2☐ NO
4.8. recreation	1☐ YES 2☐ NO
4.9. a reserve for random events	1☐ YES 2☐ NO
4.10. securing of your children's future	1☐ YES 2☐ NO
4.11. security for old age	1☐ YES 2☐ NO

4.12. for other purposes 1☐ YES 2☐ NO
4.13. for no special purpose 1☐ YES 2☐ NO

5. Is your household currently taking advantage of loans or financing? 1☐ YES 2☐ NO
If the household is currently taking advantage of loans or financing, go to question 6, if not, go to question 9.

6. Where did your household incur loans or financing? *Provide an answer for each of the sources of loans and financing listed below and put a check mark in the square next to it.*
6.1. from banks 1☐ YES 2☐ NO
6.2. from other institutions 1☐ YES 2☐ NO
6.3. from private persons 1☐ YES 2☐ NO

7. What is the total amount of debt of your household?
Show CARD No. 1, ask for the selection of one variant and put a check mark in the square next to it.
1 ☐ up to the equivalent of the monthly income of the household
2 ☐ above the monthly – up to the equivalent of the 3-month income of the household
3 ☐ above the 3-month – up to the equivalent of the 6-month income of the household
4 ☐ above the 6-month – up to the equivalent of the 12-month income of the household
5 ☐ above the 12-month income of the household
6 ☐ hard to say

8. What are the purposes of loans and financing incurred by your household?
Provide an answer for each of the purposes of credits and financing incurred listed below and put a check mark in the square next to it.
8.1. for current consumer expenses (such as food, clothes, shoes, etc) 1☐ YES 2☐ NO
8.2. regular charges (e.g. rent) 1☐ YES 2☐ NO
8.3. the purchase of durable goods 1☐ YES 2☐ NO
8.4. apartment/house purchase, payment made to housing association 1☐ YES 2☐ NO
8.5. the renovation of your house/ apartment 1☐ YES 2☐ NO
8.6. medical treatment 1☐ YES 2☐ NO
8.7. the purchase, or lease of work tools (machines, rental charges, etc) 1☐ YES 2☐ NO
8.8. recreation 1☐ YES 2☐ NO
8.9. the purchase of securities 1☐ YES 2☐ NO
8.10. the payment of previously incurred debts 1☐ YES 2☐ NO
8.11. the development of your own business activity 1☐ YES 2☐ NO
8.12. education 1☐ YES 2☐ NO
8.13. other purposes 1☐ YES 2☐ NO

9. *Provide an answer for each of the types of goods listed below by putting a checkmark in the right square or entering the number.*
Does your household or any of its members have the items of property listed below? It does not matter whether the item is owned, taken on lease or made available in any other way (the answer is provided in the column *Does the household have*?). If the household does not have a given type of item, please indicate (the answer is provided in the column *If the household does not*) whether the household would like to have this item but cannot afford it due to financial reasons (answer YES), or the household does not have this item due to other than financial reasons, for instance, does not want to have or does not need it (answer NO). In the column *How many* enter the number for only three items (desktop computer, laptop, car, etc).

	Do you have:		If not, is it due to financial reasons:		How many
9.1 washing machine	1☐ YES	2☐ NO	1☐ YES	2☐ NO	
9.2 dishwasher	1☐ YES	2☐ NO	1☐ YES	2☐ NO	
9.3 microwave oven	1☐ YES	2☐ NO	1☐ YES	2☐ NO	
9.4 LCD or plasma TV	1☐ YES	2☐ NO	1☐ YES	2☐ NO	
9.5 satellite or cable TV	1☐ YES	2☐ NO	1☐ YES	2☐ NO	
9.6 DVD player	1☐ YES	2☐ NO	1☐ YES	2☐ NO	
9.7 home cinema	1☐ YES	2☐ NO	1☐ YES	2☐ NO	
9.8 summer cottage	1☐ YES	2☐ NO	1☐ YES	2☐ NO	
9.9 desktop computer	1☐ YES	2☐ NO	1☐ YES	2☐ NO	
9.10 portable computer (laptop, notebook)	1☐ YES	2☐ NO	1☐ YES	2☐ NO	
9.11 passenger car (semi-truck)	1☐ YES	2☐ NO	1☐ YES	2☐ NO	
9.12 Internet access at home through the computer, laptop or mobile phone	1☐ YES	2☐ NO	1☐ YES	2☐ NO	
9.13 landline or stationary telephone (including voip- telephone services)	1☐ YES	2☐ NO	1☐ YES	2☐ NO	
9.14 motorboat, sailboat	1☐ YES	2☐ NO	1☐ YES	2☐ NO	
9.15 plot for recreation	1☐ YES	2☐ NO	1☐ YES	2☐ NO	

10. In comparison with 2007, did the material situation of your household:
Choose one answer by circling the appropriate answer.
1. ☐ worsen
2. ☐ improve
3. ☐ remain unchanged

11. To what extent do you agree or disagree with the following statements?

	I completely disagree	I disagree	I neither agree nor disagree	I agree	I completely agree
11.1. During shopping, we care most about the quality of the product. The price is a secondary matter.	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐
11.2. In our household, we regularly meet with many friends and relatives.	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐
11.3. In our household, we like to spend a lot of money on technical devices.	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐
11.4. In our household, we are familiar with all the latest technical devices.	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐

12. Would you change the stationary or mobile telephone operator for an operator who offers combined services of stationary and mobile telephony and access to Internet? *(this question is asked if a household has a stationary telephone and the head of household has a mobile phone*)

1 ☐ no
2 ☐ rather not
3 ☐ neither yes nor no
4 ☐ rather yes
5 ☐ yes

13. If there is a computer (desktop computer or a laptop) in the household, when was it bought or modernised? (*provide the last two digits of the year)* purchase ☐☐ modernisation ☐☐

14. If there is a computer (desktop computer or a laptop) in the household, when was it bought?
(*provide the last two digits of the year)* ☐☐

G. HOUSING CONDITIONS

Now I would like to talk about your housing conditions.

1. Does your household live in its own separate dwelling? 1☐ YES 2☐ NO

2. What is the usable dwelling space of your household in m^2? ☐☐☐

3. I would also like to ask about the installations with which your dwelling is equipped. Does your dwelling have:
Provide an answer with regard to each of the installation and equipment types by putting a checkmark in the right square.

3.1. a water-supply system 1☐ YES 2☐ NO
3.2. a flushable toilet that uses running water 1☐ YES 2☐ NO
3.3. a bathroom with a bathtub or shower 1☐ YES 2☐ NO
3.4. hot running water 1☐ YES 2☐ NO
3.5. gas from a supply system 1☐ YES 2☐ NO
3.6. gas from a cylinder 1☐ YES 2☐ NO

4. How is the apartment heated? *Choose one answer by putting a checkmark in the right square.*
1 ☐ collective central heating
2 ☐ individual central heating (using gas, coal, coke, electricity, or other)
3 ☐ fuel-fired furnaces (coal, wood, sawdust, etc.)
4 ☐ other

5. Does your household have at present any overdue payments with regard to: *Provide an answer for each of the payments listed by filling the appropriate square:*
Variants: 1 - yes 1 month, 2 - yes 2 months, 3 - yes 3 months, 4 - yes 4-6 months, 5 - yes 7-12 months, 6 - yes more than 12 months, 7 - no, 8 - not applicable.

5.1. rent payments for your apartment 1☐2☐ 3☐ 4☐ 5☐ 6☐ 7☐ 8☐
5.2. gas or electricity charges 1☐2☐ 3☐ 4☐ 5☐ 6☐ 7☐ 8☐
5.3. the payment of a housing credit 1☐ 2☐ 3☐ 4☐ 5☐ 6☐ 7☐ 8☐

6. In comparison with 2007 did the housing conditions of your household: *Please select one of the variants of the answer by putting a checkmark in the appropriate square.*
1. ☐ worsen
2. ☐ improve
3. ☐ remain unchanged

H. EDUCATION

Now I would like to ask you about the education of children.

NOTE: QUESTIONS 1 TO 5 PERTAIN ONLY TO HOUSEHOLDS WITH CHILDREN AGED 26 OR LESS

1, 2, 3. What level of education would you like your children to attain and is there a chance it will happen?
For each child, select one education level by entering the appropriate number in the column „Education level//. Then evaluate the chances for attaining the selected education level by the child, entering the appropriate number in the column "Evaluation of chances"(Show CARD No. 2).

education level
1 vocational school
2 profile-oriented (general education) secondary school
3 vocational college or secondary school
4 university (bachelor)
5 university (masters)

assessment of chances:
1 the child attained this level
2 a good chance
3 a moderate chance
4 a small chance
5 no chance

1. Child number*	2. Education level	3. Assessment of chances
1.1. ☐☐	2.1. ☐	3.1. ☐
1.2. ☐☐	2.2. ☐	3.2. ☐
1.3. ☐☐	2.3. ☐	3.3. ☐
1.4. ☐☐	2.4. ☐	3.4. ☐
1.5. ☐☐	2.5. ☐	3.5. ☐
1.6. ☐☐	2.6. ☐	3.6. ☐

**** The child number should correspond with the number of the person listed in part C row 1***

4, 5. Does your child use the computer and Internet? *(show CARD No 3)*
1 Yes, but only with other household members
2 Yes, it uses them on its own
3 No it cannot use them because of the illness
4 No, but it can use the computer/Internet
5 No it does not have access to the computer/Internet
6 No, it is too young

1. Child number*	2. The use of computer	3. The use of Internet
1.1. ☐☐	4.1. ☐	5.1. ☐
1.2. ☐☐	4.2. ☐	5.2. ☐
1.3. ☐☐	4.3. ☐	5.3. ☐
1.4. ☐☐	4.4. ☐	5.4. ☐
1.5. ☐☐	4.5. ☐	5.5. ☐
1.6. ☐☐	4.6. ☐	5.6. ☐

**** The child number should correspond with the number of the person listed in part C row 1; copy from the table above***

NOTE: QUESTIONS 1 TO 5 PERTAIN ONLY TO HOUSEHOLDS WITH CHILDREN AT SCHOOL AGE (over reception class)

6. Have you been forced for financial reasons to:
Provide an answer with regard to each of the resignation type by putting a checkmark in the right square.
6.1. withdraw from enrolling your child to extra-curricular activities? 1☐ YES 2☐ NO
6.2. withdraw or suspend school fees? 1☐ YES 2☐ NO
6.3 withdraw your child from using school's dining services? 1☐ YES 2☐ NO
6.4. withdraw your child from private lessons? 1☐ YES 2☐ NO
6.5. change school for a one with lower or no fees? 1☐ YES 2☐ NO
6.6. other limitations? 1☐ YES 2☐ NO

7. In comparison with 2007 did the satisfaction of needs of your households associated with children's education: *Please select one of the variants of the answer by putting a checkmark in the appropriate square.*
1. ☐ worsen
2. ☐ improve
3. ☐ remain unchanged

I. SOCIAL ASSISTANCE

Now I would like to ask you about the assistance for your household.

1. Does the household receive assistance? 1.☐ YES 2.☐ NO

If the household receives Assistance, we go to question 2, if not, we go to Section J Culture and Recreation
2. What is the form of assistance for the household? *Provide answers independently for each of the forms of assistance listed below by putting a checkmark in the appropriate square.*
2.1. financial 1☐ YES 2☐ NO
2.2. material 1☐ YES 2☐ NO
2.3. services 1☐ YES 2☐ NO

J. CULTURE AND RECREATION

Now I would like to talk to you about matters associated with culture and recreation.

1. Within last year, have any of your household members, due to the lack of money, had to abstain from:
Provide a separate answer for each category listed below by putting a checkmark in the right square. Answer NOT APPLICABLE means no needs of a given type.

1.1. cinema	1.☐ YES	2.☐ NO	3.☐ NOT APPLICABLE
1.2. theatre, opera, operetta, concert	1.☐ YES	2.☐ NO	3.☐ NOT APPLICABLE
1.3. museum or exhibition	1.☐ YES	2.☐ NO	3.☐ NOT APPLICABLE
1.4. the purchase of a book	1.☐ YES	2.☐ NO	3.☐ NOT APPLICABLE
1.5. the purchase of newspapers, magazines	1.☐ YES	2.☐ NO	3.☐ NOT APPLICABLE

2. How many books (approximately) do you have at home (excluding textbooks and instruction manuals)?
1 ☐ none
2 ☐ less than 25 volumes
3 ☐ 26-50 volumes
4 ☐ 51-100 volumes
5 ☐ 101-500 volumes
6 ☐ more than 500 volumes

3. In comparison with 2007 did the fulfilment of needs of your household with regard to culture: *Choose one answer by putting a checkmark in the right square*
1. ☐ worsen
2. ☐ improve
3. ☐ remain unchanged

4. Within the last year, have you (any adult or child in your household), due to financial reasons, had to withdraw from:
Provide a separate answer for each category listed below by putting a checkmark in the right square. .Answer NOT APPLICABLE means no needs of a given type.

4.1. a summer camp or a trip for your (under-age) children	1☐ YES	2☐ NO, children went for holidays	3☐ NOT APPLICABLE
4.2. holidays or trips for adults	1☐ YES	2☐ NO, the adults went for holidays	3☐ NOT APPLICABLE
4.3. family trips (adults and children)	1☐ YES	2☐ NO. the family went for holidays	3☐ NOT APPLICABLE

5. In comparison with 2007 did the fulfilment of needs of your household with regard to recreation: *Choose one answer by putting a checkmark in the right square*
1. ☐ worsen
2. ☐ improve
3. ☐ remain unchanged

K. HEALTH CARE

Now I would like to ask you about issues associated with health care.

1.Within the last year, has any household member used the services of:
Provide answers pertaining to each of the units listed below by putting a checkmark in the right square.

1.1. health care units rendering services paid for by the National Health Fund (NFZ)	1. ☐ YES	2. ☐ NO
1.2. units rendering services paid for from your own pocket	1. ☐ YES	2. ☐ NO
1.3. units paid by an employer who pays for a medical services plan	1. ☐ YES	2. ☐ NO
1.4. units paid by charity organizations/ other persons	1. ☐ YES	2. ☐ NO

2. Was any member of your household hospitalized within the last year? (for other reasons than pregnancy)
1. ☐ YES 2. ☐ NO

If any member of the household used the services of health care units (hospitalization, sanatorium, rehabilitation, medical analyses, visits to the doctor/ dentist etc.) in the last 3 months, go to question 3, otherwise go to question 4.

3. During the last 3 months, the household paid a total of (PLN) for:
3.1. the purchase of outpatient medical services in healthcare units (including the non-standard services of dentists, orthodontists, payment for orthopaedic equipment, partly financed by the by the National Health Fund) PLN ☐☐☐☐☐
3.2. informal payments, that is, the so-called gifts of gratitude aimed at obtaining better or faster service PLN ☐☐☐☐☐
3.3. gifts of sincere gratitude for services already rendered PLN ☐☐☐☐☐
3.4. treatment at a private or public hospital where costs of treatment were covered by the respondent within the confines of the official purchase of medical services PLN ☐☐☐☐☐
3.5. payments made at a public hospital (contributions, payments for services rendered by nurses during night duty hours, the purchase of medications for a patient treated at a hospital) PLN ☐☐☐☐☐

4. Please specify how much money has been spent in the last 3 months in your households on medications and other pharmaceutical articles associated with an illness in your household (in PLN)? PLN ☐☐☐☐☐

5. Did you encounter the following situations in your household during the last year: *Provide a separate answer for each situation listed below by putting a checkmark in the right square*

5.1. did you not have enough money to buy medications prescribed or recommended by the doctor
1☐ YES 2☐ NO 3☐ THERE WAS NO SUCH NEED
5.2. due to the lack of money, did you fail to treat your teeth 1☐ YES 2☐ NO 3☐ THERE WAS NO SUCH NEED
5.3. due to the lack of money, did you have to give up dental prostheses 1☐ YES 2☐ NO 3☐ THERE WAS NO SUCH NEED
5.4. due to the lack of money, did you have to give up doctor's appointments
1☐ YES 2☐ NO 3☐ THERE WAS NO SUCH NEED
5.5. due to the lack of money, did you have to give up medical tests (lab tests, X-ray, ECG)
1☐ YES 2☐ NO 3☐ THERE WAS NO SUCH NEED
5.6. due to the lack of money, did you have to give up rehabilitation treatment
1☐ YES 2☐ NO 3☐ THERE WAS NO SUCH NEED
5.7. due to the lack of money, did you have to give up a stay at a sanatorium
1☐ YES 2☐ NO 3☐ THERE WAS NO SUCH NEED
5.8. due to the lack of money, did you have to give up hospital treatment 1☐ YES 2☐ NO 3☐ THERE WAS NO SUCH NEED?

6. In comparison with 2007, did the fulfilment your household healthcare needs: *Choose one answer by putting a checkmark in the right square*
1. ☐ worsen
2. ☐ improve
3. ☐ remain unchanged?

L. INCOME SITUATION AND INCOME MANAGEMENT

Now I would like to ask about the financial situation and income of your household. Please take into consideration income obtained by all members of your households who contribute any income (from any source) to the common budget.

