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OBJECTIVE AND SUBJECTIVE QUALITY OF LIFE IN POLAND

REPORT

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Tomasz Panek



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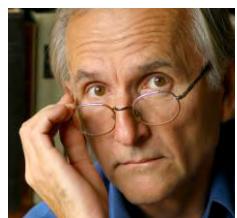
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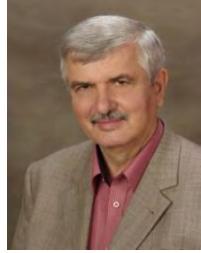
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1. INTRODUCTION

Janusz Czapinski

1.1. The aim and general assumptions of the project

There are two ways to describe the living conditions and quality of life of a society, its potential for development, directions of change, threats and challenges. One is based on institutional indicators – macroeconomic (the GDP or inflation rate) and macro-social (e.g. registered unemployment rate, number of physicians per 100,000 inhabitants, infant mortality, gross enrolment ratio or voter turnout in parliamentary elections). The other makes recourse to citizens' opinions and behaviours. Neither is fully accurate, reliable or sufficient. The fact that people are ever more affluent when the GDP is increasing does not necessarily mean that this makes them ever more satisfied or inclined towards civil behaviour. The registered unemployment rate does not necessarily reflect the actual proportion of people left jobless against their will. These two methods of describing society should be treated as complementary; they should complement and correct one another. This is the only way in which politicians and economic agents, as well as all citizens, may obtain an answer to two important questions: what the situation is like and why it is not better - that is, a diagnosis that is relatively complete and reliable. And a good diagnosis is essential for effective therapy, for wise reforms that would generate a minimum of social costs.

Our project is an attempt at complementing diagnosis based on institutional indicators with comprehensive data concerning households as well as the attitudes, state of mind and behaviours of those that constitute them; it is a diagnosis of Poles' living conditions and quality of life as they report it themselves. We therefore study households and all their available members aged 16 and above with the aid of two separate questionnaires.

The comprehensive character of our project means that a single study takes into account all the important aspects of life of individual households and their members – both economic (income, material affluence, savings, loans) and non-economic (e.g. education, medical treatment, ways of tackling problems, stress, psychological well-being, lifestyle, pathological behaviour, cultural participation, use of modern communication technologies, and many others). In this sense, the project is multi-disciplinary in nature. This also reflects the composition of the *Council for Social Monitoring*, i.e. of the main authors of the report and the team of experts invited by the *Council*. These bodies comprise economists, demographers, psychologists, sociologists, an insurance specialist and statisticians.

In line with the original idea, research within the *Social Diagnosis* is a panel study – we return to the same households and individuals every few years. The first wave took place in 2000, the next three years later. The subsequent four waves took place every second year. The study is always conducted in March, which is meant to remove seasonal effects. In 2009 and 2011, the wave was extended into April due to sample size.

Not only does this report show Polish society as it is today, but it also enables us to track its changes over the past twelve years, almost from the very beginning of the process of transition if we take into account the earlier studies of the quality of life in Poland (Czapinski, 1998), similarly extended over a longer period of time.

Social Diagnosis focuses not just on studying fleeting opinions, but rather on discovering more fundamental facts, behaviours, attitudes and experiences; it is not just an ordinary descriptive opinion poll, it is a scientific project. And this is not only because of the fact that the authors include scientists, university employees and professors. The deciding factor is the professional technique based on the research experience of the members of the *Council for Social Monitoring* and the team of experts, and – above all – the theoretical context of the particular thematic modules. A majority of variables taken into account in the project follow from the scientifically grounded knowledge of the phenomena under consideration, rather than from intuition, common observations or sponsors' commission. Apart from describing Polish society, an important goal of the *Diagnosis* is to verify scientific hypotheses. In this report, meant for the "universal" reader, theoretical background is of necessity extremely limited. An answer to the open question comes to the fore: what is Polish society like 22 years after system change, 12 years after the first study within the project, and 7 years after the accession of Poland to the European Union?

We hope that the results of the project will provide useful information to politicians, social and local government activists responsible for preparing, implementing and adjusting the reforms that change citizens' living conditions. We would also like to provide the public with reliable information about their everyday life and the changes they are subject to, as the notions individuals may have about their situation as compared to the situation of other people generally tend to be based on selective observations,

stereotypes or theses broadcast by the media, not infrequently false or exaggerated (e.g. those about the deteriorating mental health of society, about a total paralysis of health care services, about retirees and the elderly in general as the social group most adversely affected by the process of transition in economic terms, to name but a few examples). We all deserve a relatively accurate, comprehensive and objective diagnosis of the main sources of our problems in life, of the sense of mental discomfort, uncertainty of tomorrow or difficulties with adapting to new circumstances, as well as a demonstration of the advantages brought about by subsequent system changes, the educational boom and lifestyle changes. Private diagnoses are all too often illusory, defensive, simplified, and generally speaking – erroneous.

The differences between the present study and the previous concern sample size and thematic scope, reflected in the content of surveys (see Annex 1). The sample of households was extended from the original 3005 in 2000 to 12 387 in 2011 (with a resulting increase in the sample of individual respondents from 6625 to 26 453). Several thematic modules were altered in the questionnaires in subsequent study waves (*cf.* questionnaires at www.diagnoza.com).

1.2. Research issues

The project covers a range of aspects related to the situation of households and their individual members. The social factors it takes into account may be divided into three general categories:

- the demographic and social structure of households,
- household living conditions related to their material situation, access to health care services, culture and leisure, education and modern communication technologies,
- quality of life, lifestyle and citizens' individual characteristics.

Indicators that describe the demographic and social structure of households are not analysed separately in this report; they are only used for stratifying the groups of households and population to allow comparison of living conditions and quality of life across various social categories defined by gender, age, education, place of residence, social and professional status, main source of income, marital status, household type (established on the basis of the number of families and the type of the biological family) and other criteria. The analysis and description pertain properly to the living conditions of households and the quality of life of individual citizens in relation to social change, which defines the global context and the general principles that regulate the functioning of society. One of the major problems and questions that accompany any programme of social change is the distribution of the costs and benefits that arise from their implementation for particular social groups along a varied time horizon. Also in this study we were interested to see which categories of households and citizens are able to cope with the new circumstances and take advantage of system transformations, and which social groups are unable to do so and objectively or subjectively experience failures.

Within the project, the division of social indicators into living conditions and the quality of life roughly corresponds to the distinction between the *objective description* of the living circumstances (conditions) and their psychological significance as expressed by the respondent's *subjective assessment* (the quality of life)¹. This substantial distinction is roughly matched by the type of the entity examined and the method of measurement. For living conditions, the examined entity is the household, while for the quality of life – its individual members. Living conditions were measured using the method of direct interview with one representative of the household (best-informed about its situation). The quality of life was measured using a self-completion questionnaire to be filled in by the respondent, i.e. by all available members of the examined households aged 16 and above.

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 assistance the household takes advantage of,
- education of children,
- cultural participation and leisure,
- use of health care system services,
- the situation of the household and its members in the labour market,
- poverty, unemployment, disability and other aspects of social exclusion.

The indicators of the quality of life and lifestyle of individual respondents included:

- general psychological well-being (including the will to live, a sense of happiness, satisfaction with life, symptoms of mental depression),
- satisfaction with particular areas and aspects of life,
- subjective assessment of the material standard of life,
- various types of stress in life (including the Kafkaesque administrative stress related to liaison with public administration, health-related stress, parental stress, financial stress, work-related stress, environmental stress, marital stress, random stressful occurrences such as assault, burglary, arrest),
- somatic symptoms (a measure of distress, treated as a general measure of the health condition),
- strategies for dealing with stress,

¹ This distinction is not entirely sharp or disjunctive. We also used the scales of subjective assessments when describing the living conditions, and in the part devoted to the quality of life we asked not just about assessments, but also about behaviours (e.g. smoking, alcohol abuse) and objective events (e.g. arrest, death of a loved one, home renovation).

- use of the health care system,
- personal finance (including personal income and trust in financial institutions),
- the system of values, lifestyle and individual behaviours and habits (including smoking, alcohol abuse, drug use, religious practices),
- social attitudes and behaviours, including social capital,
- social support,
- civil attitudes and behaviour,
- use of modern communication technologies – computer, the Internet, mobile phone,
- situation on the labour market and professional career,
- unemployment, disability and other aspects of social exclusion.

2. MAIN RESULTS AND CONCLUSIONS

1. The results of this edition of *Social Diagnosis* still show no visible signs of the financial crisis on the standard of living of households and the quality of life of persons aged 16 and above. The majority of indicators of material well-being improved (although the pace of income growth decreased five-fold in comparison with the previous edition of *Social Diagnosis*), as did the indicators of psychological well-being (80% of very and rather happy Poles, the highest level in the history of social research in Poland) and of health. The level of life stress decreased and Polish citizens are in general more content with the majority of important issues.

2. Economic stratification in the Polish society is decreasing. The uneven distribution of equivalent income measured with the Gini coefficient dropped by 2%. Inequalities between the extreme income groups of households have also diminished. The coefficient of decile variation decreased in the period March 2009-March 2011 by 3%. These results suggest that the trend of increasing income inequalities observed in the 90s and at the beginning of this century has changed.

3. In March/April 2011, 4% of households lived on income below the subsistence minimum (PLN 480 per equivalent unit in the household) while in 2009 3.8% of households lived on income below the subsistence minimum (PLN 413). The data from the panel sample of 2009-2011 confirm that the increase in poverty (in general by 0.3 percentage points) was present only in the groups of households receiving social transfers of budget funds (employment allowances and disability pensions) while in other groups a drop was observed, with the largest decrease among the households of farmers.

4. The financial mobility of the Poles did not lessen. In the four last years, over 40% of households from the group of the poorest 20% moved to the group of households with higher income and the same percentage from the group of the richest 20% moved to the group with lower income. This means that the structure of Polish society in terms of the economic dimension is still fairly poorly crystallised.

5. No significant signs of civil society building processes were observed. In comparison with the earlier research conducted by the association Stowarzyszenie Klon/Jawor, only the percentage of volunteers increased (from 16% in 2010 to 20% in 2011). There was also a slight increase in the sensitivity to behaviour against the common good and opinions on democracy

improved a little. However, there was no growth in the indices of general trust, social activity, work to the benefit of the local community and willingness to participate in organisations, all of which have remained constantly low since the beginning of the transformation and are among the lowest in Europe.

6. The voivodeships with the highest standard of living in 2011 were the Mazowieckie, Opolskie and Wielkopolskie Voivodeships, with the lowest standard of living observed in the Warmińsko-Mazurskie, Łódzkie and Dolnośląskie Voivodeships. In terms of the general quality of life index, the best results were recorded in the Mazowieckie, Wielkopolskie, Małopolskie and Pomorskie Voivodeships, while the worst were in the Świętokrzyskie and Lubuskie Voivodeships. As regards the largest towns, the highest number of inhabitants who are happy with their lives was recorded in Warsaw, Toruń, Poznań and Kraków and the lowest in Radom, Kielce, Wałbrzych and Gliwice. The difference between the regions with the highest and the lowest quality of life index deepened.

7. In March 2011, the average net income in the surveyed households amounted to PLN 1295 per person. In the last two years it increased in real terms by 4%. Equivalent net income, which was the real measure of household affluence, increased in real terms by 3.5%. This means that in comparison with the period 2007-2009, the pace of income growth decreased five-fold.

8. In March 2011, the lowest PLN monthly net income needed to make ends meet, as stated by the surveyed households, was PLN 1347 per equivalent unit and PLN 1111 per person. In the period March 2009-March 2011, the equivalent monthly net income needed to make ends meet did not change significantly. This implies a drop in the aspirations of households by approximately 7% in real terms.

9. In March 2011, the surveyed households most often declared that with their current income they could make ends meet with some difficulty (nearly 34% of households), almost 20% of households with difficulty and nearly 18% with great difficulty. In the period 2007-2011, the percentage of households able to make ends meet with great difficulty dropped by more than 5 percentage points and in last two years only by less

than 1 percentage point, which is an insignificant change.

10. In relation to the year 2000, there was a considerable drop in the percentage of households declaring that with their current income they could make ends meet with great difficulty (from 31% to 18%) and an equally considerable increase in the percentage of households which could make ends meet rather easily (from 12% to 23%).

11. When assessing the manner of managing funds in March 2011, households mostly stated that they lived frugally and thus could afford everything (over 37% of households), and then that they lived very frugally in order to save money for important purchases (almost 21% of households). In last two years there was also a high increase in the percentage of households living very frugally in order to save money for important purchases (by over 5 percentage points).

12. In relation to the year 2000, there was a considerable decrease in the percentage of households declaring that they could afford the cheapest food but had no money to buy clothes (by 6 percentage points), with a simultaneous increase in the percentage of households which lived frugally and thus could afford everything (by 10 percentage points) and which could afford everything and made savings for the future (by 7 percentage points).

13. In March 2011, around 26% of households declared that their regular income was not sufficient to meet their current needs. In last two years, the percentage of such households dropped by over 1 percentage point and in relation to 1993 by 48 percentage points.

14. In March 2011, households mostly declared that when their income was not sufficient to meet their current needs they limited their current needs (over 86% of households with insufficient income), used the assistance of relatives (over 37% of households) or took out loans (over 31% of households). Only in 16% of households in this situation did one of the household members take up an additional job. In the period 2009-2011, the highest increase was observed in the percentage of households which – when their regular income was not sufficient to meet their current needs – limited their current needs or used the assistance of the Church or social assistance (by over 1 percentage point for each type of these solutions).

15. The percentage of households which receive external assistance in any form was 10.9%, which is almost as much as two years earlier (10.7%). However, in relation to the level from the beginning of this century there was an increase in the percentage of households receiving all three types of assistance: in the case of financial

assistance from 8% to 10.2%, in the form of goods from 4.9% to 6.3% and in the form of services from 2.6% to 3.8%. In comparison with the year 2000, there was a decline in the percentage of households receiving external assistance by 3 percentage points. However, the frequency of specific type of assistance use did not change.

16. The households which usually received external assistance included households with unearned income (almost 50%), households of pensioners, non-family multi-person and single-person households, married couples with many children and households residing in the Warmińsko-Mazurskie Voivodeship (from 17% to 25%), while married couples without children or with one child used external assistance least often (6%), as did households of self-employed persons (5%).

17. In general, this type of assistance was received by the poorest households. However, in some groups there was a considerable percentage of fairly affluent households (above the third quartile of equivalent income) that used external assistance. For instance, in 2011 among the households with unearned income the percentage of such households amounted to as much as 1/3 and in the Kujawsko-Pomorskie Voivodeship to over 7%.

18. In March 2011, over 27% of households stated that their income situation had worsened in comparison with that 2 years earlier, and nearly 62% stated that it had remained unchanged. The percentage of pessimistic assessments was lower by nearly 9 percentage points in comparison with 2009.

19. In March 2011, households stated that in the previous year they most often could not afford to satisfy their nutritional needs for financial reasons as regards fish and fish products (almost 20%), then confectionaries and stimulants (around 16% and over 15% respectively), meat and poultry and fruit and fruit preserves (around 13% and over 12% respectively). In the period 2009-2011, we observe a decline in households financial difficulties in terms of satisfying their nutritional needs apart from the needs concerning sugar, vegetables and vegetable preserves (increase in the percentage of households with such difficulties by over 1 and nearly 1 percentage point respectively). A decisive improvement was observed in this period mainly with respect to confectionaries, stimulants and meat and poultry products (the decline in the percentage of households unable to satisfy their nutritional needs in this scope for

financial reasons was at about 2 percentage points in each case).

20. In comparison with the beginning of this century, the most significant falls concerned the percentage of households which could not afford a sufficient amount of stimulants (from 54% to 15%) and fish and fish products (from 37% to 19%). In relation to other food items, excluding sugar and milk, also a considerable drop in terms of the households' inability to satisfy such needs was observed.

21. In March 2011, around 62% of households stated that their ability to meet their nutritional needs in comparison with the situation two years earlier had remained unchanged, around 31% declared that it had worsened and around 7% that it had improved. In comparison to the opinions given in March 2009, there was a decline in both negative (by 3 percentage points) as well as positive opinions (by nearly 5 percentage points).

22. Among the consumer durables indicated in the survey, in March 2011 the most common were an automatic washing machine and paid satellite or cable TV. Only over 9% of households did not have an automatic washing machine, while in the case of paid satellite or cable TV this percentage amounted to just about 30%. The consumer durables owned by households least often included a motorboat (below 1%), a summer house (below 5%), a garden plot (nearly 12%) and a home cinema set (nearly 18%). In March 2011, the consumer durables which households did not have due to the lack of money for their purchase included mainly a summer house and a garden plot (40% and 30% respectively among households which did not have such goods due to financial reasons). Over the last two years there was a considerable increase in the level of consumer durables owned by households, except for landline phones and desktop computers, which is connected with the fact that these are being replaced with mobile phones and portables computers.

23. In the period 2009-2011, only in the case of an LCD or plasma TV set and a DVD player was there a significant increase in the percentage of households which could not afford them among households which did not have such items. However, this increase is an effect only of the rise in the percentage of households which would like to own such consumer durables, since the percentage of households that did not have these consumer durables for financial reasons in the entire surveyed population decreased over the last two years in the case of all indicated consumer durables.

24. In relation to the beginning of this century, the fastest increase was observed as regards access to the Internet, microwave ovens, computers, automatic washing machines, cars and dishwashers.

25. In March 2011, nearly 63% of households did not have any savings. Among the households with savings there are visibly more households with an equivalent to between a household's monthly income and a 3-month income (over 33% of households). In the period from March 2007 to March 2011, there was a considerable increase in the percentage of households with savings (by over 9 percentage points). In the last two years we observed an increase in the percentage of households with savings by over 4 percentage points.

26. In comparison with the year 2000, the percentage of households with savings increased by over 50% though the amount of savings in relation to income did not change much.

27. Almost 68% of households which in March 2011 had savings kept them in the form of bank deposits in PLN and nearly 42% of them in cash. During the last two years the percentage of households with savings increased considerably only in the groups of households with savings in cash and in the form of shares and stocks in private joint-stock companies.

28. In comparison with the year 2000, in the group of households with savings there was an increase in the percentage of households with savings in cash (from 31% to 42%) and a decline among households with bank deposits (from 78% to 68%).

29. Households which in March 2011 declared savings most often set money aside as a reserve for unexpected events (over 60%), as a security for old age (over 35%) and as a reserve for current consumer needs (over 33%). In the period 2009-2011, there was a significant increase in the amount of savings only in the case of funds set aside as a reserve for current consumer needs (by almost 3 percentage points).

30. In relation to the year 2000, there was a drop in the percentage of households saving as a reserve for unexpected events (from 79% to 60% of households with savings), as a security for old age (from 45% to 35%), for the purpose of renovating the apartment (from 38% to 24%) and for medical treatment (from 45% to 23%).

31. In March 2011, over 39% of households declared they had loans and credits. The debt of households was most often above the amount equivalent to their yearly income (debt in this amount was declared by almost 23% of households in debt). In last two years the percentage of

households with loans or credits dropped by over 4 percentage points. In comparison with the beginning of this century, there was no change in the percentage of households in debt though the amount of debt in relation to income increased significantly.

32. Around 90% of households in debt used external financing provided by banks and nearly 13% by other institutions. Only less than 6% of households owed money to private persons. In last two years there was a considerable increase in the percentage of households with loans from private persons (by nearly 2 percentage points).

33. In relation to the beginning of this century, in the group of households in debt there was an increase in the percentage of households with bank loans (from 73% to 90%) and a decrease in the percentage of households with loans from other institutions and private persons.

34. Over 37% of households taking part in the survey in March 2011 used credits and loans to finance the purchase of consumer durables, around 32% to finance renovation of the house or apartment, and around 18% to purchase a house or an apartment. In last two years there was a considerable increase in the percentage of households with credits and loans taken out only to repay earlier debts and to finance current consumer needs (over 1 percentage point in each case).

35. In the last 11 years, credits and loans increasingly rarely financed medical treatment, regular payments and purchase of consumer durables, and more and more often the purchase of an apartment or a house.

36. When assessing the changes in material affluence in March 2011 in comparison to the situation two years earlier, nearly 57% of households declared that their situation had remained unchanged and over 32% of them that it had worsened. In relation to the opinions from March 2009, there was a considerable drop in the percentage of households assessing these changes both positively (by nearly 4 percentage points) as well as negatively (by nearly 2 percentage points).

37. In 2011, the households where the head was aged 16-24, 25-34, 35-44 and 44-59, with an analogical status on the labour market and income, were characterised by a similar tendency to save up. In 2009, the probability of having savings was considerably higher in the group of households with a household head aged 25-34 and 35-44 than in the age group of 45-59. In both these periods the highest probability of having savings was observed in the households with a household head aged 60 and above. At present, the probability of having savings in such households is considerably higher than in other age groups and additionally, the

differences between these households and the households with a head aged 45-59 are increasing (the probability higher by 37% in 2011 in comparison with around 25% in 2009).

38. If a household head is aged 25-34 or 35-44, the probability of having a liability is by around 60% higher than in the case of households with a household head aged 45-59. This may result from the willingness to meet consumer needs typical for this stage of life (purchase of consumer durables, an apartment). The households whose heads are in the youngest group (up to 24 years) are yet not sufficiently reliable for financial institutions to be able to take out loans. Additionally, this group is most affected by the restrictions in credit policy as compared with the pre-crisis situation. The availability of credit, measured with the probability of having it, was by over 60% lower in such households than in the households with the head aged 45-59.

39. The average amount of household savings in relation to income increased in the period 2007-2009 from 4.51 of monthly income in 2007 to 4.86 in 2009. In the period 2009-2011, the average amount of savings decreased slightly from 4.86 to 4.72. The highest savings in relation to income were recorded in the households with savings in the form of shares and stocks in private joint stock companies, units in investment funds and also in the form of PLN bank deposits, which are also the most common form of savings. Despite a large group of households saving money in the form of cash, this form of savings concerns only small amounts of funds and their amount is equivalent to only twice the amount of households monthly income.

40. In 2011, the highest average amount of savings in relation to income was recorded in households saving for the purchase of an apartment or a house. On the other hand, the lowest amount of savings was recorded in the households which save money as a reserve for current expenses and regular payments.

41. In 2007, the average amount of debt was at the level of income obtained by a household during 6.6 of a month, two years later this value increased to 9.6 of the monthly income and in 2011 to 15.1 of the monthly income.

42. Among households in debt, the highest average amount concerns bank debts, with the average equivalent to over 16 times the household's monthly income. The average debt to other financial institutions or with private persons is nearly five times higher than the household monthly income.

43. In 2011, the average highest amount of debt in relation to income was undoubtedly recorded in

the households financing the purchase of an apartment. Two years earlier, 60% of households with debts incurred only for this purpose had debt exceeding their yearly income and in 2011 this percentage was around 65%. In the second position in terms of debt to income were the households with debts incurred to repay their earlier debts. The average amounts of debts incurred for the purpose of financing current consumer needs are relatively low.

44. In March 2011, over 4% of surveyed households did not live alone. In the last two years this percentage dropped by over 2 percentage points.

45. In March 2011, the average useable floor area of an apartment per person was nearly 34 m² among the households taking part in the research. In the last two years this value increased by around 2.5 m².

46. As regards the conveniences and amenities indicated in the survey, in March 2011 the most common was access to a water supply system with only 2.6% of households without access. Households most often did not have access to hot running water (almost 23%). In last two years the percentage of dwellings with conveniences and amenities increased slightly, apart from access to hot running water.

47. The analysis of housing conditions in the period 2000-2011 in whole samples has demonstrated a systematic drop in the percentage of households with no access to a water supply system (from 5.5% to 2.6%), no flushing toilet (from 11.2% to 5.1%), no bathtub or shower (from 13.8% to 6.3%) and in the percentage of dwellings without hot running water (from 29.6% to 22.8%).

48. In March 2011, most households had individual or collective central heating (nearly 45% and nearly 42% of households respectively). However, still over 13% of dwellings were heated with fuel-fired furnaces. In the period 2009-2011, we observed a drop in the percentage of dwellings with fire-fuelled furnaces, which were replaced with central heating (by over 1 percentage point).

49. In March 2011, over 7% of households had outstanding payments for their apartment (rent) and almost 4% for gas and energy. In last two years the percentage of households with outstanding payments for the apartment, gas and energy did not change in a significantly.

50. In March 2011, nearly 3% of households did not make their home loan payments on time. In relation to 2009, in 2011 we observe an increase in

the percentage of households with outstanding home loan payments by over 1 percentage point.

51. The majority of households taking part in the study (over 79%) stated in March 2011 that their housing conditions had remained unchanged in relation to their situation in March 2009. Around 9% of households stated that their housing conditions had worsened and about 10% that they had improved. In relation to the opinions from March 2009, both the percentage of households giving positive opinions and of those giving negative opinions decreased (by around 4 percentage points and by almost 2 percentage points respectively).

52. The National Bank of Poland enjoys the greatest trust (74% of positive opinions among the respondents with an opinion on this matter).

53. The financial institutions enjoying the second greatest degree of trust were commercial banks (41% of positive opinions among the respondents with an opinion on this matter).

54. The attitude towards other financial institutions is very negative. After a systematic increase in trust in such institutions in the period 2003-2007, in 2009 the percentage dramatically declined as a result of the crisis on the financial markets, and this has in general not changed.

55. There was a significant increase in attendance at kindergartens and nurseries by children aged 0-6 (up to 29% at the national level), and the access to such services improved in all place of residence classes and in particular in towns with more than 500,000 inhabitants and in rural areas. Children from towns – and from the largest towns in particular – used childcare units still more often (48%) than children living in rural areas (20%). However, the gap between the towns, including the largest ones, and rural areas in access to kindergartens and nurseries diminished. Similarly as in the previous years, a vast majority of children used state nurseries and kindergartens (84.7% at the national level) but the significance of non-public units is increasing.

56. In 2011, unlike in the previous years, significant territorial differences in school attendance for youth aged 16-19 were observed (both as regards the full-time, extra-mural and extension mode). The percentage of youth at this age attending any type of school slightly increased in towns with more than 500,000 inhabitants and in towns with 20,000-100,000 inhabitants to around

98% but decreased in the remaining types of towns and in rural areas (86%-93%). No more than 3% of youth attended non-public schools regardless of their place of residence, which is considerably less than in the case of primary and lower secondary schools.

57. The percentage of persons aged 20-24 using educational services within or outside the school system slightly decreased to nearly 59%. The use of educational services in this age group changed significantly in terms of its territorial distribution. There was a considerable decrease in the use of educational services in towns with more than 500,000 inhabitants, with 100,000-200,000 inhabitants and with 20,000-100,000 inhabitants, while in large towns (200,000-500,000 inhabitants) this value was stable and it slightly increased in the smallest towns (below 20,000 inhabitants) and in rural areas. The gap between the largest towns and rural areas visibly decreased (at present from 74% to 49%). At this level of education, non-public units are gaining in importance.

58. In the age group of 20-24, there are significant differences between women and men, with women using educational services visibly more often than men (68% of women in comparison with 52% of men). This growing tendency in women's educational activity is gradually slowing down. However, the persistent decrease in the educational activity of men aged 20-24 amplified the differences in the use of educational services among the genders. The increase in the educational activity of women aged 20-24 from rural areas is undoubtedly a positive phenomenon, particularly as the general growing tendency in towns stopped, especially in the largest and medium-sized towns. The persistent decrease in the educational activity of men in this age group both in towns (apart from the smallest towns) and in rural areas has deepened the gap in the educational activity of women and men, particularly in rural areas and in the largest towns.

59. Educational activity of adult persons is still of a selective nature in terms of age, gender, place of residence as well as educational level and status on the labour market. Only 15% of persons aged 25-29 and 4% of persons aged 30-39 used educational services in 2011 and these values are lower than the ones observed in 2009, which means that the earlier tendencies shifted. Persons from the older age groups do not use educational services almost at all. Employed and unemployed persons engage in educational activity more often than persons who are professionally inactive, and persons with higher education do so more often than persons with lower education.

60. The drop in the percentage of persons aged 25-29 using educational services is an effect

mainly of the worse values for towns with 100,000-200,000 inhabitants and with 20,000-100,000 inhabitants, although a decrease was observed in all place of residence classes. In towns, this index is below 27% in comparison to only 9% in rural areas. No increase in the differences between urban and rural areas was observed. Territorial differences in the level of educational activity were still present in the age group of 30-39 (in towns 3-7% and in rural areas 2%).

61. Women aged 25-29 still increased their level of human capital more often than men from this age group (18% of women in comparison to 13% of men), and the same is true for women aged 30-39 (6% of women in relation to nearly 4% of men). In the group of women aged 25-29, there was a slight increase in territorial disproportions. The percentage of women residing in rural areas and using educational services is 2.75 times lower than the highest percentage for towns (29%). In the case of men, the disproportions between towns and rural areas are slightly lower than in the previous survey wave. Only 10% of the inhabitants of rural areas used educational services within the school system or outside it, in relation to 29% being the maximum value for towns. Medium-sized and small towns stand out in a negative way, particularly in the case of men.

62. Migration levels connected with education are slight. Migration for educational reasons concerned almost only young persons - mostly students living in large towns (mainly academic centres). Educational activity abroad is often combined with work. It is hard to state whether work abroad is undertaken to earn one's living abroad while studying or whether it is rather an additional activity. The increase of the employment rate in the period 2009-2011 was relatively not that painful for households since the percentage of households in the worst situation, that is households with unemployed persons and no employed persons, further diminished.

63. The continuing growth of the percentage of persons working as specialists results not only from the growing demand for work performed by persons with higher qualifications but also from the growing supply of such persons, which is also related to the fact that the generation now entering the labour market is the well-educated generation of the early 80s baby boom. In this context, the slowdown on the labour market in the period 2009-2011 had impact also on higher unemployment among persons who, before losing their job, worked as specialists and managers.

64. The level of human capital decreases with age. The highest level of human capital was recorded for persons aged 15-34 and the lowest among persons aged 45 and more. The discrepancy

between persons in the non-mobile age and persons aged 35-44 increases with time, though the latter group reduced the distance to the youngest persons. When the gender of respondents was included in the analysis, it turned out that in all years under analysis, i.e. in year 2007, 2009 and 2011, women were characterised by a higher level of human capital among persons aged 15-34 and 35-44, and men among persons aged 45 and above. The higher level of human capital among women aged 15-44 is undoubtedly a consequence of the higher number of years spent by women in formal education and the higher rate of schooling at the university level. The higher level of human capital among men aged 45 and above in comparison to women may result from the differences in the educational level in older age groups, to the disadvantage of women, as well as from the fact that women leave the labour market earlier than men, hence they relatively earlier lose contact with innovations which they would have learnt to use if present on the labour market.

65. The smaller the place of residence class, the lower the level of human capital. Inhabitants of the largest towns were characterised by the highest level of human capital and inhabitants of rural areas with the lowest, although in the period under analysis the relatively greatest improvement in the level of human capital was observed in the case of inhabitants of rural areas. The growing tendency concerns also inhabitants of other place of residence classes, except for towns with 100,000-200,000 inhabitants.

66. Persons who were professionally active demonstrate a higher level of human capital than persons who are professionally inactive, and among professionally active persons a higher level of human capital was recorded for employed persons. The gap between those who are professionally active and those professionally inactive increased. In the period 2009-2011 there was a significant improvement in the level of human capital among unemployed persons, leading to a visible reduction in the differences between employed and unemployed persons. Professional activity contributes to maintaining the human capital level as well as to gaining new skills. Staying outside the labour market usually leads to gradual depreciation of qualifications and skills and contributes to the decrease in the level of human capital, which in turn may be an obstacle to becoming professionally active.

67. Women were characterised by a higher level of human capital among employed and unemployed persons (in both periods under analysis) while among persons who were professionally inactive it was men. Moreover, in 2011 unemployed women were characterised by a higher level of human capital not only in

comparison with unemployed men but also employed men.

68. There are four stable groups of persons in terms of the status on the labour market and the level of human capital. The highest level of human capital was recorded for students and the second group comprises of public sector employees, private entrepreneurs and private sector employees (listed from the lowest to the highest value of this indicator). The third group, with a considerably lower level of human capital, consists of unemployed persons and other professionally inactive persons, while retirees and pensioners belong to the fourth group with the lowest level of this resource. The relative improvement in the level of human capital concerns mainly the group of unemployed persons and other professionally inactive persons and then – though to a lesser extent – farmers.

69. In March 2011, a vast majority of households wanted their children to attain higher education at the level of a Master's degree (nearly 69%). Over 20% of households considered technical or vocational secondary education as a sufficient educational level for their children and nearly 15% thought so of the level of higher vocational education with a Bachelor's degree. The average chances of attaining the above-mentioned education were assessed by households as rather high.