1. What was the net income of your household last month? ☐☐☐☐☐
if you refuse to answer – please provide the range ☐

2. Please assess the amount of the average net income in your household in year 2008 ☐☐☐☐☐
if you refuse to answer – please provide the range ☐

3. Is your household able to make ends meet at your present income level: *Select one answer and put a checkmark in the appropriate square.*
1 ☐ with great difficulty
2 ☐ with difficulty
3 ☐ with some difficulty
4 ☐ easily
5 ☐ with great ease

4. What is the lowest net income in PLN allowing your household to make ends meet? PLN ☐☐☐☐☐

5. Which of the following statements best characterize the way of managing income by your household?
Show CARD No. 4, ask for the selection of one answer and put a checkmark in the appropriate square.
1 ☐ we can afford everything and even make savings for the future
2 ☐ we can afford everything with no particular difficulties, but we do not make savings for the future
3 ☐ we live economically and thus are able to afford everything
4 ☐ we live very economically to save money for significant purchases
5 ☐ we have enough money for the cheapest food, clothes, apartment charges and to pay off credit
6 ☐ we have enough money for the cheapest food, clothes and apartment charges, but not to pay off credit
7 ☐ we have enough money for the cheapest food and clothes, but not for apartment charges
8 ☐ we have enough money for the cheapest food, but not for clothes
9 ☐ we do not have enough money even for the cheapest food

6. In comparison with 2007 did the income situation of your household: *Choose one answer by putting a checkmark in the right square*
1. ☐ worsen
2. ☐ improve
3. ☐ remain unchanged

7. Is the regular income of your household sufficient to satisfy your needs? 1.☐ YES 2.☐ NO

If the income is not sufficient to satisfy your current needs, go to question 8, if it is – go to Section M.

8. What actions does your household undertake in order to fulfil the current needs? *A separate answer is to be provided for each activity by putting a checkmark in the appropriate square.*
8.1. takes advantage of savings made 1.☐ YES 2.☐ NO
8.2. sells off or pawns property owned (material goods) 1.☐ YES 2.☐ NO
8.3. limits the current needs 1.☐ YES 2.☐ NO
8.4. takes loans or financing 1.☐ YES 2.☐ NO

8.5 takes advantage of the assistance of relatives	1.☐ YES	2.☐ NO
8.6 takes advantage of the assistance of the church/ Caritas	1.☐ YES	2.☐ NO
8.7. takes advantage of social assistance	1.☐ YES	2.☐ NO
8.8. a household member undertakes additional work	1.☐ YES	2.☐ NO
8.9. undertakes other activities	1.☐ YES	2.☐ NO
8.10. undertakes no activity	1.☐ YES	2.☐ NO

M. COMPUTERS AND THE INTERNET

Now I would like to talk to you about the issues associated with computers and the Internet.
Question 1 applies to all the households

1. At present, it is becoming possible to deal with an increasing number of matters on the Internet. Listed below are various official matters which can be dealt with over the Internet. If there were such possibilities, how would you like to deal with these issues? *Show CARD No. 5. Please mark the answers by putting a checkmark in the square next to the appropriate number from 1 to 4. The meaning of each number is as follows:*
1. I do not need the Internet to deal with this
2. On the Internet, I would only like to get information or download the appropriate forms and then deal with the matters in the traditional way
3. I would like to have the possibility of dealing with it entirely over the Internet (including payment)
4. I do not expect to deal with such matters

1.1. Tax statements	1 ☐ 2 ☐ 3 ☐ 4 ☐
1.2. Labour Office services concerning job offers	1 ☐ 2 ☐ 3 ☐ 4 ☐
1.3. Issues associated with benefits and allowances (e.g. unemployment benefits, family benefits, scholarships)	1 ☐ 2 ☐ 3 ☐ 4 ☐
1.4. Issues pertaining to personal documents (such as passport, identity card, driving license)	1 ☐ 2 ☐ 3 ☐ 4 ☐
1.5. Car registration	1 ☐ 2 ☐ 3 ☐ 4 ☐
1.6. Building permits	1 ☐ 2 ☐ 3 ☐ 4 ☐
1.7. Police, City guards, prosecutor‘s office – reporting on crimes and complaints	1 ☐ 2 ☐ 3 ☐ 4 ☐
1.8. Access to public libraries (searching through catalogues, borrowing books)	1 ☐ 2 ☐ 3 ☐ 4 ☐
1.9. Ordering and receiving certificates or copies of documents (birth certificate, marriage certificate)	1 ☐ 2 ☐ 3 ☐ 4 ☐
1.10. Crèche, kindergarten, school and university registration	1 ☐ 2 ☐ 3 ☐ 4 ☐
1.11. Change of permanent address	1 ☐ 2 ☐ 3 ☐ 4 ☐
1.12. Official issues associated with business operations	1 ☐ 2 ☐ 3 ☐ 4 ☐
1.13. Health related services (e.g. information on available services at healthcare units, waiting times for a doctor‘s appointment, hospital or sanatorium admittance, dates and places or rendering healthcare services)	1 ☐ 2 ☐ 3 ☐ 4 ☐
1.14. Dealing with matters associated with religious beliefs and activity of the Church	1 ☐ 2 ☐ 3 ☐ 4 ☐
1.15. Other official matters (courts, commune offices, district, voivodship or central offices)	1 ☐ 2 ☐ 3 ☐ 4 ☐

Questions 2, 3, and 4 apply to households with computers and access to Internet (answer YES to the question F. 9.12)

2. For how long have you had the Internet at home? *Please provide the installation year.* ☐☐☐☐

3. How do the members of your household connect to the internet at home? (*more than one answer is acceptable)*
3.1. ☐ dial-up modem (you cannot use the phone and the internet simultaneously)
3.2. ☐ permanent access from a landline phone operator - *Neostrada*
3.3. ☐ permanent access from a landline phone operator (*Netia, Dialog*, etc.)
3.4. ☐ permanent access provided by a cable TV operator
3.5. ☐ other permanent access, such as the local areal network, access from a local provider or a shared connection in the neighbourhood
3.6. ☐ permanent access provided by a mobile phone operator, e.g. *BlueConnect, iPlus* or *Twój Internet, Business Everywhere Orange*
3.7. ☐ Internet access through your mobile phone (modem in the mobile phone)
3.8. ☐ other

4. If the household has a permanent Internet link, what is the speed?
1 ☐ 128 kb/s 5 ☐ 1Mb/s 9 ☐ hard to say
2 ☐ 256 kb/s 6 ☐ 2Mb/s
3 ☐ 320 kb/s 7 ☐ 6Mb/s
4 ☐ 512 kb/s 8 ☐ higher than 6Mb/s

Question 5 pertains to households without access to the Internet (NO in question F.9.12)

5. Which of the reasons best describes why your household does not have Internet access?
Show CARD No. 6; 3 possibilities can be selected at most by putting checkmarks in the right squares.
1. ☐ the lack of adequate equipment
2. ☐ the lack of technical possibility of getting the permanent access to Internet
3. ☐ sufficient ability to use the Internet elsewhere
4. ☐ we do not need the Internet

5. ☐ it has nothing interesting to offer
6. ☐ fear of losing privacy when using the Internet
7. ☐ the Internet may be harmful, for instance, it may demoralise children and take up too much time
8. ☐ the access cost is too high
9. ☐ the lack of adequate skills to use it
10. ☐ other reasons
11. ☐ we are planning to get it this year

N. DISABILITY

THE PRESENT SECTION APPLIES ONLY TO HOUSEHOLDS WITH A DISABLED MEMBER WITH DISABLITY LIVING ALLOWANCE (in C27 symbol 1, 2 or 3)

1. Does your household have any expenses related to the disability? 1.☐ YES 2.☐ NO

2. *If 1 YES*, what was the approximate amount of expenses:
if more than 99.000 enter 99 000, if no expenses enter 0, if no answer enter 99 999
for medical treatment (including medicines) PLN ☐☐☐☐☐
for rehabilitation treatment PLN ☐☐☐☐☐
for equipment, devices, etc. PLN ☐☐☐☐☐
other PLN ☐☐☐☐☐

3. Does the disabled person work 1.☐ YES 2.☐ NO

4, 5 *If 3 YES*, does he/she work in a supported employment enterprise or on a position adapted to disabled people?

1. Person number*	2. The person works in a supported employment enterprise or on a position adapted to disabled people
4.1. ☐☐	5.1. 1. ☐ YES 2 ☐ NO
4.2. ☐☐	5.2. 1. ☐ YES 2 ☐ NO
4.3. ☐☐	5.3. 1. ☐ YES 2 ☐ NO

**** The person number should correspond with the person reference number in Part C, row 1.***

6, 7 How do you help the disabled member of your household?
(mark the answers by putting a checkmark in the square next to the appropriate number from 1 to 4 in the columns ascribed to a given person; show CARD No. 7)
SCOPE OF ASSISTANCE
1 we do not help at all, he/she performs this activity unaided
2 he/she performs this activity with little help
3 he/she performs this activity with great help
4 he/she does not perform this activity (not applicable)

Activities	Person number*		
	6.1☐☐	6.2☐☐	6.3☐☐
7.1. washing himself/herself	☐	☐	☐
7.2. getting dressed	☐	☐	☐
7.3. eating	☐	☐	☐
7.4. cleaning	☐	☐	☐
7.5. preparing food	☐	☐	☐
7.6. washing the dishes	☐	☐	☐
7.7. doing shopping	☐	☐	☐
7.8. commuting from the place of residence to school/ work	☐	☐	☐
7.9. visits to the doctor	☐	☐	☐
7.10. going for holidays	☐	☐	☐

**** The person number should correspond with the person reference number in Part C, row 1.***

QUESTIONS 8-11 APPLY TO HOUSEHOLDS WITH A DISABLED MEMBER AGED 26 OR LESS. IF THERE ARE MORE THAN ONE DISABLED CHILDREN, THE QUESTIONS REFER TO THE OLDEST ONE

8. Has the disabled child gone for holidays without parents and other relatives?
8.1. for holidays with friends 1.☐ YES 2.☐ NO
8.2. for rehabilitation camps 1.☐ YES 2.☐ NO
8.3. for group trips 1.☐ YES 2.☐ NO

9. How do you assess the chances of your child getting a job which provides him/her financial independence?
1 ☐ it has already achieved this level *(go to 11)*
2 ☐ a great chance *(go to 11)*
3 ☐ a moderate chance
4 ☐ a little chance
5 ☐ no chance

10. Why in your opinion does your child have only moderate or lower chances of getting a job which gives him/her financial independence? *Please indicate the most important reason:*
1 ☐ the type of disability does not allow/ will not allow it
2 ☐ he/she does not have/ will not acquire sufficient qualifications
3 ☐ the local labour market does not offer work opportunities for such a person
4 ☐ other reasons

11. Talking from your experience, do you agree with the following statements regarding disabled people:

11.1. They remain dependant to on other people throughout their life	1 ☐ YES	2 ☐ NO
11.2. They should have special privileges at school	1 ☐ YES	2 ☐ NO
11.3. They have difficulties making contact with others	1 ☐ YES	2 ☐ NO
11.4. They should be helped to make contact with others	1 ☐ YES	2 ☐ NO
11.5. They should live with parents/ carers as long as possible	1 ☐ YES	2 ☐ NO
11.6. They should try to live as independently as possible	1 ☐ YES	2 ☐ NO
11.7. They should work even part-time	1 ☐ YES	2 ☐ NO
11.8. Work can help them integrate with other people	1 ☐ YES	2 ☐ NO
11.9. The state should provide them all types of financial benefits and care allowances	1 ☐ YES	2 ☐ NO

THANK YOU FOR YOUR TIME

2. Individual questionnaire

Assigned questionnaire number in the voivodship (same as in Part I) □□□□

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SOCIAL DIAGNOSIS 2009

Independent study of conditions and quality of life in Poland

PART II Individual questionnaire

WOMAN[52] 2

Household identification number (*same as in Section I C*) □□□□□

Person number *(copy from Section I C)* □□ **Fixed number** *(copy from Section I C)* □□□□□

Name *(copy from Section I C)*

People are different. They live in different conditions and feel differently about what happens to them everyday. They cope in different ways with whatever life brings to them.

This questionnaire is about how you perceive your life. Most questions should be interesting, some may be boring and tiresome, many will be easy. This is about your life and not some unknown problem even if some questions are difficult. Please answer them as accurately as you can.

At some point you may have a feeling that you have answered the question already and we are asking it again in a different way. And you will be right. We are seeking the best way to ask questions. Don't be surprised when you find that we jump from one topic to another because the sets of questions have been put in a random order.

Your can be sure of our discretion. All answers will be used only for research purposes within the confines of collective statistical analyses.

Different possible answers may be provided along with questions. Please underline the one which corresponds best with your situation. In the case of some questions it will be possible to underline more than one answer. If there are no ready answers below a question, please enter your answer in the space provided.

We would like to ask you to kindly fill out the questionnaire on your own, without any help from other household members. This is about individual assessments and feelings, and not about opinions consulted with other people. If you are unable to answer any question, please ask the interviewer for assistance.

INSTRUCTIONS

In questions which it is necessary to select one or more answers, please mark your choice by placing a checkmark next to the selected answer. In questions which we ask for your assessment, please write the appropriate number in the square. If the scale of assessment for the question looks like this:

1	2	3	4	5	6	7
completely not important						very important

Then the intermediate numbers (2, 3, 4, 5, 6) mean that the lower the number, the less important a given issue is (2 is less important than 3) and the greater the number, the more important the issue is (6 more important than 5).

In questions which a numerical value should be provided, please put it in the correct squares, making sure that the last digit is in the last square.

[52] The questionnaire was prepared in two versions, for female and male respondents.

1. Your **date of birth** ☐☐ ☐☐ ☐☐☐☐
Day Month Year

2. **What, in your opinion, is the most important prerequisite for a happy, successful life** *(PLEASE CHOOSE AND UNDERLINE THREE VALUES AT MOST)*
1. ☐MONEY
2. ☐CHILDREN
3. ☐SUCCESSFUL MARRIAGE
4. ☐WORK
5. ☐FRIENDS
6. ☐PROVIDENCE, GOD
7. ☐CHEERFULNESS, OPTIMISM
8. ☐HONESTY
9. ☐KINDNESS AND RESPECT from OTHERS
10. ☐FREEDOM, LIBERTY
11. ☐HEALTH
12. ☐EDUCATION
13. ☐STRONG PERSONALITY
14. ☐OTHER

3. **How do you feel about your life as a whole, could you say it was**.... *(please underline the appropriate answer)*
1. ☐DELIGHTED
2. ☐PLEASED
3. ☐MOSTLY SATISFIED
4. ☐MIXED
5. ☐MOSTLY DISSATISFIED
6. ☐UNHAPPY
7. ☐TERRIBLE

4. **When was your life easier, before 1989 or at present?**
1. ☐it was easier before year1989
2. ☐it is easier at present
3. ☐it is difficult to say
4. ☐I am too young to remember times before year 1989

In the recent months: (NOT APPLICABLE means no husband)
5. The expectations of your husband toward you were so great you were unable to meet them
1 ☐ OFTEN 2 ☐ IT HAPPENED 3 ☐ NEVER 4 ☐ NOT APPLICABLE
6. Your husband was too extravagant in spending money that were your common property
1 ☐ OFTEN 2 ☐ IT HAPPENED 3 ☐ NEVER 4 ☐ NOT APPLICABLE
7. The problems of your husband added to your troubles and made your life difficult
1 ☐ OFTEN 2 ☐ IT HAPPENED 3 ☐ NEVER 4 ☐ NOT APPLICABLE

In the recent months: (NOT APPLICABLE means no financially dependent children)
8. You had doubts about your children being hard-working and tough enough to cope in life
1 ☐ OFTEN 2 ☐ IT HAPPENED 3 ☐ NEVER 4 ☐ NOT APPLICABLE
9. You had to listen to complaints about your children (from school, from neighbours, from other parents)
1 ☐ OFTEN 2 ☐ IT HAPPENED 3 ☐ NEVER 4 ☐ NOT APPLICABLE
10. You had to bear some expenses because of something that your children did
1 ☐ OFTEN 2 ☐ IT HAPPENED 3 ☐ NEVER 4 ☐ NOT APPLICABLE
11. Your children disregarded and rejected your help, advice and guidance
1 ☐ OFTEN 2 ☐ IT HAPPENED 3 ☐ NEVER 4 ☐ NOT APPLICABLE
12. You felt that you were losing influence over your children
1 ☐ OFTEN 2 ☐ IT HAPPENED 3 ☐ NEVER 4 ☐ NOT APPLICABLE
13. You had too little time for your children
1 ☐ OFTEN 2 ☐ IT HAPPENED 3 ☐ NEVER 4 ☐ NOT APPLICABLE

In the recent months:
14. You felt that your source of income was unstable and uncertain
1 ☐ OFTEN 2 ☐ IT HAPPENED 3 ☐ NEVER 4 ☐ NOT APPLICABLE (lack of income)
15. Financial problems added to your troubles and made your life difficult
1 ☐ OFTEN 2 ☐ IT HAPPENED 3 ☐ NEVER