70. In the school year 2010/2011, households most often were forced to cancel children's extra-curricular classes and private lessons (over 14% and over 12% of households, respectively) for financial reasons. The need to change schools for one with lower or no fees was least common (below 1% of households). Over the last two years, there were no significant changes in the frequency of household cancellations and restrictions in the field of children's education.

71. In March 2011, nearly 78% of households stated that the level of child education need satisfaction had remained unchanged in comparison with two years earlier, around 16% felt it had worsened and nearly 6% that it had improved. In relation to year 2009, the percentage of negative opinions increased, with a simultaneous decline in the percentage of positive opinions.

72. In March 2011, nearly 29% of households declared that in the previous year they could not afford theatre, opera, operetta, philharmonic concert and other concert, over 26% could not afford cinema, and over 23% a visit to a museum or an exhibition. In comparison with 2009, the

scale of households' financial difficulties as regards selected forms of participation in culture did not change in 2011.

73. In the last year, nearly 23% of households could not afford to buy a book for financial reasons. In the last two years the percentage of such households diminished by 1 percentage point.

74. In 2011, over 19% of households had to stop buying newspapers and magazines for financial reasons. No change was recorded in this matter over last two years.

75. In March 2011, households least often declared having no need to buy the press (over 6% of households) and most often having no need to visit a museum or an exhibition (nearly 44% of households). No need to go to the theatre, opera, operetta, concert hall or concert was reported by nearly 42% of households; almost 27% of households did not have the need to go to the cinema and 11% of them to buy a book. Over last two years changes in the frequency of the households' lack of interest in selected forms of participation in culture were observed only in the case of purchase of books (increase by over 1 percentage point). At the same time, the need to go to the cinema increased among the households taking part in the survey (by over 1 percentage point).

76. In March 2011, nearly 13% of households declared they had no books at all. In last two years there was a slight increase in the percentage of such households.

77. Households most often (more than 79%) were of the opinion that the extent to which their cultural needs were satisfied had remained unchanged over last two years. By contrast, nearly 17% of households think that the situation in this respect has worsened, and only 4% think that it has improved. The percentage of households that negatively evaluate the extent to which their cultural needs are met decreased significantly (by more than 3 percentage points) in comparison with March 2009.

78. The percentage of households unable to afford leisure trips in 2011 was between over 38% in the case of collective trips for children (summer camps, etc.) and nearly 47% in the case of adults' holidays. In last two years there was a considerable decrease in the frequency of situations in which households could not afford family trips by over 2 percentage points.

79. In 2011, nearly 73% of households stated that the extent to which their leisure needs are satisfied had remained unchanged in comparison

with the situation two years earlier. Nearly 24% of households think that the situation in this respect has worsened, and only 4% think that it has improved. However, the overall situation is slightly better than two years ago (decrease in the percentage of negative opinions by over 1 percentage point).

80. As reported by households in March 2011, in the previous year more than 91% used healthcare facilities funded by the National Health Fund (Narodowy Fundusz Zdrowia, NFZ), but also nearly half of them used services provided by units for which they paid themselves, and only over 6% used the services paid for by employers who purchased a health care insurance plan. In last two years the frequency in households' use of specified types of health care units did not change considerably.

81. On average, the households with a given type of expenses spent the greatest amount on outpatient treatment and examinations (PLN 550), on purchase of medicines (PLN 375), and so-called "gifts of gratitude"; i.e. bribes, used to obtain better or quicker healthcare (e.g. greater interest in the patient's problems, more care for their health, choice of the surgeon or the physician taking care of the patient in hospital, accelerating the service, etc.) amounted to PLN 311 on average. The average payment in a public hospital did not exceed PLN 300, and the amount of a token of true gratitude for care already received amounted to PLN 142 on average. In comparison with the earlier period only the fees in public hospitals increased in real terms. Other expenses, despite the increase in their nominal value (e.g. gifts or outpatient services), in real terms remained at the same level as two and four years earlier. A slight decrease in the costs of medicines was observed (both in real terms and in their nominal value).

82. The amount of specific expenses varied depending on the socio-demographic group. The households which comparatively spent most on medical treatment and examinations were those of self-employed persons while pensioners spent more than other households on medicines. Farmers spent on average the same amount on outpatient services as the households of retirees though they spent much less than retirees on medicines. As regards the types of households, the expenses on outpatient healthcare and medicines were fairly similar, except for non-family households which spent considerably less in both categories. In terms of the place of residence class, inhabitants of the largest towns have the highest expenses while inhabitants of small towns and rural areas spend least. In the case of fees for outpatient services, the

highest private expenses were recorded in the Mazowieckie and the lowest in the Warmińsko-Mazurskie Voivodeship (three times lower). As regards the expenses for medicines, the highest amounts were observed in the Śląskie and the lowest in the Warmińsko-Mazurskie Voivodeship.

83. In the year preceding the survey, the households which needed to buy medicines or healthcare services mostly could not afford dental treatment (in more than 23% of households), rehabilitation treatment (in nearly 21% of households) and purchase of prescribed or recommended medicines (in more than 19% of households). In the period 2009-2011, there was a considerable decrease in the percentage of households which could not afford prescribed or recommended medicines, pay for dental prostheses, go to a sanatorium or pay for dental treatment (by around 2, nearly 2 and over 1 percentage point, respectively). By contrast, in the same period there was an increase by over 1 percentage point in the share of households which could not afford to visit a doctor.

84. In March 2011, households mostly declared that the extent to which their health needs were met in comparison with the situation in 2009 had remained unchanged (around 72% of households). Nearly 26% of households assessed changes in this field negatively and only slightly more than 2% expressed positive opinions. These opinions were not significantly different from that formulated in 2009.

85. The share of persons registered in labour offices, falling under the definition of unemployment applied in the Labour Force Survey, remains stable at around 60%. With more and more relatively more active job seekers becoming unemployed as a result of the economic slowdown, we observed in the group of unemployed persons a decrease in the percentage of persons not interested in job seeking (to 24%), and an increase in the percentage of persons working despite being registered in the labour office (to 14%).

86. If we subtract from the group of the registered unemployed those persons who do not seek employment, those who are not ready to start a job and those who work and receive monthly net income of at least PLN 1034, the unemployment rate in the sample drops from 10.9% to 6.5% of persons of working age.

87. The relation between certain individual characteristics (such as psychological well-being, social relations, strategies of dealing with problems, income) and the loss of employment is

of a mutual nature. The loss of employment has a negative impact on psychological well-being, damages social relations, undermines task-oriented problem solving strategy and – in particular – reduces the amount of income. Persons with lower psychological well-being tend to earn less, apply the task-oriented problem solving strategy less often and have worse social relations..

88. Around 40% of job seekers are not unemployed but are already working or only “temporarily” professionally inactive. In recent years the percentage of persons working and seeking other employment at the same time increased to 6% of all working persons.

89. Among persons aged above 24, the share of those employed on the basis of contracts other than employment contracts for a specified period of time, for an unspecified period of time and based on self-employment is marginal and it is also not dominant among persons aged 18-24.

90. Employment contracts for a specified period of time are most popular among persons aged below 25 (around 44%), while the majority of contracts of persons aged 25-34 are employment contracts for a specified period of time (55%). Self-employment concerns around 11% of persons aged 25-34.

91. The analysis of the changes in the situation on the labour market as regards persons employed based on contracts for a specified period of time shows that such contracts improve the chances of finding a more stable job as well as protect against unemployment. 40% of persons employed based on a contract for a specified period of time in 2009 two years later found employment based on a contract for an unspecified period of time. Only 13% of unemployed persons achieved the same. Moreover, 32% of persons who had been unemployed in 2009 were still unemployed in 2011 while only 8% of persons employed in 2009 on the basis of a contract for a specified period of time did not have work two years later, and 10% in the case of employment based on a contract for specific work.

92. The increase in the activity of persons aged 45-59, unprecedented since 1989, resulted mainly from the ending of the tendency to “flee the labour market” typical for this age group in earlier years. The persons who already were receiving old age or disability support rarely returned to the labour market. It seems that the increase in the activity of persons in non-mobile age follows partly from the relatively slight impact of the economic slowdown on the job opportunities available for such persons. Higher chances of finding a job translate also into a rather moderate increase in the percentage of persons who instead of less available disability

support and old age pension obtained other types of support.

93. Despite the extended maternity leave available since 2011, further extension of paid maternity and child care leave still remains the solution seen by women as the best answer to facilitating child rearing and professional work. By contrast, men preferred slightly more the possibility of more flexible work hours. The third solution which received most positive opinions concerned improved access to institutional child care for children under 7.

94. First-time parents and parents with more than two children evidently preferred longer paid leaves and an increase in the amount of family allowances. Fathers of children at pre-school age or older children prefer solutions consisting of improved child care outside the home. Mothers seem to more often choose solutions which facilitate flexible work hours while keeping work separate from domestic duties.

95. Persons who returned to Poland after a stay abroad in the Western Europe in the period 2009-2011 did so in a way which was more planned and organised than in the previous period. Many respondents returning to Poland in the period 2009-2011 (9%) declared that such a return was only temporary.

96. The period 2005-2007 was crucial in terms of gaining migration experience. 10% of persons at present aged 25-34 declare that they then gained the experience connected with going abroad for work. In subsequent years such travels were not that popular though persons with secondary or vocational education from small and medium-sized towns continued to go abroad (probably the so-called circular migration).

97. The situation of persons returning from abroad after economic migration varies with gender. Persons returning to Poland in general are visibly more active on the labour market than persons who did not go abroad though men work and set up companies more often. Unemployment among women returning to Poland is three times higher than among all women.

98. There was no significant increase in the declarations of further work-related travels abroad. The more stable situation on the labour markets in the Western Europe and the opening of the labour markets in Germany and Austria encouraged such declarations slightly more than in 2009 only among unemployed persons with vocational education. Germany was definitely the most popular direction among persons who were planning a stay abroad within the next 2 years.

99. Professional training among adult persons; that is, participation in various activities aimed at

gaining new qualifications, was rather limited. In the period 2009-2011, only around 11% of persons aged 25 and above participated in any activity connected with gaining new professional qualifications or other skills, which is slightly less than in the period 2005-2007 and 2007-2009.

100. Among the persons gaining new qualifications in the period 2009-2011, women still dominated (around 54%) and their share increased slightly in relation to the previous survey wave. This group still includes mainly young persons. Around 47% are aged 25-34 while 17% and 8% are aged 45-54 and 55 or more respectively. Only one in five persons gaining new professional qualifications resided in rural areas. Among the persons gaining new qualifications in towns, slightly more than 50% still lived in towns with more than 100,000 inhabitants. Around 62% of persons gaining new qualifications in last two years had higher or post-secondary education while nearly 3% had primary or lower education.

101. Persons aged 25 and above usually gain new professional qualifications or other skills by attending courses financed by their employer (around 41%). Around 15% of respondents indicated schools or higher education schools (excluding PhD studies). Participation in self-financed training courses was slightly more often than in the period 2007-2009 (13% in comparison with 10%), and twice higher than participation in the courses co-financed by the European Social Fund (ESF). Again 8% of respondents stated that they had participated in educational activity connected with gaining other skills, such as driving courses, and only around 6% had attended courses financed by the Labour Fund.

102. The extent of taking various forms of training shows also the selective nature of this process. Most respondents mention activities financed by their employer, which reveals that new qualifications are gained mainly by employed persons.

103. Participation in activities aimed at gaining new professional qualifications increased also the chances of professionally inactive and unemployed persons finding a job. Professional activation of the professionally inactive was clearly more visible among persons who participated in educational activity though it led to the increase in the percentage of unemployed among persons participating in professional training. The differences in status changes on the labour market between persons gaining new professional qualifications and others are higher for men, indicating that professional training is more important for their labour market status than in the previous survey wave.

104. In the period 2009-2011, income of persons from both groups of respondents varies visibly to the advantage of persons participating in professional training, which is surely also related with the above-mentioned selective nature of educational activity in relation to educational level, which is an important determinant of income amount. The gap between the average income of persons who participate in educational activity and those who do not is greater in comparison with the period 2007-2009. In the period 2009-2011 the dynamics of changes in the level of net personal income of working persons, slower than in the period 2007-2009, are clearly varied to the disadvantage of persons who do not participate in educational activity. The average personal net income of persons participating in educational activity during last two years increased by 22% in comparison with 7% in the case of those who do not participate in any. The slower dynamics of the increase in income in the period 2009-2011 are connected with the economic slowdown of recent years particularly in the case of persons who do not participate in any educational activity,

105. Women who gained new qualifications during the last two years have lower average income in comparison with men who also participated in educational activity, and the increase in their income was also smaller. In the period 2009-2011, personal income of men in this group increased faster than women's (24% in comparison with 21%) and the income gap between men and women increased to 18%. By contrast, in the group of persons who did not participate in educational activity, income increased considerably more slowly than that of persons who gained new qualifications. However, such increase was greater for women than for men (8% in comparison with 5%), which translated into a smaller income gap of 19%.

106. The dynamics of the quartiles of distribution as regards income in both groups of respondents point to a greater beneficial impact of educational activity on the distribution of income for men than in the period 2007-2009. In the distribution of income of men who participated in educational activity, the greatest growth was recorded for the median and then for the third quartile, unlike in the period 2007-2009 when the greatest growth was observed in the case of the first quartile. This leads to a greater stratification of income of men participating in professional training while just the opposite is true in the case of men who do not participate in any educational activity as their income was less diversified in comparison with the period 2007-2009.

107. In the case of women, the benefits of improved qualifications concerned only the lowest income groups (a slight increase in the first

quartile). The result, which greatly differs from the one obtained in the period 2007-2009, concerns the increase in the income of women who did not participate in any educational activity being greater than in the case of women who made such an effort. This seems to show a relative decrease of benefits related to higher human capital at a certain level of its saturation.

108. Having qualifications not adjusted to the employers' requirements is in general assessed by respondents as not that significant in the context of reasons for unemployment. Among persons who did not work professionally in the period 2007-2011 only around 3% indicated the lack of qualifications required by employers as a related reason, and the majority of such answers were given by women. In this group, around 18% of respondents had primary or lower education and as much as 48% had basic vocational education. The share of persons of non-mobile age (aged 45 and more) was lower here than the share of persons aged below 30 (around 28% in comparison with 49%). Persons who did not work due to the lack of appropriate qualifications lived mainly in rural areas (around 43%) and in towns with up to 100,000 inhabitants (around 32%). What is significant is that only around 27% of persons from this group participated in any educational activity related to gaining new qualifications in the two years preceding this survey wave.

109. Among the basic reasons for unemployment in the period 2007-2011, age-related issues were the most significant, with education in the youngest groups and old-age pension in the oldest groups. Also, health and difficulties finding a job were indicated relatively often. The older the person, the more important is the issue of caring for household members who require such care. Although this reason was only the fifth more commonly indicated in the ranking based on the most frequent answers among persons aged 55 and above, it turned out to be much more common than the issue of housekeeping.

110. Around half of the persons who had not worked at all did not want to work in the period 2005-2009 and 2007-2011 (with more such answers in the period 2007-2011). Persons aged 55 and above dominated in this group of respondents (78-80%).

111. As regards the conditions for starting a job, the possibility of working part-time and flexible work hours were the ones indicated relatively often, with almost 10% of respondents indicating both of them. The possibility of working from home was marked less often (7%).

112. Women from younger and older age groups decisively dominated among the persons who marked the possibility of working part-time,

working from home, having flexible work hours, receiving more support from other household members in terms of family duties or having the possibility of using proper care services for the children or the sick. Younger women care for children and bring them up while older women care for the elderly or their grandchildren. Among the persons who indicated that they would have taken up a job in the case of retaining social benefits, around a half are persons aged 55 and above and this proportion has been growing.

113. The assessment of life-as-a-whole was found to have continued to improve. At present, this assessment is the highest within the entire period covered by the research and is more than twice as high as in 1993, which was the worst year in this respect. It is also worth stressing that starting from 1994 the increase in this assessment has been extremely systematic.

114. Similarly, the two indicators of will-to-live (lack of suicidal thoughts and the willingness to live) – the most important aspect of psychological well-being – are among the highest in the entire period since 1991.

115. The symptoms of depression were least intensive in the entire period under examination.

116. Also, the sense of happiness increased as compared to 2009 with 80% of respondents declaring it at present, which is the best result since the beginning of measurements. In comparison with 2003, the percentage of unhappy individuals decreased by almost three times (from 4.5% to 1.6%).

117. In comparison with 2009, an increase was recorded in the case of 8 out of 16 domain satisfactions while in the case of 6 we observed a decrease. Satisfaction with the level of security in the place of residence increased most while the highest decrease concerned satisfaction with the situation in the country. Poles are more and more satisfied with their place of residence; an increase by 15% of this indicator was recorded in comparison with year 2000. The greatest number of persons satisfied with where they live was recorded in Gdynia (41%), and the lowest in Kętrzyn (0%) and Radom (1%).

118. The most important factor explaining the Poles' general psychological well-being in the present study turns out to be age similarly to the previous wave. The older a person, the worse their mental condition is, especially when it comes to the symptoms of inadaptability (depression). The second factor in terms of significance for the overall psychological well-being is marriage, the fourth the number of friends, which together with

marriage may be treated as an indicator of social support. The third position, similarly as two years ago, belongs to alcohol abuse. The significance of household income per capita moved from the sixth (in 2009) to the third position. This means that under the circumstances of a slower increase in affluence, material living conditions have again become one of the more important determinants of psychological well-being.

119. Similarly as two years earlier, there were more eudaemonists (38.5%) seeking the meaning of life, than hedonists, who are focused on making life as pleasant as possible (25.3%). The hedonistic attitude to happiness does not contribute to its achievement. Focusing on achieving set objectives and seeking the meaning of life is a much better solution. The lives of eudaemonists are in many respects more successful than the lives of hedonists.

120. This year's study once again confirms the accuracy of the main hypotheses of the onion theory of happiness. Positive changes in psychological well-being are determined almost solely by the internal mechanism of adaptation ("attractor of happiness") that operates most efficiently at the deepest level – the will to live. A decreased level of well-being, particularly at the most superficial level of domain satisfactions, derives from negative changes in one's life.

121. Happy people lead happier lives; for instance, it is rather happiness that brings money than the other way round. Happy people have also more chances to find a regular partner and start a family.

122. Psychological well-being increases as the date of a wedding approaches and then declines in the subsequent years to the level from the period of many years before the wedding. The level of well-being declines rapidly within the first two years after the wedding, and then stabilises over the subsequent two years, only to start declining again after the fourth year to the level experienced the same number of years before the wedding. In other words, there is an almost ideal asymmetry of change in psychological well-being before and after getting married. In this context, though married persons are happier than persons who are single, it is not marriage itself that makes them happier in the long-term perspective.

123. Average monthly declared net personal income for the last quarter amounted to PLN 1811 in the entire sample, and somewhat less in the panel sample (PLN 1749). In comparison to year 2009, there was an increase of 10.8% in the entire sample (by a real 2.8%),

while in the panel sample of 10.3% (2.3% in real terms).

124. Respondents expect that their income will grow by an average of 33%. Two years ago their expectations were slightly higher (42%).

125. Between 2009 and 2011, personal income increased by over two and a half times less than respondents had expected in 2009, and this difference was much greater than in previous years although the optimistic expectations were least common than in 2007. School and university students, the youngest persons, the unemployed, private entrepreneurs and other professionally inactive persons are the groups which were most excessively optimistic in their expectations (78%, 63%, 51%, 43% and 41% respectively). Older persons, retirees and pensioners turned out to have the most realistic views (error below 10%), and have generally already ended their professional career.

126. A Bachelor's degree yields a rate of return which is two and a half times lower than in the case of a Master's degree, and a PhD title increases the rate of return in comparison with the Master's degree by a further 31%. In the last two years alone, the rate of return for PhD studies increased significantly. By contrast, the Master's degree markedly lost in value. It seems that Polish industry and raw material sector is no longer able to absorb the growing masses of graduates with Master's degrees in line with their specialisation. Some have to take up less demanding and less profitable work.

127. Employees in the public sector benefit less from their higher education in comparison with persons having secondary education than private sector employees. This difference between the sectors concerns in particular the Bachelor's degree. In the public sector, the Bachelor's degree nowadays brings no financial profit while in the private sector it yields a rate of return which is slightly lower than in the case of the Master's degree.

128. The rate of return differs depending on the faculty. In recent years there were also considerable changes in the rate of return on investing in the studies at various faculties. At present, studying at a law faculty is most profitable and studies at a faculty of agricultural sciences bring the lowest profit.

129. The Poles are becoming healthier. The intensity of somatic symptoms dropped to the lowest level since the beginning of measurement in 1996. The percentage of respondents who

experienced particular symptoms for at least half a month decreased over the past two years in the entire scale, with the exception of the very rare nosebleeds. The largest decreases concerned the frequency of pains in the chest or heart, pressure on the bladder and strong headaches. Since 2003, we have not recorded an increase in any of the 15 symptoms.

130. One of the risk factors for obesity-related health disorders is the proportion between weight and height (the *Body Mass Index* – BMI). The value of this index for Poland does not look very bad as compared to other selected countries. The greatest number of people who are obese live in the USA and Germany, the least in Switzerland and Romania. In the Czech Republic there are more, and in Slovakia fewer obese people than in Poland, while Poles do not differ from Hungarians or Lithuanians in this respect. As expected, the strongest BMI effect concerns circulation (sudden changes of blood pressure).

131. Also another risk factor; i.e. smoking, is connected with many symptoms of health disorders, although to a slightly lesser extent than excessive weight. The general indicator of somatic symptoms is worse for smokers, and they are less satisfied with their health condition, but in contrast to the effect of obesity, smoking does not increase the risk of a serious disease over the period of one year.

132. Alcohol abuse is a risk factor regarding all 17 measures of health condition. It affects the subjective assessment of one's own health the most but it also adversely affects objective indicators – the intensity of disorder symptoms and the likelihood of a serious disease.

133. Nearly two-thirds of Poles do not do any physical activity. The greatest number of people ride a bicycle (21.4%), while the second position is occupied by football or other team sports in the case of men (13.6%); women prefer aerobics (7.1%).

134. Physical activity, although it provides weaker effects than the risk factors (obesity, smoking and alcohol abuse) serves one's health well. It is most strongly connected with the subjective indicator (satisfaction with one's health). Both men and women, when they actively practise some kind of sport, assess their health as better.

135. The overall level of stress in life was definitely lower in 2011 than two years earlier, and the lowest since 2000. The decline in the level of stress was the same for women and men, with the intensity of stress similar in men and in women throughout the entire study.

136. Among the factors which contribute to high intensity of stress in life are firstly financially dependent children, and then age, activity as an employed person and being an entrepreneur. The factors which lessen stress in life include: being single, being a widow/widower, higher income, living in rural areas and being a retiree.

137. Since 2005, the task-oriented strategy of dealing with stress in life has grown in popularity and in the last survey the use of emotional strategy dropped in comparison with the previous years, especially as regards consoling oneself "that it could have been worse" and praying to God for help.

138. Strategies of dealing with problems have an impact on the level of psychological well-being, regardless of the level of stress in life. Persons who apply the task-oriented strategy are characterised by higher well-being indicators than persons who apply emotional strategies or surrender when confronted with problems also regardless of the level of stress in life. However, in the case of the majority of well-being indices the greater use of the task-oriented strategy increases together with higher level of stress in life.

139. When compared with the beginning of the period of political transformation, there has been no change in the declared sense of social support (*I feel loved and trusted*) which is above 90% (!). Only 21% of respondents feel lonely while they would prefer not to.

140. Since 2005, there has been also no change in the average number of friends (7). The number of friends – after age, marriage and income per person – is the fourth most important factor affecting one's psychological well-being. Having friends has a greater buffer impact (lessening the influence of stress) and in general contributes to a better psychological well-being more in the case of women than men.

141. The Poles' value system is very stable. However, it is worth emphasising the significant increase in the importance of friends (the percentage of indications more than doubled the amount of 2000 when there was a deep crisis of relationships of friendship, manifested in the decline of the average number of friends). The importance of education also increased as compared with the 1990s, although still both friends and education seem to be undervalued, given their real impact on the quality of life.

142. The quick increase in the affluence of Poles is also reflected in the decline of the frequency of the choice of money as one of the three most important values (by 28% as compared to year 2000). The importance of God (Providence) is also declining, which corresponds to the decline in the frequency of religious practices.

143. Similarly to all the previous years, the following are indicated as important values: health (64% of respondents), then a successful marriage (a slight decline), followed by children and work. The values that are indicated the least often are freedom, strong personality, education and kindness and being respected.

144. Persons with a materialistic attitude assess their lives as worse, are less happy, have suicidal tendencies more often, a weaker will to live and suffer from a greater number of psychic depression symptoms. Shopaholism has the opposite effect, affecting positively all well-being indices.

145. A TV set is the main channel connecting the average Pole with the world. During last 13 years, there was a considerable increase in the percentage of adult Poles who spend 3 or more hours daily watching TV. Persons who work less (retirees and pensioners, unemployed persons and housewives) watch TV for significantly more time than employed persons, and in particular entrepreneurs, who watch least TV and farmers. Older persons spend more time watching TV than younger persons. The higher the educational level, the fewer hours a person spends watching TV.

146. The relation between psychological well-being and the time spent watching TV is, as regards age and gender, curvilinear: among the persons who do not watch TV at all and similarly among the persons who watch TV for many hours on a daily basis the percentage who are unhappy, not satisfied with their lives, with no will to live and suffering from depression is higher than in the group of "moderate" TV viewers.

147. Just as in the case of psychological well-being, the relation between the time spent watching TV and the physical condition is also curvilinear. The persons who do not watch TV at all and those who watch it for many hours on a daily basis formulate worse assessments of their health condition and suffer from more somatic symptoms. In the case of the obesity indicator (proportion between weight and height – BMI) this relation is of a linear nature: the more time spent watching the TV, the higher the percentage of obese persons.

148. Moreover, the more time spent watching TV, the lower the trust in people, and in general the lower the level of social capital.

149. The number of people who consider their past year as good has been systematically increasing (at present 81% of respondents state so).

150. Poles less and less often think there is a relation between whether they have a good life (whether their past year was good) and what the authorities do. They mainly think they are responsible for their own lives, especially if their past year was good.

151. W 2011, 42.7% of adults declared that they systematically participated in church services or other religious ceremonies. This is 1 percentage point less than in 2009 and 3.4 percentage points less than in 2007, thus being the lowest result since 1992.

152. Until 2005, the declining participation in services and other religious ceremonies was accompanied by an increase in the percentage of people who prayed in difficult situations in life. In other words, Poles went to church less often, but prayed more often. This suggested the de-institutionalisation (privatisation) of faith and was consistent with the process observed in western countries, where religious behaviours are becoming more private and institutional forms in the relations between man and God are losing significance. However, since 2007 the downward trend in institutional religious behaviours was joined by a decline in the frequency of prayer in difficult situations in life, and the decline was ever deeper in subsequent waves in 2009 and 2011. This may mean that after a period when faith was becoming more private, a process of secularisation has set in.

153. The population groups which are most religious in terms of their participation in institutional practices include women, the elderly (aged 65 and above), residents of rural areas (including farmers), pensioners, retirees and those with primary education, while the lowest behavioural indicators of religiosity concern men, people under 44, residents of the largest towns, those with the highest education and highest income, unemployed persons, private sector employees and private entrepreneurs.

154. As regards the regional cross-section, the most “religious” voivodeships are: the Podkarpackie, Małopolskie, Opolskie and Lubelskie Voivodeships that are dominated, except for the Opolskie Voivodeship, by people

who have lived there for many generations and nearly three-quarters participate in services at least 4 times a month. The least “religious” are the Zachodniopomorskie, Łódzkie, Warmińsko-Mazurskie and Dolnośląskie Voivodeships, i.e. the north-western regained territories, dominated by an immigrant population. The Podkarpackie Voivodeship differs the most from the national average, with less than 12% of its residents not going to church at all. At the other extreme there is the Zachodniopomorskie Voivodeship, where nearly a half of inhabitants (49%) do not go to church at all, and less than every third one participates in religious ceremonies at least 4 times a month (there is a double difference in the average frequency of participation in services between these voivodeships). The largest towns (with more than 500,000 residents) are the least religious (49% do not go to church at all, compared with 21% of residents of rural areas).

155. In comparison with 2009, the largest increase in the percentage of those who do not participate in religious services at all occurred among the youngest people, residents of medium-sized towns, the richest, school and university students and unemployed persons, and in terms of voivodeships, among the residents of the Zachodniopomorskie, Warmińsko-Mazurskie, Pomorskie, Mazowieckie, Łódzkie and Kujawsko-Pomorskie Voivodeships. However, in some groups the percentage of those who do not participate in religious services slightly decreased; i.e. among farmers, other professionally inactive, residents of the Wielkopolska and Lubuskie Voivodeship.

156. When we track the changes in religious practices in Poland in subsequent years, we may observe a certain pattern of occurrence. First, the group of devout people (more than 4 visits in church a month) is diminishing to the advantage of the group of those who practise “ritually” (4 visits in church a month), and at the same time in the group of those who practise sporadically (1-3 times a month in church) some have moved to the group of those who do not engage in religious practices at all. At the second stage, the group of those who practise “ritually” is diminishing to the advantage of the group who practise sporadically. Yet another cycle brings the further increase in the number of those who do not practise at all and a temporary increase in the number of those who practise “ritually” to the disadvantage of the group of devout persons. Since this trend is very stable in Poland, the result will be the secularisation of society, although slower than in other Catholic countries (e.g. Ireland or Spain), but fairly certain. And this has nothing to do with the more or less publicised issues that undermine the prestige and

reliability of the Catholic Church and its priests although the behaviour of priests, and especially of the bishops, may accelerate or slow down the process of secularisation. However, this process cannot be stopped let alone reversed.

157. Institutional religious practices (church going) are connected with a higher level of psychological well-being while prayers and indicating God as one of the three most important values do not yield such effects. This suggests that going to church has a fundamentally different role than prayer; it is an activity that enhances the sense of support, not only from God, but also from other people. And social support is of a crucial importance for psychological well-being.

158. Every fourth adult Pole smokes slightly less than 16 cigarettes a day. As compared to 1995, the percentage of smokers decreased by as much as 11 percentage points, and in comparison with the beginning of the 1990s by approximately 15 percentage points.

159. Smokers are mostly poorer men, who are middle-aged with basic vocational education. Definitely the highest percentage of smokers is among unemployed persons and those employed in the private sector. The lowest percentage of smokers is among the elderly (65 and above 12%), retirees (17%), school and university students (13%), those with higher education (18%) and among women (21%). Between the year 2000 and 2011, the percentage of smokers declined in the majority of socio-demographic groups. The most spectacular decrease occurred among entrepreneurs (from 42% to 28%), then among the youngest, including school and university students, among public sector employees, those with higher education and among residents of large towns.

160. The percentage of persons who drink alcohol in response to problems is lower at 3.4% (4.4% two years earlier) than the percentage of persons who admit abusing alcohol (6.8% and 6.5% two years earlier). The percentage of persons abusing alcohol is the highest since the beginning of the survey (since 1991).

161. Men admit that in the previous year they drank too much alcohol 5 times more often than women (nearly six times more often six years ago). Inhabitants of large towns drink too much alcohol decisively more often than residents of small towns and rural areas (though these differences decreased considerably), middle-aged persons more often than older and younger persons, the rich at present more rarely than the poor (in the past it was the

other way round), private entrepreneurs slightly more often than their employees (an increase in both groups), unemployed persons more than two times more often than public sector employees, farmers more often than private sector employees, school and university students more often than public sector employees by 50% more often than in 2005.

162. In terms of professional groups, the problem of alcohol abuse is most acute among construction workers (shell core 16% of persons admitted drinking too much alcohol in the previous year), miners, workers in the food processing sector, other qualified employees and operators of low-speed vehicles, all of which are typically male professions. The lowest percentage of persons drinking too much alcohol was found among nurses (0%), teachers from primary schools, workers in the clothing sector and medium level office personnel, which are highly feminised professions.

163. The percentage of persons who admit using drugs increased until 2005. In this year's survey there was again a slight increase on 2009 and is considerably higher than in the entire period under research since 2005 (an increase over three times in relation to 1992). At present, persons who are most at risk of drug abuse include men, school and university students (in general younger persons), inhabitants of large towns, unemployed persons and other professionally inactive persons, persons with basic vocational and secondary education, and as regards territorial differences, residents of the Zachodniopomorskie and the Lubuskie Voivodeships.

164. Between 1993 and 2003, the number of victims of theft and burglary increased. However, no change was observed as regards the percentage of victims of assaults and battery. In this period in the survey samples, there was also an increase in the percentage of persons defending both criminal and civil law court cases. After 2003, a significant decrease in the percentage of victims of theft was recorded (by half) as well as in the case of home and car burglaries (by more than half between 2003 and 2011), and a drop in the percentage of victims of assaults and battery (by half in relation to year 2000). This explains a high increase in the sense of safety in this period (the percentage of persons who were satisfied with the level of safety in their place of residence has increased since 2000 by 50%, which is in a comparable manner to the decrease in the number of victims of theft, burglary and assault).

165. Persons drinking too much alcohol or drinking alcohol when faced with difficult situations in life are more often the perpetrators of aggression but also fall victim to aggression more often.

166. The percentage of persons causing road accidents is directly proportional to the level of motorisation in specific groups. The highest among young persons (up to 34 years), inhabitants of the largest towns, persons with higher education, relatively rich persons and working persons (apart from farmers) particularly among private entrepreneurs.

167. In the sample of persons with a driving licence, those who drink too much alcohol cause road accidents twice as much regardless of age. Age is also related to the likelihood of causing a collision or an accident. After the age of 45, the probability of causing a collision or an accident is almost three times lower than in the age group below 30. Gender is of marginal importance here. Women cause collisions and road accidents more rarely to a statistically insignificant extent.

168. Both the percentage of victims and the percentage of perpetrators of criminal offences are visibly higher among men than among women; these values are also much higher in the younger age groups in comparison with older persons. Situations which involve crime are on average twice or three times more common in large towns than in rural areas and small towns.

169. In 2011, a general and unambiguous assessment of the post-1989 reforms in Poland is still a difficult task for respondents. 49% are still unable to make up their mind in this respect (in 2009 51% and 60% in 1997). Among those who formulated their assessments the dominant view is that the reforms were unsuccessful (37%), exceeding the percentage of persons who are of the opinion that the reforms were successful (14%). This prevalence is observed in all social categories, age groups, broad education categories, income categories, social and professional status groups as well as among inhabitants of all place of residence types. However, in not all of them is it equally high. Positive assessments of the reforms were recorded more often in large towns, among persons with higher education and with higher income. On the lower rungs of the social ladder the share of those who consider the reforms to be unsuccessful and/or are unable to assess them visibly rises. Only among persons with a Master's degree, positive opinions (30%) are as frequent as the negative (29%), and only in the elitist group of PhD title

holders do the positive views (36%) visibly dominate over the negative (30%).

170. What contributes to a positive assessment of the reforms is the subjective improvement of one's life situation after 1989. Persons who think that at present life is easier for them than before 1989, though considering the reforms to be unsuccessful and successful with the same incidence (30-31%), clearly differ in their views from persons who state that life was easier for them before 1989. The latter assess the reforms as successful very rarely (7%) and usually find them unsuccessful (60%). Assessment of the reforms is also positively dependent on the acceptance of democracy as a form of governance. Persons who accept democracy as a superior form find the reforms successful twice more often than all respondents (29% in comparison with 14%). The combination of the two factors amplifies their impact and in the group of persons who experienced an improvement in their life and at the same time approve of democracy as much as 44% think that the reforms were successful.

171. In the period 1997-2003, the assessments of the reforms visibly declined, while since 2003 they have systematically improved. In 2003, 6% of respondents assessed the reforms as successful and today it is 14%. With the passing of time, among the persons who remember the times of reforms there is an increase in the percentage of persons who think that after 1989 their life improved from 14% in 2000 to 27% in 2011.

172. The analysis of changes in the social assessments of the post-1989 reforms and changes in the comparative assessments of life before and after 1989 shows that the two processes are to some extent simultaneous. However, the general assessments of the reforms are visibly worse than the assessments of the impact of post-1989 changes on respondents' lives. Since 2000, in each study there have been at least twice as many respondents who said that after 1989 life was easier for them than those who assessed the reforms as generally unsuccessful. The assessment of the changes in living conditions stems from personal evaluation while the general assessments of the reforms are highly influenced by social interactions and public discourse. Those who said life was easier for them after 1989 may be trying to boost their self-esteem by underlining that despite the reforms being in general a failure they managed to take advantage of the new opportunities. On the other hand, those who were not successful in life may be defending their self-esteem by stating that the reforms were generally unsuccessful and they suffered the consequences just like "everyone else" did.

173. In 2011, 15% of respondents were members of organisations, associations, political parties, committees, councils, religious groups and clubs (13% in 2009). In last two years, 16% of respondents were involved in initiatives for the benefit of their own community, and 20% performed unpaid work or services for persons from outside the family or for a social organisation. During last year, almost one in four Poles (23%) participated in a public meeting (outside the workplace). These basic indices show a low level of a civil society in Poland, as well as low civil experience and competence. Civil experiences tend to accumulate; the persons who are members of an organisation and those who act for the benefit of the community and participate in meetings are often the same.

174. Civil experiences and skills are connected with social position measured by educational level. The higher the education, the more often people set up organisations, join already existing ones and voluntarily serve functions in such organisations, as well as being more willing to participate in initiatives for the benefit of their community, organise public meetings, participate in them, chair them and speak at them. People with higher education are better organised and express their interests better. They can better take advantage of the opportunities democracy offers at the local level.

175. The acceptance of democracy as a political principle has no significant impact on participation in civic life at the local level. Active citizenship is visibly linked with higher trust in other people though only after the threshold of secondary education is reached. Other education-related factors have a much greater impact. These may include being more interested in public matters, a more developed net of social contacts, lifestyle with prevailing motivations of non-economic nature as well as organisational skills connected with the knowledge of procedures and regulations. The impact of these factors is not overly high since the indicators of active citizenship in Poland are low and thus their diversification explained here is also low.

176. In 2011, over 40% of respondents declared that they did not care at all or cared little about how public goods were used. The Poles care least about the fact that someone does not pay for public transport or avoids paying taxes. Indifference to such forms of violating the common good considerably decreased in comparison with 2007 and 2009. Moreover, an increase in the sensitivity to violation of the common good was observed in other categories. After 20 years of democracy building, nearly a half of citizens are still indifferent to six forms of violating the common good.

177. Poland does not meet any of the criteria of civil society. In terms of general trust, Poland ranks at one of the lowest positions among the countries covered in the European Social Survey (ESS) in 2008. Only 10.5% of Polish respondents agreed with the opinion that "most people can be trusted" according to our research in 2003 and 2005, 11.5% in 2007, 13.4% in 2009 and in 2011, while the ESS of 2008 showed 19%, which is three times lower than in Denmark, Norway and Finland.

178. In comparison with the representatives of other societies, the Poles also believe less in the good intentions of others. According to the 2008 ESS, only 13% of Poles (lower values were recorded only for Greece and Bulgaria) were positively convinced that most people try to help others, and this value was confirmed by *Social Diagnosis* in 2011.

179. One of the signs of Poles' low tolerance of minorities is their attitude to homosexuals. According to ESS 2008, only 10 per cent (second to last position among 29 countries) and according to *Social Diagnosis* 2011 even less (8 per cent) decisively agree with the opinion that homosexuals should be allowed to live according to their beliefs.

180. The data of *Diagnosis* confirm the dependency between social capital, defined in accordance with the assumed indices, and the remaining dimensions of the quality of life.

181. Similarly as in the analysis by countries, we find a significant connection between social capital and the affluence of subregions and larger towns. The average level of social capital among the inhabitants of 66 subregions is explained by 21% of the GDP diversification. In the subregion with the highest level of social capital (Warsaw), we observe also the visibly highest level of GDP per capita. Among the 40 largest towns, the relation between social capital and the residents' affluence is even more visible (46% of corrected variance).

182. More than a half of the Poles aged 16 and above cannot find (42%), or have difficulties finding (14.1%), a representative of their own beliefs or interests on the political scene. This means that more than a half of Poles have no political identity. Among these who in March and April indicated their representatives, 41.1% identified with the Civic Platform (PO), 28.5% with Law and Justice (PiS), 17% with the Democratic Left Alliance (SLD), 7.5% with the Polish People's Party (PSL), 2% with Poland Comes First (PJN) and 3.7% with another party.

183. The persons who declared their political identity, in terms of a series of individual characteristics, can be grouped as follows: one

group includes PO and SLD enthusiasts while the other PiS and PSL supporters.

184. In the first half of 2011, as much as 66% of households had a computer, and 61% had access to the Internet.

185. The number of computers in specific households has also increased and nearly 28% of all households had more than one computer. More and more often such computers are portable models. In the last four years the number of households with a laptop computer increased from 11% to 39%.

186. The number of households with a computer is growing ever more slowly, a sign that the market is gradually becoming saturated. On the other hand, the percentage of households with access to the Internet is significantly increasing and the gap between the percentage with computers and access to the Internet is dwindling.

187. More than a half of all households have a permanent Internet connection, and 15% use a mobile connection offered by mobile phone network operators.

188. Computers and Internet access are more common among multi-person households and as a consequence 75.6% of Poles aged 16 and above have a computer at home (increase from below 70% in 2009). 70.5% of Poles have Internet access at home (11 percentage points more than two years ago).

189. Not all persons with a computer at home actually use it. It turns out that as much as 23% of Poles aged 16 and above do not use a computer despite having one in their household. 14.1% of Poles live in households where there is a computer with Internet access but do not use the Internet at all. This group is growing.

190. The main barrier to the more common use of computers and the Internet is a lack of motivation as well as a lack of skills. Financial obstacles are significant for around 10% of households and only 1% declare they do not have Internet access in their households due to technical difficulties. Hard barriers to having Internet access (infrastructural or financial) are becoming less significant, while soft barriers to the spread of new technologies, in terms of mindset and competence, are growing (the lack of needs and appropriate skills regarding its use).

191. The number of households with a landline phone is still decreasing. In April 2011, only 54% of households had a landline phone, four years earlier 71.4% and in March 2005 over 80%. In 88% of households, their members have a mobile

phone. Only less than 5% of Poles have neither their own mobile phone nor a landline phone at home.

192. The availability of computers and the Internet in households very much depends on the type of family. These technologies are considerably more often present in households of married couples with children. Single-person households are definitely least often equipped with computers and Internet access. The availability of technologies is connected also with the households' affluence. The size of place of residence and region are relatively of less significance.

193. In last two years we observed a very visible decrease in the differences between towns and rural areas. In particular, the increase in Internet access is faster in rural areas. However, at the same time, income differences are growing and thus the availability of computers and Internet access is increasing faster in the richest households. In spite of this, the percentage of households that do not have the equipment and motivate its lack by financial considerations is decreasing.

194. At present, nearly 60.6% of Poles aged 16 and above use computers, which nearly always also involves Internet use (60%). More than 85% of Poles use mobile phones. The growth in the number of mobile phone users is still faster than the increase in the number of people using computers.

195. More and more people using the Internet have Internet access at home (currently 94% in comparison with 91% two years earlier and 80% in 2007).

196. Computer, Internet and mobile phone users are highly diversified in terms of various socio-demographic factors and in particular by age and education. A majority of young people use the Internet (93% of those aged 16-24 years) and very few older people do so (11% of those aged 65 and above). Almost all learners (97% of school and university students) and those better educated (89% of people with higher education) are Internet users. Among those with primary education only 10% use the Internet. Men use information and communication technologies slightly more often than women. Social and professional status is also very important for the use of computers and the Internet. A vast majority of school and university students are Internet users, as well as the majority of working persons. The fewest users are among retirees, pensioners and farmers. Using computers and the Internet is connected with affluence as well as with the size of place of residence; 77% of residents of the largest towns and 48% of persons living in rural areas use the Internet. However, the

significance of the size of place of residence is lower than in the case of other factors, and additionally is decreasing.

197. The growth in the number of Internet users has impact on important changes in the structure of this group. The average age of Internet users is growing. In 2003, 40% of Internet users were persons aged 16-24 and now they account for barely 19%. Eight years ago 16% of Internet users were at least 45 years old and now this is true for 35.5%. The share of school and university students also diminished; at present they account for 15% of all Internet users while in 2003 their share was 30%. The percentage of persons from the largest towns is decreasing and the share of persons living in rural areas is growing (from 21% to 31% in eight years).

198. Computer and Internet competences are very varied, with Internet skills relatively most common, while the situation is worse as regards more advanced activities and the use of office programmes. The level of skills is similar to that from the previous surveys and is highly dependent on socio-demographic factors. Persons from the group where there are proportionally more users also have a higher level of these skills.

199. Internet use is more and more common and intensive, although this growth is not that high as in the previous years where we observed a fast increase in the number of permanent connections and in Internet access in households. Similarly as in the case of skills, Internet use is also more common in groups where there are proportionally more users and hence among the younger, those in education, better educated and living in larger towns.

200. A vast majority of communication on the Web involves contact with everyday acquaintances. Social networking services are growing in importance. Now, over 40% of Poles admit having an account at one of the social networking sites and using it from time to time. Almost 35% of Poles have an account with NK.pl, 20% on Facebook and 13% at some other site.

201. In Poland, like in the U.S., there are clear class differences in the use of social networking sites. NK.pl is frequented by users of all social groups. On the other hand, Facebook users are mainly better the educated, students and entrepreneurs, persons from larger towns and with higher incomes. These differences are also an effect of the dynamics of the popularity of specific sites and persons from other social groups joining them more slowly.

202. Internet users have more friends and acquaintances than those who do not use the Internet. They also more frequently take part in

social meetings and more rarely feel alone. Internet users, especially those who use social networking sites, have a greater number of social relationships and maintain regular contact outside the Internet with more people. However, the number of these relations is not increasing significantly. Paradoxically, during last six years the increase in the number of regular contact with family members and acquaintances was observed mainly among Internet users not using any social networking sites.

203. Internet users visibly participate in culture more actively than non-users. They also practice sport more often. What is interesting is that we observe an increase in activity among persons who started using the Internet in recent years and a drop among those who used the Internet in 2009 and do not use it at present.

204. Although Internet users spend visibly less time watching TV than non-users, the amount of time devoted to TV watching has not changed much among Poles and the analysis of the changes in the period 2009-2011 shows no impact of Internet use. Moreover, persons who in this period started using the Internet have not changed their TV watching habits.

205. Among Internet users there are visibly more persons who are socially active. Internet users more often get involved in activity for the benefit of local community, more often than non-users are members of organisations and associations and are also members of a greater number of organisations. We can observe also a slight increase in the membership of organisations among persons who started using the Internet only recently.

206. Although Internet users take part in elections more often than non-users, at present this group includes visibly more persons who did not know for whom to vote in the 2011 elections.

207. Not only Internet users have a job more often than non-users but what is more – when compared with only working persons – it turns out that Internet users visibly more often have better paid work or an additional job, more often gain new qualifications and skills with the view to earning more and they also get promoted more often. Internet users also more often start their own enterprises. Internet use is associated with lower risks of unemployment and greater chances of finding a job.

208. A vast majority of children have a computer at home – 93% among primary school students. Far over 80% of children from each birth year group have Internet access at home. The majority of them grow up having contact with technology and start using it early; almost a half of

five-year-olds use their home computer as well as nearly 80% of children going to the first class of primary school. Parents use computers more rarely.

209. Despite a significant increase in the number of Internet users, the declared desire to benefit from particular public services available on-line is practically not changing. On the other hand, there was an increase in the number of persons using information published on the websites of public institutions.

210. The growing use of information and communication technologies, their increasing capacities, and often their indispensability in everyday life, at school and work to gain access to information and knowledge mean that people who do not use them become socially excluded. The scale of digital exclusion in Poland is not decreasing and the activities conducted within the Operational Programmes bring scarce results.

211. The extreme poverty line, equal to the subsistence minimum calculated by the Institute of Labour and Social Studies, was PLN 480 for single-person households in the first quarter of 2001. The deficiency line, estimated on the basis of assessments of households and their real net income, was for the same group of households PLN 1515. This is more than 3 times higher than in the objective approach. This means that the aspirations of households regarding their income situation allowing for satisfaction of their needs at an acceptable minimum level are much higher than the minimum standards established by experts.

212. In March 2011, 4.0% of households in Poland were below the poverty line (according to the objective approach) and 36.8% below the subjective deficiency line. However, these values should be considered overestimated as households tend to underestimate their income in the statements they make. The poverty depth indices reached almost 25.3% according to the objective approach and 28.7% with the subjective approach. This means that in March 2011 the average equivalent income of Polish households below the poverty line was lower by 25.3% than the subsistence minimum and the average equivalent income of Polish households below the deficiency line was lower by 28.7% than the deficiency line (subjective poverty line). The poverty intensity index derived from the combined incidence and depth of poverty was 1.0% in March 2011, while the deficiency intensity index was 10.6%. This means that in March 2011 on average each household below the poverty line should receive PLN 4.9 in order to eliminate poverty. In order to eliminate deficiency, the average transfer to each

household below the poverty line should amount to PLN 160. The poverty severity index, derived from the incidence and depth of poverty and income inequalities among the poor, was 0.41% in March 2011, while the deficiency severity index was 4.65%.

213. Movements of households in Poland in terms of their belonging to the poverty sphere from March/April 2009 to March/April 2011 were not observed. In the same period, there was a considerable drop in the percentage of households below the deficiency line (by around 11 percentage points). This was caused by the decrease in income inequalities in the analysed period, between all households under analysis, measured with the value of the Gini coefficient, as well as by the increase in the value of real equivalent income. In the period analysed, there was a considerable increase in poverty depth (objective approach), with a simultaneous decrease in deficiency depth (subjective approach). The value of the poverty depth index increased by approximately 3 percentage points and the value of the deficiency depth index decreased by almost 4 percentage points. This means that households below the poverty line were in 2011 on average less affluent than in 2009. On the other hand, the average affluence of households below the deficiency line in this period increased significantly in the period under analysis. Poverty intensity measured with the income gap index dropped in Poland significantly in the period March/April 2009–March/April 2011 with the subjective approach (by around 5 percentage points) and did not change significantly with the objective approach. A similar tendency was observed as regards poverty severity. The value of poverty severity index decreased in the period under analysis at the national level by more than 4 percentage points with the subjective approach and did not change significantly with the objective approach.

214. For most households participating in the last two research waves, extreme poverty (with the objective approach) was not of a permanent nature. However, out of the 3.70% of households in extreme poverty in March/April 2009, as much as 36% remained in poverty also in March/April 2011. Households in permanent deficiency (with the subjective approach) constituted as much as 66% of households in deficiency in March/April 2009, which means that deficiency was of a rather permanent nature for most households studied in the analysed period.

215. Approximately 4.4% of households between March/April 2009 and March/April 2011 shifted between poverty and non-poverty. The percentage of households which have entered the poverty sphere in the last two years was slightly higher (2.37% of households) than the percentage

of those which left this sphere (2.07% of households). A different mobility trend can be noted in the case of households belonging to the deficiency sphere. In the analysed period, almost 22% of households shifted between the deficiency sphere and beyond that sphere. In March 2011, the income of over 16% of households had improved on March 2009 to the extent they left the deficiency sphere. In the same period, only slightly over 5% of households entered the deficiency sphere due to significantly lower income.

216. The main factors increasing the risk of poverty for households include low educational level of household head, unemployment and disability.

217. The level of the sense of discrimination in Poland is still low though in relation to the mid 90s it increased threefold. At present, 1.7% of adult Poles feel discriminated on any grounds.

218. However, not feeling discriminated does not mean a lack of discrimination. Women feel discriminated as regards income. An average personal income declared by women is by ¼ lower than the income declared by men (similarly as in 2009). This difference does not result from differences in the social and professional status. In all social and professional groups, apart from pensioners, school students and other professionally inactive, this difference is the same or similar to the general difference in terms of education and age. Also in specific professional groups of relatively levelled competence, duties and positions, the difference in income of women and men does not disappear although it drops to 18.5%.

219. When considering educational level and age (as an index of the years in employment), the difference between personal income of men and women increases from 22% to 24.9%. Women on average work shorter by half a year while their education is longer by half a year. This means it is education and not years of employment that is the critical factor deciding the differences in income between men and women. When comparing income of women and men working in the same selected professions and when assuming that both genders have exactly the same educational level measured with the number of years in education the difference increases by 3.2 percentage points and when assuming an equal number of years in employment it decreases only by 0.2 percentage points.

220. However, women do not feel discriminated more often than men, and in 2007 and 2011, the percentage of men feeling discriminated was even

higher than that of women (in the remaining years the differences were statistically insignificant). Even if we consider only working persons and compare men and women with the same number of years in employment and the same educational level, we do not observe a higher sense of discrimination among women than among men (1.6% and 1.7%, respectively).

221. The differences in the sense of discrimination between women and men are influenced by their educational level and age. In the case of men, those with lowest educational level feel discriminated most often while in the case of women those with the highest educational level report a sense of discrimination more often. The proportions of women and men who feel discriminated are different only in the group of the youngest respondents (16-24 years) where the percentage of men who feel discriminated is more than twice as high as in the case of women. In the remaining groups the proportions are similar and decreasing with age.

222. Objective social impairment of disabled persons translates moderately into their sense of being discriminated. The level of disability is of crucial importance here. In the group of persons with a severe disability, the index of subjective discrimination was four times higher than in the group of persons with slight disability, which does not differ in this respect to non-disabled persons. What is also important is the interaction between disability and gender. The level of disability has a stronger impact on the index of subjective discrimination among men than among women. The percentage of men who feel discriminated and have a severe disability is nine times higher than among men with a slight disability. In the case of women this difference is only two and a half times higher. This may be a result of the differences in failed professional aspirations between disabled men and women.

223. Undoubtedly, the persons who feel discriminated most often are persons who are victims and perpetrators of crimes, abuse alcohol or drug takers, or are undergoing psychiatric or psychological treatment (from 2 to 5 times more often than the average in the population).

224. The analysis of potential risk factors in terms of social exclusion (old age, disability, loneliness, low educational level of the father or guardian (low cultural capital), low own educational level, residence in rural areas, alcohol and/or drug addiction, criminal record, sense of discrimination, poverty and unemployment) demonstrated four separate categories of exclusions: physical (related with age and disability), structural (related with low cultural capital and residing in rural areas), prescriptive

(connected with dysfunctions) and material (related with unemployment and poverty).

225. Poverty and unemployment have been treated as the main barriers to full participation in social life since the beginning of the study. They have been given most attention and it has been assumed that preventing unemployment and poverty should be the main purpose of the policy of social reintegration. The fact that at present in Poland material exclusion is only one of four separate types of exclusion, means that it is necessary to make reintegration policy more varied to take into account also other premises of exclusion independent of the situation on the labour market and material living standards, requiring separate instruments addressed to persons with lower education, rural residents, disabled, alcohol and drugs addicts and those with a criminal record.

226. The highest percentage of Poles aged 16 and above is at risk of structural and physical exclusion (17.5% and 16.2% respectively). However, the percentage of persons who are actually excluded is the highest as regards material exclusion (8.5% in comparison with 5% of the physically excluded, 1.1% of the structurally excluded and 4.8% of the prescriptively excluded). The persons who may be deemed to be socially excluded have lower indices of psychological well-being and social functioning.

3. THE RESEARCH METHOD

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3.1. Research structure, procedure and progress

The *Social Diagnosis* research project is a joint academic undertaking by the members of the *Council for Social Monitoring*. The concept and logistics of the project were developed by the Council. Data are analysed and reports are prepared by Council members in cooperation with a group of experts.

The project is a panel study. Each subsequent wave involves all available households from the previous wave and households from a new representative sample. So far, six waves have been conducted: in 2000, 2003, 2005, 2007, 2009, and in 2011.

Two questionnaires have been used in the study (Annex 1). The first one is a source of information about household composition and living conditions completed by the interviewer during an interview with a household representative who knows the most about household situation and its members. The questionnaire provides data about household structure and living conditions, and about the demographic and social features of its individual members. The other questionnaire is completed by all available members of a given household aged 16 and above and helps gather information about the quality of life of individual persons.

In each wave field research is conducted in March or in March and April by professional interviewers of the Central Statistical Office. Supervision over the organisation of the questionnaire survey is provided by the Office for Statistical Analyses and Research of the Polish Statistical Association.

3.2. Sampling design and weighting method

The first wave of the study, conducted in March 2000, involved 3005² households with 10002 members. From among them, all 6614 available persons aged 16 and above participated in the individual survey.

The second wave of the study, carried out in March 2003, covered 3961 households (including 2396 from the first wave – 79.7 %) with a total of 13693 members and 9587 persons aged 16 and above who filled in the self-completion questionnaire (including 8180 – 81.8 %, and 4719 – 71.3 % from the first wave of the study respectively, and 458 and 202 new individuals in households interviewed in 2000 respectively).

The assumption of the third wave of the study, conducted in March 2005, was to examine all households which had participated in the second panel wave along with all households where members of those from the initial panel sample had transferred; i.e. households established as a result of the division of the initial panel sample of households.³ It was also decided that the self-completion questionnaire would be handed to all household members born no later than March 1990. As a result, 3113 households which had participated in the second wave were entered in the database (78.6 % of second wave households). The database was expanded with information about 9939 members of households examined in 2003 (72.6 % of individuals from the second wave), 537 new members of those households, 6388 individual respondents who had completed the questionnaire in 2003 (66.6 % of all individual respondents from the second wave) and 231 new individual respondents from households examined in 2003 (mainly individuals who turned 16 between the second and third wave). In addition, 900 new households and their members were included in the study. In order to obtain the assumed number of 900 new households for the third panel wave, a 900-element basic sample and a reserve sample of the same structure and size were drawn. 738 new households with 2351 members and 1572 individual respondents were entered in the database. The third wave database included a total of 3851 households with 12872 members and 8820 individual respondents.

In 2007, the study covered 5532 households with 18067 members and 12645 individual members of those households aged 16 and above. Interviewers managed to reach 2760 households (71.7 %) from the 2005 sample, with 8406 of the same members (65.3 %) and 5593 of the same individual respondents (63.4 %) as well as 109 households established by members of households examined in 2005 with 294 members

² All information about sample size pertains to cases entered in the database rather than all cases examined. Some of the latter were not entered in the database or were removed from it due to incorrectly completed questionnaires or problems with identifying households and individual respondents. Figures concerning the number of households and their members from previous waves differ slightly from those included in the *Social Diagnosis* reports of 2000, 2003, 2005, 2007 and 2009 since after they had been published the databases were once again verified in terms of the identifiability of cases and the logical coherence of data and approx. 2.5 % of examined entities (households and persons) were either removed or restored.

³ The panel sample of households is defined in section 3.2.

and 207 individual respondents. The panel sample of 2005 was extended by 883 members and 452 individual respondents. From the new set of 3000 households sampled in 2007, the study was carried out in 2663 with 8822 members and 6844 individual respondents aged 16 and above.

In 2009, the study covered 12381 households with 36778 members and 26243 individual members of those households aged 16 and above. Researchers managed to revisit 3686 households from the 2007 sample (66.6 %) with 11126 of the same members (61.6 %) and 7638 of the same individual respondents (60.4 %).

In 2011, 12386 households with 36753 members were examined as well as 26453 individual members of those households aged 16 and above. Researchers returned to 8504 households from the 2009 sample (68.7 %) with 24074 of the same members (65.5 %) and 16440 of the same individual respondents (62.6 %).

Out of the initial sample of the first wave, after twelve years the survey was conducted in 2011 in 746 households (24.8 %) with 1952 of the same members (19.5 %) and 1241 of the same individual respondents (18.8 %).

A total of 20655 households with 65282 members and 48562 respondents were examined in the six waves of the study.

Households were selected using the two-stage stratified sampling method. Prior to sampling, they were stratified by voivodeship and then within voivodeships by the class of the place of residence into large towns (with more than 100,000 inhabitants), small towns (with fewer than 100,000 inhabitants) and rural areas. For urban strata, statistical regions (covering at least 250 dwellings) were the primary sampling units (PSUs) in particular voivodeships, while statistical districts were the PSUs for rural strata. At the second stage, two dwellings from the randomly generated list of dwellings were drawn systematically in separation for each of the strata established at the first stage.

In the first wave of the study (2000), the same number of households was sampled for each voivodeship with a view to obtaining a relatively high number of households also in voivodeships where the number of households was relatively low. The assumption was that estimates of parameters for Poland in general would be obtained as weighted averages of voivodeship data. In the subsequent five waves of the study (2003, 2005, 2007, 2009, and 2011), the number of new households sampled for particular voivodeships was directly proportional to the share of the number of households in a given voivodeship in the total number of households in the country; i.e. in the general population. In case of non-response, households were replaced by those from reserve samples that belonged to the same statistical region.

In 2009 and 2011, due to the significantly greater size of the new sample of households, both the number of strata and the number of dwellings sampled from each particular stratum at the second stage were increased. Census areas were the primary sampling units, sampled with probabilities proportional to the number of dwellings they covered. Urban strata were divided into large towns with more than 100,000 inhabitants, medium-sized towns with 20,000-100,000 inhabitants and small towns with fewer than 20,000 inhabitants. Furthermore, in five largest cities the strata covered individual districts. At the second stage, three dwellings were sampled per census area in large towns, four dwellings per area in medium-sized ones and five dwellings per area in the smallest towns. Six dwellings were sampled for rural areas.

3.2.1. Principles of defining the panel sample

In the panel approach proposed in the study, the examined panel sample of households (i.e. households that participated in the second wave of the study) constitutes 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 in subsequent waves when the households from the panel sample died out naturally or refused to participate further in the study. The first of such situations is treated as a natural process in which part of the population of households die out. In the second case however, in order for the decrease in the number of households not to affect the evaluation of the dynamics of the changing phenomena and processes, we propose to apply an appropriate system for weighting the results. At the same time, the initial panel sample of households was complemented in subsequent waves (starting from wave three) by new households where members of households from the initial panel sample of households had transferred; i.e. those established through the division of the initial panel sample of households.

The dynamic approach to the panel sample requires not only that the panel sample of both households (the so-called panel sample of households) and their members (the so-called panel sample of persons) be defined at the beginning, but also that principles for treating those research units in the subsequent waves be established. These definitions are presented in Annex 2 (principles of defining the panel sample).

3.2.2. Sample weighting systems

3.2.2.1. Premises for the use of weights in panel studies

In panel studies based on samples observed over a longer period of time, problems arise as to the representative character of samples and the precision of results not encountered in cross-sectional studies (Kalton and Brick, 1995; Verma, Betti and Ghellini, 2007). Due to the long-term character of the study, the sample loses its units due to their refusal to participate in the study (on the part of households and/or their members) in subsequent waves. Households also change their place of residence and contact with them is lost or they disintegrate in the course of the study. At the same time, the sample is complemented by new households established by individuals from the panel sample of persons. Finally, the structure of studied households is subject to change.

All these factors make the sample less representative in the subsequent waves of the panel and make it impossible to compare the samples and the results based on them between the subsequent waves of the panel.

If the decreases are not random and their frequency depends on observable characteristics of the entities under investigation, then the systematic bias of results may be eliminated by the appropriate weighting of raw data from subsequent panel waves. Similarly, households added to the panel sample of households must receive suitable weights in order not to disturb the structure of the sample.

It is necessary to construct the weighting system for each stage of the study both for cross-sectional and for longitudinal analyses. The weights for the first panel wave (the initial sample) are meant to restore the original structure of the sample distorted by refusals to participate in the study (refusals on the part of households and their members) during the calculations. Weighting at the first stage of the study may also be aimed to adjust the distribution of features in the sample (of both households and persons) on the basis of data available from independent and reliable sources concerning the distribution of those features in the population. This type of weighting eliminates random errors in the selected sample.

In subsequent panel waves, weighting is meant to adjust sample distortions that arise due to the decrease in the number of entities under investigation (households and persons) caused by refusals and loss of contact by extending the sample to include households newly established by individuals from the panel sample of persons and other changes in the households under investigation. Changes due to the entities dying out should not be adjusted for as this type of decrease is representative for the population.

3.2.2.2. Cross-sectional weights

The results were appropriately weighted in order to preserve their representative character as obtained in the study on the national scale as well as for individual voivodeships and the particular classes of place of residence,

The initial weight of a household sampled from a given stratum is the inverse of the sampling fraction for the dwelling in that stratum. Initial weights were then adjusted to account for the refusals of some households to participate in the study with the reserve sample exhausted, or for the fact that some of them did participate (the household questionnaire was completed) but no individual interview was conducted there. In order to estimate the household non-response, the sample of households was divided into groups according to the class of the place of residence, with six groups of such classes identified. It was assumed that the probability of household non-response was the same for each class. In other words, the household non-response ratio identified for a given class constitutes an estimate of the non-response ratio for each household within that class.

The adjusted initial weights for households were calculated for individual locations by dividing their initial weights by the relevant non-response ratios for those locations.