In the recent months: (NOT APPLICABLE means lack of paid work)
16. You felt that your work was too tiresome, dirty or dangerous
1 ☐ OFTEN 2 ☐ IT HAPPENED 3 ☐ NEVER 4 ☐ NOT APPLICABLE
17. You felt you had too many work responsibilities that you were not able to cope with them
1 ☐ OFTEN 2 ☐ IT HAPPENED 3 ☐ NEVER 4 ☐ NOT APPLICABLE
18. You were treated unjustly by others at work
1 ☐ OFTEN 2 ☐ IT HAPPENED 3 ☐ NEVER 4 ☐ NOT APPLICABLE

In the recent months:

19. You had a feeling that the place you live in was overcrowded; for instance too many people live in your apartment, neighbouring apartments, the whole building
1 ☐ OFTEN 2 ☐ IT HAPPENED 3 ☐ NEVER
20. You were afraid of crime, drug addiction, or hooliganism within your district, housing estate, or vicinity
1 ☐ OFTEN 2 ☐ IT HAPPENED 3 ☐ NEVER
21. Problems associated with neighbours or other people living in the close vicinity of your home made your life difficult
1 ☐ OFTEN 2 ☐ IT HAPPENED 3 ☐ NEVER

In the recent months:

22. You suffered from a physical indisposition, such as bones aching or shortness of breath which made it difficult to walk about, climb the stairs, etc.
1 ☐ OFTEN 2 ☐ IT HAPPENED 3 ☐ NEVER
23. Health problems made it difficult for you to perform everyday tasks or participate in other activities
1 ☐ OFTEN 2 ☐ IT HAPPENED 3 ☐ NEVER

In the recent months:

24. You had to deal with some formal matters
1 ☐ YES 2 ☐ NO (if NO, please go to question 28)
25. You were not able to deal with a formal matter efficiently, quickly and easily
1 ☐ OFTEN 2 ☐ IT HAPPENED 3 ☐ NEVER
26. You had to search for friends or other ways in order to deal with a formal matter
1 ☐ OFTEN 2 ☐ IT HAPPENED 3 ☐ NEVER
27. You felt completely helpless and humiliated when dealing with a formal matter
1 ☐ OFTEN 2 ☐ IT HAPPENED 3 ☐ NEVER

28 **Did you vote during the last parliamentary election in 2007?** 1☐ YES 2☐ NO

29. **Do you use a mobile phone?** 1☐ YES 2☐ NO

During the last year, did you:

30. Undertake a more profitable or an additional job	1☐ YES	2☐ NO
31. Invest some money in production, trade or services	1☐ YES	2☐ NO
32. Make some money on stocks, bonds or transfer of money between bank accounts	1☐ YES	2☐ NO
33. Acquire new qualifications or skills with better earnings in mind	1☐ YES	2☐ NO

34. **How would you evaluate your material situation at present?**
1. ☐ GREAT
2. ☐ VERY GOOD
3. ☐ GOOD
4. ☐ NEITHER GOOD NOR BAD
5. ☐ NOT TOO GOOD
6. ☐ BAD
7. ☐ TERRIBLE

35. Taken all together, how would you say things are these days? **Would you say that you are**....?
1. ☐ VERY HAPPY
2. ☐ RATHER HAPPY
3. ☐ NOT TOO HAPPY
4. ☐ UNHAPPY

36. **During the last year, did you take advantage of the services of the health care units:**

36.1. paid for by the National Health Fund	1☐ YES	2☐ NO
36.2. paid for from your own pocket	1☐ YES	2☐ NO
36.3. paid for by an employer who paid for a medical services plan	1☐ YES	2☐ NO

37. **How often within the last few months were you so depressed that you thought about suicide?**
1. ☐ VERY OFTEN
2. ☐ QUITE OFTEN
3. ☐ RARELY
4. ☐ NEVER

38. **Do you feel loved and trusted?** 1☐ YES 2☐ NO

39. **How often, on average, during the month, do you participate in sermons or other meetings of religious character?** *(if less often than once a month – please enter 0)* ☐☐ times a month

40. **How many people do you consider to be your friends?** ☐☐

41. **How strong is your willingness to live these days?** *(please put a checkmark in the appropriate square)*

☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
1	2	3	4	5	6	7	8	9	10

I do not want to live at all — I want to live very much

42. **Do you feel lonely, although you do not want to be?** 1☐ YES 2☐ NO

43. **Do you believe that reforms in Poland after year 1989 were successful or unsuccessful?**
1.☐ successful
2.☐ unsuccessful
3.☐ hard to say

44. **Has the accession of Poland to the European Union had any influence on your life?** 1☐YES 2☐NO
45. if **YES,** then, in general, **was that influence positive or negative**?
1. ☐ very negative
2. ☐ negative
3. ☐ positive
4. ☐ very positive
5. ☐ it is difficult to say

46. Do you smoke cigarettes? 1☐ YES 2☐ NO
47. — if **YES**, **how many cigarettes per day do you smoke**? ☐☐ cigarettes
48. — if **NO**, **have you ever smoked cigarettes in your life**? 1☐ YES 2☐ NO

49. In the last two years, did you engage in any activities in your community? (commune, housing estate, town, neighbourhood) 1☐ YES 2☐ NO

50. **Please specify how you usually react to troubles and difficult situations in your life**: *(you can choose more than one answer, putting a checkmark in the appropriate square)*
50.1. ☐I turn to others for advice
50.2. ☐I pull myself together and take action
50.3. ☐I start using alcohol
50.4. ☐I tell myself that it could be worse or that others face even worse situations
50.5. ☐I give up, I do not know what to do
50.6. ☐I use tranquilizers
50.7. ☐I pray to God for assistance
50.8. ☐I get occupied with other things which divert my attention from problems and make me feel better

51. What was **the education level of your father** (or main guardian), when you were 14?
1.☐uncompleted primary
2.☐ primary
3.☐vocational
4.☐ uncompleted secondary
5.☐ secondary vocational
6.☐secondary – general education
7.☐uncompleted university/ college (including post-secondary)
8.☐university/ college
52. **In the last year, did you attend a public meeting** (but not at work)? 1☐ YES 2☐ NO

53. - If yes, **did you speak during the meeting**? 1☐ YES 2☐ NO

54. **In the last year, did you participate in preparing or conducting of meeting** (outside work)? 1☐ YES 2☐ NO

55. **Listed below in the fields separated by lines N, O, P etc., we describe various categories of feelings and behaviours. Please read each group of four statements carefully, and then pick out one statement in each group that best describes the way you have been feeling during the past four weeks. Mark your selection by putting a checkmark in the appropriate circle next to number 0, 1, 2 or 3.**

N. ☐0. I think that I don‘t look worse than I used to
☐1. I am worried because I think I look old and I am not attractive
☐2. I feel that I look worse than I used to
☐3. I am sure that I look terrible.

O. ☐ I have as much energy as ever to work.
☐1. I have less energy than I used to have.
☐2. I don‘t have enough energy to do much.
☐3. I don‘t have enough energy to do anything.

P. ☐0. I have not experienced any change in my sleeping pattern.
☐1. I do not sleep as well as I used to.
☐2. In the morning, I wake up 1-2 hours earlier and find it difficult to fall asleep again.
☐3. I wake up several hours too early and I can‘t get back to sleep.

Q. ☐ 0. I am no more tired or fatigued than usual.
☐1. I get tired or fatigued more easily than usual.
☐2. I am too tired or fatigued to do a lot of things I used to do.
☐3. I am too tired or fatigued to do most of the things I used to do.

R. ☐ 0. I have not experienced any change in my appetite.
☐1. My appetite is somewhat less than usual.
☐2. My appetite is much less than before.
☐3. I have no appetite at all.

T. ☐ 0. I am not worried about my health any more than I used to be.
☐1. I am worried about such ailments as: stomach pains, upset stomach, or constipation.
☐2. I am very worried about my health; I think about it constantly.
☐3. My health condition is so worrying that I cannot think of anything else.

U. ☐ 0. I have not noticed any recent change in my interest in sex.
☐1. I am less interested in sex than I used to be.
☐2. I am much less interested in sex now.
☐3. I have lost interest in sex completely.

56. **Provided below are several statements. Please assess to what extent they are consistent with your beliefs and attitudes. Please mark the assessments by entering the selected digit in the square next to each statement. The meaning of each digit is as follows:**
1 – DEFINITELY YES
2 – YES
3 – RATHER YES
4 – NEITHER YES NOR NOT
5 – RATHER NOT
6 – NO
7 – DEFINITELY NOT

56.1. ☐ I admire people who have expensive houses, cars and clothes.
56.2. ☐ My life has sense and is valuable, despite painful experiences
56.3. ☐ The most important thing is a life full pleasures
56.4. ☐ The measure of success in life is the state of ownership of various material goods
56.5. ☐ I like to have things that others envy
56.6. ☐ I like to buy things of no practical use
56.7. ☐ Shopping itself gives me a lot of joy
56.8. ☐ In order to be successful in life, you have to sometimes disregard other people's interests
56.9. ☐ I have a lot of energy now
56.10 ☐ People mainly try to help others
56.11 ☐ Homosexuals should be able to live according to their beliefs
56.12. ☐ Criminals should not have the same rights as honest people
56.13. ☐ A real patriot should not speak badly about Poles and Poland
56.14. ☐ The situation in the country would be better, if we did not care so much of treating everybody equally
56. 15. ☐ Foreigners in our country have too strong influences
56.16. ☐ I wait impatiently for what the next day will bring
56.17. ☐ The groups wronged by fate (the blind, the deaf-mute, people on wheelchairs) have developed an attitude of entitlement and focus too much on their privileges
56.18. ☐ Some people are just more worthy than others
56.19 ☐ I would like to be attractive and look good
56.20 ☐ In an ideal world, all nations would be equal
56.21. ☐ I attach great importance to material goods
56.22. ☐ We should do our best to treat people equally
56.23 ☐ I want to gain some friends
56.24. ☐ Some groups of people do not deserve respect
56.25. ☐ Most people would take advantage of me, if they could
56.26. ☐ We should aim at making the incomes of all people more or less equal
56.27. ☐ Without physical punishment, it is impossible to bring up children well

57. **Taking all into account, do you believe that the last year was successful in your life?** 1☐ YES 2☐ NO

58. **Who or what was the cause that the previous year was a good one or a bad one in your life?** *(more than one answers are acceptable)*
58.1. ☐ authorities
58.2. ☐ myself
58.3. ☐ other people
58.4. ☐ fate (providence)

59. **Listed below are several ailments associated with health conditions. Please specify whether you suffered from any of them within the LAST MONTH.** If you did not suffer from it at all during the last month, please circle number 1; if you suffered from it less frequently than for 15 days of the month, circle number 2; if you suffered from an ailment for at least one half of the month, please circle number 3.

IN THE PAST MONTH:	I did not suffer	I suffered less than 15 days	I suffered at least for one half of the month
59.1. strong headaches	1☐	2☐	3☐
59.2. stomach pains or flatulence	1☐	2☐	3☐
59.3. pain or tension in the neck or arm muscles	1☐	2☐	3☐
59.4. chest or heart pains	1☐	2☐	3☐
59.5. dry mouth or throat	1☐	2☐	3☐
59.6. attacks of excessive sweating	1☐	2☐	3☐
59.7. shortness of breath	1☐	2☐	3☐
59.8. shortness of breath	1☐	2☐	3☐
59.9. accelerated heartbeat (palpitation)	1☐	2☐	3☐
59.10. shivers or convulsions	1☐	2☐	3☐
59.11. pressure on the bladder and more frequent urinating	1☐	2☐	3☐
59.12. a feeling tiredness not associated with work	1☐	2☐	3☐
59.13. constipation	1☐	2☐	3☐
59.14. nosebleeds	1☐	2☐	3☐
59.15. sudden changes of blood pressure	1☐	2☐	3☐

60. In general, **do you believe that most people can be trusted or are you of the opinion that one can never be too careful with people?**
1.☐ most people can be trusted
2.☐ one can't be too careful in dealing with people
3.☐ it is difficult to say

61. **Are you a member of any organizations, associations, parties, committees, councils, religious groups, unions or associations?**

1. ☐ YES, one
2. ☐ YES, two
3. ☐ YES, three or more
4. ☐ NO

62. **—** if **YES**, **have you ever performed any functions in such organizations?** 1☐ YES 2☐ NO

63**. Do you use computer at work, at home, or any other place**, at least from time to time? 1☐ YES 2☐ NO

64. We would like you to now evaluate the following aspects of your life and tell us to what extent you are satisfied with each of them. Please mark your choice by circling the appropriate number by each aspect of life. The numbers stand for:
1 – VERY SATISFIED
2 – SATISFIED
3 – SOMEWHAT SATISFIED
4 – SOMEWHAT UNSATISFIED
5 – UNSATISFIED
6 – VERY UNSATISFIED
7 – not applicable

To what extent are you satisfied with:							
64.1. your relations with close family members	1☐	2☐	3☐	4☐	5☐	6☐	7☐
64.2. the financial situation of your family	1☐	2☐	3☐	4☐	5☐	6☐	7☐
64.3. the financial situation of your family	1☐	2☐	3☐	4☐	5☐	6☐	7☐
64.4. the present income of your family	1☐	2☐	3☐	4☐	5☐	6☐	7☐
64.5. your ability to fulfil nutrition needs	1☐	2☐	3☐	4☐	5☐	6☐	7☐
64.6. health	1☐	2☐	3☐	4☐	5☐	6☐	7☐
64.7. what you are accomplishing in life	1☐	2☐	3☐	4☐	5☐	6☐	7☐
64.8. the situation in the country	1☐	2☐	3☐	4☐	5☐	6☐	7☐
64.9. housing conditions	1☐	2☐	3☐	4☐	5☐	6☐	7☐
64.10. your place of residence	1☐	2☐	3☐	4☐	5☐	6☐	7☐
64.11. goods and services you can get	1☐	2☐	3☐	4☐	5☐	6☐	7☐
64.12. what the future seems to hold for you	1☐	2☐	3☐	4☐	5☐	6☐	7☐
64.13. your sex life	1☐	2☐	3☐	4☐	5☐	6☐	7☐
64.14. education	1☐	2☐	3☐	4☐	5☐	6☐	7☐
64.15. ways of spending leisure time	1☐	2☐	3☐	4☐	5☐	6☐	7☐
64.16. moral standards in you community	1☐	2☐	3☐	4☐	5☐	6☐	7☐
64.17. work	1☐	2☐	3☐	4☐	5☐	6☐	7☐
64.18. children	1☐	2☐	3☐	4☐	5☐	6☐	7☐
64.19. marriage	1☐	2☐	3☐	4☐	5☐	6☐	7☐
64.20. safety in the place of residence	1☐	2☐	3☐	4☐	5☐	6☐	7☐

65. **Below, you will find a number of different behaviours listed. Some may pertain directly to you; others may pertain only to other people. By circling one of the responses, please indicate which of the following behaviours bother you personally and which do not**. *Please enter the appropriate number from 1 to 5 in the square next to each of the described behaviours. The meaning of the numbers is as follows:*

1 – I DO NOT CARE ABOUT IT AT ALL
2 – I CARE LITTLE ABOUT IT
3 – I CARE ABOUT IT TO SOME EXTENT
4 – I CARE ABOUT IT VERY MUCH
5 – IT IS HARD TO SAY

How much do you care if:

65.1. ☐Someone pays less tax than she/he ought to.
65.2. ☐Someone avoids paying for the use of public transport (e.g. busses, trains, trams).
65.3. ☐Someone is able not to pay for electricity.
65.4. ☐Someone collects unemployment insurance longer than regulations allow
65.5. ☐Someone does not pay administration fees for his/her apartment (despite being able to).
65.6. ☐Someone imports goods from abroad and does not pay duty.

66. Your own personal net monthly income average from the last three months amounted to: PLN ☐☐☐☐☐

67. What personal net monthly income do you expect to get in two years? PLN ☐☐☐☐☐

68. **How much time did you spend watching TV on average in the last week?**

1. ☐I do not watch TV
2. ☐less than one hour
3. ☐one to two hours
4. ☐two to three hours
5. ☐three to four hours
6. ☐above four hours

69. **In the past month, did you go:**

69.1. to the cinema, theatre or a concert ☐☐
69.2. to a restaurant, café, pub ☐☐
69.3. for a meeting with friends ☐☐
69.4. for a birthday, name-day or other party ☐☐

IN THE PAST YEAR:

70. I visited a psychologist (psychiatrist) 1☐ YES 2☐ NO
71. I drank too much alcohol 1☐ YES 2☐ NO
72. I tried drugs 1☐ YES 2☐ NO
73. I lost a close acquaintance 1☐ YES 2☐ NO
74. I could not find a job after graduating from school 1☐ YES 2☐ NO 3☐ NOT APPLICABLE
75. I was shifted to a lower position at work 1☐ YES 2☐ NO 3☐ NOT APPLICABLE
76. I missed a promotion at work 1☐ YES 2☐ NO 3☐ NOT APPLICABLE
77. I was promoted 1☐ YES 2☐ NO 3☐ NOT APPLICABLE
78. I had serious problems with my superior 1☐ YES 2☐ NO 3☐ NOT APPLICABLE
79. I started my own business 1☐ YES 2☐ NO
80. I lost a lot of money doing business 1☐ YES 2☐ NO 3☐ NOT APPLICABLE
81. I fell victim to a theft 1☐ YES 2☐ NO
82. I fell victim to mugging 1☐ YES 2☐ NO
83. Somebody broke into my car or house 1☐ YES 2☐ NO
84. I was accused of a criminal offence 1☐ YES 2☐ NO
85. I was detained by the police 1☐ YES 2☐ NO
86. I was accused in a civil case 1☐ YES 2☐ NO
87 I caused a collision or a car accident 1☐ YES 2☐ NO
88. A close friend/relative was detained or broke the law 1☐ YES 2☐ NO
89. I was discriminated against due to my nationality, appearance, beliefs, or due to other reasons 1☐ YES 2☐ NO
90. My apartment (house) was seriously damaged 1☐ YES 2☐ NO
91. My apartment (house) was renovated 1☐ YES 2☐ NO
92. I had problems with the owner or manager of the building in which I live 1☐ YES 2☐ NO 3☐ NOT APPLICABLE
93. I fell seriously ill 1☐ YES 2☐ NO

94. **What, in your opinion, is the most important in life**?

1. ☐ pleasures, affluence, the lack of stress
2. ☐ a feeling of sense, achieving important objectives despite difficulties, pain and sacrifices

95. **Do you plan to go abroad to work in the next two years?**

1. ☐ YES, to a European Union country; *provide the name of the country* .....
2. ☐ YES, to a country outside the European Union; *provide the name of the country*.....
3. ☐ NO

96. — if YES, **for how long?**
1. ☐no longer than one year
2. ☐one to two years
3. ☐more than two years
4. ☐permanently
5. ☐it depends on how I will be doing abroad

97. **Do you plan to go abroad within the next two years to study there?**

1. ☐ YES, to a European Union country; *provide the name of the country* .....
2. ☐ YES, to a country outside the European Union; *provide the name of the country*.....
3. ☐ NO

98. — if YES, **for how long?**
1. ☐no longer than one year
2. ☐one to two years
3. ☐more than two years
4. ☐permanently
5. ☐it depends on how I will be doing abroad

99. What, in your opinion, is the most important in a professional career? *(Please read all answers and select no more than 3, putting a checkmark in the squares next to them)*
1. ☐The lack of tension and stress
2. ☐A high level of independence
3. ☐The possibility of personal development
4. ☐Work consistent with skills
5. ☐The possibility of a quick promotion
6. ☐Employment stability
7. ☐Favourable work hours
8. ☐The possibility of working at home
9. ☐Long leave
10. ☐Job respected by others
11. ☐Good remuneration
12. ☐Other factors

100. **What solutions would make it easier to reconcile work and family duties, including parenting?** *Please enter the appropriate number from **1** (the most important solution) to **10** (the least important solution)*
100.1 ☐ part-time job
100.2.☐ shift work
100.3.☐ flexible work hours
100.4.☐ possibility of doing some of the work at home
100.5.☐ more days off during the week
100.6.☐ longer maternity leave
100.7.☐ longer paid parental leaves
100.8.☐ higher benefits (family, children, etc.)
100.9.☐ better opportunities of providing care outside home to children aged 7 or less (more crèches and kindergartens near your home, adjustment of time of crèche and kindergarten care to the working hours of the parents)
100.10.☐ better opportunities of providing care outside home to children aged 7-12 (more extracurricular activities at schools, housing estate dayrooms etc.)

101. **Do you trust the following institutions?:**

101.1. Banks	1☐ YES 2☐ NO 3☐ I HAVE NO OPINION
101.2. The Sejm (lower chamber of Polish Parliament)	1☐ YES 2☐ NO 3☐ I HAVE NO OPINION
101.3. The President	1☐ YES 2☐ NO 3☐ I HAVE NO OPINION
101.4. Investment funds	1☐ YES 2☐ NO 3☐ I HAVE NO OPINION
101.5. Life insurance companies	1☐ YES 2☐ NO 3☐ I HAVE NO OPINION
101.6. The European Parliament	1☐ YES 2☐ NO 3☐ I HAVE NO OPINION
101.7. The Police	1☐ YES 2☐ NO 3☐ I HAVE NO OPINION
101.8. The government	1☐ YES 2☐ NO 3☐ I HAVE NO OPINION
101.9. The Social Insurance Institution	1☐ YES 2☐ NO 3☐ I HAVE NO OPINION

102. **Which of the statements concerning democracy, provided below, do you support most?**
1. ☐democracy is better than any other form of government
2. ☐sometimes, non-democratic rule is better than democracy
3. ☐for people like me, it does not really matter whether the government is democratic or not
4. ☐democracy is a bad form of government
5. ☐it is hard to say

103. **Do you practice any sports or physical activity?** 1☐ YES 2☐ NO

104. Were you unemployed for some time between 2000 and 2009 (did not have a job and kept seeking one)?
1☐ YES 2☐ NO

105 – if YES, **what was the main reason for being unemployed** *(you may mark more than one answer*):
105.1.☐ a period between contracts of employment with the same company
105.2.☐your own decision
105.3.☐ individual dismissal
105.4. ☐obligatory work stoppage due to the problems of the employer
105.5. ☐due to training/ school
105.6. ☐due to family/ personal reasons
105.7. ☐group dismissal
105.8. ☐end of a fixed-term contract
105.9. ☐other reasons

106. **Do you agree with the following statements regarding disabled people?:**

106.1. They remain dependant to other people throughout their entire life	1 ☐ YES	2 ☐ NO
106.2. They should have special privileges at school	1 ☐ YES	2 ☐ NO
106.3. They have difficulties to make contact with others	1 ☐ YES	2 ☐ NO
106.4. They should be helped to make contact with others	1 ☐ YES	2 ☐ NO
106.5. They should live with parents/ carers as long as possible	1 ☐ YES	2 ☐ NO
106.6. They should try to live as independently as possible	1 ☐ YES	2 ☐ NO
106.7. They should work even part-time	1 ☐ YES	2 ☐ NO
106.8. Work can help them integrate with other people	1 ☐ YES	2 ☐ NO
106.9. The state should provide them all types of financial benefits and care allowances	1 ☐ YES	2 ☐ NO

106.10. – if in your opinion, disabled people should work, what would be the most appropriate workplace for them? *Please choose one answer*
1 ☐ In supported-employment enterprises employing only or mainly disabled people
2 ☐ In all enterprises which are ready to employ on a position for disabled persons

106.11. They should stay at home and live on disability allowance 1☐ YES 2☐ NO

107. **How in your opinion work should be divided in family with respect to the age of children?** *(Please select for one of four situations one of six variants of division of work by putting a checkmark in the squares next to them)*

OPTIONS OF WORK DIVISION
1 – both husband and wife work full time
2 – the father works full time, and the mother works part time
3 – the father works full time, and the mother stops working for a certain time
4 – the father works full time, and the mother gives up work
5 – the father works part time, and the mother works full time
6 – the father stops working for a certain time and the mother works full time

107.1. if there are no children aged 12 or less	☐
107.2. if there are children aged 3 or less	☐
107.3. if there are children aged 3-6	☐
107.4. if there are children aged 6-12	☐

Provided below are questions addressed only to some respondents. Please check which conditions you meet and go to the appropriate sections of the questionnaire:
Working at present
Persons who changed a job between 2000 and 2009, regardless of whether they are working now
Persons who did not work between 2000 and 2009
Persons who within the last 12 months were entitled to a parental leave
Using computers
Using the Internet
Disabled persons

****

PERSONS WORKING AT PRESENT

108. **Is it possible at your main workplace to?**

108.1. change the starting or ending hour of work	1☐ YES	2☐ NO
108.2. leave the company for at least one hour	1☐ YES	2☐ NO
108.3. perform some of your duties at home	1☐ YES	2☐ NO

109. **What are the conditions that would convince you to work abroad?** *(please select no more than 2 answers*)
1.☐if the salary was higher than now
2.☐ if the job was more interesting than the one I have
3.☐if the possibilities of promotion/ development were greater than now
4.☐if I was sure I would get employed for at least a year
5.☐I would not work abroad under any conditions

110. **How much time does it take you to get to work on the average?**
(one direction in minutes; if you usually work at home, enter 0) ☐☐☐ minutes

****
PERSONS WHO CHANGED A JOB BETWEEN 2000 AND 2009, REGARDLESS OF WHETHER THEY ARE WORKING NOW

111. **How many times did you change jobs in years 2000–2009?** ☐ times

112. **Why did you change jobs in years 2000–2009?** *(you may choose more than one reason)*
112.1. ☐voluntary decision to get a better job/ remuneration
112.2. ☐end of fixed-term agreement
112.3. ☐due to independent reasons (health, dismissal, leave, company restructuring, company bankruptcy, retirement)
112.4. ☐other reasons

113. **Was the job change associated with the change of profession as well?** 1☐ YES 2☐ NO

114. **Was the job change associated with the change of place of residence?** 1☐ YES 2☐ NO

****
PERSONS WHO DID NOT WORK BETWEEN 2000 AND 2009

115. **Why didn't you work between 2000 and 2009?** *(select no more than 3 reasons by putting checkmarks in squares)*
1.☐ studying, raising qualifications
2.☐taking care of the home
3.☐taking care of children
4.☐taking care of disabled/ elderly household members
5.☐due to a health condition
6.☐due to inappropriate age
7.☐due to the lack of qualifications demanded by employers
8.☐retirement
9.☐due to difficulties with finding a job
10.☐the receipt of social benefits
11.☐I did not want to work

116. **Under what conditions would you be willing to work in the country?**
(please select and mark no more than 2 answers)
1.☐if there was a possibility of working part-time
2.☐if there was a possibility of working at home, at least partially
3.☐ if there was a possibility of flexible work time organization
4.☐if there was a possibility of receiving greater assistance from other family members in the performance of family duties
5.☐ if there was a possibility of taking advantage of proper care for children or ill persons
6.☐ if there was a possibility of retaining the social benefits I am receiving now
7.☐ other
8.☐ I do not want to work at all
****
PERSONS WHO WITHIN THE LAST 12 MONTHS WERE ENTITLED TO A PARENTAL LEAVE

117. **Did you go on a parental leave in the last 12 months?** 1☐YES 2☐NO *(go to question 120)*

118. – if YES, **which forms of parental leave did you take advantage of?**
1. ☐ work time reduction
2. ☐ a full-time parental leave
3. ☐ a part-time parental leave
4. ☐ a mixed form (leave/work time reduction)

119. **Did you receive a parental leave allowance during the parental leave?** 1☐YES 2☐NO

120. – if NO in question 117 – **What were the main reasons for which you did not take advantage, a parental leave in the last 12 months?** *(please select and mark no more than 2 answers)*

1. ☐ the lack of or too low a parental leave allowance
2. ☐ the lack of sufficient possibilities to choose a convenient period for a parental leave
3. ☐ negative effects on the amount of future old-age pension
4. ☐ negative effects on my career (negative attitude of the employer)
5. ☐ I wanted to go back to work as soon as possible
6. ☐ other reasons

****

PERSONS USING COMPUTERS

121. **How many hours did you spend using the computer this week?** ☐☐ hours

122. **What is your main activity when using the computer?** *Please specify two activities in which you dedicate most of your time – enter number 1 next to the activity which consumes most of your time, and number 2 next to the second activity.*
122.1. ☐work
122.2. ☐studying
122.3. ☐entertainment
122.4. ☐searching and reading information on the Internet
122.5. ☐maintaining relations with others using the Internet

123. **When using a computer, did you perform the following functions?**
Place checkmarks in squares with the proper answers

	YES	NO
123.1. copying or pasting a file or a folder	☐	☐
123.2. using the function of copying, cutting and pasting for the purpose of duplication or for moving selected fragments of a document	☐	☐
123.3. using the basic mathematical functions in a spreadsheet	☐	☐
123.4. the creation of an electronic presentation	☐	☐
123.5. the installation of new devices (printer, scanner, etc.)	☐	☐
123.6. sending an e-mail with attachments (documents, graphics)	☐	☐
123.7. using a Web browser (e.g. Google, Yahoo!) to find information	☐	☐
123.8. creating a Web page	☐	☐
123.9. writing a computer program, using programming language	☐	☐

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PERSONS USING THE INTERNET

124. **When did you start using the Internet?** *(enter year)* ☐☐☐☐

125. **How many hours did you spend last week using the Internet?** ☐☐

126. **Have you ever met, in person, anyone that you got to know on the Internet?**
1☐ YES 2☐ NO 3☐ I have not met anybody on the Internet

127. **Please specify whether using the Internet you performed the activities listed below?** *(please read the list and mark which of them you ever did, and the ones you did last week, by placing checkmarks in the appropriate squares)*

Activity	Any time	During the last week
127.1. checking and sending electronic mail (e–mail)	☐	☐
127.2. the use of communicators enabling conversations with friends (such as *ICQ*, *Gadu-Gadu* etc.)	☐	☐
127.3. chatting	☐	☐
127.4. participation in discussion groups and forums	☐	☐
127.5. phone calls using the Internet (*VoIP*, *Skype*),	☐	☐
127.6. videoconferences	☐	☐
127.7. Web page browsing	☐	☐
127.8. gathering of materials necessary for work or studies	☐	☐
127.9. participation in Internet trainings and courses	☐	☐
127.10. looking for a job, sending job offers	☐	☐
127.11. purchasing products on the Internet (except for auctions)	☐	☐
127.12. using online banking services	☐	☐
127.13. participation in Internet auctions	☐	☐
127.14. playing network games	☐	☐
127.15. downloading free software	☐	☐
127.16. downloading free music, movies	☐	☐
127.17. creation or modification of your own Web page or blog	☐	☐

127.18. creating and publishing your own text, graphics, music or other kinds of art on the Internet	☐	☐
127.19. obtaining information from the Web pages of public institutions	☐	☐
127.20. downloading or filling out official forms	☐	☐
127.21. listening to music or radio on the Internet	☐	☐
127.22. watching TV and video files on the Internet	☐	☐
127.23. booking tickets (e.g. for a flight, cinema or theatre)	☐	☐
127.24. reading newspapers on the Internet	☐	☐
127.25. using the Internet and e-mail for work	☐	☐
127.26. visiting web pages of social network services (e.g. *Nasza Klasa*)	☐	☐

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DISABLED PERSONS

128. **Do you feel that others treat you badly only due to your disability?** 1☐ YES 2☐ NO

129. **What are the things associated with your disability that make your life difficult?**
Please select and mark no more than three answers

1 ☐ architectural barriers
2 ☐ impracticable regulations impeding access to public places
3 ☐ inappropriate attitude to persons like me
4 ☐ the lack of confidence in my own abilities
5 ☐ the unwillingness of employers to employ persons like me
6.☐ excessive care and the lack of confidence of guardians in my self-reliance
7 ☐ the lack of care, loneliness
8 ☐ the lack of adequate types of rehabilitation treatment
9 ☐ other
10 ☐ nothing

130. **Whose company do you prefer the most**?

1 ☐ of disabled people
2 ☐ of people without disabilities
3 ☐ It does not matter to me, if I socialise with disabled or people without disabilities

131. **Do you encounter architectural barriers** in the building you live, which impede moving? 1☐ YES 2☐ NO

132. – if YES, **what barriers are these**? *(please select and mark all the important ones)*

1 ☐ too narrow door frames
2 ☐ too narrow corridors
3 ☐ the lack of lift
4 ☐ high or steep stairs
5 ☐ too narrow staircases
6 ☐ the lack of banisters and handholds
7 ☐ the lack of wheelchair ramps
8 ☐ uneven floors and high doorsteps
9 ☐ other

WE ARE VERY THANKFUL FOR YOUR TIME.

WE WOULD LIKE TO ASSURE YOU ONCE AGAIN THAT ALL INFORMATION PROVIDED BY YOU WILL BE USED ONLY IN COLLECTIVE STATISTICAL SCIENTIFIC REPORTS
for *THE COUNCIL FOR SOCIAL MONITORING*

Janusz Czapiński, Ph. D., professor at the University of Warsaw and University of Finances and Management

3.Instruction for interviewers

INSTRUCTIONS CONCERNING THE ORGANIZATION AND RULES OF THE FILLING OUT OF QUESTIONNAIRES FOR THE RESEARCH PROJECT "SOCIAL DIAGNOSIS 2009" R5

Introductory remarks

"Social Diagnosis" is a cyclical project, repeated with the same sample of households. In the upcoming fourth wave (*R5*), we plan to examine all households which participated in the third wave of the panel research (R4) and new households.

In year 2009, only those households will be examined (questionnaires for households which are included in the collective list sent to the Voivodship Statistical Offices by e-mail on 08.01.2009 or later. If the household is on the list, but any of its current members are not, they are assigned consecutive numbers after the last number from the list of year 2007.

Data on households is gathered on the basis of the interview conducted with the household head or a person who knows a lot about the household (part I of the questionnaire). Household members aged 16 (those, who turned 16 no later than on the 1st March, 2009) and older fill out part II of the questionnaire on their own in the presence of a pollster. If the respondents cannot fill out this part on their own, the pollster is obliged to help them. Men cannot be given questionnaires for women and women cannot be given questionnaires for men because the respondent's gender is coded in the questionnaire.