At the next stage, the adjusted initial weights were calibrated against external sources of information in order to enhance the precision of estimation. The method of integrated calibration applied in the study provides estimates of the weights for households and their members simultaneously. The values of variables concerning persons are first aggregated within individual households by calculating the total value of those variables within households (e.g. the number of women/men in a household). Then calibration is conducted at the level of the household, with the use of variables related to households and variables related to persons in the aggregated form. The advantage of this technique is that it ensures concordance between the estimation concerning households and the estimation concerning persons since all household members

(persons) receive the same cross-sectional weights as households they belong to. The following calibration variables were applied in the study:

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

at the level of the person: gender, age group (14 age groups were identified: under 16, 16-19, eleven five-year groups, 75 and above).

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

Applying the integrated calibration procedure yielded the calibrated cross-sectional weights for households.

Subsequently, calibrated cross-sectional weights are adjusted to eliminate extreme weights. Excess variation of weights is unfavourable for the results of the estimation as it increases the variance of estimators. For each of the variables, the evaluation of whether a given variable should be deemed as extreme was based on estimating the ratio of the quotient of the calibrated value of that variable and the average value of weights for all variables after calibration to the quotient of its value before calibration and the average of the values of weights of all variables before calibration. If the value of that ratio fell outside the range of [0.3; 3], it was properly adjusted (decreased or increased) in order for the ratio to move closer to the (upper or lower) limit of the acceptable range of variation. The application of the procedure of calculating extreme weights yields the final basic weights (the so-called final weights).

The procedure for calculating basic weights as presented here is applied separately to each new sample included in the study in subsequent panel waves. At the final stage of estimating cross-sectional weights, samples from subsequent years are combined and cross-sectional weights of their households and persons undergo simultaneous integrated calibration. Then extreme weights are trimmed to yield final cross-sectional weights for a given year (panel wave).

This kind of procedure ensures the assumed size of the sample and its representative character on the national scale and in the identified cross-sections of classification.

3.2.2.3. Longitudinal weights

The purpose of longitudinal weights is to preserve the representative character of the sample throughout panel duration (Ernst, 1989; Verma, Betti and Ghellini, 2007). The final cross-sectional weights for 2009 served as the starting point for constructing longitudinal weights for 2011.

The guiding principle assumed for the study was to observe the initial panel sample of persons in subsequent panel waves⁴. In order to minimize the possible impact on comparison results of sample attrition due to examined persons leaving, cross-sectional weights assigned to those persons were properly adjusted. Longitudinal weights for persons not belonging to the initial panel sample of persons were estimated on the basis of longitudinal weights of persons from the panel sample.

⁴ Cf. section 3.3.

3.3. Basic terms and classifications

Two basic types of entities were identified for the purposes of the study: households and their members aged 16 and above. The study covered single-person and multi-person households. A single-person household is understood to mean a person who makes a living on their own; i.e. they do not combine their income with anyone else irrespective of whether they live on their own or with other persons. A multi-person household on the other hand, is understood to mean a group of people who live together and make a living together. The following cross-sections of households were adopted in the study for the purposes of classification:

- the socio-economic group, identified on the basis of the main source of income,
- household type, established on the basis of the number of families and the type of the biological family,
- class of the place of residence,
- voivodeship,
- economic activity.

Seven basic socio-economic groups were identified based on source of household income:

- households where the sole or main (dominant) source of income is from gainful employment in the public or private sector and from performing home-based work or on the basis of agency agreements – *households of employees*,
- households where the sole or main (dominant) source of income is from a farm with agricultural land exceeding 1 ha (including users of plots up to 1 ha of agricultural land and owners of domestic animals who do not hold agricultural land if income from them constitutes the sole or main source of income) – *households of farmers*,
- households where the sole or main (dominant) source of income is self-employed activity other than agriculture or a liberal profession – *households of the self-employed*,
- households where the sole or main (dominant) source of income is a retirement pension – *households of retirees*,
- households where the sole or main (dominant) source of income is a form of disability support – *households of pensioners*,
- households where the sole or main (dominant) source of income are sources other than paid work (except for retirement pension, disability benefit or other type of pension) - *households living on passive sources of income*.

Household type involves the following categories:

- one-family households: married couples with no children, married couples with children (one child, two children, and three or more children),
- single-parent families,
- multi-family households,
- non-family one-person households,
- non-family multi-person households.

With regard to the type of economic activity, the households under examination were divided into households without the unemployed and households with the unemployed.

The class of place of residence is divided into urban and rural areas, with urban areas further subdivided by size: towns with more than 500,000 inhabitants, with 200,000-500,000 inhabitants, with 100,000-200,000 inhabitants, with 20,000-100,000 and with fewer than 20,000. Classification by the class of place of residence and voivodeship is common for households and their members.

In addition, the following criteria for the classification of household members were identified:

- gender,
- age,
- educational attainment,
- household income per capita,
- social and professional status,
- disability.

As regards educational attainment, four categories were identified:

- primary and lower,
- basic vocational,
- secondary,
- higher and post-secondary.

As regards household income level, three classes of households were identified: those with income per capita below the first (lower) quartile of income distribution, higher than the first quartile and lower than the third quartile, and higher than the third quartile.

The following categories of social and professional status of household members were identified:

- public sector employees,
- private sector employees,
- private entrepreneurs excluding farmers,
- farmers,
- pensioners,
- retirees,
- the unemployed (registered in labour offices or – in some analyses – identified on the basis of Labour Force Survey criteria),
- school and university students,
- others professionally inactive.

3.4. Features of the sample by main categories

3.4.1. Features of the sample of households

Tables 3.4.1-3.4.3 present the features of the entire sample of households and their members in the most important social and demographic cross-sections weighted with the cross-sectional weight.

Table 3.4.1. Households by socio-economic group and class of the place of residence

Socio-economic group	Place of residence						Total	
	Towns with more than 500,000 inhabitants	Towns with 200,000-500,000 inhabitants	Towns with 100,000-200,000 inhabitants	Towns with 20,000-100,000 inhabitants	Towns with fewer than 20,000 inhabitants	rural areas	N	%
Employees	979	781	483	1297	827	1778	6145	49.8
Farmers	13	4	1	17	28	509	572	4.6
Self-employed	123	101	53	132	93	205	707	5.7
Retirees	476	414	292	814	495	1059	3550	28.7
Pensioners	50	81	78	200	121	320	850	6.9
Living on passive sources of income	71	81	36	95	73	168	524	4.2
Total N	1712	1462	943	2555	1637	4039	12348	
Total %	13.9	11.8	7.6	20.7	13.3	32.7		100.0

Table 3.4.2. Households by type and class of the place of residence

Household type	Place of residence						Total	
	Towns with more than 500,000 inhabitants	Towns with 200,000-500,000 inhabitants	Towns with 100,000-200,000 inhabitants	Towns with 20,000-100,000 inhabitants	Towns with fewer than 20,000 inhabitants	rural areas	N	%
One-family								
Married couples with no children	330	245	167	464	292	589	2087	16.9
Married couples with 1 child	318	295	158	434	269	576	2050	16.6
Married couples with 2 children	236	242	150	450	304	697	2079	16.8
Married couples with 3 or more children	37	47	58	142	136	508	928	7.5
Single-parent families	149	168	103	251	150	396	1217	9.9
Multi-family	54	49	46	130	109	508	896	7.3
Non-family								
Single-person	566	398	256	664	371	735	2990	24.2
Multi-person	22	15	9	12	11	35	104	0.8

Table 3.4.3. Households by voivodeship and class of the place of residence

Voivodeship	Place of residence						Total	
	Towns with more than 500,000 inhabitants	Towns with 200,000-500,000 inhabitants	Towns with 100,000-200,000 inhabitants	Towns with 20,000-100,000 inhabitants	Towns with fewer than 20,000 inhabitants	rural areas	N	%
Dolnośląskie	249	0	89	224	159	248	969	7.8
Kujawsko-Pomorskie	0	210	39	78	105	224	656	5.3
Lubelskie	0	139	0	134	81	329	683	5.5
Lubuskie	0	0	90	40	79	104	313	2.5
Łódzkie	320	0	0	225	69	270	885	7.1
Małopolskie	280	0	34	120	112	423	970	7.8
Mazowieckie	683	98	32	278	188	498	1777	14.4
Opolskie	0	0	41	82	65	142	330	2.7
Podkarpackie	0	0	47	138	95	302	582	4.7
Podlaskie	0	113	0	92	50	124	379	3.1
Pomorskie	0	256	27	156	89	203	731	5.9
Śląskie	0	408	375	455	107	298	1643	13.3
Świętokrzyskie	0	85	0	72	57	196	411	3.3
Warmińsko-Mazurskie	0	0	104	96	107	151	458	3.7
Wielkopolskie	180	0	37	265	166	385	1033	8.3
Zachodniopomorskie	0	152	31	108	119	153	563	4.5

The distribution of households according to the type of the source of income is comparable to that obtained in studies of household budgets. Employee households were the most common and the second most common group were retiree households. These two groups account for a total of 78.5 % of the examined sample of households.

Two-thirds of households lived in towns, with one-fourth living in towns with more than 200,000 inhabitants. The share of households from small and the smallest towns; i.e. those with 20,000-100,000 and with fewer than 20,000 inhabitants amounted to 20.7 and 13.3 % respectively.

Among the households examined in 2011, 67.7 % comprised one family. The significant difference between rural and urban areas concerns multi-family households, which are disproportionately numerous in rural areas, and non-family one-person households, which are disproportionately few in rural areas.

The most numerous are households from the Mazowieckie and Śląskie voivodeships (14.4 and 13.3 % of the total number of households), and then those from the Wielkopolskie, Dolnośląskie, Małopolskie, and Łódzkie voivodeships.

3.4.2. Features of the sample of household members

Out of the 36753 members of examined households in the weighted sample, 51.9 % were women. Over one-third of women and men (39.5 %) lived in rural areas (Table 3.4.4). Every fifth woman and every fifth man were in the “immobile” working age (45-59 years) and the share of women and men aged 60 and above amounted to 22.4 and 16.0 % respectively. The share of children and youth under 24 did not exceed 30 % on the national scale.

Educational attainment is a significant feature of household members. Observable changes that occurred over the past four years concern individuals within the lowest and the highest category of educational attainment. The share of respondents with at most primary education decreased significantly and the percentage of those with post-secondary and higher education increased both among women and among men. Differences in the structure of educational attainment as differentiated by gender still persist. Educational attainment not higher than basic vocational education is characteristic of 50.4 % of members of examined households (45.5 % of women and 55.7 % of men) (in 2007 53.0 % in total, 48.4 % of women and 58.1 % of men) but they have at most primary education much less often. Individuals with higher and post-secondary education currently constitute 20.4 % (23.5 % of women and 17.0 % of men), while in 2007 they amounted to 17.8 % in total.

Only 37.5 % (37.1 % in 2007) of total respondents were employees, private entrepreneurs or farmers. The share of pensioners and retirees amounted to 22.9 % (23.4 % in 2007), and similarly to two years before every fifth persons was a school or university student. After the decrease of 2009, the share of the unemployed increased back to the level of 2007 (5.3 %) and the share of other professionally inactive persons slightly decreased (to 12.8 %, down from 13.9 in 2009).

Apart from formal education, one of the significant factors that have a deciding influence on employability are the skills described as “civilizational”; e.g. driving licence, command of foreign languages or computer skills. The 2011 study, similarly to those two and four years before, included questions concerning those skills; here we will disregard the issue of computer skills as those are studied separately in analyses of the development of information society.

47 % of household members have a driving licence (nearly 3 percentage points more than two years before), which is nearly twice as many men as women (Table 3.4.5). The greatest percentage of individuals have an active command of English (18.4 %), with German ranking the second (8 %). The third position belongs to Russian, spoken by 6.5 % and the fourth to French (1.1 %). In comparison with 2007, only the command of English has increased; active command of other languages has decreased with Russian affected the most.

The proportion of respondents who have a certain skill, in terms of the demographic and social characteristics under discussion (excluding gender and educational attainment), is the least diversified in the case of driving licences. The command of languages differs significantly in particular groups of respondents. As educational attainment and income per capita increase, so does the proportion of individuals who speak foreign languages. The percentage of those who speak foreign languages decreases along with the class of the location and is definitely the lowest among the residents of rural areas. Farmers, retirees, pensioners and other professionally inactive individuals differ considerably *in minus* in terms of the command of foreign languages from those who work outside agriculture.

The command of German is the most common in Western voivodeships (with the Opolskie as the leader) and Pomorskie. Russian is the most popular in the Podlaskie voivodeship.

Table 3.4.4. Population in households by demographic and social characteristics⁵

Demographic and social characteristics	Women			Men			Total		
	% 2011	% 2009	% 2007	% 2011	% 2009	% 2007	% 2011	% 2009	% 2007
Age									
Under 24	27.8	29.1	30.2	31.0	32.5	34.1	29.3	30.7	32.1
25-34	15.4	15.3	16.0	17.1	16.6	16.8	16.2	15.9	16.4
35-44	12.5	12.3	12.1	13.8	13.5	12.8	13.1	12.8	12.4
45-59	21.9	22.3	21.7	22.2	22.6	21.1	22.0	22.4	21.4
60-64	6.0	4.9	4.4	5.4	4.4	3.7	5.7	4.7	4.1
65 and above	16.4	16.1	15.7	10.6	10.4	11.5	13.6	13.4	13.7
Place of residence									
Towns with more than 500,000 inhabitants	12.1	12.0	10.6	10.8	10.7	9.7	11.5	11.4	10.2
Towns with 200,000-500,000 inhabitants	9.8	10.4	10.9	9.3	9.8	10.5	9.6	10.1	10.7
Towns with 100,000-200,000 inhabitants	7.7	7.2	8.2	7.3	6.9	8.1	7.5	7.1	8.2
Towns with 20,000-100,000 inhabitants	19.3	18.9	19.9	19.0	18.6	19.4	19.1	18.8	19.7
Towns with fewer than 20,000 inhabitants	12.6	12.4	12.8	13.0	12.8	13.1	12.8	12.6	13.0
Rural areas	38.5	39.1	37.6	40.6	41.0	39.1	39.5	40.1	38.3
Voivodeship									
Dolnośląskie	7.5	7.6	7.8	7.4	7.4	7.6	7.5	7.5	7.7
Kujawsko-Pomorskie	5.4	5.4	5.1	5.3	5.4	5.6	5.4	5.4	5.4
Lubelskie	5.6	5.6	5.6	5.7	5.7	6.0	5.7	5.7	5.8
Lubuskie	2.5	2.6	2.6	2.6	2.6	2.7	2.6	2.6	2.6
Łódzkie	6.7	6.8	6.6	6.5	6.6	6.6	6.6	6.7	6.6
Małopolskie	8.4	8.5	8.0	8.5	8.5	8.5	8.5	8.5	8.3
Mazowieckie	13.5	13.5	13.3	13.4	13.3	12.9	13.5	13.4	13.1
Opolskie	2.7	2.7	2.9	2.7	2.7	2.8	2.7	2.7	2.9
Podkarpackie	5.5	5.5	5.4	5.6	5.6	5.6	5.6	5.5	5.5
Podlaskie	3.1	3.2	3.3	3.2	3.2	3.3	3.1	3.2	3.3
Pomorskie	5.9	5.9	5.8	5.9	5.9	5.7	5.9	5.9	5.8
Śląskie	12.4	12.3	12.8	12.3	12.3	12.6	12.4	12.3	12.7
Świętokrzyskie	3.5	3.4	3.6	3.5	3.5	3.3	3.5	3.4	3.5
Warmińsko-Mazurskie	3.8	3.7	3.8	3.9	3.8	3.9	3.8	3.8	3.8
Wielkopolskie	9.1	8.9	8.9	9.1	9.0	8.3	9.1	9.0	8.6
Zachodniopomorskie	4.4	4.5	4.5	4.4	4.5	4.6	4.4	4.5	4.5
Educational attainment									
Primary and lower education	22.4	24.2	25.2	17.8	19.7	20.5	20.2	22.0	23.0
Basic vocational/lower secondary school	23.1	24.2	23.2	37.9	38.4	37.6	30.2	31.0	30.0
General secondary	31.0	30.0	31.0	27.3	26.9	27.3	29.2	28.5	29.2
Higher and post-secondary	23.5	21.7	20.6	17.0	15.1	14.7	20.4	18.5	17.8
Social and professional status									
Public sector employees	11.3	12.1	12.4	9.4	9.7	9.4	10.4	10.9	10.9
Private sector employees	15.6	14.5	14.5	25.4	23.8	23.4	20.3	19.0	18.8
Private entrepreneurs	2.1	1.9	2.0	5.4	5.2	5.0	3.7	3.5	3.5
Farmers	2.4	2.4	3.5	3.9	4.4	4.3	3.1	3.4	3.9
Pensioners	6.7	7.3	7.3	5.1	5.7	5.9	5.9	6.6	6.7
Retirees	20.0	20.2	19.4	13.8	13.7	13.9	17.0	17.1	16.7
School and university students	21.2	19.9	19.9	21.9	21.7	22.0	21.5	20.8	20.9
The unemployed	5.8	5.2	6.1	4.9	4.4	4.5	5.4	4.8	5.3
Other professionally inactive	15.0	16.3	14.9	10.2	11.4	11.7	12.7	13.9	13.4
Total N*	2007	9430		8635			18067		
	2009	19244		17534			36778		
	2011	19268		17475			36753		
Total %	2007	51.9		48.1					
	2009	51.8		48.2					
	2011	51.9		48.1					

⁵ The table presents weighted values (with the exception of the "Total N" row, where non-weighted values are presented); the distribution by educational attainment only concerns persons aged 12 and above. In over a dozen cases, the gender of the household member was not specified.

Table 3.4.5. Population in households holding driving licence and with the command of foreign languages in 2009 and in 2011 by demographic and social properties⁶

Demographic and social characteristics	Driving licence		(Active) command of a language (%)							
			English		German		French		Russian	
	2011	2009	2011	2009	2011	2009	2011	2009	2011	2009
Total	47.0	44.3	18.4	18.1	8.0	8.2	1.1	1.2	6.5	7.5
Gender										
Men	60.1	57.8	18.4	18.2	8.1	8.3	0.8	0.8	6.2	6.8
Women	34.8	31.8	18.3	18.1	7.8	8.1	1.2	1.5	6.9	8.1
Age										
Under 24	17.1	15.7	29.9	30.9	12.7	12.7	0.9	1.2	1.8	2.5
25-34 years	73.9	71.0	36.5	34.4	11.2	10.9	1.9	2.0	4.7	6.9
35-44 years	73.0	70.9	14.8	12.7	5.6	6.3	1.4	1.0	9.0	10.6
45-59 years	60.1	57.7	5.8	5.9	4.4	4.1	0.8	1.1	11.4	12.2
60-64 years	49.0	48.0	3.2	2.8	2.3	3.3	0.6	0.8	9.6	12.0
65 and above	32.3	29.7	2.1	1.7	4.3	5.2	0.7	0.5	7.2	6.7
Place of residence										
Towns with more than 500,000 inhabitants	54.0	49.7	31.5	31.9	8.4	9.7	2.7	3.1	10.0	11.1
Towns with 200,000-500,000 inhabitants	48.9	46.0	25.1	24.7	8.4	8.4	1.3	1.7	7.6	8.7
Towns with 100,000-200,000 inhabitants	44.7	44.5	21.2	23.2	8.4	10.5	0.9	1.2	8.3	9.9
Towns with 20,000-100,000 inhabitants	46.9	44.6	19.2	18.0	9.1	8.7	0.9	0.9	6.5	7.8
Towns with fewer than 20,000 inhabitants	46.9	43.7	15.2	15.3	8.0	8.2	1.2	1.0	6.2	6.8
Rural areas	44.9	42.4	13.1	12.7	7.1	7.0	0.6	0.6	5.1	5.7
Voivodeship										
Dolnośląskie	46.8	43.9	17.3	16.3	10.8	10.6	0.6	0.7	6.8	7.8
Kujawsko-Pomorskie	42.8	43.0	16.7	16.9	7.9	8.3	1.0	1.2	6.5	6.6
Lubelskie	45.5	42.4	16.3	16.2	6.6	5.7	0.6	0.7	8.8	10.6
Lubuskie	45.4	41.9	11.5	14.9	8.3	10.3	0.2	0.2	5.8	8.9
Lódzkie	46.8	43.7	14.3	16.0	6.3	7.5	0.9	0.9	3.9	7.0
Małopolskie	46.9	43.9	20.8	19.5	8.0	7.3	1.5	1.9	6.1	7.1
Mazowieckie	50.1	46.9	23.1	22.5	6.4	6.4	1.8	1.9	8.4	9.6
Opolskie	45.7	45.8	18.0	19.2	16.3	18.6	0.7	0.3	7.8	10.1
Podkarpackie	47.4	42.4	16.0	17.0	6.6	8.6	0.8	0.8	4.0	4.2
Podlaskie	47.8	44.6	21.2	18.7	7.3	4.7	2.1	1.6	17.3	17.0
Pomorskie	46.5	42.5	22.1	22.3	10.4	10.2	1.2	0.9	6.9	6.1
Śląskie	47.1	45.5	19.5	18.4	7.8	7.8	1.2	1.4	5.0	6.2
Świętokrzyskie	44.8	41.7	15.5	15.7	6.5	5.0	0.6	0.6	4.5	6.0
Warmińsko-Mazurskie	43.1	40.9	16.4	14.5	5.3	5.8	0.4	0.4	5.6	6.3
Wielkopolskie	51.4	49.2	16.2	16.2	7.7	9.2	1.0	1.4	5.2	5.9
Zachodniopomorskie	41.7	40.3	17.3	17.7	10.1	10.3	0.4	0.9	6.6	4.4
Educational attainment										
Primary and lower	16.9	15.9	10.1	10.6	4.9	5.4	0.3	0.2	2.2	1.9
Basic vocational/lower secondary	50.4	48.3	12.3	11.9	7.7	7.5	0.4	0.7	4.8	6.2
Secondary	66.3	64.4	19.3	21.1	9.1	10.1	0.9	1.1	8.5	9.7
Higher and post-secondary	79.4	77.9	43.3	41.5	14.6	14.6	3.6	4.0	15.4	18.5
Income per capita										
Lower quartile	32.1	30.4	10.5	12.1	5.3	6.2	0.3	0.4	3.7	4.8
2nd quartile	42.0	37.9	15.2	13.4	6.5	7.5	0.6	0.8	5.7	5.7
3rd quartile	50.9	46.6	18.4	17.0	8.6	7.7	1.1	1.0	6.6	8.2
Upper quartile	64.0	60.5	29.9	28.4	11.7	10.9	2.5	2.3	10.9	11.1
Social and professional status										
Public sector	74.3	73.5	23.6	23.3	8.1	8.1	1.8	2.1	13.0	14.4
Private sector	73.4	72.1	20.8	22.9	7.6	8.6	1.3	1.2	7.0	8.9
Private entrepreneurs	91.5	91.9	22.9	24.3	11.2	11.6	2.0	2.0	10.0	13.4
Farmers	76.6	75.3	2.6	1.9	3.3	3.5	0.5	0.5	7.2	8.4
Pensioners	34.1	32.5	2.0	6.8	3.4	4.3	0.3	0.4	6.2	6.2
Retirees	39.8	36.7	2.6	2.2	3.9	4.6	0.7	0.8	9.0	8.7
School and university students	18.5	13.8	37.8	37.6	15.5	15.2	1.2	1.6	2.4	2.9
The unemployed	49.1	42.6	17.5	13.4	7.6	7.8	1.0	0.6	5.7	8.0
Other professionally inactive	25.0	24.8	9.1	7.7	3.7	3.7	0.7	0.7	3.6	4.0

⁶ The table presents weighted values.

4. HOUSEHOLD LIVING CONDITIONS

4.1. Income and income management

4.1.1. Level and variability of household income and income inequalities

Income is the main measure of the level of household affluence and the key factor conditioning the extent to which the households' needs are satisfied. The surveyed groups of households are almost always composed of households with a varied number of members and demographic composition, thus having different consumer needs. Therefore, in order for the income (expenditure) of a household to be a correct measure of its ability to satisfy needs, comparable with the household having varied consumer needs, it should be adjusted in relation to the level of such needs. The simplest way to achieve that is to assume that all persons in the household have the same needs and to adjust the household's income by dividing it by the number of persons in the household. However, this solution has two major drawbacks. First of all, it involves an underlying unrealistic assumption that all persons, adults and children of various ages alike have the same needs and these are at the same level, and thus the amount of money necessary to satisfy them is equal as well. Moreover, this solution disregards the existence of certain savings resulting from living together (such as paying the rent together, using one TV set, washing machine or dishwasher). Hence, an important part of the household's regular expenditure is shared by a higher number of persons. Therefore, the income ensuring that the needs are satisfied at the same level does not grow proportionally to the growing number of persons in the household. For instance, ensuring the satisfaction of a four-person household needs at the same level as a one-person household does not require four times higher expenditure (income). The phenomenon of the decrease of household unit costs together with the growth in the number of household members is called economy of scale (Szulc, 2007, p. 139).

Thus, rather than adjusting household income by dividing it by the number of its members, adjusting it with equivalence scales seems more correct. Equivalence scales are parameters with which it is possible to measure the impact of the households' size and demographic characteristics on the level of their needs and, thus, on the differences in the amount of income (expenditure) necessary to achieve the same level of satisfying needs. The equivalence scales for a household of a given type indicate how many times its income should be diminished or increased in order to reach the same level of satisfying needs with a standard household being the reference point for comparison. Most often such a standard household, with the equivalence scale of 1, is a one-person household⁷. The analysis will include both the category of equivalent income as the category of income per person.

The average net income of the surveyed households in March 2011 amounted to PLN 1295 per person (table 4.1.1). In the period from March 2007 until March 2011 in the panel sample, in real terms, it increased by 18%⁸ (table 4.1.1). In last two years, on the other hand, this income increased in real terms by approx. 4%⁹.

In March 2011, the highest average net income per person was recorded in the households of self-employed persons (PLN 1750 per person). Other groups of households with the highest average net income per person include the households of employees and retirees (PLN 1355 and PLN 1328, accordingly). The persons from the households with income received but not earned and the households of farmers had visibly the lowest average net income per person – PLN 765 and PLN 827¹⁰, accordingly.

⁷ The manner of estimating the equivalence scales has been presented in Annex 4.

⁸ This is the percentage difference in the income from two surveys for all households. In the panel sample, also the average percentage change in the income amount from the two surveys may be also calculated for specific households. In the latter case the rate of change is considerably higher (37%). This difference results from the "base effect": in the households with lower income in the first survey the growth (drop) in the income amount by a certain value gives a considerably higher percentage rate of change than in the households with higher starting income and if the majority of changes on this individual level displays a similar tendency and is similar in terms of the nominal value, and in each event not fully proportional to the amount of starting income, then the average change is affected more by the changes in the households with lower starting income which are greater in percentage terms. When calculating the percentage change in average income in the entire sample, the differences in the starting level of income in specific households are of no significance and the changes in the households with a starting lower income have the same weight as the changes in the households with a higher starting income. It is unresolved which of these two manners of calculating the rate of change provides better information on the dynamics of the changes in the level of the society's affluence.

⁹ The average percentage change in the income of specific households is in this case 17% (cf. footnote 9).

¹⁰ The low income in this socio-economic group of households results partly from its seasonality.

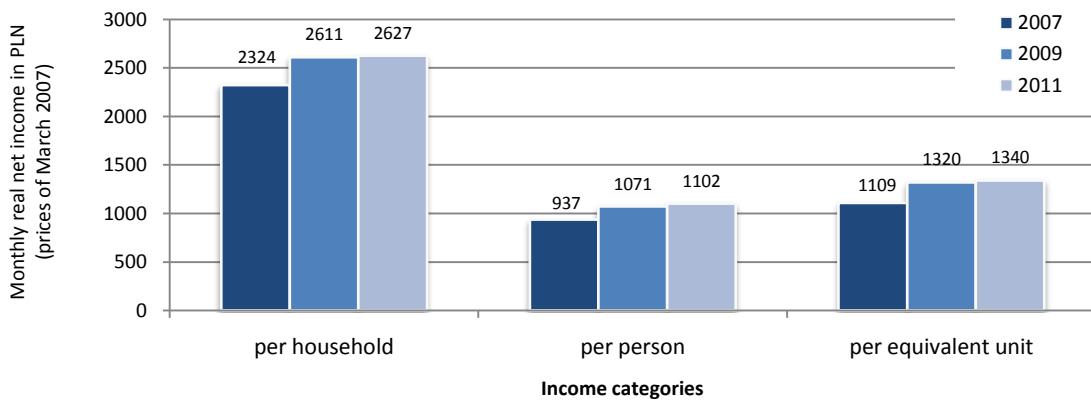


Figure 4.1.1. Real net income of households in the period 2007-2011 in the month preceding the survey in the panel sample

The socio-economic groups of households with the highest and the lowest equivalent income (being the indicator of their affluence level) are the same as in the case of income per person. The income of the groups of households with the highest affluence level amounted to PLN 2328, PLN 1812 and PLN 1425 accordingly, and in the case of the groups of households with the lowest level of affluence PLN 864 (table 4.1.1). In March 2011, the equivalent net income increased by approx. 3.5% in real terms¹¹, in comparison to March 2009 (table 4.1.5). The highest average increase was observed in the group of households being relatively less affluent, namely pensioners (by approx. 13.5%).

In March 2011, the net income per equivalent unit was visibly the lowest in the households of married couples with many children and in single-parent households (on average PLN 1229 and PLN 1337 accordingly, table 4.1.2). In last two years, the real income per equivalent unit increased most in the households of married couples with one child and without children, as well as in non-family multi-person households (by almost 7% and by nearly 6% accordingly) (table 4.1.6.).

In the households with the unemployed, the net income per equivalent unit was on average lower than in the households without the unemployed by PLN 600 (table 4.1.1). In the period from March 2009 until March 2011, such income increased in real terms in the group of households with the unemployed by approx. 8%, and in the group of households without the unemployed only by around 3% (table 4.1.5.).

Table 4.1.1. Net income of households in March 2011 by socio-economic group and type of economic activity

Socio-economic group and type of economic activity	Net income in PLN		
	per household	per person	per equivalent unit
Employees	3860.71	1355.01	1811.87
Farmers	3104.34	826.89	1199.11
Retirees	2274.73	1328.35	1425.02
Pensioners	1683.37	996.90	1062.75
Self-employed	4972.30	1750.26	2327.64
With income received but not earned	1385.99	764.71	863.50
Without the unemployed	3234.92	1372.85	1681.86
With the unemployed	2710.63	756.23	1092.33
Total	3168.65	1294.92	1607.30

The income per equivalent unit is in March 2011 evidently correlated with the place of residence class. The average monthly income per equivalent unit is the lower the smaller the place of residence (in March 2011, in the biggest towns such income was on average PLN 2337, while in the rural areas – PLN 1273 (table 4.1.3)). In March 2011, evidently the lowest income per equivalent unit was recorded in Lubelskie and Świętokrzyskie Voivodeship households (PLN 1267 and PLN 1310, accordingly), and the highest in the Mazowieckie and Pomorskie Voivodeships (PLN 1998 and PLN 1715 (table 4.1.4)). In last two years, there was a considerable increase in average real monthly income per equivalent unit as regards all place of residence classes (apart from the rural areas) (table 4.1.7). The greatest increase was observed in this period in the households living in a medium-sized towns with 100,000 to 200,000 inhabitants and in rural areas (more than 6% and approx. 5%, accordingly). In terms of voivodeships, the greatest increase in this type of

¹¹ This index constitutes the change in the average values for the households in the panel sample 2009-2011; that is, households which were surveyed twice – in 2009 and in 2011.

income was recorded in the group of households living in the Kujawsko-Pomorskie and Podkarpackie Voivodeships (by around 10%) (table 4.1.8).