Definitions, classifications and groupings are largely consistent with those used in research based on the samples of households conducted by the Central Statistical Office. The proposed additions or slightly different qualifications are associated with the recommendations of *Eurostat* for research on households.

In the case of households which were included in the R4, apart from the full form for the fourth wave of research, you will receive the printouts from part C of the form R4 *(number of household, number of voivodship and district, numbers of household members, their gender and year of birth as well as fixed numbers of household members)*. Please conduct the interview section C on the basis of printouts from the fourth wave of research that is, taking into account all persons from the household included in printouts from R4 and the new household members. **It is necessary to keep in mind that the household members are to be numbered in the same way as in wave R4** and persons who joined the household after year 2007 are assigned the consecutive numbers after the last number from the R4. **If the number of persons is greater than 8, all persons with numbers above 8 are entered in a separate Section C sheet.** For persons who left the household permanently after the third wave, we ask only that you fill out of the selected rows: rows 42 (enter symbol 3), 44, 47, 48, 50. We are doing our best to conduct individual interviews (part II of the questionnaire) with all household members aged 16 or more, even those with whom, for various reasons, interviews could not be conducted during the first, second or third wave.

On the cards, which are shown to the respondent, answers like "I don't know" or "it is hard to say" are not included, but they may be included in the questionnaire and market, if the respondent spontaneously gives us such an answer. Also, in the case of questions which are not accompanied by cards, we do not read such answers to the respondent, but we mark them (if they are included among the available answers), if the respondent spontaneously answers the question in this way.

Please inform the examined households that, like in the previous years, 20 money prizes will be drawn among them for PLN 1000 each.

Detailed instructions

PART I

Section A. HOUSEHOLD CHARACTERISTICS

point 0 – enter the one-digit symbol of household status in the study:

symbol
1 the household participated in the third wave (R4) and it lives at the same address ⇒we go to point 1
2 the household participated in the third wave, but its address in the country has changed ⇒ we do not conduct the interview (we do not follow this household)
3 the household participated in the third wave of research, but it moved abroad or all household members have moved to collective accommodation facilities ⇒ we do not conduct the interview
4 a new household (it did not participate in the third wave of research) and it was drawn for the purpose of the current wave.

point 1 – enter the seven-digit symbol of the territorial unit accordingly with the new territorial division of the country (voivodship, district, commune)

point 3 – enter the one-digit symbol of the class of place of residence in which the household lives, according to the list of symbols provided below:
symbol
1 cities inhabited by population of 500 thousand or more
2 cities inhabited by population of 200–500 thousand
3 cities inhabited by population of 100–200 thousand
4 cities inhabited by population of 20–100 thousand
5 cities inhabited by population smaller than 20 thousand
6 the rural area

point 4 – enter the identification number of the household. It is a five-digit number which does not change during the subsequent research cycles, therefore, for those households which participated in the previous wave (R4), it will be the same as in year 2007; for new households, established as a result of a division of the household examined in year 2007, it will be assigned from the pool of numbers reserved for a given voivodship especially for these households.

point 5 – enter the one-digit symbol of the source of income of the household in accordance with the list of symbols provided below:
symbol
1 households of employees
2 households of farmer - employees
3 households of farmers
4 households of the self-employed working outside agriculture, freelancers
5 households of retirees and disability pensioners
6 households living on unearned sources other than disability pension and retirement

Section B. INFORMATION ON THE CONDUCTED INTERVIEW

Question 5. Please ask whether the household agrees to participate in the subsequent wave in year 2011.

Section C. HOUSEHOLD COMPOSITION

row 1 – for households which were examined in year 2007, please number the members exactly in the same way as in 2007. If the number of household members is greater than 8, for the remaining persons (9, 10 etc.) data in Section C is entered on a separate sheet, which is put inside the questionnaire after the interview.
2 **fixed number** – a number assigned to persons participating in the *R4* and included in the register of households drawn for the wave of 2009.

row 4 – enter the one-digit symbol of relationship to the household head:
symbol
1 household head
2 husband, wife
3 partner (husband, wife, common law spouse)
4 son, daughter
5 son in law, daughter in law (child's partner)
6 granddaughter, great granddaughter
7 father, mother, father in law, mother in law
8 grandfather, grandmother
9 brother, sister
10 other
The household head is the person who mostly or fully provides for the household.

row 5 – enter the one-digit family symbol:
symbol
1 for the first family members
2 for the second family members
3 for the third family members
4 – 8 for members of the fourth and subsequent families
0 for persons who are not members of families in a family household and for persons in a non-family or special household.

row 6 – enter the one-digit symbol of relationship to the household head. The household head is the man in the case of a full family (married couple, couple with no children or with children) or a single parent in a single parent family:
symbol
1 household head
2 partner (wife)
3 son, daughter
4 other persons outside the family
0 a person in a non-family or special household

A family consists of household members who are married (formally or informally), related or adopted. The following types of families are found:
Full family – married couple (couple) with no children, married couple (couple) with children
Single-parent family – mother with children, father with children
Non-family households are those, in which there is no group of persons defined as a family (in accordance with the definition provided above). There are single-person and multi-person non-family households (for instance, a grandmother with a grandson, a brother and sister living together, or persons who are not related living together).
Special households consist of persons, living together with a single or multi-person household, who are not members of such households and who do not constitute a separate household in accordance with the definition provided above (family and non-family households). These may be maids, students renting rooms, or employees.
Note: In each questionnaire, both rows 4 and 6 are to be filled out.

row 10 – enter the one-digit gender symbol:
symbol

1 man
2 woman

row 11 – enter the one-digit status symbol:
symbol
1 single
2 married
3 widowed
4 divorced
5 legally separated (separation declared by the court)
6 separated in fact (spouses do not live together without a decree passed by the court)

row 11 – enter the two-digit symbol of completed education
symbol
10 university with an academic degree, at least Ph. D.
11 university with the M.A., M. Sc. or equivalent degree
12 university with engineer, bachelor degree
20 postsecondary
30 vocational secondary
40 general secondary
50 vocational
51 lower secondary school
60 completed elementary
70 no education (elementary not completed, no school education)
99 not applicable (person aged 0–12)

row 13 – enter the total number of full years of education, regardless of whether a given school has been completed (elementary, secondary, vocational or grammar school, full-time or extramural studies, doctoral studies). Years of education during any kind of postgraduate studies, trainings and courses are not included. A training course is understood as a non-school form of education, leading to attaining, raising or changing ones professional qualifications, preparatory courses for entry exams, language courses, computer courses, driving schools etc.

row 14 – enter the two-digit symbol of the area of education completed
symbol
14 education
21 art
22 humanities (religion, foreign languages and mother tongue, history, archaeology, philosophy, etc)
31 social sciences (psychology, sociology, demography, political sciences, economy, etc) 32 journalism and information
34 economy and administration (management, marketing, finances, banking, insurance, accounting and taxes, management and administration sciences, etc)
38 law
42 biological sciences
44 physical sciences
46 mathematics and statistics
48 computerization (IT science)
52 technical sciences (technology, industry, construction, etc)
54 production and processing
58 architecture and construction
62 agriculture, forestry, fishing
64 veterinary science
71 public health
72 healthcare (medicine, dentistry, nursing, pharmacology, etc)
76 social assistance (social services)
81 public services and transport services
85 environmental protection and sanitary services
86 security and protection
90 armed forces and defence
91 other
92 no specialization (e.g. elementary, grammar or general secondary education)
98 not applicable (persons prior to the completion of elementary school or with no elementary education)
99 no data

row 15 – enter a one-digit symbol on the educational status of the person, defined as using or not using various educational services, rendered by the education system or other public and non-public institutions outside school (pertains to the current situation)
symbol
1 attending crèche or kindergarten
2 full time student
3 evening, extramural student
4 taking advantage of various forms of education outside school (additional courses, trainings, etc.)
5 following individual programme of study
8 not taking advantage of any educational services

For persons who have symbol 1, 2, 3 or 4 entered in row 15, fill out row 16 and possibly 17 (if a person takes advantage of more than one education service). If symbols 5 or 8 have been entered already, go to row 18.

row 16–17 – enter a two-digit symbol of the type of educational service (two most significant)
symbol
11 public crèche, kindergarten
12 non-public crèche, kindergarten
21 student at an elementary, grammar public school
22 student at an elementary, grammar non-public school
30 student at a vocational school, vocational training
41 student at a public general secondary school
42 student at a non-public general secondary school
51 student at a public vocational secondary school
52 student at a non-public vocational secondary school
61 student at a public postsecondary school
62 student at a non-public postsecondary school
71 student at a public university
72 student at a non-public university
81 postgraduate studies student at a public university
82 postgraduate studies student at a non-public university
83 doctoral studies student at a public university
84 doctoral studies student at a non-public university
90 additional training and courses financed by an employer
91 additional training and courses, financed from the resources of the Labour Fund
92 additional training and courses, financed from the resources of the European Social Fund
93 additional training and courses, financed from the resources of the household
94 other forms of skills development (e.g. driving school, instrument playing lessons, foreign language course)
98 I don‘t know

row 17 – enter:
1 if the respondent has a driving license
2 if the respondent does not have a driving license
3 if not applicable (if the respondent is under age)

row 19 – 24 – for each language enter:
1 if a given person knows the language actively (able to speak and write)
2 if a given person knows the language actively (able only to write)
3 if a given person does not know one of the languages

row 27 – enter a one-digit symbol with regard to the disability category:
symbol
1 for persons having a valid certificate from a medical commission at the Social Insurance Institution
2 for persons having a valid certificate from the Disability Adjudicating Panel at the District Family Assistance Centre
3 for persons having valid certificates both from the medical commission at the Social Insurance Institution and the Disability Adjudicating Panel at the District Family Assistance Centre
4 for persons declaring that due to their disability or illness they are completely or partially unable to perform such activities as learning, working or taking care of the household, but who do not have a certificate of the medical commission
5 disabled children aged 16 or less
0 in other cases
8 not applicable (the person is not disabled)

row 28-30 – type of illness; enter up to three main ones
symbol
1 a motor organ illness not requiring a wheelchair
2 a motor organ illness requiring a wheelchair
3 a sight organ illness
4 a hearing organ illness
5 a psychical illness (neurosis, autism, depression, schizophrenia, Alzheimer’s disease, etc.)
6 diabetes
7 cardiovascular diseases
8 neoplastic diseases
9 other chronic diseases

row 31 – only for persons with symbols 1,2 or 3 in row 27
symbol
1 a certificate of severe disability or a complete inability to work and to independent existence, or the first group of invalidity
2 a certificate of moderate disability or a general inability to work, or the second group of invalidity
3 a certificate of slight disability or a partial inability to work, or a requirement to professional retraining, or the third group of invalidity

row 32 – enter only one illness (the basis for the statement of disability)
symbol
1 psychical diseases (neurosis, autism, depression, schizophrenia, Alzheimer's disease, etc.)
2 sight organ diseases
3 hearing organ diseases
4 speech or vocal organs diseases
5 cardiovascular or respiratory diseases (heart, lung or bronchial tubes, or haemopoietic system diseases)
6 digestive or metabolic, or endocrine system diseases (diabetes)
7 genitourinary system diseases
8 muscular and skeletal diseases (diseases of motor organs, rheumatism, rheumatoid arthritis, backbone diseases)
9 other

row 33 – enter 0 if the illness is inborn; in other cases enter the number of years passed since the diagnosis; if the illness lasts less than one year, enter 1

row 34 – enter an appropriate symbol
symbol
1. The disabled person requires assistance and/or care several times a day and at night-time
2. The disabled person requires assistance and/or care several times a day
3. The disabled person requires assistance and care twice a day at most
4. The disabled person requires assistance and care from time to time, not every day
5. The disabled person requires assistance only from time to time
6. The disabled person does not require any assistance or care

row 35 – enter the X symbol in the column of a household member who helps, cares and looks after the disabled person; if there is also a person from outside the household who regularly helps the disabled person, enter an appropriate symbol in the column of the disabled member of household
symbol
1 a relative from outside the household
2 a friend or an acquaintance
3 a nurse or a social worker (a person paid by the household or an institution)
4 a neighbour
5 someone else (regardless of being paid or not)

row 36 – enter an appropriate symbol (regardless of the time of diagnosis):
1 The disabled person learnt/ learns at a comprehensive school
2 The disabled person learnt/ learns at a special school
3 The disabled person learnt/ learns at a mixed abilities school or in a mixed abilities class at a comprehensive school
8 The disabled person has never learnt at any school

rows 37 and 38 – symbols listed in the questionnaire

rows 39-41 – pertain to the source of income of individual household members;
enter the two-digit symbols of the main and additional sources of income (only two additional sources of income can be provided)
symbol
11 hired work in the public sector
12 hired work in the private sector
13 hired casual job in the public sector
14 hired casual job in the private sector
15 farming
16 assisting in farming
17 employer, excluding individual farmers
18 regular self-employment
19 casual self-employment
20 assisting in self-employment
21 pension (outside the farming social insurance system)
22 pension of individual farmer (due to the farming social insurance)
23 disability pensions
24 family benefits 25 maternity benefits
26 unemployment benefits
27 other benefits from the Labour Fund
28 allowances for persons on parental leaves (former parental benefits)
29 other social insurance benefits (e.g. childbirth and funeral benefits, illness and rehabilitation benefits)
30 family benefits and allowances in accordance with the act on family benefits of 2003 and its subsequent amendments, childcare benefits, or housing benefits
31 social assistance benefits
32 other social assistance benefits (e.g. parental, targeted and special benefits)
33 alimony for the children
34 other income in form of social benefits (including scholarships)
35 income from property (interest, dividends etc.)
36 income from the rental of a house, apartment, or garage

37 foreign old age and disability pensions
38 benefits due to voluntary illness and accident insurance
39 other insurance compensation
40 donations, alimony from private persons
41 other income
42 other revenues (sale of property, savings, credits)
43 being supported by other household members

row 42 – enter the one-digit symbol for the status of presence of the person in the household
symbol
1 person present in the household
2 person temporarily absent, but treated as a household member (absent over 2 months)
3 permanently absent from the household (pertains only to persons participating in wave 4)

row 43 – enter the one-digit symbol concerning the reasons for a temporary absence
symbol
1 stay at a hospital or assistance home
2 being away studying
3 serving in the army
4 other institutions (e.g. custody, prison etc.)
5 work away from place of residence in the country
6 work outside the country
7 studying away from place of residence in the country
8 studying abroad
9 business trip
0 other

row 44 – enter the one-digit symbol of membership in the household
symbol
1 the person was a member of a household subjected to wave 4 of research (belongs to the panel sample of persons) and is still a household member,
2 the person left the household permanently,
3 the person died,
4 a person was born after wave 4 – the mother was subjected to research during this wave,
5 the person was not a member of the household subjected to research in wave 4 (does not belong to the panel sample of persons), if one of three conditions is met:
a) the household was subjected to examination in wave 4 and the person became a member after wave 3 (from outside),
b) a household newly included in research (none of its members belonged to a household examined during wave 4),
6 the person was supposed to be examined during wave 4, but he or she was not included by mistake (he/she belongs to the panel sample),
7 the person came back to the household: the person was a member of the household subjected to research in waves 1,2,3, but did not participate in wave 4 of the study (belongs to a new panel sample of persons).

NOTE:
Rows 45–50 are filled out only for households which participated in the third wave of research (R4) in year 2007. They pertain to persons who were household members in the previous cycle and left, or persons who joined the household in the interval between the previous and current wave:

rows 45 - 46 – enter the date of joining the household – month and year (two last digits)
rows 47 - 48 – enter the date of leaving the household – month and year (two last digits)

row 49 – enter the one-digit symbol pertaining to the reason for joining the household symbol of reason for JOINING the household –
1 marriage, cohabitation, breakdown of informal relationship
2 divorce, separation
3 birth
4 other
8 not applicable

row 50 – enter the one-digit symbol pertaining to the reason for leaving the household symbol of reason for LEAVING the household –
1 marriage, cohabitation
2 divorce, separation, breakdown of informal relationship
3 death
4 establishing an independent household in the country (enter the address and possibly the phone number on a separate sheet)
5 establishing a new household abroad
6 other
8 not applicable

row 51
symbol
1 subject to individual interview (member of the household, present at the household, 16 or older as of 01.03.2009, that is the ones born not later than on 01.03.1993)
2 subject to individual interview, but requires special treatment (staying away temporarily, e.g. army service, hospital, studying, long-term leave except for staying abroad)
3 staying abroad
4 not subject to individual interview (younger than 16)
5 not subject to individual interview due to other reasons (mentally ill, old age)

row 52
symbol
1 complete interview
The interview was not conducted, although contact was established because:
2 the person was unable to provide answers (illness, intoxication)
3 the person did not return the form to be filled out
4 the person initially refused to participate in the interview (there is a possibility of participation in the consecutive years)
5 the person definitely refused to participate in the research now and in the future
The person could not be contacted because:
6 he/she was away from the household temporarily (e.g. a short business trip)
7 it was not possible to contact this person at home, and he/she was not delivered the forms to be filled out in the household.

Section D. ECONOMIC ACTIVITY OF HOUSEHOLD MEMBERS AGED 15 OR MORE

This section pertains to persons aged 15 not later than 01.03.2009, that is the ones born by the end of February 1994.

row 1 – enter the personal number same as in Section C row 1
row 2 - 3 – symbols and rules provided on the form

row 5 – enter symbol
symbol

1. based on a fixed term contract (but not a contract mentioned as untypical forms of employment (6–11) or for a period longer than one year)
2. based on a contract of employment for an unspecified period of time
3. own activity as an entrepreneur hiring workers
4. own activity as a self-employed person
5. family member assisting free of charge
6. casual job (based on fixed-term agreements, e.g. for substitution, for the period of performance of specific work)
7. other short-term agreements (e.g. student trainings)
8. trial period employment
9. hired on the basis of a civil law agreement (contract for specific work; mandate contract)
10. hired with no formal agreement and/or on the basis of an oral agreement
11. other

row 6 – symbols and rules provided on the form
Full-time means full-time employment in at least one company.

row 7 – enter the symbol of the most significant reason symbols
1. cannot find a full-time job
2. does not want to work full time
3. has to because he/she is unable to provide the children with appropriate care
4. has to because he/she is unable to provide care for an ill, elderly or disabled person
5. has another job
6. other reasons

row 8 – symbols and rules provided on the form

row 9 – symbols provided on the form

row 10 – the question pertains to all the respondents, rules provided on the form
symbol
1. YES and he/she currently does not work
2. YES and he/she currently works
3. NO and he/she currently does not work, but he/she has already found a job
4. NO and he/she currently does not work
5. NO and he/she currently works

row 11 – enter the symbol of the most significant reason:
symbol
1. studying, raising qualifications
2. taking care of the house
3. taking care of the children
4. taking care of the disabled or elderly household members
5. due to health conditions
6. due to inappropriate age
7. due to the lack of qualifications
8. retired person
9. he/she is convinced he/she will not find a job
10. does not want to lose the right to social benefits
11. does not want to work
12. other reasons

row 12 – symbols provided on the form

rows 13 - 14 – enter the number of months/years of unemployment; for persons who have never worked enter 97 and go to row 23; it is 2 years or more go to row 22; it is less than 2 years to row 21

row 15 – enter the one-digit number of the form of ownership of the institution being the main workplace symbol
1. state
2. belonging to the units of territorial self-government
3. private
4. cooperative or social/religious organizations
8 not applicable (enter in the case of persons who do not work)

row 16 – enter the one-digit number of the form of ownership of the institution being an additional workplace symbol
1. state
2. belonging to units of territorial self-government
3. private
4. cooperative or social/religious organizations
8. not applicable (enter in the case of persons, who do not work)
9. not applicable (enter in the case of persons with no additional job)

row 17 – symbols provided on the form (according to the administrative division)

row 18 – enter the three-digit symbols of the profession performed in accordance with the "Ordinance of the Minister of Labour and Social Policy of 10.12.2002 concerning the classification of professions and specializations for the needs of the labour market and the scope of its application."

row 19 – symbols and rules provided on the form

row 20 – enter how many times the person was registered at the Labour Office

row 21 – enter the total number of months of unemployment

row 22 – enter the three-digit symbols of the profession performed in accordance with the "Ordinance of the Minister of Labour and Social Policy of 10.12.2002 concerning the classification of professions and specializations for the needs of the labour market and the scope of its application."
This classification is also used in the BAEL and EUSILC.

row 23 – symbols and rules provided on the form

rows 24, 25, 26 – enter the two-digit symbols of educational activity type
symbol
21 student at an elementary, grammar public school
22 student at an elementary, grammar non-public school
30 student at a vocational school, vocational training
41 student at a public general secondary school
42 student at a non-public general secondary school
51 student at a public vocational secondary school
52 student at a non-public vocational secondary school
61 student at a public postsecondary school
62 student at a non-public postsecondary school
71 student at a public university – full-time studies
72 student at a public university – extramural or evening studies
73 student at a non-public university studies
81 postgraduate studies student at a public university
82 postgraduate studies student at a non-public university

83 doctoral studies student at a public university
84 doctoral studies student at a non-public university
90 additional training and courses financed by the employer
91 additional training and courses, financed from the resources of the Labour Fund
92 additional training and courses, financed from the resources of the European Social Fund
93 additional training and courses, financed from the resources of the household
94 other forms of skills development (e.g. driving school, instrument playing lessons, foreign language course)
98 I don't know

row 27 – symbols provided on the form
row 28 – symbols and rules provided on the form
row 29 – enter the number of stays

rows 30, 31 – enter symbol
symbol

1 Austria	6 Greece	11 Germany	16 other EU countries (Czech Republic, Slovakia, Hungary, Estonia, Lithuania, Latvia, Cyprus, Slovenia, Malta, Bulgaria, Romania)	17 USA
2 Belgium	7 Spain	12 Portugal		18 Canada
3 Denmark	8 The Netherlands	13 Sweden		19 Australia
4 Finland	9 Ireland	14 Great Britain		20 other countries
5 France	10 Luxembourg	15 Italy		

rows 32 – 33 – enter the number of months

row 34 – enter a symbol if the persons meets the following condition: he/she was abroad for a longer period than 6 months between 2005 and 2009 and came back to Poland last year (after the 1st January 2008)
symbol
1. The person had such a plan on leaving abroad
2. The person lost/ finished his/her work
3. The person finished studying
4. The person was unable to find work abroad
5. The person came back for family reasons
6. The person came back due to a decrease in wages abroad as compared with the wages in Poland
7. The person came back for health reasons
8. The person came back for a certain time to deal with his/her matters
0. other reasons
9. hard to say

rows 35, 36 – enter the number of years
row 37 – enter the number of workplaces

Section F. MATERIAL AFFLUENCE
Questions 12 and 13 – regardless of when the household was established; if the respondent does not remember, we enter 9; if there is more than one computer in the household, in question 12 the subject is the last purchase (modernization), and in question 13 – the first purchase.

Section H. SOCIAL ASSISTANCE
Question 1 pertains to various forms of assistance, both from private persons and institutions, such as social assistance centers (communal, district, voivodship-level), district family assistance centers, non-religious charity organizations (these include non-governmental organizations acting in the field of social assistance, including the charity organizations, that is, associations, foundations, committees, charity societies and actions, such as the Polish Red Cross, PKPS, Foundation for Social Action), religious organizations (e.g. Caritas) and parishes, trade unions and companies.

Section L. INCOME SITUATION

Questions 1 and 2 – in the case of a refusal, we enter 99999, in the case of difficulties with providing of precise amount, we ask for a range and enter the middle value from the interval in a single right square. If a provided interval is higher than one of the listed below, we enter a symbol of the interval which is closer to the upper value. If the respondent provides a precise amount of income or categorically refuses to answer, the income interval square remains blank.

symbol of income interval

1.Less than PLN 300	9.PLN 6001 - PLN 7000
2.PLN 301 – 600	10.PLN 7001 – PLN 8000
3.PLN 601 – 1000	11.PLN 8001 – PLN 9000
4.PLN 1001 – 2000	12.PLN 9001 – PLN 10 000
5.PLN 2001 – 3000	13.PLN 10 001 – PLN 15 000
6.PLN 3001 – 4000	14.PLN 15 001 – PLN 20 000
7.PLN 4001 – 5000	15.More than 20 000
8.PLN 5001 – 6000	

Question 5 – answer 5 is marked also when the household dos not have to repay a credit

Section M. COMPUTER AND INTERNET

Question 2, if the respondent does not remember, fill in 9999

Other sections in part I do not provide for the special definitions of categories of answers, and any doubts will be explained during the training.

Part II (individual questionnaire)

The pollster fills out only the first page (copying from section C the household number, the number of the person and his/her first name); the rest is filled out by the respondent in the presence of the pollster.

In exceptional situations, the respondent may fill out the questionnaire without the pollster being present; in such cases, it is necessary to attach an envelope, so that other members of the households cannot see the filled-out questionnaire before it is picked up by the pollster.

Please explain the rules of filling out of the questionnaire in a simple manner (page two); particularly, the meaning of the numerical scales, defined verbally only at the ends. Please point out to the respondent that in the date of birth on page 3, Roman numbers cannot be used (e.g. 15 02 78 and not 15 II 78).

ANNEX 2. RANKING OF 147 SOCIO-DEMOGRAPHIC AND PROFESSIONAL GROUPS IN EIGHT DIMENSIONS DESCRIBING THE QUALITY OF LIFE IN 2009

Table 1. Civilisational level

Place	Socio-demographic group	2009
1	specialists in social sciences	1.55
2	university lecturers	1.47
3	engineers	1.35
4	computer engineers	1.33
5	lawyers	1.32
6	other education specialists	1.25
7	heads of large and medium-sized organisations	1.23
8	economists	1.23
9	doctors	1.22
10	teachers	1.19
11	public administration specialists	1.15
12	higher and vocational college education	1.12
13	policemen	1.04
14	employed in the financial and trade sectors	0.96
15	directors of small enterprises	0.95
16	professional soldiers	0.89
17	Opole	0.82
18	middle office personnel	0.81
19	private entrepreneurs	0.79
20	middle personnel - biology and health care	0.73
21	Warsaw	0.72
22	middle technical personnel	0.71
23	receptionists, help-desk employees	0.71
24	cashiers	0.67
25	Toruń	0.66
26	public sector employees	0.63
27	income per person above 3rd quartile	0.60
28	office workers	0.58
29	Olsztyn	0.55
30	Poznań	0.55
31	nurses	0.54
32	age: 25-34	0.54
33	Gdynia	0.50
34	cities with 500 thousand inhabitants and over	0.49
35	school and university students	0.49
36	Koszalin	0.47
37	Szczecin	0.46
38	Cracow	0.45
39	Rzeszów	0.45
40	Gdańsk	0.41
41	other personal care employees	0.40
42	Białystok	0.40
43	Gliwice	0.39
44	Lublin	0.38
45	age: 16-24	0.36
46	private sector employees	0.36
47	Wrocław	0.36
48	Ostrowiec Świętokrzyski	0.35
49	secondary education	0.33
50	shop assistants	0.32
51	Zielona Góra	0.31
52	married couple with 2 children	0.30
53	unmarried	0.30
54	towns with 200-500 thousand inhabitants	0.29
55	Bydgoszcz	0.29
56	Kędzierzyn Koźle	0.29
57	married couple with 1 child	0.28
58	age: 35-44	0.26
59	security guards	0.24
60	Częstochowa	0.24
61	workers in the precision production	0.23
62	towns with 100-200 thousand inhabitants	0.23
63	electricians	0.22
64	drivers	0.22
65	Grudziądz	0.20
66	Słupsk	0.20
67	machinery and equipment mechanics	0.18
68	Legnica	0.17
69	miners	0.16
70	Katowice	0.16
71	engine drivers, railwaymen	0.15
72	Wałbrzych	0.15
73	Łódź	0.15
74	Kalisz	0.13
75	gardeners	0.12
76	male	0.12
77	pomorskie	0.12
78	mazowieckie	0.11
79	low-speed vehicle operators	0.10
80	Sosnowiec	0.10
81	Bielsko Biała	0.09
82	Zabrze	0.09
83	towns with 20-100 thousand inhabitants	0.07
84	wielkopolskie	0.06
85	metalwork labourers	0.05
86	married	0.05
87	Kielce	0.04
88	married couple with 3+ children	0.04
89	machine operators	0.03
90	dolnośląskie	0.03
91	opolskie	0.03
92	śląskie	0.03
93	małopolskie	0.02
94	Radom	0.02
95	income per person between 2nd and 3rd quartile	0.01
96	locksmiths	0.00
97	lubuskie	0.00
98	Jaworzno	0.00
99	Tychy	0.00
100	Kętrzyn	-0.02
101	zachodniopomorskie	-0.03
102	assemblers	-0.04
103	podlaskie	-0.04
104	kujawsko-pomorskie	-0.05
105	towns with fewer than 20 thousand inhabitants	-0.06
106	personal care employees	-0.07
107	construction labourers	-0.07
108	woodwork labourers	-0.08
109	łódzkie	-0.08
110	hotel and gastronomy sector employees	-0.11
111	age: 45-59	-0.11
112	female	-0.11
113	podkarpackie	-0.11
114	multi-family household	-0.14
115	painters	-0.15
116	lubelskie	-0.16
117	warmińsko-mazurskie	-0.16
118	married couple with no children	-0.16
119	textile industry labourers	-0.18
120	świętokrzyskie	-0.18
121	single parent family	-0.18
122	divorced	-0.18
123	Tczew	-0.21
124	the unemployed	-0.23
125	farmers - plant production	-0.24
126	separated	-0.26
127	other professionally inactive	-0.27
128	food sector labourers	-0.29
129	rural areas	-0.30
130	farmers	-0.30
131	runners, porters, concierges	-0.31
132	income per person between 1st and 2nd quartile	-0.32
133	basic vocational/lower secondary education	-0.35
134	farmers - crops and farm animals	-0.38
135	auxiliary labourers in mining and construction	-0.39
136	unqualified industrial labourers	-0.42
137	age: 60-64	-0.42
138	non-family one-person household	-0.47
139	income per person below 1st quartile	-0.53
140	housekeepers, cleaners	-0.54
141	auxiliary agricultural labourers	-0.61
142	retirees	-0.66
143	farmers - for own needs	-0.67
144	pensioners	-0.71
145	age: 65+	-0.89
146	widow(er)	-0.90
147	primary and lower education	-1.32

Table 2. Material affluence level

Place	Socio-demographic group	2009
1.	lawyers	1.46
2.	computer engineers	1.31
3.	heads of large and medium-sized organisations	1.28
4.	doctors	1.27
5.	directors of small enterprises	1.25
6.	university lecturers	1.23
7.	economists	1.14
8.	public administration specialists	1.02
9.	Warsaw	1.01
10.	income per person above 3rd quartile	0.97
11.	private entrepreneurs	0.96
12.	employed in the financial and trade sectors	0.90
13.	engineers	0.89
14.	specialists in social sciences	0.83
15.	higher and vocational college education	0.72
16.	professional soldiers	0.68
17.	other education specialists	0.67
18.	teachers	0.66
19.	middle office personnel	0.65
20.	policemen	0.64
21.	Gdynia	0.63
22.	Szczecin	0.62
23.	cities with 500 thousand inhabitants and over	0.59
24.	Koszalin	0.57
25.	middle technical personnel	0.51
26.	nurses	0.47
27.	Wrocław	0.46
28.	Poznań	0.46
29.	public sector employees	0.42
30.	Gdańsk	0.39
31.	cashiers	0.37
32.	other personal care employees	0.37
33.	Opole	0.37
34.	middle personnel - biology and health care	0.36
35.	drivers	0.30
36.	private sector employees	0.30
37.	office workers	0.29
38.	Cracow	0.29
39.	Jaworzno	0.27
40.	Olsztyn	0.27
41.	engine drivers, railwaymen	0.24
42.	age: 25-34	0.24
43.	mazowieckie	0.24
44.	Gliwice	0.24
45.	married couple with 1 child	0.24
46.	miners	0.22
47.	machinery and equipment mechanics	0.22
48.	Rzeszów	0.22
49.	Bydgoszcz	0.21
50.	married couple with no children	0.21
51.	towns with 200-500 thousand inhabitants	0.20
52.	Toruń	0.20
53.	shop assistants	0.19
54.	age: 35-44	0.18
55.	Lublin	0.18
56.	Katowice	0.18
57.	electricians	0.17
58.	Zabrze	0.17
59.	pomorskie	0.16
60.	Łódź	0.16
61.	Zielona Góra	0.15
62.	metalwork labourers	0.14
63.	secondary education	0.14
64.	Legnica	0.14
65.	dolnośląskie	0.13
66.	gardeners	0.12
67.	towns with 100-200 thousand inhabitants	0.12
68.	Sosnowiec	0.12
69.	married couple with 2 children	0.12
70.	married	0.12
71.	wielkopolskie	0.09
72.	security guards	0.08
73.	low-speed vehicle operators	0.08
74.	zachodniopomorskie	0.08
75.	Kalisz	0.08
76.	towns with 20-100 thousand inhabitants	0.06
77.	opolskie	0.06
78.	śląskie	0.06
79.	Grudziądz	0.06
80.	man	0.05
81.	Wałbrzych	0.05
82.	personal care employees	0.04
83.	machine operators	0.03
84.	age: 45-59	0.03
85.	Tychy	0.03
86.	income per person between 2nd and 3rd quartile	0.03
87.	receptionists, help-desk employees	0.02
88.	construction labourers	0.02
89.	Białystok	0.00
90.	Częstochowa	0.00
91.	textile industry labourers	-0.01
92.	towns with fewer than 20 thousand inhabitants	-0.01
93.	małopolskie	-0.01
94.	workers in the precision production	-0.02
95.	school and university students	-0.03
96.	assemblers	-0.04
97.	Kędzierzyn Koźle	-0.04
98.	woman	-0.05
99.	Ostrowiec Świętokrzyski	-0.05
100.	unmarried	-0.05
101.	locksmiths	-0.06
102.	age: 60-64	-0.06
103.	hotel and gastronomy sector employees	-0.07
104.	age: 16-24	-0.07
105.	lubuskie	-0.07
106.	Bielsko Biała	-0.07
107.	warmińsko-mazurskie	-0.08
108.	łódzkie	-0.09
109.	painters	-0.11
110.	runners, porters, concierges	-0.11
111.	multi-family household	-0.11
112.	food sector labourers	-0.12
113.	kujawsko-pomorskie	-0.12
114.	woodwork labourers	-0.13
115.	Kielce	-0.14
116.	podlaskie	-0.16
117.	Radom	-0.17
118.	divorced	-0.18
119.	married couple with 3+ children	-0.19
120.	unqualified industrial labourers	-0.21
121.	basic vocational/lower secondary education	-0.21
122.	Tczew	-0.21
123.	retirees	-0.24
124.	farmers - plant production	-0.25
125.	housekeepers, cleaners	-0.25
126.	Słupsk	-0.25
127.	non-family one-person household	-0.25
128.	auxiliary labourers in mining and construction	-0.26
129.	Kętrzyn	-0.26
130.	other professionally inactive	-0.28
131.	rural areas	-0.29
132.	lubelskie	-0.31
133.	separated	-0.32
134.	świętokrzyskie	-0.35
135.	farmers	-0.35
136.	podkarpackie	-0.37
137.	farmers - crops and farm animals	-0.39
138.	single parent family	-0.39
139.	age: 65+	-0.40
140.	widow(er)	-0.42
141.	income per person between 1st and 2nd quartile	-0.43
142.	auxiliary agricultural labourers	-0.46
143.	pensioners	-0.47
144.	the unemployed	-0.52
145.	primary and lower education	-0.65
146.	farmers - for own needs	-0.73
147.	income per person below 1st quartile	-0.81