Table 4.1.2. Net income of households in March 2011 by household type

Household type	Net income in PLN		
	per household	per person	per equivalent unit
Single-family:			
Married couples with no children	3277.61	1582.27	1923.10
Married couples with 1 child	3974.85	1321.11	1855.22
Married couples with 2 children	4178.19	1062.87	1629.31
Married couples with 3 or more children	3795.85	726.08	1228.91
Single-parent families	2574.02	1037.93	1337.34
Multi-family	4526.50	879.95	1439.56
Non-family:			
One-person	1624.81	1622.32	1493.13
Multi-person	2366.70	1119.67	1343.67

Table 4.1.3. Net income of households in March 2011 by place of residence class

Place of residence class	Net income in PLN		
	per household	per person	per equivalent unit
Towns with more than 500,000 inhabitants			
inhabitants	4176.30	1966.34	2336.98
Towns with 200,000-500,000 inhabitants			
inhabitants	3290.63	1455.51	1773.14
Towns with 100,000-200,000 inhabitants			
inhabitants	3144.52	1354.21	1652.99
Towns with 20,000-100,000 inhabitants			
inhabitants	3067.78	1299.73	1593.97
Towns with fewer than 20,000 inhabitants			
inhabitants	3005.84	1184.51	1486.96
Rural areas	2818.17	969.00	1272.76

Table 4.1.4. Net income of households in March 2011 by voivodeship

Voivodeships	Net income in PLN		
	per household	per person	per equivalent unit
Dolnośląskie	3174.20	1333.83	1641.05
Kujawsko-Pomorskie	2898.88	1169.85	1464.32
Lubelskie	2523.55	1021.96	1267.27
Lubuskie	3070.35	1249.44	1558.86
Łódzkie	2824.19	1202.50	1465.59
Małopolskie	3392.28	1331.12	1669.71
Mazowieckie	3794.63	1631.57	1997.97
Opolskie	2943.85	1167.80	1455.44
Podkarpackie	3120.33	1069.25	1403.04
Podlaskie	3051.83	1129.53	1445.90
Pomorskie	3383.74	1377.32	1714.78
Śląskie	3049.22	1312.32	1600.53
Świętokrzyskie	2725.49	1035.33	1309.99
Warmińsko-Mazurskie	2893.47	1135.38	1434.66
Wielkopolskie	3265.40	1283.75	1616.13
Zachodniopomorskie	3138.48	1318.74	1630.81

Table 4.1.5. Changes in real net income from the last month in the period March 2009-March 2011 (March 2009=100) by socio-economic group and type of economic activity

Socio-economic group and type of economic activity	Net income in the last month		
	per household	per person	per equivalent unit
Employees	102.39	102.96	102.61
Farmers	110.14	104.81	106.64
Retirees	104.48	104.43	104.29
Pensioners	114.66	113.54	113.51
Self-employed	102.96	101.71	101.93
With income received but not earned	103.77	109.05	105.57
Without the unemployed	102.03	103.87	102.93
With the unemployed	110.79	107.24	108.33
Total	102.93	104.25	103.48

Table 4.1.6. Changes in real net income of households in the period March 2009-March 2011 (March 2009=100) by household type

Household type	Net income in the last month		
	per household	per person	per equivalent unit
Single-family:			
Married couples with no children	104.38	106.85	105.63
Married couples with 1 child	104.94	108.66	106.93
Married couples with 2 children	98.71	101.11	100.71
Married couples with 3 or more children	108.08	104.49	104.79
Single-parent families	98.62	99.98	100.03
Multi-family	102.24	102.45	102.52
Non-family:			
One-person	103.70	108.35	100.25
Multi-person	104.38	106.85	105.63

Table 4.1.7. Changes in real net income of households in the period March 2009-March 2011 (March 2009=100) by place of residence class

Place of residence class	Net income in the last month		
	per household	per person	per equivalent unit
Towns with more than 500,000 inhabitants	102.58	103.66	102.58
Towns with 200,000-500,000 inhabitants	102.11	102.54	102.36
Towns with 100,000-200,000 inhabitants	102.74	107.92	106.45
Towns with 20,000-100,000 inhabitants	100.09	104.65	102.64
Towns with fewer than 20,000 inhabitants	104.16	103.08	102.93
Rural areas	105.08	105.24	105.07

Table 4.1.8. Changes in real net income of households in the period March 2009-March 2011 (March 2009=100) by voivodeship

Voivodeship	Net income in the last month		
	per household	per person	per equivalent unit
Dolnośląskie	100.98	104.24	102.82
Kujawsko-Pomorskie	110.81	110.10	110.12
Lubelskie	99.43	104.83	102.30
Lubuskie	103.62	107.89	106.33
Łódzkie	100.26	102.68	101.10
Małopolskie	103.05	104.93	104.24
Mazowieckie	99.92	100.71	99.92
Opolskie	97.80	97.44	95.96
Podkarpackie	113.27	108.86	109.80
Podlaskie	111.65	105.42	107.40
Pomorskie	104.06	106.75	106.49
Śląskie	106.02	106.51	106.41
Świętokrzyskie	105.19	99.33	101.57
Warmińsko-Mazurskie	104.82	103.11	102.84
Wielkopolskie	102.89	107.94	105.94
Zachodniopomorskie	95.29	101.67	98.77

The uneven distribution of the households' income was measured with the Gini coefficient and the coefficient of decile variation defined as the relation of the ninth decile to the first decile in the income distribution¹². The most adequate income category for examining the uneven distribution of income in this case is the income per equivalent unit, based on which the income of households with varied demographic composition may be compared.

¹² When measuring of the extent of uneven distribution of income, the Gini coefficient takes into account the shares of income of all households in the total income. Meanwhile the coefficient of decile variation, when assessing the extent of uneven distribution of income, takes into account only the income of 10% of households with the lowest income and 10% of households with the highest income; that is, the extreme income groups (cf. Panek, 2011).

The uneven distribution of equivalent income measured with the Gini coefficient dropped in the last four years in the panel sample by 2% (figure 4.1.2). A similar drop, also in the panel sample, was observed in the last two years (figure 4.1.3).

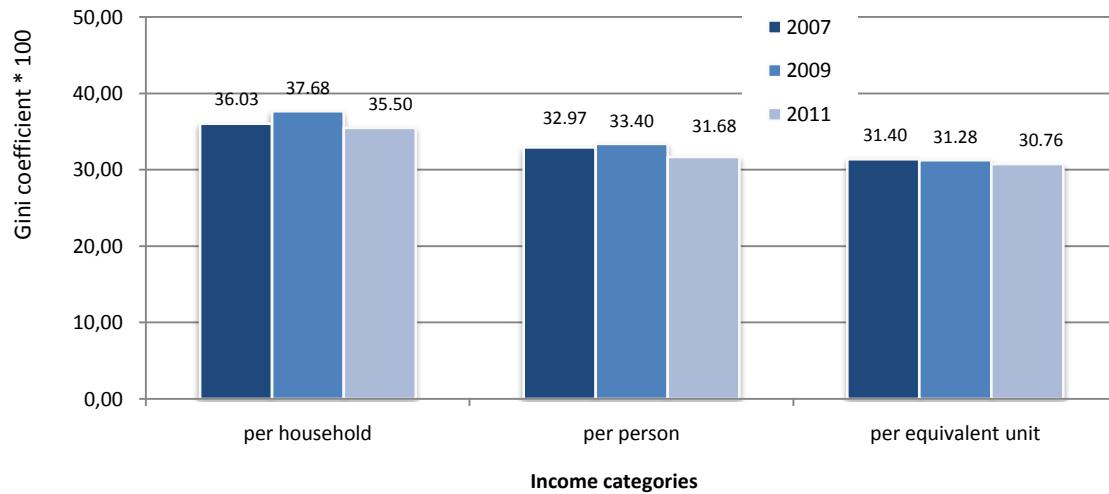


Figure 4.1.2. Gini coefficient in 2007, 2009 and 2011 in the panel sample

On the other hand, in the period from March 2009 to March 2011 this uneven distribution decreased by 4% (figure 4.1.3). These results suggest that the growing trend of income inequalities observed in the 90s and at the beginning of this century has changed. A similar trend was observed also as regards the income inequalities between the group of households with the highest and the lowest equivalent income; that is, the inequality between the extreme groups of households in terms of income in the period 2007-2011. Although in March 2011 the value of the coefficient of decile variation did not change significantly in relation to its value in March 2007, in the period March 2009-March 2011 a drop by 3% was observed.

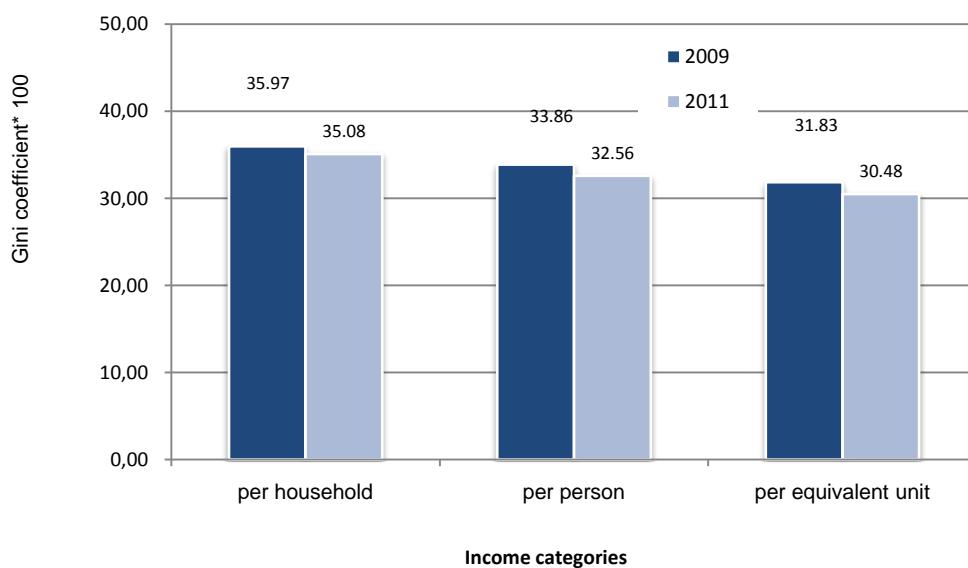


Figure 4.1.3. Gini coefficient in 2009 and 2011 in the panel sample

In March 2011, the lowest monthly net income in PLN needed to make ends meet, as stated by the surveyed households, was PLN 1347 per equivalent unit. In the period 2007-2011, it increased by PLN 208 (figure 4.1.4); that is, by nearly 20%. The aspirations of the households as regards the minimum income in real terms increased in the period March 2007-March 2011 by almost 4%.

In the period March 2009-March 2011, the equivalent monthly net income needed to make ends meet in the households did not change significantly (figure 4.1.5). However, this implies a drop in the aspirations of the households in real terms by around 7%.

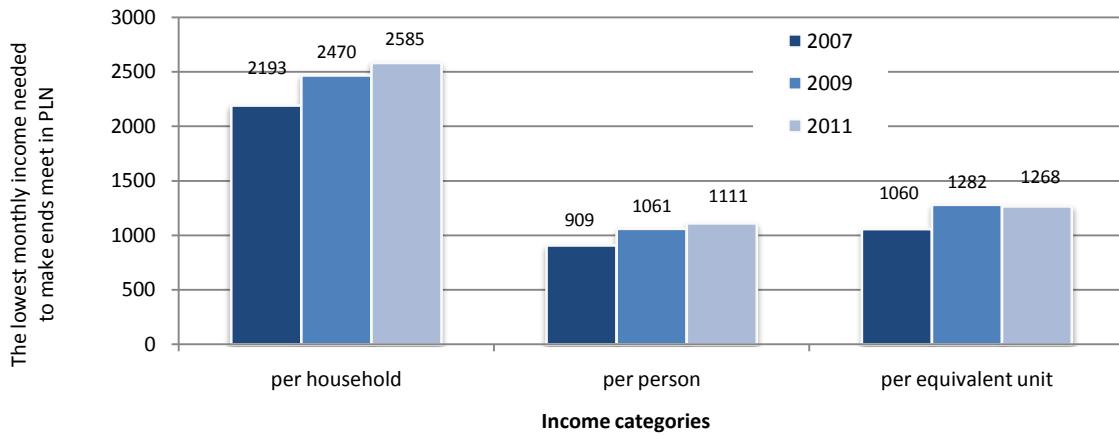


Figure 4.1.4. The lowest monthly net income in PLN needed to make ends meet in the period 2007-2011 in the panel sample

In March 2011, the highest aspirations concerning minimum acceptable equivalent income were noted in the households of self-employed members and the households of employees, as well as in the households of married couples with no children and married couples with 1 child (the equivalent minimum income indicated amounted to PLN 1642, PLN 1428, PLN 1511 and PLN 1443 accordingly). In last two years there was a significant increase in the income aspirations in nominal terms only in the households of farmers, households with married couples with children and in single-parent households. However, in real terms a drop in the income aspirations was observed in this period in all socio-economic groups and types of households. In March 2011, the lowest income aspirations were declared by the households with the lowest income, that is the households with income received but not earned (PLN 1019 per equivalent unit) and the households of married couples with many children (PLN 1081).

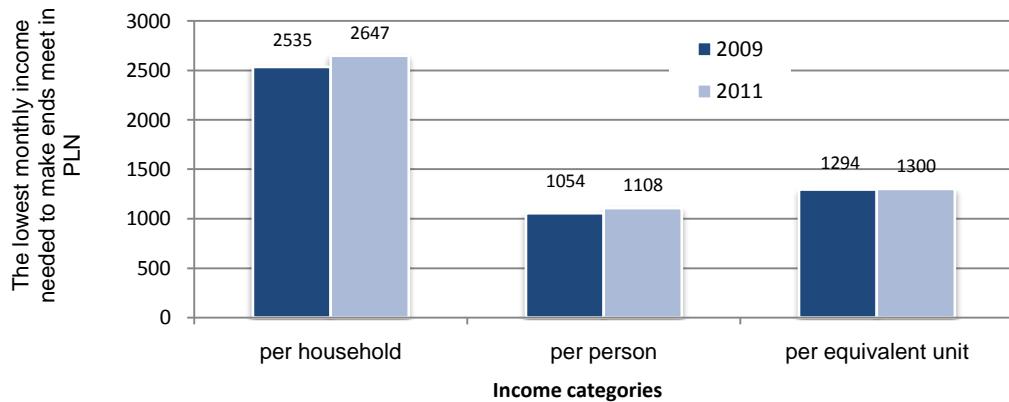


Figure 4.1.5. The lowest monthly net income needed to make ends meet in the period 2009-2011 in the panel sample

The level of monthly equivalent net income needed to make ends meet as declared by the households without the unemployed is significantly higher than in the case of the households with the unemployed (PLN 1385 and PLN 1075, accordingly). In March 2011, the level of such income decreased in real terms in relation to the situation in March 2009 for both groups of households, although in the households with the unemployed this drop was greater (by 7%).

The level of aspirations as regards the lowest monthly net income needed to make ends meet decreased in general together with the decreasing size of place of residence. The lowest level of monthly net income per equivalent unit needed to make ends meet was declared by the rural households (PLN 1121). As regards the regional distribution, the households declaring such lowest income were the households living in the Podkarpackie Lubelskie and Świętokrzyskie Voivodeships (PLN 1003, PLN 1155 and PLN 1172 per equivalent unit, accordingly). In the period 2007-2009, we observe a drop in such aspirations in real terms in all place of residence classes and voivodeships, with the greatest decline in the case of households living in small towns with 20,000-100,000 inhabitants and in the Dolnośląskie and Zachodniopomorskie Voivodeships.

4.1.2. Strategies for coping in difficult financial situations

Janusz Czapinski

In the last 11 years, the percentage of households which make ends meet with great difficulty or with difficulty declined significantly (by 13 and 5 percentage points accordingly) and the percentage of households making ends meet rather easily and easily increased (by 11 and 3 percentage points accordingly) (figure 4.1.6).

In last 11 years, the greatest increase was observed in the households which state that they live frugally and thus can afford everything (by 10 percentage points). The percentage of households which can afford everything and make savings for the future also increased, by 7 percentage points, while the percentage of households in the most difficult situation, which have no money for loan repayment, rent or clothes, decreased (figure 4.1.7). There was also an increase of the percentage of households living very frugally in order to save money for important purchases to the level recorded in 2000.

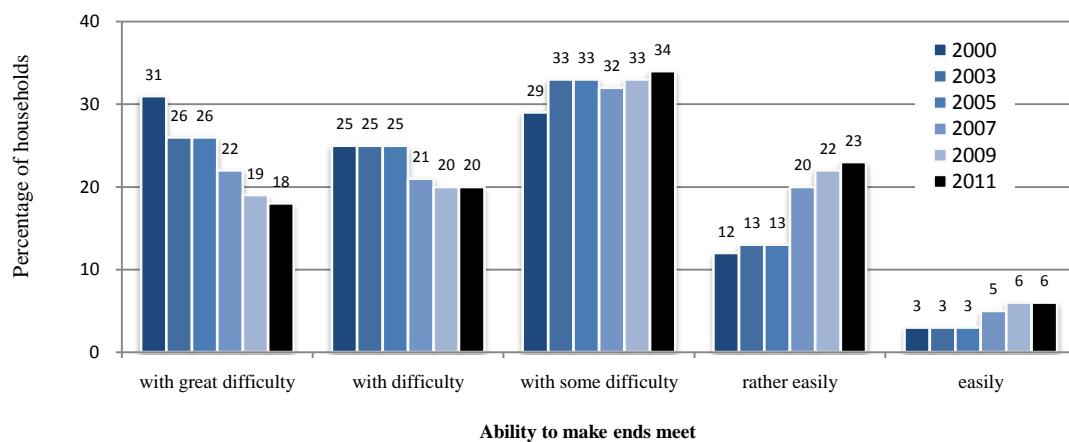


Figure 4.1.6. The extent to which households are able to make ends meet in the period 2000-2011, in whole samples

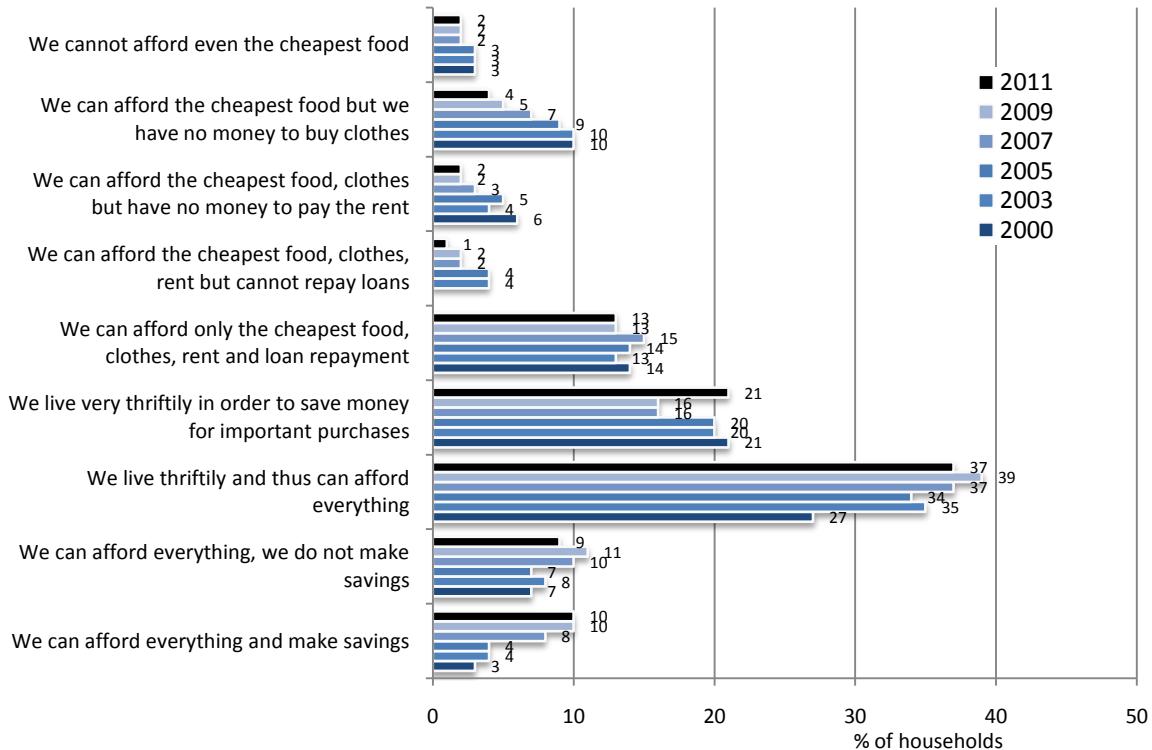
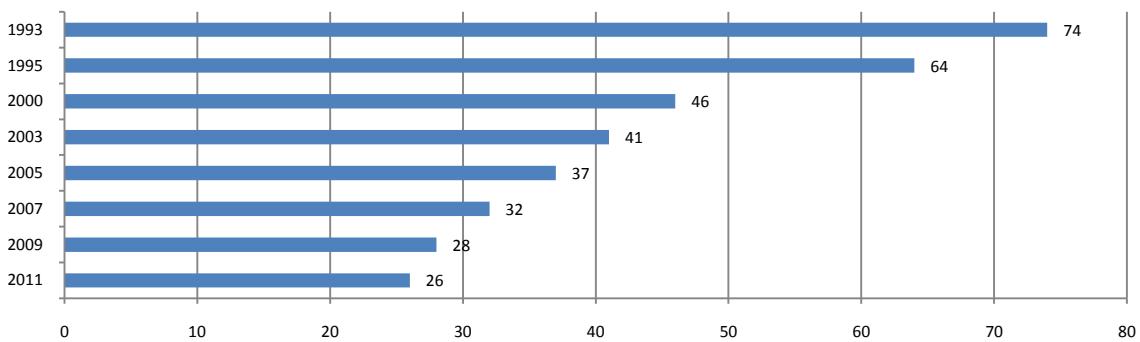


Figure 4.1.7. The manner in which households manage their income in the period 2000-2011 in whole samples

In March/April 2011, fewer than 26% of households declared that their regular income was not enough for them to meet their current needs. In last two years, the percentage of households whose income was not enough to meet their current needs dropped by 2 percentage points and in the period 1993-2011 this drop was almost threefold (figure 4.1.8).



Source of data 1993-1997 – Czapinski, 1998; 2000-2011 – Social Diagnosis

Figure 4.1.8. Percentage of households declaring that their regular income was not enough to meet their current needs in the period 1993-2011 in whole samples

In the period 1993-2011, the percentage of households which limited their current needs, started additional jobs, used their savings or took out loans when having insufficient income decreased (table 4.1.9). There was also a decline in the percentage of helpless households which did not take any actions in a difficult financial situation, with a simultaneous increase of the households which in such a situation asked for external assistance (mainly social assistance).

*Table 4.1.9. Percentage of households declaring various manners of coping with financial difficulties as regards meeting their current needs, among the households where regular income is insufficient to meet the current needs, in whole weighted samples in the period 1993-2011**

Manners of coping with financial difficulties	1993 N=1700	1995 N=1940	2000 N=1350	2003 N=1579	2005 N=1598	2007 N=1745	2009 N=3433	2011 N=3100
Limiting the needs	93.3	88.8	88.7	92.5	89.5	89.2	86.4	86.2
Taking up an additional job	29.4	32.9	22.9	22.1	21.5	18.1	16.3	16.3
Using the savings	20.8	15.1	16.6	9.5	8.5	7.6	13.0	9.7
Taking out loans and credits	43.3	44.6	50.7	42.9	42.0	40.9	35.5	32.2
Using the assistance of relatives	44.7	42.9	40.3	35.5	39.1	39.5	38.9	37.1
Using the assistance of the Church	1.0	0.8	1.3	0.7	1.9	3.4**	3.3**	3.9**
Applying for social assistance	7.5	7.1	11.7	13.4	16.2	16.7	15.5	16.6
Selling own property	no data	no data	5.7	6.9	5.9	4.4	4.5	4.6
Other actions	no data	no data	19.0	20.3	23.4	16.6	16.2	15.3
Not taking any actions	no data	no data	13.1	12.6	11.3	9.8	10.7	8.1

* in relation to the households whose income is insufficient to meet the current needs

** since 2007 "assistance from the Church/Caritas"

Source of data: 1993-1997 – Czapiński, 1998; 2000-2011 – Social Diagnosis

4.2. Nutrition

Tomasz Panek, Janusz Czapinski

In last 10 years there has been a drop in the percentage of households which for financial reasons, could not afford to buy food items as regards all groups (figure 4.2.1). The greatest decrease concerns stimulants (3.5 times), confectionary (almost 3 times), fruit and fruit preserves (over 2.5 time), meat and poultry as well as meat and poultry products (2.5 times) and fish and fish products (2 times). These were the same food items households most often could not afford in the last years.

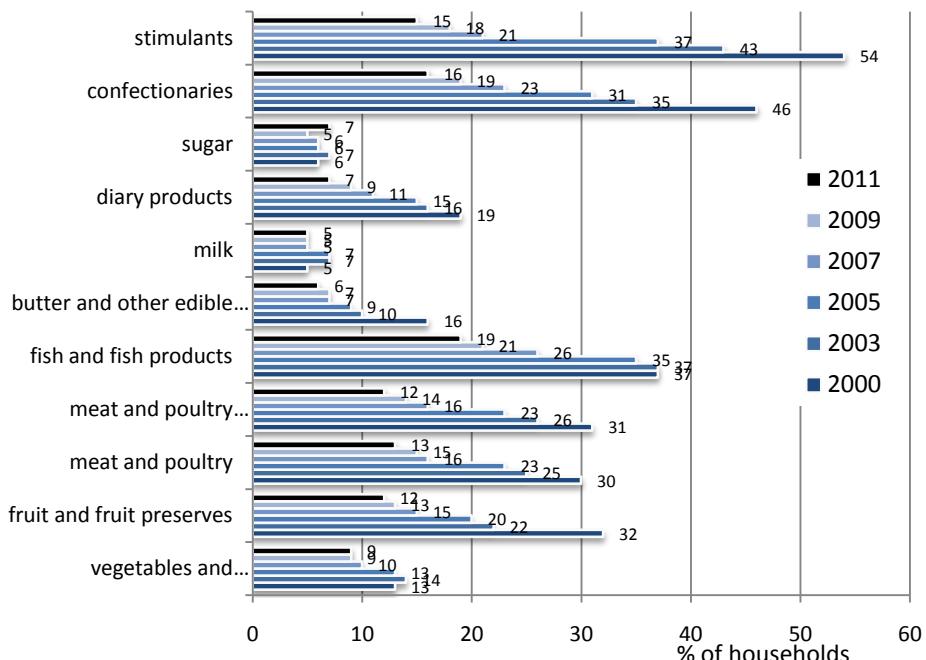


Figure 4.2.1. Percentage of households which could not afford a sufficient amount of various food items in the period 2000-2011

There was also a certain shift in the order of the food item groups which households stopped buying first for financial reasons: stimulants were no longer on the first position but second to fish and fish products, while fruit and fruit preserves went from the fourth to the fifth position. In last year there was also an increase in the number of households which did not buy only sugar but kept buying confectionaries. The overall number of households abstaining from buying food items from most groups significantly decreased, especially in terms of stimulants (by 3 percentage points).

4.3. Material affluence

4.3.1. Situation in 2011 and its change in last four years

Tomasz Panek, Janusz Czapinski

One of the main elements determining the households' affluence is possession of consumer durables. From among the consumer durables indicated in the survey, in March 2011 the most common were an automatic washing machine and paid satellite or cable TV. Approximately 9% of the surveyed households did not have an automatic washing machine, while 30% did not have paid satellite or cable TV. Among the least common consumer durables were a summer house (below 5%), a garden plot (below 12%) and a home cinema set (18%).

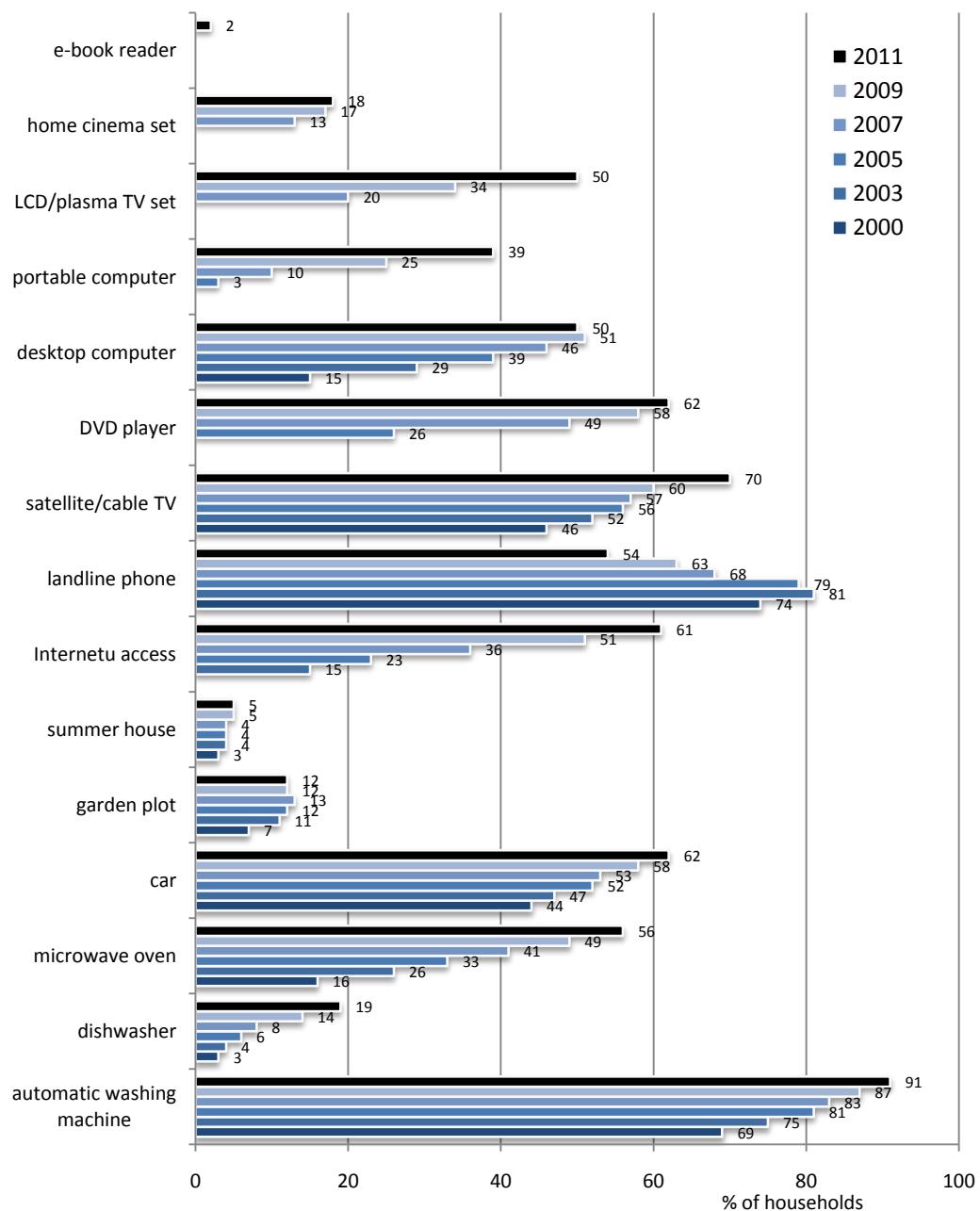


Figure 4.3.1. Possession of selected consumer durables in the households in the period 2000-2011

The households with on average the lowest number of consumer durables were in March 2011 the households with income received but not earned, other than old age or disability pension, and the households of pensioners. In terms of the household type, these households were in majority non-family households (both one-person and multi-person ones) and the households of single-parent families. The number of possessed consumer durables of the households without the unemployed is slightly higher for the decisive majority of consumer durables, than in the households with the unemployed. However, the number of possessed consumer durables in households broken down by the place of residence class and voivodeship varies depending on the consumer durable indicated in the survey, although in the case of majority, the lowest number was observed in rural households.

Apart from the landline phone, which increased until 2003 but afterwards its prevalence started to fall more and more quickly to the level of 54% of households, all other consumer durables are more present in households (figure 4.3.1), with the greatest increase in the state-of-the-art communication technology devices.

The lack of some consumer durables often results not from the lack of funds for their purchase but from the lack of willingness to own. In March 2011, the consumer durables which households most often did not have due to the lack of money for their purchase included mainly a summer house and a garden plot (40% and 30% of households, accordingly, did not have such goods). In the last four years we observed a strong drop in the percentage of households that could not afford to buy any of the consumer durables indicated in the survey, with the greatest drop in the percentage of households which could not afford to buy a passenger car and a desktop computer (both over 16 percentage points, figure 4.3.1). In the period 2009-2011, there was a significant increase only in the case of the households which could not afford to buy an LCD or plasma TV set and a DVD player (figure 4.3.1). However, this increase is an effect only of the increase in the percentage of households which would like to possess such consumer durables, since the percentage of the households not having such consumer durables for financial reasons in the entire surveyed population (and not only in relation to those households which do not have such consumer durables) decreased during the last two years in the case of all indicated consumer durables.

In March 2011, the differences between the groups of households formed with the criteria adopted under the research as regards the lack of certain consumer durables due to financial reasons were multidirectional. The greatest differences in this regard can be observed between the group of households without the unemployed and the group of households with the unemployed. The percentages of households with the unemployed which could not afford to possess certain consumer durables are considerably higher than in the case of the households without the unemployed, particularly in the case of a home cinema set (almost 46% and over 27% of households in these groups, accordingly, could not afford to buy such a product), a portable computer (more than 37% and over 20% of households in these groups, accordingly, did not have this consumer durable due to financial reasons) and a dish washer (over 42% and over 26% of households in these groups, accordingly, were not equipped with a dishwasher due to financial reasons). Moreover, financial difficulties were relatively most often indicated as reasons for not having certain consumer durables by the households of pensioners and the households with income received but not earned, by the households of married couples with many children as well as the households of single-parent families and non-family households.