Table 3. Social well-being level

Place	Socio-demographic group	2009
1.	professional soldiers	0.36
2.	policemen	0.32
3.	lawyers	0.30
4.	low-speed vehicle operators	0.30
5.	university lecturers	0.28
6.	miners	0.25
7.	Opole	0.24
8.	electricians	0.22
9.	Jaworzno	0.20
10.	heads of large and medium-sized organisations	0.17
11.	nurses	0.17
12.	machinery and equipment mechanics	0.17
13.	Gdynia	0.16
14.	middle technical personnel	0.15
15.	other personal care employees	0.15
16.	age: 16-24	0.15
17.	school and university students	0.15
18.	Legnica	0.15
19.	directors of small enterprises	0.14
20.	food sector labourers	0.14
21.	drivers	0.14
22.	married couple with no children	0.14
23.	middle office personnel	0.13
24.	auxiliary labourers in mining and construction	0.13
25.	private entrepreneurs	0.13
26.	married couple with 3+ children	0.13
27.	teachers	0.12
28.	office workers	0.12
29.	Słupsk	0.12
30.	income per person above 3rd quartile	0.12
31.	married couple with 1 child	0.12
32.	married	0.12
33.	computer engineers	0.11
34.	woodwork labourers	0.11
35.	engineers	0.10
36.	farmers - crops and farm animals	0.10
37.	married couple with 2 children	0.10
38.	construction labourers	0.09
39.	higher and vocational college education	0.09
40.	public sector employees	0.09
41.	Cracow	0.09
42.	employed in the financial and trade sectors	0.08
43.	machine operators	0.08
44.	age: 25-34	0.08
45.	private sector employees	0.08
46.	dolnośląskie	0.07
47.	małopolskie	0.07
48.	security guards	0.06
49.	man	0.06
50.	secondary education	0.06
51.	locksmiths	0.05
52.	podkarpackie	0.05
53.	farmers	0.05
54.	Gdańsk	0.05
55.	Zabrze	0.05
56.	multi-family household	0.05
57.	hotel and gastronomy sector employees	0.04
58.	opolskie	0.04
59.	pomorskie	0.04
60.	Bydgoszcz	0.04
61.	Rzeszów	0.04
62.	Kalisz	0.04
63.	income per person between 2nd and 3rd quartile	0.04
64.	age: 35-44	0.03
65.	rural areas	0.03
66.	lubelskie	0.03
67.	wielkopolskie	0.03
68.	Wrocław	0.03
69.	workers in the precision production	0.02
70.	towns with 20-100 thousand inhabitants	0.02
71.	Wałbrzych	0.02
72.	Grudziądz	0.02
73.	Ostrowiec Świętokrzyski	0.02
74.	shop assistants	0.01
75.	painters	0.01
76.	basic vocational/lower secondary education	0.01
77.	unmarried	0.01
78.	specialists in social sciences	0.00
79.	auxiliary agricultural labourers	0.00
80.	łódzkie	0.00
81.	śląskie	0.00
82.	metalwork labourers	-0.01
83.	Częstochowa	-0.01
84.	Kielce	-0.01
85.	farmers - plant production	-0.02
86.	assemblers	-0.02
87.	Toruń	-0.02
88.	Gliwice	-0.02
89.	income per person between 1st and 2nd quartile	-0.02
90.	cities with 500 thousand inhabitants and over	-0.03
91.	towns with fewer than 20 thousand inhabitants	-0.03
92.	mazowieckie	-0.03
93.	warmińsko-mazurskie	-0.03
94.	Tczew	-0.03
95.	Poznań	-0.03
96.	economists	-0.04
97.	Olsztyn	-0.04
98.	Koszalin	-0.04
99.	doctors	-0.05
100.	personal care employees	-0.05
101.	woman	-0.05
102.	towns with 200-500 thousand inhabitants	-0.05
103.	towns with 100-200 thousand inhabitants	-0.05
104.	retirees	-0.05
105.	Sosnowiec	-0.05
106.	other education specialists	-0.06
107.	middle personnel - biology and health care	-0.06
108.	age: 60-64	-0.06
109.	kujawsko-pomorskie	-0.06
110.	textile industry labourers	-0.07
111.	engine drivers, railwaymen	-0.07
112.	age: 45-59	-0.07
113.	zachodniopomorskie	-0.07
114.	Warsaw	-0.07
115.	other professionally inactive	-0.08
116.	Kędzierzyn Koźle	-0.08
117.	cashiers	-0.09
118.	Lublin	-0.09
119.	Łódź	-0.09
120.	receptionists, help-desk employees	-0.10
121.	Szczecin	-0.10
122.	podlaskie	-0.11
123.	świętokrzyskie	-0.11
124.	Radom	-0.12
125.	unqualified industrial labourers	-0.13
126.	lubuskie	-0.13
127.	age: 65+	-0.14
128.	housekeepers, cleaners	-0.16
129.	runners, porters, concierges	-0.17
130.	Katowice	-0.18
131.	income per person below 1st quartile	-0.19
132.	farmers - for own needs	-0.20
133.	Bielsko Biała	-0.21
134.	primary and lower education	-0.24
135.	the unemployed	-0.24
136.	gardeners	-0.25
137.	Tychy	-0.25
138.	Białystok	-0.26
139.	pensioners	-0.28
140.	Zielona Góra	-0.30
141.	single parent family	-0.30
142.	public administration specialists	-0.31
143.	Kętrzyn	-0.36
144.	widow(er)	-0.38
145.	non-family one-person household	-0.45
146.	divorced	-0.56
147.	separated	-0.85

Table 4. Mental well-being

Place	Socio-demographic group	2009
1.	professional soldiers	0.73
2.	computer engineers	0.59
3.	policemen	0.59
4.	school and university students	0.58
5.	lawyers	0.56
6.	university lecturers	0.54
7.	age: 16-24	0.52
8.	other personal care employees	0.49
9.	heads of large and medium-sized organisations	0.48
10.	age: 25-34	0.47
11.	engineers	0.46
12.	other education specialists	0.46
13.	economists	0.46
14.	doctors	0.43
15.	middle technical personnel	0.43
16.	private entrepreneurs	0.43
17.	teachers	0.42
18.	employed in the financial and trade sectors	0.41
19.	electricians	0.41
20.	low-speed vehicle operators	0.41
21.	directors of small enterprises	0.40
22.	office workers	0.40
23.	Kalisz	0.40
24.	specialists in social sciences	0.35
25.	middle office personnel	0.35
26.	receptionists, help-desk employees	0.35
27.	metalwork labourers	0.35
28.	higher and vocational college education	0.35
29.	Opole	0.35
30.	Koszalin	0.35
31.	nurses	0.34
32.	drivers	0.34
33.	private sector employees	0.34
34.	miners	0.33
35.	construction labourers	0.32
36.	machinery and equipment mechanics	0.32
37.	married couple with 2 children	0.32
38.	unmarried	0.32
39.	workers in the precision production	0.31
40.	public sector employees	0.31
41.	Toruń	0.31
42.	public administration specialists	0.30
43.	food sector labourers	0.30
44.	income per person above 3rd quartile	0.30
45.	shop assistants	0.29
46.	woodwork labourers	0.29
47.	gardeners	0.28
48.	Gdynia	0.27
49.	married couple with 3+ children	0.27
50.	cashiers	0.26
51.	assemblers	0.25
52.	age: 35-44	0.25
53.	hotel and gastronomy sector employees	0.23
54.	engine drivers, railwaymen	0.23
55.	middle personnel - biology and health care	0.22
56.	machine operators	0.21
57.	Tczew	0.21
58.	Cracow	0.20
59.	Rzeszów	0.20
60.	security guards	0.19
61.	painters	0.19
62.	auxiliary labourers in mining and construction	0.19
63.	Wałbrzych	0.19
64.	Gliwice	0.19
65.	married couple with 1 child	0.19
66.	unqualified industrial labourers	0.18
67.	Ostrowiec Świętokrzyski	0.18
68.	Poznań	0.18
69.	Szczecin	0.18
70.	Słupsk	0.17
71.	secondary education	0.15
72.	wielkopolskie	0.14
73.	Kędzierzyn Koźle	0.13
74.	Gdańsk	0.13
75.	man	0.12
76.	Grudziądz	0.12
77.	locksmiths	0.10
78.	pomorskie	0.10
79.	Lublin	0.10
80.	cities with 500 thousand inhabitants and over	0.09
81.	Olsztyn	0.09
82.	married	0.09
83.	zachodniopomorskie	0.08
84.	Wrocław	0.08
85.	towns with 100-200 thousand inhabitants	0.07
86.	farmers	0.07
87.	Bydgoszcz	0.07
88.	Kielce	0.07
89.	śląskie	0.06
90.	basic vocational/lower secondary education	0.06
91.	Warsaw	0.06
92.	Bielsko Biała	0.06
93.	Częstochowa	0.06
94.	farmers - crops and farm animals	0.05
95.	towns with 200-500 thousand inhabitants	0.05
96.	opolskie	0.05
97.	income per person between 2nd and 3rd quartile	0.04
98.	towns with 20-100 thousand inhabitants	0.03
99.	kujawsko-pomorskie	0.03
100.	małopolskie	0.03
101.	Jaworzno	0.03
102.	textile industry labourers	0.02
103.	dolnośląskie	0.02
104.	Łódź	0.02
105.	multi-family household	0.02
106.	farmers - plant production	0.00
107.	other professionally inactive	0.00
108.	towns with fewer than 20 thousand inhabitants	-0.02
109.	Legnica	-0.02
110.	Sosnowiec	-0.02
111.	podkarpackie	-0.03
112.	personal care employees	-0.04
113.	Katowice	-0.05
114.	rural areas	-0.06
115.	łódzkie	-0.06
116.	mazowieckie	-0.06
117.	warmińsko-mazurskie	-0.07
118.	Zielona Góra	-0.09
119.	Zabrze	-0.09
120.	lubelskie	-0.10
121.	woman	-0.11
122.	runners, porters, concierges	-0.12
123.	married couple with no children	-0.12
124.	lubuskie	-0.15
125.	świętokrzyskie	-0.16
126.	the unemployed	-0.16
127.	auxiliary agricultural labourers	-0.17
128.	age: 45-59	-0.17
129.	podlaskie	-0.17
130.	income per person between 1st and 2nd quartile	-0.17
131.	Radom	-0.18
132.	Białystok	-0.18
133.	Tychy	-0.22
134.	housekeepers, cleaners	-0.25
135.	income per person below 1st quartile	-0.32
136.	single parent family	-0.32
137.	farmers - for own needs	-0.39
138.	age: 60-64	-0.47
139.	divorced	-0.58
140.	Kętrzyn	-0.61
141.	retirees	-0.65
142.	non-family one-person household	-0.68
143.	primary and lower education	-0.80
144.	pensioners	-0.81
145.	age: 65+	-0.89
146.	separated	-0.93
147.	widow(er)	-1.00

Table 5. Social capital level

Place	Socio-demographic group	2009
1.	university lecturers	1.34
2.	teachers	0.81
3.	lawyers	0.79
4.	heads of large and medium-sized organisations	0.74
5.	other education specialists	0.71
6.	Opole	0.64
7.	public administration specialists	0.59
8.	Kędzierzyn Koźle	0.59
9.	specialists in social sciences	0.51
10.	gardeners	0.51
11.	higher and vocational college education	0.50
12.	economists	0.49
13.	engineers	0.48
14.	doctors	0.48
15.	directors of small enterprises	0.45
16.	policemen	0.42
17.	Poznań	0.38
18.	engine drivers, railwaymen	0.36
19.	public sector employees	0.35
20.	farmers - plant production	0.33
21.	computer engineers	0.32
22.	employed in the financial and trade sectors	0.32
23.	private entrepreneurs	0.32
24.	farmers	0.32
25.	Warsaw	0.31
26.	Toruń	0.29
27.	income per person above 3rd quartile	0.29
28.	middle personnel - biology and health care	0.26
29.	Gdynia	0.26
30.	middle office personnel	0.25
31.	Gdańsk	0.25
32.	nurses	0.21
33.	Szczecin	0.21
34.	farmers - crops and farm animals	0.20
35.	professional soldiers	0.19
36.	cities with 500 thousand inhabitants and over	0.18
37.	Lublin	0.18
38.	Legnica	0.16
39.	middle technical personnel	0.14
40.	age: 35-44	0.13
41.	age: 45-59	0.13
42.	Cracow	0.13
43.	Wrocław	0.12
44.	Katowice	0.11
45.	married couple with no children	0.11
46.	towns with 200-500 thousand inhabitants	0.10
47.	security guards	0.09
48.	Grudziądz	0.09
49.	Rzeszów	0.09
50.	Olsztyn	0.09
51.	married	0.09
52.	opolskie	0.08
53.	pomorskie	0.08
54.	secondary education	0.08
55.	electricians	0.07
56.	age: 60-64	0.07
57.	man	0.07
58.	mazowieckie	0.06
59.	Częstochowa	0.06
60.	receptionists, help-desk employees	0.05
61.	zachodniopomorskie	0.05
62.	Zabrze	0.05
63.	Kielce	0.05
64.	married couple with 2 children	0.05
65.	dolnośląskie	0.04
66.	podlaskie	0.03
67.	married couple with 1 child	0.03
68.	office workers	0.02
69.	farmers - for own needs	0.02
70.	lubelskie	0.02
71.	małopolskie	0.01
72.	Bydgoszcz	0.01
73.	Zielona Góra	0.01
74.	Koszalin	0.01
75.	runners, porters, concierges	0.00
76.	wielkopolskie	0.00
77.	divorced	0.00
78.	cashiers	-0.01
79.	retirees	-0.01
80.	income per person between 2nd and 3rd quartile	-0.01
81.	Białystok	-0.02
82.	non-family one-person household	-0.02
83.	miners	-0.03
84.	podkarpackie	-0.03
85.	private sector employees	-0.03
86.	Radom	-0.03
87.	Tychy	-0.03
88.	Ostrowiec Świętokrzyski	-0.03
89.	age: 25-34	-0.04
90.	towns with 100-200 thousand inhabitants	-0.04
91.	towns with 20-100 thousand inhabitants	-0.04
92.	towns with fewer than 20 thousand inhabitants	-0.04
93.	rural areas	-0.05
94.	kujawsko-pomorskie	-0.05
95.	lubuskie	-0.05
96.	śląskie	-0.05
97.	warmińsko-mazurskie	-0.05
98.	separated	-0.05
99.	woman	-0.06
100.	married couple with 3+ children	-0.06
101.	personal care employees	-0.07
102.	locksmiths	-0.07
103.	Gliwice	-0.07
104.	drivers	-0.08
105.	łódzkie	-0.08
106.	other personal care employees	-0.09
107.	machinery and equipment mechanics	-0.09
108.	workers in the precision production	-0.09
109.	świętokrzyskie	-0.09
110.	Łódź	-0.10
111.	age: 65+	-0.11
112.	income per person between 1st and 2nd quartile	-0.11
113.	multi-family household	-0.11
114.	unmarried	-0.12
115.	textile industry labourers	-0.13
116.	Tczew	-0.13
117.	machine operators	-0.14
118.	housekeepers, cleaners	-0.14
119.	single parent family	-0.14
120.	pensioners	-0.16
121.	school and university students	-0.16
122.	low-speed vehicle operators	-0.17
123.	Sosnowiec	-0.17
124.	widow(er)	-0.17
125.	hotel and gastronomy sector employees	-0.18
126.	construction labourers	-0.18
127.	woodwork labourers	-0.18
128.	shop assistants	-0.19
129.	basic vocational/lower secondary education	-0.20
130.	unqualified industrial labourers	-0.21
131.	the unemployed	-0.21
132.	Bielsko Biała	-0.21
133.	Kętrzyn	-0.21
134.	metalwork labourers	-0.22
135.	age: 16-24	-0.22
136.	other professionally inactive	-0.22
137.	Słupsk	-0.22
138.	Jaworzno	-0.22
139.	painters	-0.23
140.	Kalisz	-0.23
141.	auxiliary agricultural labourers	-0.24
142.	income per person below 1st quartile	-0.24
143.	food sector labourers	-0.28
144.	Wałbrzych	-0.29
145.	assemblers	-0.31
146.	auxiliary labourers in mining and construction	-0.33
147.	primary and lower education	-0.36

Table 6. Frequency of social pathologies (the lower the ratio, the greater the social pathology)

Place	Socio-demographic group	2009
1.	specialists in social sciences	-0.33
2.	Szczecin	-0.31
3.	Zabrze	-0.30
4.	Katowice	-0.29
5.	construction labourers	-0.28
6.	Tychy	-0.28
7.	separated	-0.28
8.	Warsaw	-0.26
9.	Sosnowiec	-0.25
10.	Opole	-0.23
11.	employed in the financial and trade sectors	-0.20
12.	divorced	-0.20
13.	private entrepreneurs	-0.19
14.	doctors	-0.18
15.	directors of small enterprises	-0.17
16.	engine drivers, railwaymen	-0.17
17.	drivers	-0.17
18.	Grudziądz	-0.17
19.	Kalisz	-0.17
20.	Koszalin	-0.17
21.	machinery and equipment mechanics	-0.16
22.	auxiliary labourers in mining and construction	-0.16
23.	age: 16-24	-0.16
24.	the unemployed	-0.16
25.	painters	-0.15
26.	locksmiths	-0.15
27.	man	-0.15
28.	Gdańsk	-0.15
29.	Poznań	-0.15
30.	unmarried	-0.15
31.	miners	-0.14
32.	cities with 500 thousand inhabitants and over	-0.14
33.	towns with 200-500 thousand inhabitants	-0.13
34.	lubuskie	-0.12
35.	Gdynia	-0.12
36.	computer engineers	-0.11
37.	gardeners	-0.11
38.	zachodniopomorskie	-0.11
39.	Toruń	-0.11
40.	Białystok	-0.11
41.	single parent family	-0.11
42.	professional soldiers	-0.10
43.	other education specialists	-0.10
44.	middle technical personnel	-0.10
45.	middle personnel - biology and health care	-0.10
46.	food sector labourers	-0.10
47.	Tczew	-0.10
48.	cashiers	-0.09
49.	mazowieckie	-0.09
50.	pensioners	-0.09
51.	Radom	-0.09
52.	security guards	-0.08
53.	school and university students	-0.08
54.	Łódź	-0.08
55.	workers in the precision production	-0.07
56.	towns with 100-200 thousand inhabitants	-0.07
57.	Wrocław	-0.07
58.	engineers	-0.06
59.	economists	-0.06
60.	low-speed vehicle operators	-0.06
61.	auxiliary agricultural labourers	-0.06
62.	private sector employees	-0.06
63.	Gliwice	-0.06
64.	other professionally inactive	-0.05
65.	public administration specialists	-0.04
66.	hotel and gastronomy sector employees	-0.04
67.	electricians	-0.04
68.	age: 25-34	-0.04
69.	basic vocational/lower secondary education	-0.04
70.	Zielona Góra	-0.04
71.	non-family one-person household	-0.04
72.	metalwork labourers	-0.03
73.	age: 35-44	-0.03
74.	podlaskie	-0.03
75.	pomorskie	-0.03
76.	Wałbrzych	-0.03
77.	Bydgoszcz	-0.03
78.	Częstochowa	-0.03
79.	income per person below 1st quartile	-0.03
80.	income per person above 3rd quartile	-0.03
81.	wielkopolskie	-0.02
82.	Lublin	-0.02
83.	married couple with 3+ children	-0.02
84.	lawyers	-0.01
85.	policemen	-0.01
86.	receptionists, help-desk employees	-0.01
87.	assemblers	-0.01
88.	dolnośląskie	-0.01
89.	śląskie	-0.01
90.	higher and vocational college education	-0.01
91.	shop assistants	0.00
92.	age: 45-59	0.00
93.	secondary education	0.00
94.	Cracow	0.00
95.	Rzeszów	0.00
96.	married couple with 2 children	0.00
97.	woodwork labourers	0.01
98.	Bielsko Biała	0.01
99.	heads of large and medium-sized organisations	0.02
100.	unqualified industrial labourers	0.02
101.	lubelskie	0.02
102.	Kielce	0.02
103.	kujawsko-pomorskie	0.03
104.	income per person between 1st and 2nd quartile	0.03
105.	income per person between 2nd and 3rd quartile	0.03
106.	married couple with 1 child	0.03
107.	textile industry labourers	0.04
108.	machine operators	0.04
109.	towns with 20-100 thousand inhabitants	0.04
110.	towns with fewer than 20 thousand inhabitants	0.04
111.	Legnica	0.04
112.	Olsztyn	0.04
113.	multi-family household	0.04
114.	office workers	0.05
115.	łódzkie	0.05
116.	warmińsko-mazurskie	0.05
117.	married couple with no children	0.05
118.	middle office personnel	0.06
119.	runners, porters, concierges	0.06
120.	rural areas	0.06
121.	farmers	0.06
122.	married	0.06
123.	świętokrzyskie	0.07
124.	public sector employees	0.07
125.	personal care employees	0.08
126.	farmers - crops and farm animals	0.08
127.	opolskie	0.08
128.	primary and lower education	0.09
129.	małopolskie	0.10
130.	teachers	0.11
131.	podkarpackie	0.11
132.	housekeepers, cleaners	0.12
133.	age: 60-64	0.12
134.	university lecturers	0.13
135.	Słupsk	0.13
136.	farmers - plant production	0.14
137.	woman	0.14
138.	Jaworzno	0.14
139.	other personal care employees	0.15
140.	farmers - for own needs	0.16
141.	Ostrowiec Świętokrzyski	0.17
142.	widow(er)	0.17
143.	Kędzierzyn Koźle	0.18
144.	retirees	0.19
145.	age: 65+	0.21
146.	nurses	0.26
147.	Kętrzyn	0.28

Table 7. Physical well-being (health)

Place	Socio-demographic group	2009
1.	professional soldiers	0.43
2.	policemen	0.43
3.	other education specialists	0.42
4.	public administration specialists	0.41
5.	university lecturers	0.39
6.	miners	0.39
7.	computer engineers	0.38
8.	painters	0.38
9.	machinery and equipment mechanics	0.38
10.	electricians	0.38
11.	school and university students	0.37
12.	engineers	0.35
13.	woodwork labourers	0.35
14.	heads of large and medium-sized organisations	0.34
15.	teachers	0.34
16.	age: 16-24	0.34
17.	Opole	0.34
18.	lawyers	0.33
19.	workers in the precision production	0.33
20.	low-speed vehicle operators	0.33
21.	auxiliary agricultural labourers	0.33
22.	age: 25-34	0.33
23.	auxiliary labourers in mining and construction	0.32
24.	private entrepreneurs	0.32
25.	employed in the financial and trade sectors	0.31
26.	construction labourers	0.31
27.	assemblers	0.31
28.	food sector labourers	0.30
29.	private sector employees	0.30
30.	office workers	0.29
31.	shop assistants	0.29
32.	metalwork labourers	0.29
33.	public sector employees	0.29
34.	economists	0.28
35.	middle personnel - biology and health care	0.28
36.	machine operators	0.28
37.	farmers	0.28
38.	doctors	0.27
39.	nurses	0.27
40.	middle office personnel	0.27
41.	receptionists, help-desk employees	0.27
42.	farmers - plant production	0.27
43.	drivers	0.27
44.	directors of small enterprises	0.25
45.	middle technical personnel	0.25
46.	hotel and gastronomy sector employees	0.25
47.	other personal care employees	0.25
48.	married couple with 3+ children	0.25
49.	gardeners	0.24
50.	age: 35-44	0.24
51.	Słupsk	0.24
52.	cashiers	0.23
53.	farmers - crops and farm animals	0.23
54.	locksmiths	0.23
55.	textile industry labourers	0.23
56.	unmarried	0.23
57.	unqualified industrial labourers	0.22
58.	higher and vocational college education	0.22
59.	the unemployed	0.21
60.	married couple with 2 children	0.21
61.	Kalisz	0.20
62.	specialists in social sciences	0.18
63.	Grudziądz	0.18
64.	Koszalin	0.18
65.	opolskie	0.17
66.	Kędzierzyn Koźle	0.17
67.	Olsztyn	0.17
68.	income per person above 3rd quartile	0.16
69.	Sosnowiec	0.15
70.	engine drivers, railwaymen	0.14
71.	Szczecin	0.14
72.	Rzeszów	0.13
73.	married couple with 1 child	0.13
74.	Jaworzno	0.12
75.	Kętrzyn	0.12
76.	Gliwice	0.11
77.	personal care employees	0.10
78.	Ostrowiec Świętokrzyski	0.10
79.	secondary education	0.09
80.	Warsaw	0.08
81.	man	0.07
82.	other professionally inactive	0.07
83.	warmińsko-mazurskie	0.06
84.	Cracow	0.06
85.	śląskie	0.05
86.	zachodniopomorskie	0.05
87.	basic vocational/lower secondary education	0.05
88.	mazowieckie	0.04
89.	Bielsko Biała	0.04
90.	multi-family household	0.04
91.	cities with 500 thousand inhabitants and over	0.03
92.	wielkopolskie	0.03
93.	Gdańsk	0.03
94.	towns with 100-200 thousand inhabitants	0.02
95.	pomorskie	0.02
96.	Toruń	0.02
97.	income per person between 2nd and 3rd quartile	0.02
98.	married	0.02
99.	rural areas	0.01
100.	Wałbrzych	0.01
101.	Gdynia	0.01
102.	Tychy	0.01
103.	housekeepers, cleaners	0.00
104.	runners, porters, concierges	0.00
105.	kujawsko-pomorskie	0.00
106.	Wrocław	0.00
107.	towns with 20-100 thousand inhabitants	-0.01
108.	towns with fewer than 20 thousand inhabitants	-0.02
109.	łódzkie	-0.02
110.	podkarpackie	-0.02
111.	Poznań	-0.02
112.	towns with 200-500 thousand inhabitants	-0.04
113.	Lublin	-0.04
114.	małopolskie	-0.05
115.	podlaskie	-0.05
116.	świętokrzyskie	-0.05
117.	single parent family	-0.05
118.	Bydgoszcz	-0.06
119.	security guards	-0.07
120.	woman	-0.07
121.	dolnośląskie	-0.07
122.	Łódź	-0.07
123.	farmers - for own needs	-0.08
124.	lubelskie	-0.08
125.	Zabrze	-0.09
126.	age: 45-59	-0.10
127.	income per person below 1st quartile	-0.13
128.	Legnica	-0.14
129.	income per person between 1st and 2nd quartile	-0.14
130.	Białystok	-0.16
131.	Katowice	-0.16
132.	Kielce	-0.18
133.	lubuskie	-0.20
134.	Zielona Góra	-0.21
135.	Radom	-0.21
136.	Tczew	-0.21
137.	Częstochowa	-0.21
138.	divorced	-0.21
139.	separated	-0.21
140.	married couple with no children	-0.26
141.	age: 60-64	-0.38
142.	retirees	-0.43
143.	non-family one-person household	-0.45
144.	primary and lower education	-0.52
145.	widow(er)	-0.63
146.	age: 65+	-0.69
147.	pensioners	-1.40

Table 8. Life stress (the lower the ratio, the greater the stress)

Place	Socio-demographic group	2009
1	engine drivers, railwaymen	-0.87
2	lawyers	-0.72
3	policemen	-0.68
4	Opole	-0.68
5	housekeepers, cleaners	-0.63
6	directors of small enterprises	-0.61
7	other education specialists	-0.60
8	private entrepreneurs	-0.60
9	nurses	-0.59
10	specialists in social sciences	-0.55
11	painters	-0.53
12	Gliwice	-0.53
13	heads of large and medium-sized organisations	-0.52
14	public administration specialists	-0.52
15	textile industry labourers	-0.52
16	drivers	-0.51
17	metalwork labourers	-0.48
18	locksmiths	-0.48
19	age: 35-44	-0.48
20	professional soldiers	-0.47
21	machine operators	-0.47
22	public sector employees	-0.44
23	middle technical personnel	-0.42
24	employed in the financial and trade sectors	-0.42
25	gardeners	-0.42
26	engineers	-0.41
27	miners	-0.41
28	electricians	-0.41
29	economists	-0.40
30	shop assistants	-0.40
31	middle office personnel	-0.39
32	doctors	-0.38
33	middle personnel - biology and health care	-0.37
34	private sector employees	-0.36
35	personal care employees	-0.35
36	machinery and equipment mechanics	-0.35
37	food sector labourers	-0.35
38	assemblers	-0.35
39	runners, porters, concierges	-0.35
40	teachers	-0.34
41	construction labourers	-0.34
42	auxiliary labourers in mining and construction	-0.34
43	auxiliary agricultural labourers	-0.33
44	Lublin	-0.33
45	Warsaw	-0.33
46	Bydgoszcz	-0.32
47	office workers	-0.30
48	unqualified industrial labourers	-0.30
49	Tychy	-0.30
50	married	-0.29
51	cashiers	-0.28
52	workers in the precision production	-0.28
53	low-speed vehicle operators	-0.28
54	age: 45-59	-0.28
55	Toruń	-0.27
56	Ostrowiec Świętokrzyski	-0.27
57	farmers	-0.26
58	Katowice	-0.26
59	Szczecin	-0.26
60	university lecturers	-0.25
61	Białystok	-0.25
62	higher and vocational college education	-0.24
63	Gdynia	-0.24
64	receptionists, help-desk employees	-0.23
65	towns with 200-500 thousand inhabitants	-0.23
66	Gdańsk	-0.23
67	security guards	-0.22
68	Olsztyn	-0.22
69	Sosnowiec	-0.21
70	married couple with 2 children	-0.21
71	farmers - plant production	-0.20
72	separated	-0.20
73	farmers - crops and farm animals	-0.19
74	woodwork labourers	-0.19
75	Wrocław	-0.19
76	Zabrze	-0.19
77	Poznań	-0.19
78	married couple with 1 child	-0.19
79	Kędzierzyn Koźle	-0.18
80	hotel and gastronomy sector employees	-0.17
81	cities with 500 thousand inhabitants and over	-0.17
82	farmers - for own needs	-0.16
83	age: 25-34	-0.16
84	lubuskie	-0.15
85	Wałbrzych	-0.15
86	Zielona Góra	-0.15
87	Radom	-0.14
88	computer engineers	-0.13
89	income per person above 3rd quartile	-0.12
90	mazowieckie	-0.10
91	zachodniopomorskie	-0.10
92	Koszalin	-0.10
93	multi-family household	-0.10
94	secondary education	-0.09
95	Rzeszów	-0.08
96	married couple with 3+ children	-0.08
97	towns with 100-200 thousand inhabitants	-0.07
98	Cracow	-0.07
99	Częstochowa	-0.07
100	dolnośląskie	-0.06
101	Legnica	-0.05
102	man	-0.04
103	Kielce	-0.04
104	kujawsko-pomorskie	-0.03
105	opolskie	-0.01
106	podlaskie	-0.01
107	pomorskie	-0.01
108	śląskie	-0.01
109	income per person between 2nd and 3rd quartile	-0.01
110	towns with 20-100 thousand inhabitants	0.00
111	świętokrzyskie	0.00
112	divorced	0.00
113	lubelskie	0.01
114	the unemployed	0.01
115	other personal care employees	0.03
116	towns with fewer than 20 thousand inhabitants	0.03
117	małopolskie	0.03
118	other professionally inactive	0.03
119	woman	0.04
120	Grudziądz	0.04
121	Łódź	0.05
122	łódzkie	0.06
123	basic vocational/lower secondary education	0.06
124	income per person below 1st quartile	0.08
125	married couple with no children	0.08
126	wielkopolskie	0.09
127	Tczew	0.10
128	income per person between 1st and 2nd quartile	0.10
129	Jaworzno	0.12
130	rural areas	0.13
131	podkarpackie	0.15
132	warmińsko-mazurskie	0.20
133	single parent family	0.21
134	age: 60-64	0.23
135	primary and lower education	0.34
136	Bielsko Biała	0.35
137	pensioners	0.36
138	unmarried	0.38
139	retirees	0.41
140	Kalisz	0.43
141	age: 16-24	0.48
142	Słupsk	0.49
143	non-family one-person household	0.49
144	Kętrzyn	0.53
145	age: 65+	0.55
146	widow(er)	0.59
147	school and university students	0.61