In March 2011, 62% of households did not have any savings. Among the households declaring savings, there are visibly more households with savings at the equivalent of a monthly income (over 33% of all households) than a 3-months' income.

The percentage of households with savings has increased twice since 2000 (figure 4.3.2). Among the households with savings, the structure of savings has not changed considerably since 2000 and the households with the savings equivalent to their 3-months' income still prevail. The percentage of the households with savings equivalent to more than their yearly income has remained at the same level of 8%, which translates into only 3% in relation to all households.

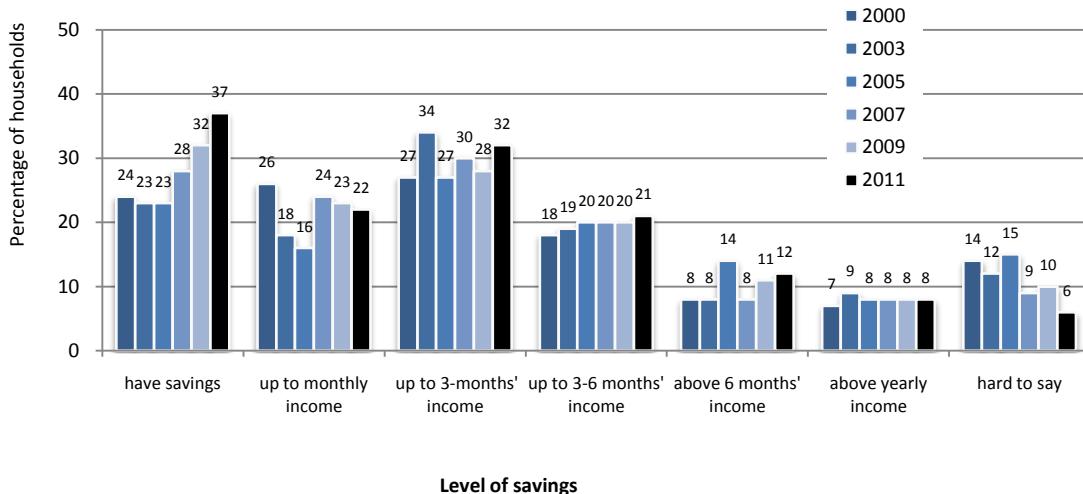


Figure 4.3.2. Percentage of households with savings and the percentage of households with various amounts of savings in relation to all households with savings in the period 2000-2011

Households with unearned income and the households of pensioners decisively most rarely declared any savings – almost 82% and over 81% accordingly. The households which do not have savings are present more often among married couples with many children and single-parent families (around 73% and around 71%, accordingly). The percentage of households without the unemployed not without savings is significantly lower than in the group of the households with the unemployed (61% and 75% of households accordingly). In all socio-economic groups and all household types there was a significant increase in the amount of savings in last 2 years, except for the households with self-employed members where the percentage of households with savings did not change in a significant manner.

The smaller the place of residence, the higher is the percentage of households without savings. The households declaring that they did not have any savings mostly lived in rural areas and in the smallest towns (almost 71% and over 67% of households from such areas accordingly). When broken down by voivodeships, the differences between the percentages of the households without any savings are not that high. The voivodeships where the households in most cases do not have any savings are the Warmińsko-Mazurskie (over 76% of households) and Lubelskie Voivodeships (over 66% of households). In March 2011 there was an increase, in relation to March 2009, in the percentage of households with savings in all place of residence classes and voivodeships, with the greatest surge in the Opolskie Voivodeship (there the percentage of households with savings increased by almost 12 percentage points).

The forms of savings in general did not change (figure 4.3.3). However, it should be noticed that in comparison with the years before the global financial crisis (2005-2007), the share of savings in the form of deposits in investment funds, real property and on Individual Pension Accounts decreased, while the percentage of safe bank deposits in PLN increased (although their share is still below the level from the beginning of this century).

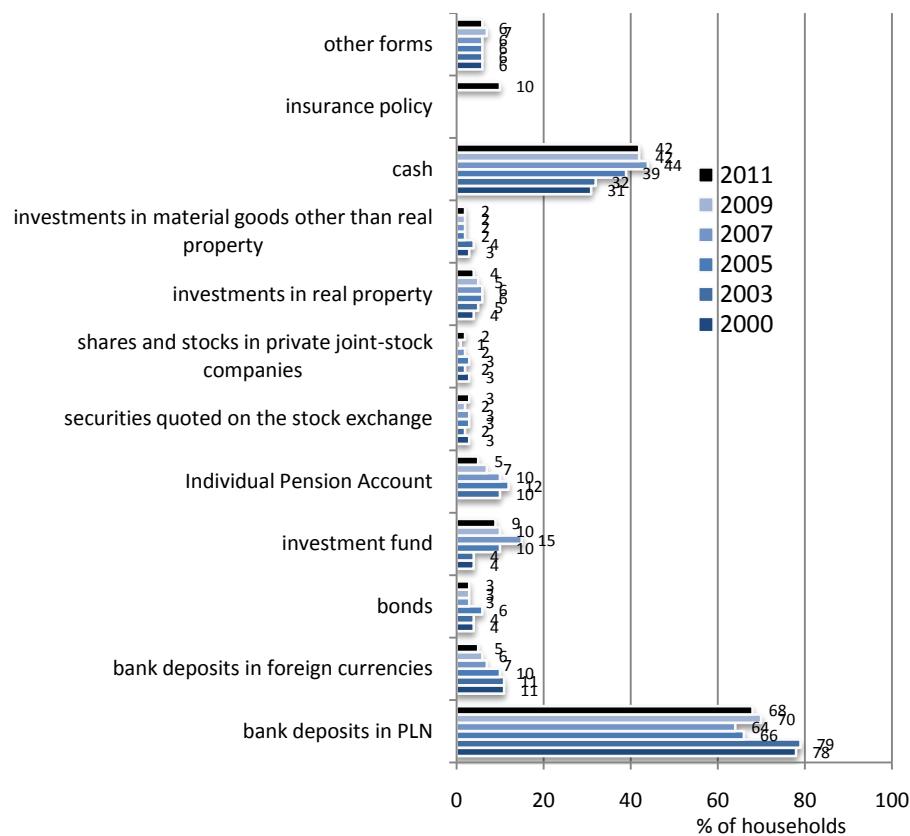


Figure 4.3.3. Forms of households' savings in the period 2000-2011

Bank deposits in PLN were made most often by the households of farmers (nearly 71%) and these households also most frequently had savings in the form of cash (over 54%), similarly as the households with income received but not earned (also more than 54%). In terms of the household types, bank deposits in PLN were most popular among the married couples with one child (almost 71%). Cash, on the other hand, was chosen most often by the households with many children (over 54%). Both in the households without the unemployed and in the households with the unemployed, the evidently prevailing forms of savings were bank deposits in PLN (over 68% and more than 63% in these groups, accordingly) and cash (nearly 42% and almost 44% of such households, accordingly).

Relatively, the highest percentage of households which placed their savings in bank deposits in PLN was observed in the largest towns with more than 500,000 inhabitants (over 73%). Cash savings were the preferred form among the households living in rural areas and in smaller towns (nearly 53% and nearly 49%, accordingly).

Bank deposits in PLN were made most often by the households from the Zachodniopomorskie and Podlaskie Voivodeships (in both over 74%). The voivodeships where the highest percentages of the households had cash savings are the Warmińsko-Mazurskie (over 53% of households) and Lubelskie (over 50% of households).

When analysing the purpose of the savings, there is a lower percentage of households which make savings in case of unexpected events, as a security for the old age, for purchase of consumer durables, for leisure and renovation of the house or apartment (figure 4.3.4).

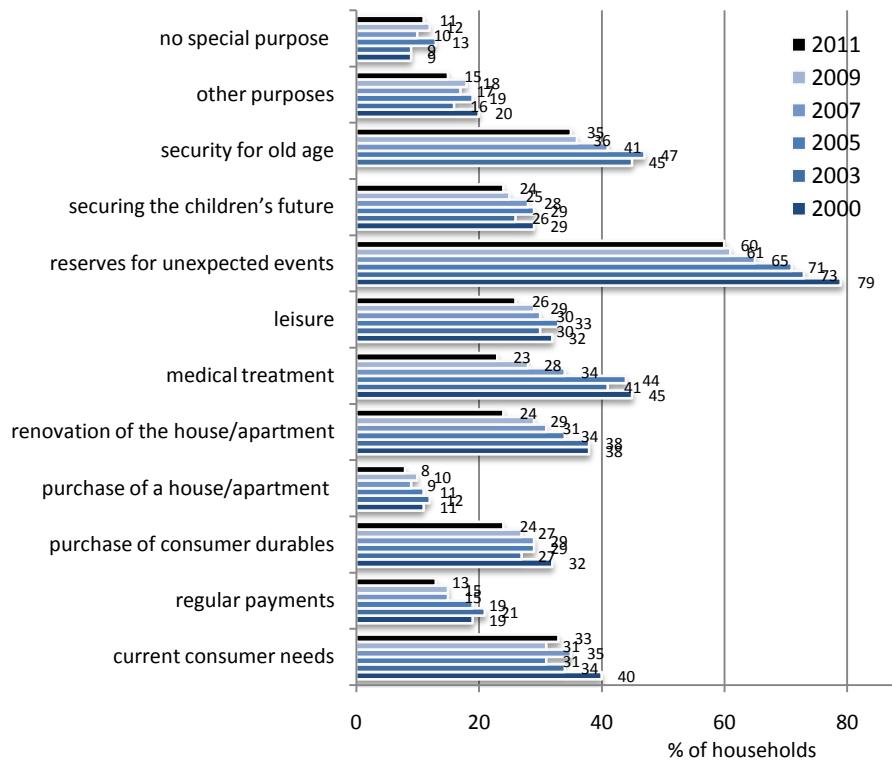


Figure 4.3.4. Purposes of the savings in households with savings, in the period 2000-2011

The savings set aside as a reserve for unexpected events were in March 2011 most common in the households of retirees and in the households of pensioners (over 63% and nearly 62% of the households from these socio-economic groups having savings declared this purpose). This purpose of savings was mostly mentioned by the households of single-parent families (almost 71% of this type of households). Also in the case of the households with the unemployed and the households without the unemployed, the savings were mostly made as a reserve for unexpected events (over 56% and more than 60% in these groups accordingly). However, the group of households with savings set aside as a reserve for unexpected events was not highly diversified in terms of the place of residence class or voivodeship. This purpose of savings was most often present in large towns with 200,000-500,000 inhabitants (in almost 64% of households) and in the Podlaskie and Lubuskie Voivodeships (over 80% and nearly 78% of households, accordingly).

The security for old age was in March 2011 most frequently indicated as the purpose of savings among the households of retirees and pensioners (in the case of 49% and 41% of households, accordingly), non-family one-person households (in more than 41% of households), the households living in the towns with more than 500,000 inhabitants (in over 40% of households) and in the Mazowieckie and Pomorskie Voivodeships (in over 42% of households).

Among the socio-economic groups, those which in March 2011 most often made savings for the current consumer needs were the households with income received but not earned and the households of farmers (nearly 67% and nearly 44% of households from these groups accordingly). As regards the household type, this purpose was most often indicated by the households of married couples with many children (over 44% of households). The savings set aside as a reserve for the current consumer needs were most common among the households living in rural areas (almost 39% of households) and in the Wielkopolskie (around 45% of households) and Podkarpackie Voivodeships (around 44% of households). Also in the group of households with the unemployed this purpose of savings was rather common (around 47% of households declared savings were made for this purpose).

Over 39% of the surveyed households in March 2011 declared they had loans and credits to repay. The debt of the households was most often above the amount equivalent to their yearly income (debt in this amount was declared by almost 23% of households being in debt).

The number of households in debt dropped slightly during last four years (from 42 to 39%), with a significant drop in the number of households with debts equivalent to their 3-months income and a rise in the percentage of households with debts equivalent to their yearly income (from 8% in 2000 and 19% in 2009, to 23%) (figure 4.3.5).

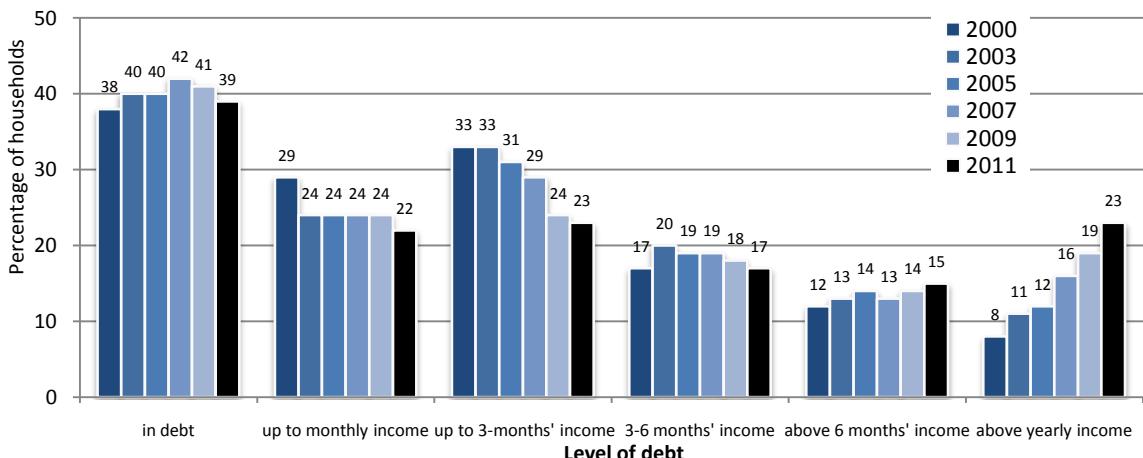


Figure 4.3.5. Percentage of households in debt and percentage of households with varied amounts of debt among the households in debt in the period 2000-2011

In March 2011, the group of households in debt included mainly households of employees and households of self-employed persons (nearly 49% and above 47% of households from these groups accordingly). In terms of the household type, the highest percentage of the households in debt was observed among households of married couples with 2 children and married couples with many children (almost 52% and over 50% of households in these groups accordingly). The number of households in debt was at the same level among the households with the unemployed and among households without the unemployed (in both cases around 39% of the households from these groups).

The distribution of households in debt in terms of their place of residence class and voivodeship is relatively only slightly diversified. The highest percentage of households in debt was observed in the towns with 100,000-200,000 inhabitants (over 42% of households) while the lowest in rural areas (over 36% of households). The highest percentage of households in debt was recorded in the Dolnośląskie and Lubuskie Voivodeships (around 51% and almost 48% of households, accordingly), and the lowest in the Świętokrzyskie and Podlaskie Voivodeships (around 27% and 30% of households, accordingly).

Since the beginning of this century, the percentage of the households with bank debts has been growing significantly and systematically (from 73% in 2000 to 91% in 2009 and 90% in 2011) at the expense of the debts owed to other financial institutions (figure 4.3.6).

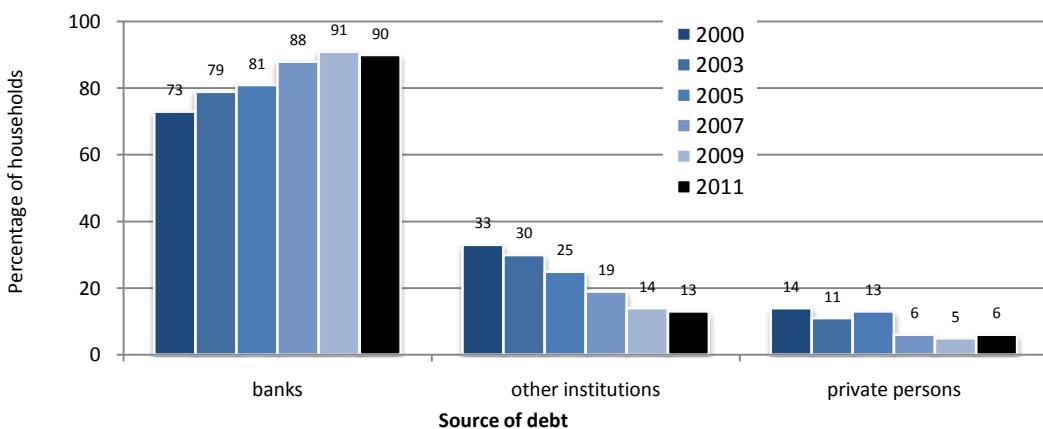


Figure 4.3.6. Source of households' debt in the period 2000-2011

Bank loans were the most common sources of debt in households living in the largest towns (over 94% of households in debt) and in the Podlaskie and Zachodniopomorskie Voivodeships (over 95% and nearly 94% of the households being in debt, accordingly).

Loans from financial institutions other than banks were taken out mainly by households of employees (around 15% of the households being in debt), single-parent families (over 24% of the households being in debt), households in towns with 200,000-500,000 inhabitants (more than 18% of the households in debt) and households in the Lubelskie and Lubuskie Voivodeships (over 17% and nearly 17% of the households in debt accordingly). Meanwhile, households with unearned income (around 26% of the households in

debt), with the unemployed (over 11% of the households in debt), of single-parent families (more than 10% of the households in debt), living in small towns with 20,000-100,000 inhabitants (more than 7% of the households in debt) and households in the Warmińsko-Mazurskie and Lubuskie Voivodeships (nearly 11% and over 8% of the households in debt accordingly) relatively more often took out loans from private persons.

In order to examine the purpose of the external financing of households, information was collected on the purpose of the loans and credit taken out by households. In March 2011, more than 37% of households used their credits and loans for financing the purchase of consumer durables, around 32% of households took out loans and credit in order to renovate their apartment or house, and approximately 18% of households used their financing for the purchase of a house or an apartment.

Credit and loans are now more rarely used for medical treatment, education or regular fees (e.g. rent), and more and more often for the purchase of an apartment or a house (figure 4.3.7). Together with the changes in the amount of debt, this means a drop in consumer credit and an increase in home loans.

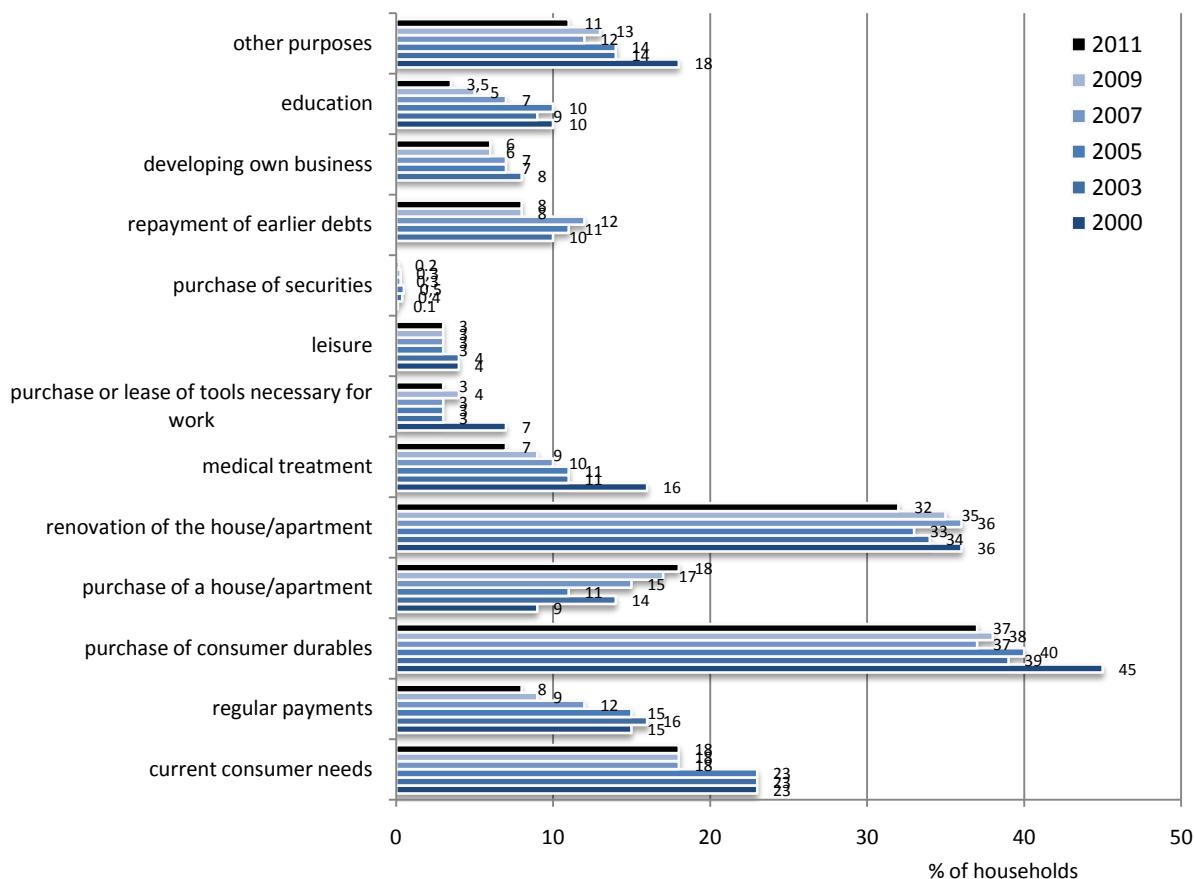


Figure 4.3.7. Purposes of the credit and loans taken out by households among the households in debt in the period 2000-2011

In March 2011, credit for the purchase of consumer durables was taken out mainly by households of employees (over 39% of the households with credits). The groups which relatively most often used their credit for renovation of their house or apartment included households of employees, households of retirees and the households of pensioners (almost 35%, over 33% and nearly 33%, accordingly).The purchase of a house or an apartment was the main reason for taking out a credit mainly among households of self-employed persons (in more than 32% of the households with credit.).

As regards the classification by the household type, the credit and loans financing the purchase of consumer durables were taken out by mainly multi-family households and non-family one-person households (in both cases more than 41% of the households with credits). For multi-family households, credit was also an important source of financing the renovation of the house or apartment (in more than 41% of the households with credit.). Meanwhile, the purchase of a house or an apartment was mainly financed with credit and loans in households of married couples with one child (in more than 27% of households with credit).

In the case of groups of households without the unemployed, loans and credit were used mainly, similarly as in relation to all households, for the purchase of consumer durables, for renovation of the house or apartment or for the purchase of a house or an apartment (more than 37%, nearly 32% and more than 19% of the households with credits in this group accordingly). The purchase of consumer durables was also the most frequent purpose of loans and credit in the households with the unemployed (nearly 38% of the households with credit). In this group of households, the next most frequent purposes of credit and loans were the renovation of the house or apartment and current consumer needs (around 35% and over 28% of households with credits/loans took out a loan or a credit to this end accordingly).

The purchase of consumer durables was most frequently financed with credit and loans by the households in large towns with 200,000-500,000 inhabitants, (over 43% of the households with credit) and in the Świętokrzyskie Voivodeship (in almost 45% of the households with credit). Credit for the purpose of renovating the house or apartment were mostly taken out by the households living in the smallest towns and rural areas (around 39% and nearly 36% of the households with credit accordingly) and in the Opolskie and Małopolskie Voivodeships (in both cases over 40% of the households with credit). The purchase of a house or an apartment was the reason for taking out a credit or loan mainly among the inhabitants of larger towns with more than 500,000 inhabitants (almost 31% of the households with credit) and in the Mazowieckie Voivodeship (nearly 29% of the households with credit).

When assessing the changes in material affluence as of March 2011 in comparison to the situation two years before, nearly 57% of households declared that their material situation had not changed and over 32% stated that it had worsened. In relation to the assessments from March 2009, there was a considerable drop in the percentage of households assessing the changes both positively (by nearly 4 percentage points), as well as negatively (by nearly 2 percentage points). Negative assessment of these changes was in March 2011 formulated mostly by the households with income received but not earned and the households of pensioners (over 47% and nearly 35% of households accordingly) as well as the households of single-parent families (over 37% of households). As regards the households assessing these changes negatively, this group includes visibly more households with the unemployed in relation to the households without the unemployed (nearly 46% and over 30% accordingly). The households which stated that their material situation had worsened are mainly from large towns with 200,000-500,000 inhabitants (over 34% of households), from the Lubelskie (over 40% of households) and Opolskie Voivodeships (nearly 37% of households).

4.3.2. Households' activity on the financial market

Piotr Białowolski, Irena E. Kotowska

The previous edition of *Social Diagnosis* of March 2009 was conducted shortly after the outbreak of the financial crisis. At that time, the changes associated with the introduction of credit restrictions by banks and other financial institutions were not visible yet in relation to the household credit portfolios. Since credit instruments are usually based on contracts for a period of many years, and in the case of mortgages such contracts may even range several dozens of years. Only in this edition of the research have we had the possibility of examining to what extent the use of financial market instruments by households had changed. It should be underlined that in the period 2009-2011, apart from the changes in the attitude of households and the changes in the policy of banks and financial intermediaries as regards credits (cf. Białowolski, Bieszki, Borusowski 2009), we may also observe some modifications in the regulations on the functioning of financial markets. These result from the regulations introduced by the Polish Financial Supervision Authority (KNF) affecting the credit policy of banks. These observations follow from the results of the cyclical research on the credit policy of banks conducted by the National Bank of Poland (NBP) (cf. e.g. NBP 2010).

4.3.2.1. Factors affecting possession of savings and debts

Since the outbreak of the financial crisis, the percentage of households with savings has decisively increased (from 28% in 2007 and 32% in 2009 up to 37% in 2011), which – in comparison with the stable level of this percentage (23-24%) in the 2000, 2003 and 2005 waves – suggests a considerable change.

The behaviour of households concerning savings depends on many factors connected with the course of life (the stage of life is determined by the age of the household head), the ability to generate savings (determined mainly by means of income) and a relative position of the household in the given period connected with the status on the labour market of the household head, in reference to an average situation

within the course of life¹³. These variables have been taken into account in the model of logistic regression (e.g. Gruszczyński, 2002). The probability of the household having savings has been made conditional upon its material situation, age of the household head and his/her status on the labour market:

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

where:

Y – binary random variable with the following possible values: 1 – if the household has savings, 0 – if the household has no savings;

F – logistic distribution function;

x – column vector for explanatory variables¹⁴;

β – column vector for parameters.

The models have been estimated separately for the data collected in the 2007, 2009 and 2011 waves, and table 4.3.1 includes the results for the two last editions.

Table 4.3.1. Results of the estimation of the logistic regression model as regards having or not having savings

Explanatory variables	2009 research		2011 research	
	B (standard error)	Odds ratio Exp (β)	β (standard error)	Odds ratio Exp (β)
Income per consumer unit	0.00086*** (0.000)	1.001	0.00093*** (0.000)	1.001
Age of the household head	up to 24 years	0.197 (0.167)	1.208	0.143 (0.196)
	25-34 years	0.264*** (0.068)	1.302	-0.043 (0.070)
	35-44 years	0.129** (0.064)	1.137	0.002 (0.062)
	45-59 years	ref.		ref.
	60 and more	0.220*** (0.071)	1.246	0.317*** (0.069)
Status on the labour market	Employees	ref.		ref.
	Unemployed	-0.655*** (0.184)	0.519	-0.514*** (0.167)
	Inactive	-0.378*** (0.070)	0.686	-0.417*** (0.068)
Constant	-1.992*** (0.061)	0.136	-1.938*** (0.060)	0.144
N	11472		11643	
Measure of fit (Cox-Snell R ²)	0.123		0.143	

Variables are significant with the statistical significance of *** 0.01, ** 0.05, * 0.1

In both periods (2009 and 2011), household income influenced the probability of having savings in a similar manner – the growth in household income by PLN 100 increased the odds¹⁵ of having savings by around 10%. Another strong determinant of savings in both periods was also the status of household head on the labour market. In each research wave, the odds for having savings was around 35% to 60% lower in the case of households with the head at the same age and the same income, when the household head did not work in comparison to the households with a working household head. Additionally, on the basis of an analysis of models' parameters it may be concluded that unemployment limits the possibility of savings more than professional inactivity.

The results of the model estimation for 2011 indicate changes in the influence of the age of household head on the probability of savings – the age groups of 16-24 years, 25-34 years, 35-44 years and 44-59 years ceased to be significant. Unlike in the case of the results of 2009, in 2011 the respondents had a similar propensity to save in each age group with an analogical status on the labour market and analogical income.

In 2009, the probability of savings in the age group of 25-34 years and 35-44 years was considerably higher than in the reference group (45-59 years). However, in both these periods the highest probability of savings was observed in the households with the household head aged 60 and more. At present, the probability of savings in such households is higher than in other groups, and, additionally, the differences between the oldest and the reference group are increasing (the odds higher by 37% in 2011 in comparison with nearly 25% in 2009).

Unlike in the case of changes in the share of households with savings, the percentage of households with a loan or a credit has been systematically decreasing; in 2011 it was below 39%, which means a drop

¹³ If the household head does not work, the relative income is usually lower than in the other stages of the course of life.

¹⁴ Variables: age of the household head and his/her status on the labour market were categorical variables, which required assumption of reference categories. In both cases the groups with the largest representation in 2011 were assumed as such categories. In the case of the age of the household head, this was the group of persons aged 45-59, and in the case of the household head's status on the labour market – the category of an employed person.

¹⁵ In logistic regression models, the coefficients next to the variable influences the change in odds, defined as quotient of the probability of success (here: having savings) and the probability of failure (here: lack of savings).

by approximately 2 percentage points in comparison with 2009. This is a tendency observed since the outbreak of the financial crisis. The decrease in the activity of households as regards taking out loans and credit is observed against the background of the relatively poorly developed Polish credit market. However, during the crisis considerable restrictions were introduced to the credit policy of banks and financial institutions. The Polish Financial Supervision Authority also made some regulatory moves (mainly Recommendation T¹⁶) which resulted in the decreased availability of credit products and thus lower activity of households on the credit market. In order to assess to what extent the changes in the supply of credit influenced the changes of the demand for credit among households, as previously, a model of logistic regression was estimated. In this model, the dependent variable is the possession of liabilities by households, while the explanatory variables are the same as in the case of the regression model concerning savings; that is, the probability of having liabilities is dependent on the amount of income, age of household head and his/her status on the labour market (table 4.3.2).

Table 4.3.2. Results of the estimation of the logistic regression model as regards having or not having liabilities

Explanatory variables	2009 research		2011 research	
	B (standard error)	Odds ratio Exp (β)	β (standard error)	Odds ratio Exp (β)
Income per consumer unit	0.00008*** (0.000)	1.00008	0.00005*** (0.000)	1.00005
Age of the household head	up to 24 years	-0.293* (0.152)	0.746	-0.976*** (0.219)
	25-34 years	0.273*** (0.062)	1.314	0.459*** (0.064)
	35-44 years	0.192*** (0.057)	1.212	0.495*** (0.056)
	45-59 years	ref.	ref.	ref.
	60 and more	-0.770*** (0.063)	0.463	-0.498*** (0.064)
Status on the labour market	Employees	ref.	ref.	ref.
	Unemployed	-0.642*** (0.134)	0.526	-0.727*** (0.137)
	Inactive	-0.322*** (0.060)	0.725	-0.378*** (0.062)
Constant	-0.179*** (0.046)	0.836	-0.340*** (0.047)	0.712
N	11421		11507	
Measure of fit (Cox-Snell R ²)	0.068		0.068	

Variables are significant with the statistical significance of *** 0.01, ** 0.05, * 0.1

While the probability of having savings depended to a large extent on the size of income, the probability of having a loan depends on this variable only to a slight extent. This impact is ten times smaller and indicates that each additional PLN 100 of income translates into a higher odds of having a loan by only 1%. As expected, the households with a young household head are more active on the credit market than households from the reference group (households with a household head aged 45-59 years). In the groups aged 25-34 years and 35-44 years, the odds for having credit liabilities is around 60% higher than in the reference group, which may result from the eagerness to fulfil consumer needs typical for this stage of life (purchase of consumer durables, apartment). The households whose heads are in the youngest group (up to 24 years) are yet not sufficiently reliable for financial institutions to be able to take out loans. Additionally, this group is most affected by the restrictions of credit policy when compared with the pre-crisis situation. The availability of credit, measured with the odds for having one, was over 60% lower than in the reference group. In 2009, it was lower only by 25%. In the case of the households of older persons (household's head aged 60 and more), the odds for having a loan was around 40% lower than in the reference group. This may be caused by two main factors. Firstly, after reaching a certain age the majority of needs which are usually satisfied with a credit are already fulfilled. Secondly, it should be remembered that the group of households whose heads are now aged above 44 years started their professional activity (and thus started to have the largest loan needs) in the period when the Polish credit market was poorly developed and did not offer products adequate to the needs of this group.

Similarly, as in the case of having savings, the fact of being employed contributes to the chance of having a loan. It was observed both in 2009 and 2011 and is related to the factors which affect households credit position both with respect to supply and demand. On the one hand, the households with lower income are not willing to make larger purchases which are often financed with a loan. On the other hand, the households whose head has no permanent employment are considerably less reliable for financial institutions and, therefore, have decisively lower chances to receive a loan. Moreover, the unemployment of the household's head decreases more the probability of having a loan in comparison with the households whose head is professionally inactive. Unemployment is a highly negative signal for financial institutions and very often blocks any access to credit products for such households. Meanwhile in the case of the

16 The purpose of Recommendation T was to introduce a set of good practices for managing retail credit risk in the banking sector. This Recommendation includes a series of regulations concerning the provision of credit by banks, with the most restrictive for households being a more strict examination of creditworthiness. These regulations have decisively reduced the availability of credit to households.

households where the heads are professionally inactive, income is often received from social benefits. Such benefits are provided for a longer period of time or even permanently (such as old age pension), which contributes to a higher creditworthiness of such households and enables them to use credit more often (than in the case of the unemployed).

4.3.2.2. Amount of Polish household savings in relation to the form of savings

The pace of growth of average household income in Poland in the period 2009-2011 declined considerably; in the period 2007-2009 the growth in equivalent income reached almost 22%, after adjustment for inflation, and in the period 2009-2011 it amounted only to 3.4%. However, even such modest growth of real income was reflected in the growth of the percentage of households with savings. The average amount of household savings was analysed taking into account the fact that households got used to a quickly growing standard of living. The following analytical approach was applied; it was assumed that the level of savings in relation to income may be described with a positively skewed distribution for the variable with negative values. The hypothesis that the amount of savings in relation to income may be described with a log-normal¹⁷ distribution was verified. On the basis of the estimated parameters of the log-normal distribution an average amount of savings in relation to income in Polish households was calculated with the following formula:

$$E(X) = e^{\mu + \frac{\sigma^2}{2}}$$

where μ stands for the mean of the underlying normal distribution and σ for its standard deviation. The results of these calculations have been presented in table 4.3.3.

Table 4.3.3. Average amount of savings in 2007, 2009 and 2011

	2007	2009	2011
Average amount of savings (in relation to monthly income)	~4.51	~4.86	~4.72

An average amount of savings in relation to income in Polish households increased in the period 2007-2009 from 4.51 of monthly income in 2007 to 4.86 of monthly income in 2009. In the period 2009-2011, the average amount of savings decreased slightly from 4.86 of monthly income to 4.72.

The structure of households with savings broken down by the form of savings has been presented in figure 4.3.4. Here, an analysis of the amount of such savings is presented, depending on their form, which depicts the manner in which households manage their savings. Households may be oriented to using financial instruments, which (1) bring on average higher profits or (2) limit the risk – in a positive manner in the case of bank deposits, and in a negative manner in the case of cash savings. Since households provided only the total amount of savings, without listing the specific amounts broken by the forms of savings, a model of multinomial logistic regression was used in the analysis. In this model, the probability that a respondent with X features belongs to category j of variable Y may be described with the following formula (e.g. Gruszczyński, 2002): $P(Y = j|X) = \frac{e^{x\beta_j}}{\sum_{l=1}^m e^{x\beta_l}}$

$$P(Y = j|X) = \frac{e^{x^T \beta_j}}{\sum_{j=1}^m e^{x^T \beta_j}}$$

where:

Y – random variable with m categories, describing the amount of the savings expressed as a multiple of income,

X^T – column vector for explanatory variables;

β – column vector for parameters, where β is zero for the reference category (in the analysed model the reference category is the debt amount below the amount of monthly income).

Then, the conditional probability of the household belonging to a given category of the savings amount was calculated, on the condition that it has savings only in one form. The average amount of savings, calculated based on the distribution of conditional probabilities, has been presented in table 4.3.4.

¹⁷ Calculated on the basis of the data, the value of Kolmogorov λ amounted to: 0.543 for the year 2007, 0.630 for the year 2009 and 0.256 for the year 2011, thus, providing no basis for dismissing the hypothesis concerning the correspondence of the distribution of the savings level in relation to the income with the log-normal distribution.

Table 4.3.4. Average amount of savings in 2009 and 2011 in households, depending on the form of savings

Form of savings	Average amount of savings (as a multiple of the household income) in 2009	Average amount of savings (as a multiple of the household income) in 2011
bank deposits in PLN	~4.2	~4.5
bank deposits in foreign currencies	~3.9	~3.1
bonds	~4.7	~3.3
investment funds	~3.9	~4.6
Individual Pension Account	~2.0	~2.5
securities quoted on the stock exchange	~5.0	~3.1
shares and stocks in private joint-stock companies	~4.3	~5.4
investment in real property	~4.0	~4.5
investments in material goods other than real property	~3.4	~2.2
cash	~2.2	~2.4
insurance policy	not recorded	~2.5
other forms	~2.6	~2.6

The highest savings in relation to income were recorded in households with savings in the form of shares and stocks in private joint-stock companies. In 2011, the savings of this form amounted on average to 5.4 of monthly household income. Savings in the form of investment funds are also high (4.6 of monthly income). Household savings in the form of PLN bank deposits are only slightly lower, and this form of savings is the most popular among households. The amount of savings in this form, among households with savings only in this form, amounted to 4.5 of monthly income. In comparison to 2009, the amount of savings in the form of stocks and bonds decreased considerably. In the case of stocks, it seems that the popularisation of public shareholding could have had a significant impact, as after the privatisation of large companies (mainly PZU and GPW) there are a higher percentage of households using this form of saving. However, it should be considered that the possibility of purchasing stocks for individual investors under public shareholding offers was limited, which translated into the lower average amount of savings gathered in this manner. With respect to bonds, it seems that at present this instrument is considerably less popular due to the restricted number of such offers for households and limited promotion of this instrument by the government. Hence, in the case of bonds also a lower percentage of households using this form of savings were recorded, as well as a lower average amount of savings gathered in this manner. Despite the fact that a large group of households saves money in the form of cash, this form of savings concerns only a small amount of funds, equivalent to only twice the amount of monthly income, which is a positive signal. Similarly, small amounts of savings are gathered on individual pension accounts (IKE). Although the average amount of savings in this form increased in comparison with 2009 (from 2.0 to 2.5 of income), this increase results to a large extent from the smaller group of households with an individual pension account (cf. figure 4.3.4). This means that some households closed their individual pension accounts or ceased to save in this form. This fact is mainly connected with the lack of incentives for persons saving in this manner (as regards tax exemptions). On the other hand, it may be assumed that households in Poland are not willing to save in the long-term perspective.¹⁸

In point 4.3.1, the purpose of making savings is analysed. The structure of the households with savings broken down by the form of savings is presented in figure 4.3.5. Moreover, the average amount of savings in relation to the purpose of saved funds is analysed. The amounts presented in the table below show the expected average amount of savings in households with savings made for only one purpose¹⁹.

In 2011, the highest amount of savings in relation to income was recorded in households saving for the purchase of an apartment or a house. In relation to their monthly income, the amount of savings made for this purpose was over eight times higher than their average income. In addition, an increase in the average amount of savings for this purpose was observed when compared with the situation in 2009. This stems from the fact that since the outbreak of the financial crisis, it became more difficult to obtain a loan for the purchase of an apartment without a considerable contribution. The increase in the amount of savings from 6.2 to 8.1 of income should be in this case also considered as a positive signal for the housing market as it means that this industry will be able to develop thanks to greater investments made by households with savings.

¹⁸ This is partly connected with the expected path of future income in the course of life of a household. In the case of a relatively poorly developed economy, it is highly probable that household income will increase rather fast in coming years. In such an event, making savings, and long-term ones in particular, is not that rational.

¹⁹ The average amount of savings has been calculated on the basis of checking the correspondence of the distribution of expected answers to the question about the amount of savings with the log-normal distribution.

Table 4.3.5. Average amount of household savings in 2009 and 2011 by purpose of savings

Purpose of savings	Average amount of savings (as a multiple of the household income) in 2009	Average amount of savings (as a multiple of the household income) in 2011
as a reserve for current consumer needs (e.g. food, clothes)	~2.3	~2.3
regular payments (e.g. home payments)	~2.1	~2.3
purchase of consumer durables	~4.0	~4.3
purchase of a house or an apartment, payment to the housing cooperative	~6.2	~8.1
renovation of the house or apartment	~3.5	~3.3
medical treatment	~2.6	~2.9
medical rehabilitation	~3.6	~4.5
Leisure	~3.2	~3.9
a reserve for unexpected events	~3.5	~3.5
securing the children's future	~4.9	~4.3
security for old age	~7.2	~6.5
other purposes	~4.1	~4.0
no special purpose	~3.2	~4.2

As regards the amount of savings, the savings gathered as a security for old age are in second place, though the average amount dropped in comparison to 2009 (from 7.2 of monthly income to 6.5). The lowest amount of savings was recorded in the households which save as a reserve for current expenses and regular fees. The savings, if gathered for any of the above-mentioned purposes, did not exceed much the amount equivalent to the amount of twice the monthly income.

4.3.2.3. Amounts of households' debt, by source and purpose

For those households which have debts, the amount of debt in relation to income is assessed, together with its changes over time. By applying a similar analytical approach as in the case of savings, it is also assumed that the amount of debt in relation to income may be described with a log-normal distribution.²⁰ The results of the estimation of an average amount of debt were presented in table 4.3.6.

Table 4.3.6. Average amount of debt in 2007, 2009 and 2011

	2007	2009	2011
Average amount of debt (in relation to monthly income)	~6.61	~9.58	~15.1

The average amount of household debt is considerably higher than the average amount of savings in relation to income in all years compared. Moreover, there is a fast growth of household debt, simultaneously with the stabilisation of the savings average. This means that the discrepancy between the level of savings and the level of debt in Polish households is widening. In 2007, the average amount of debt was equal to the income earned by a household during 6.6 of a month. In 2009, this value increased by an amount equal to the quarterly income earned by a household, and in 2011 it increased five-fold, reaching the final level of 15.1 of monthly income of a household.

There is also a systematic growth in the variability of the amount of household debt measured with a standard deviation of the amount of debt in relation to income²¹. This result corresponds with the statistical data on the amount of debt among Poles in the recent period. According to the data of the National Bank of Poland, in recent years the main factor contributing to the growth of the Polish credit market is growing household debt mainly through home loans. Based on these data, the value of consumer credits increased in the last period at a pace below the inflation rate. What is more, the increase in total debt due to home loans is often not an effect of new loans being taken out but rather of the growing value of loans in foreign currencies (mainly in CHF). Although purchase of a real estate through a loan is still available to a relatively small group of households, such purchase is connected with a financial obligation of a considerable value often equivalent to many years' income of such household.

Households may use three main sources of financing: banks, other financial institutions and private persons. The structure of households with debts broken down by the source of financing is presented in figure 4.3.7. During last two years, among the households with debts, the percentage of households with bank debts and debts in other financial institutions slightly decreased while the percentage of households

²⁰ The calculated value of the Kolmogorov λ testing statistics amounted to: 0.178 for the year 2007, 0.245 for the year 2009 and 0.184 for the year 2011, thus, providing no basis for dismissing the hypothesis concerning the correspondence of the distribution of the debt level in relation to income with the log-normal distribution for any of the periods.

²¹ In the period 2007-2011 it was observed that the standard deviation of the amount of households' debt increased more than twice.

financing their expenditure with loans from private persons increased. This may result both from the fact that there is less interest in the credit offer of the institutions of financial intermediation as well as from the limited availability of credit, especially the consumer loans, offered by the banking sector. Moreover, the availability of such sources of financing as loans from employers – once non-market competition for bank loans – is declining. Even though Polish households are slowly learning that financing their expenditures with money borrowed from private persons (mainly family) is connected with considerable risk and introduces tension in family relations, unfortunately when cut off from the market sources of financing, they are forced to use more archaic methods of financing surplus consumption.

In order to assess the impact of the source where the liability was incurred on the amount of such liability, a model of multinomial logistic regression was estimated. On the basis of conditional distributions, the average amounts of financial liabilities have been calculated for bank debts, other financial institutions and private persons. These have been presented in table 4.3.7.

Table 4.3.7. Average amount of a household's debt in 2009 and 2011 by source of financing

Source of financing	Debt		
	in banks	in other institutions	with private persons
Average amount of debt (as a multiple of the household income) in 2009	~10.7	~3.0	~3.9
Average amount of debts (as a multiple of the household income) in 2011	~16.7	~4.6	~4.8

Among the households with debts, the highest average amount of debt concerns bank debts; the average amount of such debt is equivalent to an amount over 16 times exceeding the household's income. The amount of debt taken in other financial institutions or with private persons is below the amount equivalent to five months household income. This considerable disproportion may result partly from the fact that only banks offer loans of high value, including mainly home loans. Moreover, practically only banks offer credit for individual business activity. In other financial institutions often a credit for current consumption needs is available. Banks debts and debts in other institutions increased significantly during last two years. In the case of banks, this increase resulted most probably from the shift in the focus of banking sector policy. Banks are no longer that willing to finance consumption, thus focusing more on financing purchases of apartments. Additionally, the average amount of credit in foreign currencies increased (and very significantly for that matter), causing a considerable increase in household debt even if no additional credits were taken out. In relation to other institutions, the growth in the average amount of debt may be also an effect of banking policy. More strict financial requirements on clients caused the shift of the demand for credit to the sector of other financial institutions which still apply less stringent principles on households while usually demanding a higher remuneration in the form of higher interest rates.

The value of loans from family and friends is decisively lower than in the case of bank debts, though it is higher than the level of households' debt in other financial institutions. It means that the offer of the institutions of financial intermediation (being the loan source for the households with lower creditworthiness) is still not competitive enough to replace loans from family and friends which do not require many formalities and are usually connected with a very low or even zero interest rate. Moreover, we can still observe a high reluctance to use the services of financial institutions in general in Poland, which significantly limits the circle of their potential customers. However, it is worth underlining that also in 2011 there was a significant increase in the average amount of debt as regards loans of households from private persons in relation to 2009. This results, most probably, from the limited availability of credits to the households with lower creditworthiness. Such households, caught in the spiral of debt, seek alternative sources of financing their consumption and take out loans from their family or friends.

In point 4.3.1 the structure of households with debts broken down by purpose is presented. The distribution of households with debts broken down by their purpose is presented in figure 4.3.7. Analogically as in the case of the source of financing, we present an analysis of the average amount of debts by their purpose.²² The amounts presented in table 4.3.8 show the expected average amount of debt for households with a credit or loan taken out for only one purpose.

²² Average amounts of such debts have been calculated on the basis of the correspondence of the log-normal distribution with the distribution of expected answers to the question on the amount of debt in relation to the possessed savings.

Table 4.3.8. Average amount of debt in 2009 and 2011 in households by purpose of loan or credit

Purpose of credit or loan	Average amount of debt (as a multiple of the household's income) in 2009	Average amount of debt (as a multiple of the household's income) in 2011
reserve for current consumer needs (e.g. food, clothes, footwear)	~4.3	~3.9
regular payments (e.g. home payments)	~4.2	~6.2
purchase of consumer durables	~4.0	~5.6
purchase of a house or an apartment, payment to the housing cooperative*	----	----
renovation of the house or apartment	~6.3	~8.2
medical treatment	~3.8	~4.0
purchase or lease of tools necessary for work (machines, lease of a facility, etc.)	~7.1	~7.6
leisure	~4.1	~4.3
purchase of securities**	----	----
repayment of earlier debts	~10.9	~16.4
developing own business	~14.5	~11.7
education	~5.4	~4.0
other purposes	~5.9	~5.8

* estimation of an average amount of debt connected with the purchase of an apartment is difficult since the majority of households with this type of debt declare that such debt exceeds the equivalent of their yearly income. The estimated models of multinomial logistic regression show that in 2009 among the households with debts only for the purchase of an apartment, as many as 60% had debts exceeding the amount equivalent to their yearly income and in 2011 this percentage amounted to 65%.

** the information on the average amount of debt for purchasing securities was not estimated due to the very low number of respondents having this type of debts – 10 and 6 persons in 2009 and 2011 accordingly.

In 2011, a higher average amount of debt in relation to income was recorded undoubtedly in the case of the households which took out loans for the purchase of an apartment. In 2009, among the households with loans taken out only for this purpose, over 60% had debts exceeding their yearly income. In 2011 this percentage amounted to approximately 65%. The next position, in terms of the amount of debt in relation to income, features the loans incurred for repaying earlier debts. This is a disturbing observation, particularly if we consider the very high increase in the average amount of loans incurred for this purpose – from the amount equivalent to nearly 11 months income in 2009, to the amount equivalent to over 16 months income in 2011. Moreover, the number of households with loans incurred for repaying earlier debts increased in 2011 in relation to 2009. This means that despite the positive pace of economic growth, the group of households which have trouble repaying their debts is systematically growing. In the third position, in terms of the average amount of debt, we observe loans taken out in order to develop own businesses. The average value of loans incurred for this purpose is around the amount equivalent to the household's yearly income. However, also in this area banks and other financial institutions have introduced restrictions to their credit policy, which caused a decrease in the financing of business activity of households in Poland. The average value of loans incurred to finance consumption or current needs is relatively low.

4.3.2.4. Summary

In the last two years, there have been many important changes in how households use financial services. On the one hand, the decreased dynamics of household income has created a wider gap between average savings and average debt. According to the behavioural economy concept, it may be assumed that the expectations of fast growth in income translate into creating certain consumption habits, which in turn contributes to the willingness to maintain the current consumption dynamics (cf. Brown 2008). As a result, an increase was observed in the average level of household debt and a decrease in average household savings. On the other hand, sustained positive household income dynamics brought about a slight increase in affluence, and in consequence translated into an increased percentage of households which want to have and can afford savings. Such an increase in affluence and the more restrictive credit policy of banks contributed also to a lower demand for low value credits, and as a result in a lower percentage of households with debts.

4.4. Housing conditions

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In March 2011, over 4% of household members did not live on their own. The household members not living on their own were recorded most often in the group of households with unearned income and the households of farmers (over 7% and over 6%, accordingly). As regards the breakdown of households by type, the household members who most often did not live on their own were multi-family households. In this group the percentage of such households was nearly 6%. The household members not living on their own were recorded most often in rural areas (over 5%). The voivodeship with the highest percentage of household members not living on their own was the Lubelskie Voivodeship (over 11%).

In March 2011, among the households taking part in the survey, the average usable floor area of an apartment per person was nearly 34 m². In relation to March 2007, this area increased by 4 m² and in last two years by around 2.5 m².

The highest occupancy density was observed among the households of employees (around 28 m² per person). In the period 2009-2011, a decrease in occupancy density was observed in all socio-economic groups of households, apart from the households of farmers.

As regards the types of households, in March 2011 the highest occupancy density was recorded in the homes of married couples with many children and in multi-family households (around 19 m² and below 21 m² of useable floor area per person accordingly). In March 2011, occupancy density, in relation to March 2009, decreased significantly in most types of households, with the greatest decrease in non-family multi-person households (by more than 3 percentage points).

Occupancy density in households in rural areas is considerably lower than in the case of urban households. When broken down by voivodeships, the differences between the groups of households as regards occupancy density can be treated as slight. In all groups of households broken down by place of residence class and voivodeship, a decrease in the number of persons per home was observed in the last two years. The greatest decrease in occupancy density was observed in rural areas (by nearly 3 m²) in the Pomorskie and Lódzkie Voivodeships (by over 6 m²).

As regards the conveniences and amenities included in the survey, the most common was a water supply system as only 2.6% of households did not have access to it.

Households most frequently did not have access to hot running water (nearly 23%). This was most often the case in households with unearned income (nearly 42%) and the households of pensioners (almost 33%).

Homes without running hot water were mostly occupied by non-family one-person households (around 30%). In last two years, the greatest growth in the percentage of households without running hot water was observed among non-family multi-person households (by over 9 percentage points). At the same time, a considerable increase in the percentage of dwellings without running hot water was recorded in the group of multi-family households and households of married couples with many children (by over 3 and around 2 percentage points accordingly).

The relatively highest percentage of homes without hot running water was in rural areas (over 32% of households). In last two years an improvement in the level of conveniences was observed in general in all place of residence classes, apart from, as regards hot running water, the smallest towns and rural areas.

The households without hot running water were most frequently in the Świętokrzyskie Voivodeship (almost 38% of homes in this voivodeship did not have hot running water). In the period 2009-2011, there was an improvement in the majority of voivodeships as to the level of homes with conveniences and amenities.

The households most often had central heating, individual or collective (nearly 45% and nearly 42% of households accordingly). However, still over 13% of households were heated by fuel-fired furnaces. This form of heating was recorded mainly in the households with unearned income and the households of pensioners (nearly 33% and nearly 26% of households, accordingly, used this type of heating), as well as non-family multi-person households (around 23% of households in this group). This type of heating was present in 22% of the households with unemployed and only in around 12% of households without the unemployed. The households heated by fuel-fired furnaces were often in rural areas (around 22% of rural households) and in the Lubelskie and Podkarpackie Voivodeships (over 17% and nearly 17% of households from these voivodeships accordingly).

The analysis of housing conditions in the period 2000-2011 in whole samples, shows a systematic decrease in the percentage of the households without access to a water supply system (from 5.5% to 2.6%), without a flushing toilet (from 11.2% to 5.1%), without bathtub or a shower (from 13.8% to 6.3%) and hot running water (from 29.6% to 22.8%) (figure 4.4.1).

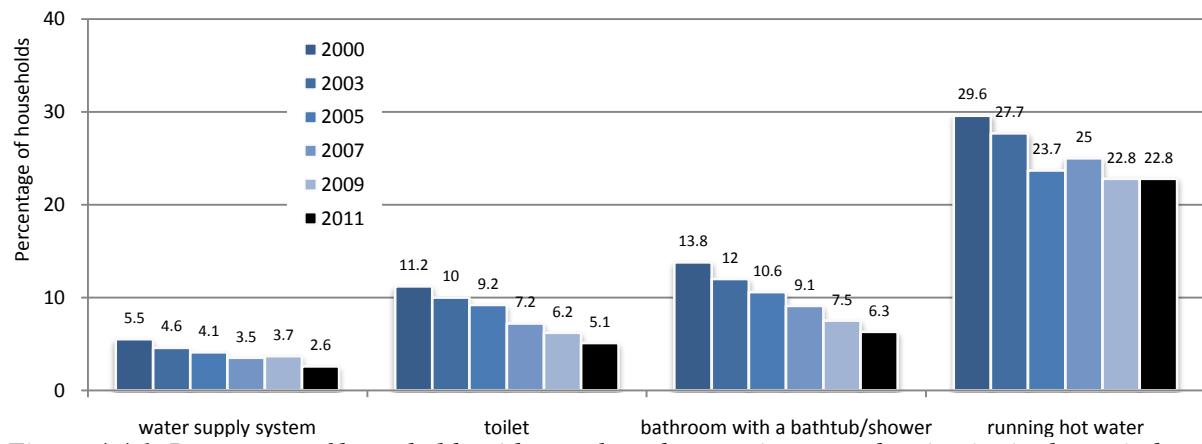


Figure 4.4.1. Percentage of households without selected conveniences and amenities in the period 2000-2011 in whole samples

4.5. Education

4.5.1. Educational status of household members

Izabela Grabowska, Irena E. Kotowska

This assessment of educational activity of the population is made on the basis of the extent of use of a specific educational service within the school system (education in schools in the full-time, evening or extramural mode, all postgraduate studies) or outside it. The percentage of persons in a particular age group who use a specific form of educational service is the basis for assessing the extent to which such form of service is used. This measure for educational services provided within the school system corresponds to the schooling rate. For the services addressed to children aged 6 and below it is equivalent to the coverage rate and is used for assessing the scope of institutional care for children, and in the case of persons aged 25 and above it may be used to assess their educational activity. While analysing the educational activity of adults (persons aged 18 and above), also the forms of educational activity and the status of respondents on the labour market are taken into account.

4.5.1.1 Educational activity of household members

Table 4.5.1 shows the values of the indicator of the use of educational services for the years 2000, 2003, 2005, 2007, 2009 and 2011, where in the research from the last five waves of *Social Diagnosis* also the educational activity outside the school system was taken into account, which has impact on the assessment of the educational activity of adults. In the comments, we focus on the results of the last three waves and examine the changing trends in the period 2000-2011.

The results of 2011 demonstrate an important increase in the use of childcare in kindergartens and nurseries (29.1%). In the previous research waves, apart from year 2003, only one in five children aged 6 and below used childcare in a kindergarten or a nursery countrywide. The improved access to these services occurred in all place of residence classes, especially in towns with more than 500,000 inhabitants (by 17 percent in comparison with 2009) and in rural areas (by 7 percent). However, children in the towns still spent time in childcare units more often than children in rural areas where only 20% from this age group had access to this type of care (in the past this measure fluctuated between 8% and 11-13%). Contrary to the results of the previous research waves, which showed a widening gap in the spatial access to institutional childcare between towns (even in the case of small towns) and rural areas, in 2011 a considerable decrease of this gap was observed. The higher number of births observed in Poland between 2004 and 2010 resulting from postponed births and an increase in the number of women of child-bearing age (the baby-boom in the 1980s), increased the demand for places in nurseries and kindergartens. The market of such services in the towns, particularly in the case of private service providers, adapted to the higher demand faster, which in the previous periods under the study additionally widened the territorial discrepancies in access to such units. In 2011, this considerable growth in the use of childcare offered by kindergartens and nurseries is undoubtedly connected with the accessibility of funds from the European Social Fund under the Human Capital Operational Programme offering co-financing for kindergartens especially in rural areas. The next research wave will enable us to observe the consequences of another state intervention in this field, i.e. the implementation of the Act of 4 February 2011 on care of children aged three and below (Dz.U. of 2011, no. 45, item 235).

Moreover, similarly as in the previous years, the majority of children are placed in public nurseries and kindergartens (84.7% at the country level, 90.7% in the towns of more than 500,000 and 83.7% in rural areas) although non-public units have gained in significance.

Despite these positive changes, the accessibility of this form of educational and care service is in Poland still among the lowest in the European Union. This ongoing deep lack of institutional childcare in rural areas may be a factor which limits the increase in women's professional activity in rural areas and their employment outside the farming sector in particular. In the light of the necessary changes in the structure of employment among the rural population, in order to shift some part of labour force outside the farming sector, more accessible institutional childcare in rural areas seems particularly important. Moreover, it is commonly underlined that high quality childcare services, available to parents for an appropriately low price, are an effective solution to the educational and economic inequalities (cf., for instance, Kotowska, Sztanderska, Wóycicka 2007, Szukalski, Warzywoda-Kruszyńska, 2005). Unfortunately, as regards the accessibility of this form of childcare, Poland has one of the lowest results in the European Union.

As in previous years, there was no significant territorial differences observed in access to education for children aged 7-15 in 2011 who, as a vast majority, attended state schools (from 88% in the largest towns to 94.1% in rural areas). At the national level and in rural areas around 90% of children at this age were in education, and in the towns this percentage was between 88% and 92%. In comparison with the results from the 2005 and 2007 waves, the slight decrease in the level of schooling among children from this age group (particularly for the towns with 20,000-200,000 inhabitants) was recorded as was already observed in 2009, which is difficult to explain. The results obtained in 2003 were attributed to the influence of the education reform of 1999. At that time, this age group included not only children and youth from primary schools but also from lower secondary schools for the first time.

In contrast to the results from the previous research waves, in 2011 significant territorial differences in schooling of youths aged 16-19 were observed (both as regards full-time, evening and extramural education). The percentage of youths at this age attending any type of school increased slightly in the towns with more than 500,000 inhabitants (by 1.6 percentage points) and in the towns with 20,000-100,000 inhabitants (by 1.1 percentage points), to around 98%, while in other types of towns and in rural areas it decreased. The greatest fall was recorded for medium-sized towns (100,000-200,000 inhabitants) to around 86.4% (by 10.7 percentage points), while in rural areas the fall in the rate of youth attending various types of schools was lower (by 1.7 percentage points) reaching in 2011 92.5%. These changes translated into a fall in the use of educational services for youths in this age group by 1.9 percent to 93.5%, which halted a growing trend observed in previous years. Moreover, the low share of non-public schools for youths in this age group should be indicated here. No more than 3% of youths attended non-public schools, regardless of place of residence class, which is much fewer than in the case of primary and lower secondary schools.

Educational activity of adults is defined as the participation of persons aged 18 and above in various forms of education however, due to the age groups assumed above, our analysis will concern only persons aged 20 and above.

The territorial discrepancies in access to educational services as described for children and youth aged 7-19 are considerably different in the case of educational activity of persons in older age groups. The percentage of persons aged 20-24 at school and outside the school system slightly decreased (by 2.1 percentage points) in 2011 and was 58.8% (in comparison with 61% in 2007 and in 2009). On the other hand, the use of educational services in this group in terms of territorial distribution changed significantly. There was a considerable fall in the use of educational services in the towns with more than 500,000 inhabitants from 83% in 2009 to 73.5% in 2011, in towns with 100,000-200,000 inhabitants from 66.9% in 2009 to 57.1% in 2011, and in towns with 20,000-100,000 inhabitants from 65.8% to 61.2%. The stabilisation of the use of educational services in big towns, with 200,000-500,000 inhabitants (72.8%) was accompanied by a slight increase from 58% in 2009 to 60.1% in 2011 in smaller towns (with fewer than 20,000 inhabitants), and similarly in rural areas (from 47.6% in 2009 to 49.4% in 2011). Hence, the territorial differences in the use of educational services decreased to the level observed in the first half of the decade. At this level of education the role of non-public units is more visible as 15.6% of students attended such units in the largest towns in comparison to 11.9% in rural areas.

It should be underlined that some significant differences in the educational activity of men and women in this age group are emerging. Women study visibly more often than men (68.1% of women in 2011, 67% in 2009, 63% of women in 2007 in comparison to 52.5% of men in 2011, 55% in 2009 and 57% in 2007). The growing tendency of educational activity among women is gradually slowing. However, the ongoing decrease in the educational activity of men aged 20-24 has widened the gap between how educational services are used by men and women.

There are visible differences in the educational activity of women and men aged 20-24 in terms of their place of residence. In 2011, women aged 20-24 in towns used educational services to a lesser extent in comparison with the situation in 2009, unlike women in rural areas. This rate fluctuates depending on the size of the town between 61.3% and 80.2% (in 2009 64-87% and in 2007 60-84%), while in rural areas it was 60.8% (in 2009 54.5% and in 2007 54%). The percentage of men in towns who use educational services in the school system and outside it amounts to 54.1%-72.9% (in 2009 51-81%, in 2007 57-81%) in relation to 40.9% in rural areas (in 2009 42%, in 2007 43%), which demonstrates a decrease in the educational activity of men aged 20-24 in all place of residence classes. A positive phenomenon is undoubtedly the increased educational activity of women in rural areas. However, the general growing tendency has stopped particularly in large and medium-sized towns. The persistent decrease in educational activity of men both in the towns (apart from the smallest) and in rural areas has widened the gap between the educational activity of women and men particularly in rural areas and in the largest towns.

The extent of using educational services is significantly lower in the next age group. It is also lower in comparison with the previous survey wave, which means that the tendencies observed earlier have shifted. In 2011, the share of persons aged 25-29 actively using educational services amounted to 15.1% (18% in 2009, 17% in 2007). This change is a result of mainly the lower rates for towns with 100,000-200,000

inhabitants and 20,000-100,000 inhabitants, although their drop was observed in all place of residence classes. This rate did not exceed 26.8% in towns (29% in 2009 and 34% in 2007) and in rural areas amounted only to 9% (11.4% in 2009 and 8.5% in 2007). In this age group, no widening of the gap between the towns and rural areas was observed. However, the inter-relations between the rates in towns have changed with lower results in towns with 20,000-200,000 inhabitants.

Table 4.5.1. Population in households by educational status and place of residence (percentage of persons at a given age and a given place of residence using a specific educational service) in 2000-2011 (in %)

Educational status	Place of residence class						Total
	Towns above 500,000	Towns with 200,000-500,000	Towns with 100,000-200,000	Towns with 20,000-100,000	Towns below 20,000	Rural areas	
Total percentage of persons using educational services	25.30 ⁶	25.70	24.50	22.30	24.00	24.20	24.10
	26.60 ⁵	28.00	25.00	25.10	25.30	25.60	25.80
	27.09 ⁴	27.26	27.59	25.17	27.26	26.61	26.60
	28.20 ³	27.88	29.55	27.85	30.03	26.84	27.94
	25.43 ²	23.78	26.73	23.97	25.76	22.22	23.91
	27.02 ¹	26.41	24.01	27.17	27.39	24.64	25.94
Children aged 0-6 attending nursery or kindergarten	47.90	37.90	30.90	30.00	32.80	20.00	29.10
	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 attending schools	91.60	90.00	87.50	88.70	92.20	91.60	90.70
	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
Youths aged 16-19 attending schools	98.10	93.10	86.40	98.20	91.20	92.50	93.50
	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 using educational services within the school system and outside it	73.50	72.80	57.10	61.20	60.10	49.40	58.80
	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 using educational services within the school system and outside it	26.80	24.50	10.50	13.80	16.60	9.00	15.10
	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 using educational services within the school system and outside it	7.10	6.80	6.90	3.40	6.00	1.90	4.30
	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 aged above 39 using educational services within the school system and outside it	3.20	2.20	2.30	1.00	0.80	0.50	1.30
	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

⁶ survey results of 2011

⁵ survey results of 2009

⁴ survey results of 2007

³ survey results of 2005

² survey results of 2003

¹ survey results of 2000

In 2011, women aged 25-29 still used educational services more often than men from this age group (18.1% of women in comparison to 13.4% of men, in relation to 19% of women and 17% of men in 2009 and 2007). This age group is characterised by the highest fertility of women, which may limit their

educational activity as well as the motivation of men to continue education, increasing their motivation to work instead. Territorial disproportions have slightly increased; the percentage of women residing in rural areas aged 25-29 and actively using educational services is 2.75 times lower than the highest percentage for towns, which is between 14.1%-28.6%. In 2009, the percentage of women residing in rural areas who actively used educational services was 2.5 times lower. However, in 2007 it was over 4 times lower than the highest percentage for towns. In the case of men the disproportions between towns and rural areas are also high although lower than in the previous survey wave. Similarly to 2009, only 10.4% of inhabitants from rural areas (9% in 2007) used educational services within the school system or outside it, compared to 7.8-28.9% of men from towns (17-26% in 2009 and 13-35% in 2007). Medium-sized and small towns stand out in a negative way particularly in the case of men.

Territorial differences in educational activity are present also in the next age group (30-39 years). In order to maintain a comparable size of sample in relation to the age groups analysed above, the age groups of 30-34 and 35-39 have been presented jointly. However, it is the group of persons aged 30-34 which has the decisive influence on the value of the indicators discussed below. Persons aged 30-39 used various types of educational services three times less often than persons aged 25-29. In 2011, the percentage of persons actively using educational services at this age decreased to 4.3% (in towns from 3.4% to 7.1%, in rural areas to 1.9% in comparison with 6.2% in 2009 (in towns from 7% to 11%, in rural areas to 3.8%), and from 7% in 2007 (in towns from 8% to 12%, in rural areas to 2.5%) but it remained at a higher level than previously. The percentage of women using educational services in this age group was 6.2%, in comparison with 7.7% in 2009 and 2007, while in the case of men it was 3.5% (4.6% in 2009 and 4.3% in 2007). Nearly 3.4% of women residing in rural areas aged 30-39 actively use educational services (3.9% in 2009 and 3.3% in 2007), in comparison with 1.1% of men (1.8% in 2009 and 2% in 2007). Similarly, as in the previous age groups and also in the case of persons aged 30-39, the use of educational services decreased. This concerns both women and men, regardless of their place of residence. Here towns with 20,000-100,000 inhabitants stand out in a particularly negative way. Persons aged above 39 are rarely involved in any educational activity.

To sum up, the analysis of educational activity conducted separately for adult women and men, and from the point of view of their age and place of residence, demonstrates not only a general drop in the level of use of educational services, but also the still visibly growing educational aspirations of women. However, it also highlights territorial disproportions, not only between towns and rural areas, but also between various types of towns with a particularly negative picture of medium-sized towns with 100,000-200,000 inhabitants and the smaller with 20,000-100,000 inhabitants. In the case of towns with fewer than 20,000 inhabitants and rural areas, the observed tendencies were not that negative, which may be connected with a greater availability of various types of programmes and projects offered for such areas; e.g. from the European Social Fund.

4.5.1.2. Forms of adult educational activity

In 2011, educational activity of persons aged 18 and above was mainly in schools or higher education at 93.3% (in comparison with 92% in 2009 and 87% in 2007), where 84.1% attended state schools (in comparison with 83.6% in 2009 and 80% in 2007). This is connected with the age structure of this population group. Around 72.8% of respondents using educational services were aged 18-24 (in comparison with 70.2% in 2009 and 74% in 2007), 12.7% were aged 25-29 (14% in 2009, 11% in 2007) and only 7.2% of those persons were aged 30-39 (8.7% in 2009 and 8% in 2007) in 2011. The age structure of the group of persons using educational services changed in relation to 2009; the share of persons aged 18-24 increased while the percentage of persons aged 25-29 and 30-39 decreased, which is a sign of the selective nature of the process of continuous training among adult persons in relation to age.

Among the persons using educational services aged above 24, there is a higher use of services outside the school system, organised in the form of courses and trainings, both at work and outside the workplace. However, this form of services is still not that significant; only around 6.5% of persons aged 25-29 and 13.3% of persons aged 30-39 used this type of training (in 2009 it was 7.5% and 31% accordingly in 2007). In comparison with the results from the previous survey waves, in the age group of 30-39 there was a considerable drop in the use of courses and trainings. This drop is considerably higher than the general decrease in the educational activity in this age group, which suggests the shift of educational activity towards the offer of schools and higher education schools in particular. The visibly lower percentage of persons aged 25-29 using educational services outside the school system in comparison with the persons aged 30-39 results also from the more frequent use of postgraduate studies within the school system, a general development of services within the school system or better adjustment to the requirements of the labour market (connected with, for instance, computer skills) among younger persons. It is worth underlining that 69% of persons using educational services outside the school system had completed higher

education (53% in 2009, 47% in 2007) and nearly 28% secondary and post-secondary education (35% in 2009 and 32% in 2007). Thus, the process of selective use of educational services depending on educational attainment of persons aged above 24 deepened; the persons who undergo additional training are mainly persons with higher education. On the other hand, the trend from the previous survey waves for a growing share of persons with completed secondary education who also participate in continuous education has reversed.

4.5.2. Human capital

Dorota Węziak-Białowolska, Irena E. Kotowska

As a result of the development of knowledge-based economy and information society – regardless of how we define those phenomena – there has been a shift in the focus of discussions on the conditions of contemporary processes of development from material resources to non-material resources (cf. e.g. Drucker, 1999; Kukliński, 2004; Zacher, 1999; OECD, 1998). The latter are often identified as intellectual resources. Their most important element is human capital, which is also considered to have the greatest growth potential. The size and productivity of intellectual resources is extremely difficult to measure and assess. However, without the attempts at measuring these we may not analyse the course of the development processes in the past.

The present edition of *Social Diagnosis* measured the human capital of Poles as was done in 2007 and 2009. Human capital was understood, as the supply of knowledge, skills and qualifications of specific persons, groups of persons and the entire society defining their ability to work, adapt to change and also act creatively. The analysis covered the level of human capital and its diversification according to selected demographic, economic and social characteristics. It enabled an assessment of differences in the level of human capital in various socio-economic population groups, as well as comparison of changes in the level of human capital between the subsequent editions of *Social Diagnosis*. In order to make comparisons over time, the same measurement method as in the previous years was applied.

4.5.2.1. Measurement of human capital

With the use of *Social Diagnosis* data from 2007, 2009 and 2011, human capital was measured on the basis of the following procedure:

- a theoretical model of human capital was formulated – a definition of human capital,
- a measurement model of human capital was formulated – a selection of manifest variables,
- the correctness of the model for measuring human capital was verified with the use of exploratory and confirmatory factor analysis
- a synthetic human capital index was created on the basis of categorical principal component analysis (CATPCA).

The methods mentioned in point 3 and 4 of this procedure have been described in more detail in the Annex.

The synthetic human capital index has been calculated for appropriate population groups selected on the basis of demographic, social and economic characteristics. The comparison of changes in the values of this index over time for various population groups enabled an assessment of evolution of their relative situation.

Similarly as in the previous years, in order to measure human capital on the basis of *Social Diagnosis* 2011, information on the educational attainment of respondents aged 16 and above was gathered. This included their civilisational competence and participation in life-long learning to gain new professional qualifications and other skills. Just as in 2009, educational attainment was measured by the number of years of education completed, which contributed to a greater precision of results.

The selection of manifest variables resulted from the assumed definition of human capital. Over a dozen years ago this definition covered mainly educational attainment though now it is much broader. The information society and knowledge-based economy require constant expansion and updating of knowledge, skills and competences. Now, not only meeting the requirements of the contemporary labour market, but also the sole functioning in society and adjustment to change requires different skills than over a dozen years ago. Such skills include for instance:

- knowledge of information and telecommunications technology (ICT),
- ability to obtain and use information from electronic sources,
- fast communication,
- command of foreign languages, in particular the English language as it is the main language of the Internet and science.

Apart from the skills mentioned above, it is important to be aware of the necessity of continuously expanding and updating one's knowledge and skills through appropriate educational activities.

These were the factors taken into consideration when selecting the manifest variables to measure human capital on the basis of *Social Diagnosis 2011* data. The following variables were used:

- education – measured with the number of years of education completed [years of completed education]²³,
- civilisational competence – it was assumed that these are manifested through:
- use of computers at work, at home or in any other place [computer],
- use of an Internet search engine (such as Google or Yahoo!) in order to find information [search engine],
- command of the English language [English],
- participation in life-long learning – a measurement made on the basis of answers to a question on new professional qualifications or other skills gained in the preceeding two years [trainings].

The variables defining human capital are considered to act as its stimulants, meaning that their higher values are identified as a higher level of human capital.

The quality of the human capital measurement model was verified by confirmatory factor analysis for each study wave separately as well as on the combined data set. In the latter case, the estimated model imposed equality conditions for all factor loadings, as well as the intercept for the variable [years of completed education] and the thresholds of the scales of answers for the remaining four manifest variables.

Thus, the results obtained confirmed that not only education and trainings determine the level of human capital but also civilisational skills, though the importance of the former two should not be underestimated.

Categorical Principal Component Analysis²⁴ (CATPCA) was used to prepare the synthetic human capital index based on the quality of four out of five pointer variables. In order to compare levels of human capital in 2007, 2009 and 2011, the analysis was conducted on the combined set of data for *Social Diagnosis 2007*, *Social Diagnosis 2009* and *Social Diagnosis 2011*.

It was confirmed that the set of variables proposed may reflect well the latent variable "human capital". It turned out that in the three waves, in total five manifest variables may be replaced with one synthetic variable which explains 54.42% of the total variability of the set of manifest variables. Moreover, the first principal component may be also deemed as a synthetic human capital index. In order to better highlight the differences in the level of human capital, its synthetic index, which was a standardised value (with the average equalling 0 and standard deviation of 1), was normalised so as to take values from 0-100²⁵. All comparative analyses were conducted with the normalised variable.

4.5.2.2. Human capital in Polish society in the period 2007-2011

Since 2007, the human capital of Polish people has been systematically growing. In 2007, its index amounted to 45.2, in 2009 it was 46.17 and in 2011 46.67 (figure 4.5.1).

This result corresponds to observations based on analysis of the dynamics of specific manifest variables in 2007-2011 (figure 4.5.2). In this period there was a considerable increase in the percentage of persons using search engines and computers. The percentage of persons taking part in activity aimed at gaining new qualifications or skills first increased (in 2009 in relation to 2007) and then decreased (in 2011 in relation to 2009). The share of persons with the command of English (active or passive) was stable.

²³ The square brackets include abbreviated names of the variables – these names will be used in the further text.

²⁴ As mentioned by Górnjak (2000, p. 316), categorical principal component analysis, as opposed to the factor analysis, allows for unambiguous calculation of the value of variables representing the dimension measured by the set of manifest variables.

²⁵ Value 0 and 100 were ascribed with non-normalised value of the human capital index, corresponding to the minimum and maximum values of manifest variables. In the case of the number of years of completed education the assumed minimum value was 0 and the maximum 30.

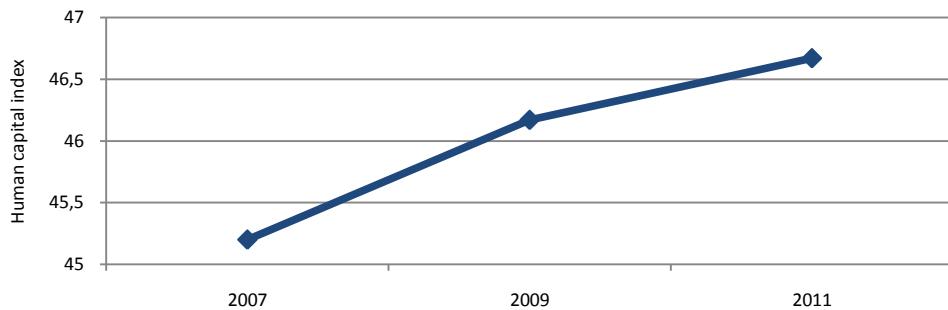
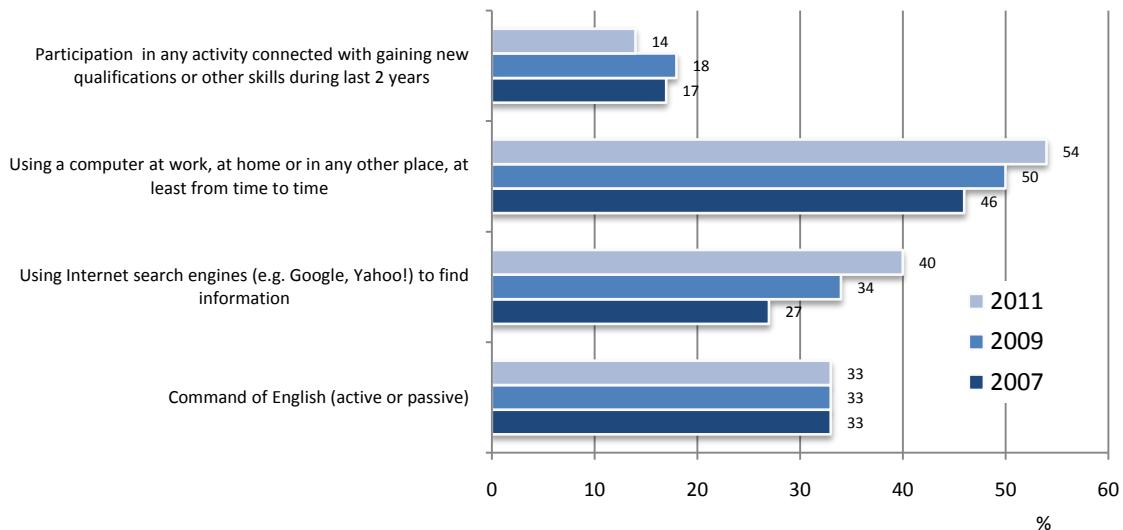


Figure 4.5.1. Human capital in 2007, 2009 and 2011



NOTE: The percentage of persons using Internet search engines was expressed in relation to all respondents.

Figure 4.5.2. Percentage of persons with a command of English (active or passive) seeking information using search engines at work or at any other place and participating in any activity related to gaining new professional qualifications or other skills during last 2 years

These changes are undoubtedly the consequence of the greater computerisation of the socio-economic life in Poland. The very dynamic development of computer tools also has a considerable impact as it allows for more effective search for information in the Internet, similarly as in the case of a greater availability of professional software dedicated to certain types of businesses.

The results show that the greater availability of technologies is reflected in their more common use. The consequent development of human capital will contribute to the closing of the gap between Poland and other European Union countries with a high level of human capital.

4.5.2.3. Diversification of human capital by socio-economic group

In order to assess the level of Polish human capital in 2011, an average level of this asset was used, measured for the population groups based on:

- gender,
- age,
- size of place of residence,
- status on the labour market,
- social and professional status.

The results of calculations have been presented in tables 4.5.2-4.5.4 and figures 4.5.3-4.5.7. The comparison of the values of human capital level for specific demographic and social groups has led to the following observations:

- since 2009, men have been characterised by a higher human capital than women.
- The level of human capital decreased with age; the highest level of human capital was recorded for persons aged 15-34 and the lowest among persons aged 45 and more. The discrepancy between the persons in the non-mobile age and persons aged 35-44 increased with time, though the latter group reduced its distance to the youngest persons,
- The level of human capital decreased together with the diminishing size of the place of residence. Thus, the inhabitants of the largest towns were characterised by the highest level of human capital and the inhabitants of rural areas by the lowest, although the relatively greatest improvement in the level of human capital was observed among the inhabitants of rural areas. A growth trend was recorded also among the inhabitants of other place of residence classes with an exception of cities with 100,000-200,000 inhabitants.
- Persons who were professionally active demonstrated a higher level of human capital than persons who were professionally inactive. Among professionally active persons the employed demonstrated a higher level of human capital. The distance between professionally active and professionally inactive persons increased. It should be also underlined that in the period 2009-2011, there was a considerable improvement in the level of human capital among the unemployed, which contributed to a visible closing of the gap between the employed and the unemployed as regards the level of human capital.
- There are four stable groups of persons in terms of status on the labour market and level of human capital: the highest level was observed among students, the second group comprises public sector employees, private entrepreneurs and private sector employees, listed from the lowest to the highest value of this indicator. The third group, with a considerably lower level of human capital, consists of the unemployed and other professionally inactive persons, while retirees and pensioners belong to the fourth group with the lowest level of human capital. The relative improvement in the level of human capital concerns mainly the group of unemployed and other professionally inactive persons and then – though to a lesser extent – farmers.

In 2007 no difference in the level of human capital between men and women was observed. However, such difference appeared in 2009 and remained in 2011.

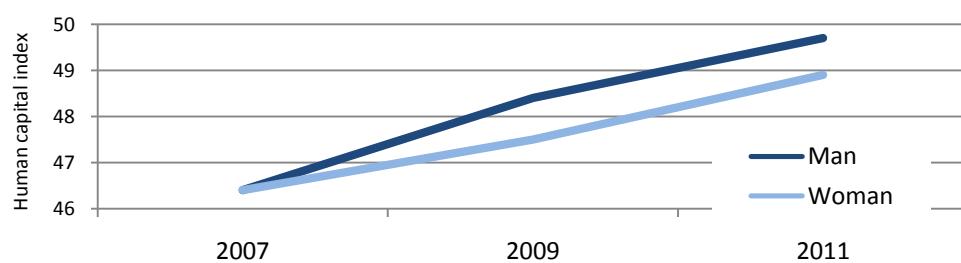


Figure 4.5.3. Average level of human capital in the period 2007-2011 by gender

The level of human capital decreases very dynamically with age, which seems to be a feature of contemporary times. The technologies which are used and recognised as modern have had a short history. In the past people had a lot more time to learn new skills which remained useful for a large part of their life. In the knowledge-based economy an individual's position on the labour market and his or her competitiveness, as well as efficient functioning in the society, are determined by their ability and willingness to quickly learn how to gain information about new technologies and skilfully use them. Young people are better at dealing with these challenges, hence the highest level of human capital in the age group 15-34.

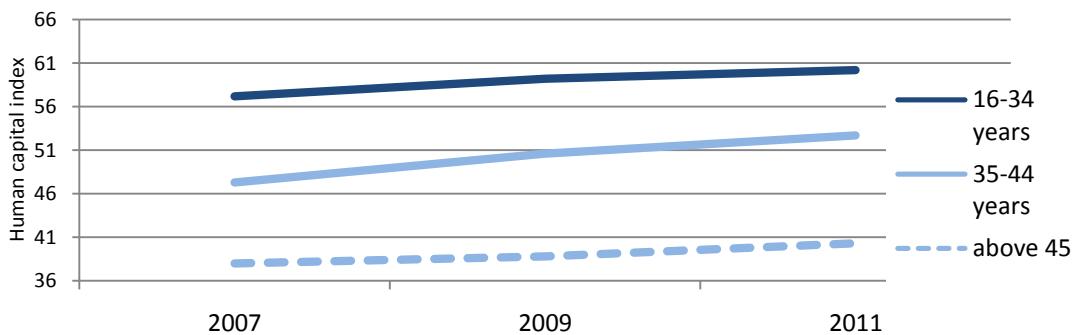


Figure 4.5.4. Average level of human capital in the period 2007-2011 by age

The fact that the smaller the place of residence class, the lower the level of human capital is, stems from several factors. Firstly, large towns offer a much better selection of education. All towns with more than 500,000 inhabitants are academic centres with a considerable level of human capital. They have also the best secondary and often also primary, schools. They offer a much better infrastructure for school and university students providing, for instance, access to libraries and places where state-of-the-art technologies are available. Secondly, the persons with the highest educational attainment migrate to large towns where, thanks to the concentration of human capital, they are more mobile and able to receive better job offers. Thirdly, the head offices of large enterprises are located in large towns, hiring employees with higher qualifications and attracting persons with higher human capital.

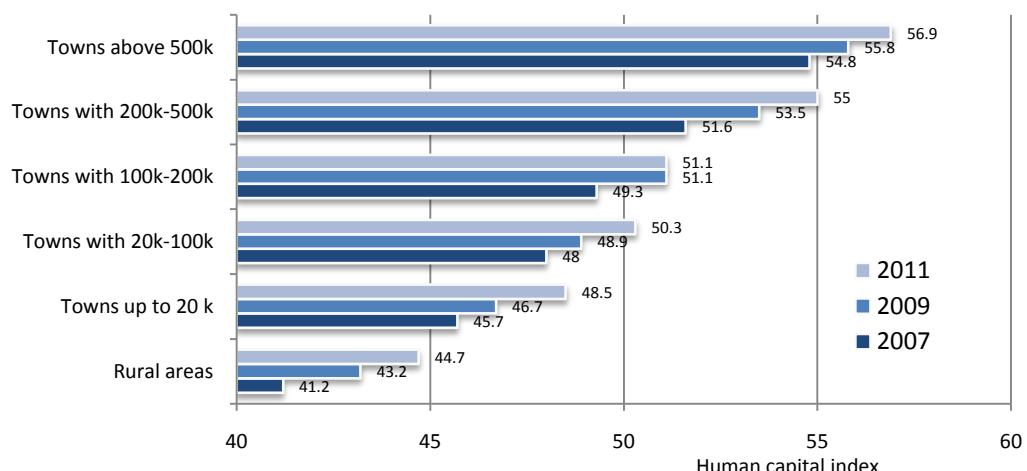


Figure 4.5.5. Average level of human capital in the period 2007-2011 by place of residence class

Professional activity contributes to maintenance of the level of human capital as well as to gaining new skills. Remaining outside the labour market usually leads to a gradual depreciation of skills and contributes to a decrease in the level of human capital, which in turn may be an obstacle to becoming professionally active.

In order to take a closer look at the level of human capital among Polish people, we examined it with respect to gender and the following characteristics:

- age,
- size of the place of residence,
- social and professional status,
- status on the labour market.

The results were presented in table 4.5.2 (for gender and age) and table 4.5.3 (for the remaining three characteristics). The synthetic human capital index demonstrates that in 2009 and 2011 men were characterised by higher level of human capital. However, having taken age into account, in all years under analysis, i.e. in 2007, 2009 and 2011, among persons aged 15-34 and 35-44, women were characterised by a higher level of human capital, and among persons aged 45 and above it was men (table 4.5.2). The observed differences between women and men for the group aged 15-34 and the group aged 45 and above were

statistically significant for all analysed periods²⁶, meanwhile for the group aged 35-44 these were statistically significant only for year 2011²⁷.

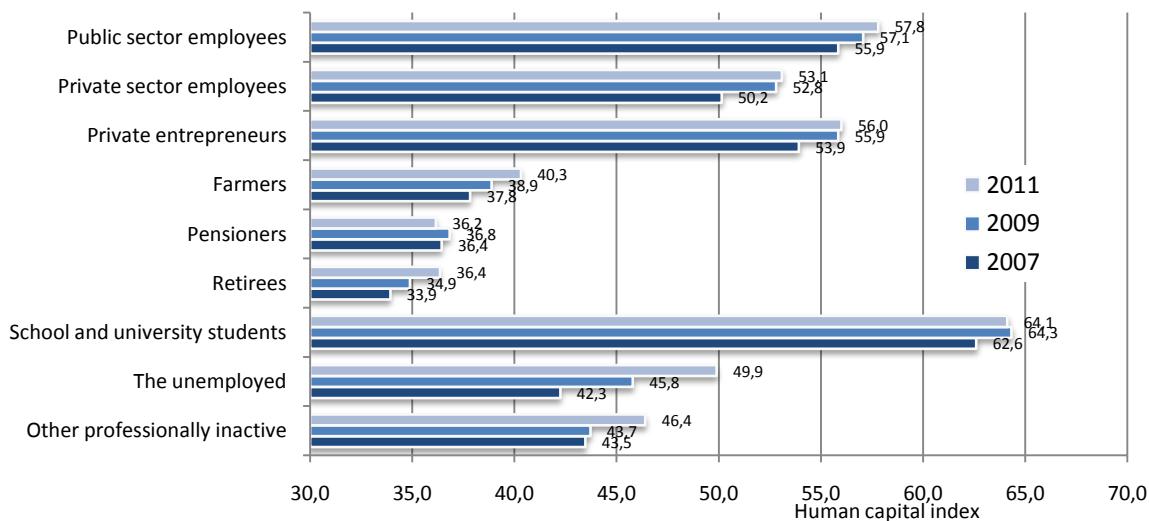


Figure 4.5.6. Average level of human capital in the period 2007-2011 by social and professional status

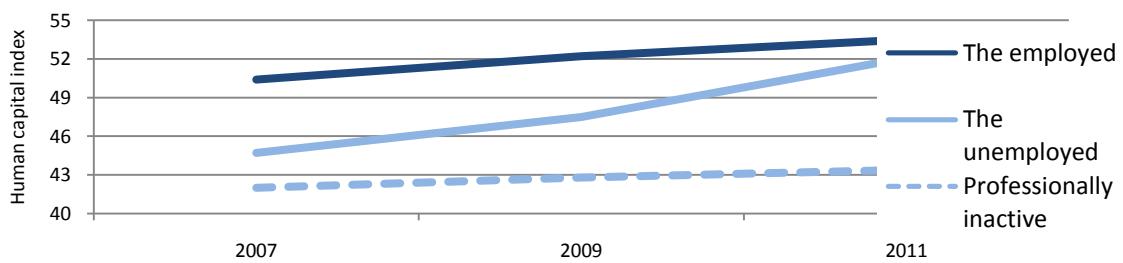


Figure 4.5.7. Average level of human capital in the period 2007-2011 by status on the labour market

The higher level of human capital among women aged 15-44 is undoubtedly a consequence of the higher number of years spent by women in formal education and the higher rate of schooling at the university level. The higher level of human capital among men aged 45 and above in comparison to women may result from the differences in educational attainment in the older age groups, to the disadvantage of women, as well as from the fact that women leave the labour market earlier than men. Therefore, they lose contact with innovations that one has to be familiar with while being on the labour market.

Table 4.5.2. Level of human capital by gender and age

Age group	Gender	Human capital in 2007		Human capital in 2009		Human capital in 2011	
		Average	Standard error	Average	Standard error	Average	Standard error
15-34	Men	56.03	0.29	58.25	0.18	59.28	0.16
	Women	58.15	0.26	60.08	0.17	61.20	0.15
35-44	Men	46.91	0.46	50.34	0.31	52.13	0.30
	Women	47.60	0.45	50.93	0.32	53.32	0.30
45 and above	Men	38.27	0.24	39.42	0.17	41.07	0.17
	Women	37.71	0.22	38.28	0.15	39.76	0.15

In all periods under analysis, among the inhabitants from different residence classes, men were characterised by a higher level of human capital, regardless of the size of their place of residence. The one exception was year 2007, when women from the smallest towns (with up to 20,000 inhabitants) and from rural areas were characterised by a higher level of human capital than men. However, the observed differences were statistically significant only for the largest towns and only for year 2011, towns with

²⁶ At the level of significance of 0.01; the one exception was the comparison between women and men made in 2007 in the group aged 35-44 – this was at the level of significance of 0.1.

²⁷ At the level of significance of 0.01.

100,000-200,000 inhabitants only in 2009 and 2011, towns with 20,000-100,000 inhabitants in all periods under analysis and for towns with fewer than 20,000 inhabitants only in 2009 and 2011. In none of the periods under analysis were these differences statistically significant for inhabitants of rural areas and towns with 200,000-500,000 inhabitants.

Table 4.5.3. Level of human capital among women and men by place of residence class, status on the labour market and social and professional status

Values for independent characteristics	Gender	Human capital in 2007		Human capital in 2009		Human capital in 2011	
		Average	Standard error	Average	Standard error	Average	Standard error
Place of residence class							
Towns with more than 500,000 inhabitants	men	54.88	0.68	56.07	0.40	57.77	0.37
	women	54.67	0.57	55.49	0.38	56.27	0.35
Towns with 200,000-500,000 inhabitants	men	52.14	0.62	53.90	0.42	55.47	0.42
	women	51.09	0.57	53.23	0.42	54.64	0.41
Towns with 100,000-200,000 inhabitants	men	49.70	0.68	52.48	0.48	52.35	0.47
	women	48.94	0.63	49.84	0.49	50.09	0.46
Towns with 20,000-100,000 inhabitants	men	48.74	0.44	49.82	0.31	50.87	0.28
	women	47.44	0.41	48.00	0.30	49.74	0.28
Towns with up to 20,000 inhabitants	men	45.49	0.52	47.57	0.36	49.64	0.35
	women	45.91	0.52	45.92	0.37	47.30	0.36
Rural areas	men	41.03	0.29	43.53	0.21	44.89	0.20
	women	41.30	0.30	42.97	0.22	44.41	0.22
Status on the labour market							
Employed	men	48.64	0.26	50.81	0.17	52.38	0.16
	women	52.33	0.27	53.82	0.19	54.96	0.17
Unemployed	men	43.48	0.80	46.78	0.55	50.21	0.54
	women	45.66	0.72	48.28	0.56	53.99	0.49
Professionally inactive	men	43.44	0.35	44.19	0.25	44.63	0.24
	women	41.18	0.26	41.95	0.19	42.70	0.19
Social and professional status							
Public sector employees	men	53.14	0.54	55.10	0.37	56.34	0.35
	women	57.65	0.41	58.58	0.29	58.97	0.28
Private sector employees	men	48.47	0.36	51.61	0.23	52.23	0.21
	women	52.42	0.40	54.65	0.28	54.37	0.26
Private entrepreneurs	men	53.52	0.64	54.78	0.44	54.80	0.42
	women	54.82	1.02	58.45	0.68	58.77	0.63
Farmers	men	38.22	0.58	38.97	0.40	40.09	0.44
	women	37.44	0.56	38.76	0.49	40.69	0.54
Pensioners	men	38.37	0.59	39.71	0.45	38.86	0.41
	women	35.11	0.50	34.76	0.35	34.26	0.31
Retirees	men	34.26	0.32	35.56	0.23	37.14	0.26
	women	33.71	0.26	34.47	0.18	35.85	0.20
School and university students	men	62.02	0.31	64.02	0.20	63.48	0.20
	women	63.11	0.28	64.61	0.19	64.72	0.18
Unemployed	men	41.74	0.73	44.10	0.52	48.51	0.52
	women	42.55	0.54	47.16	0.48	51.00	0.44
Other professionally inactive	men	42.16	0.90	43.20	0.48	46.26	0.60
	women	43.87	0.53	43.95	0.31	46.47	0.33

In terms of status on the labour market, the highest level of human capital was recorded among persons who were employed, then the unemployed and the lowest among the professionally inactive. This observation changes considerably when gender is taken into account. The one exception was unemployed women who in 2011 were characterised by a higher level of human capital than employed men. The observed difference in the level of human capital between the two groups was statistically significant²⁸. It should be also underlined that women were characterised by a higher level of human capital among employed and unemployed persons (in both periods under analysis) while among persons who were professionally inactive men had a higher level of human capital. Each time the observed difference in the level of human capital was statistically significant²⁹.

In the groups broken down by social and professional status, in all periods under analysis, women were characterised by higher level of human capital than men within groups of public sector and private sector employees, private entrepreneurs, the unemployed, other professionally inactive persons, school and university students and farmers (only in 2011).

²⁸ At the level of significance of 0.01.

²⁹ At the level of significance of 0.01.

Table 4.5.4. Level of human capital among persons aged 15-34, 25-44 and 45 and above, by place of residence class, status on the labour market and social and professional status

Values for independent characteristics	Age group	Human capital in 2007		Human capital in 2009		Human capital in 2011	
		Average	Standard error	Average	Standard error	Average	Standard error
Place of residence class							
Towns with more than 500,000 inhabitants	16-34	64.84	0.45	65.70	0.29	65.74	0.25
	35-44	58.93	0.97	59.93	0.60	61.93	0.51
	45 and above	45.17	0.59	46.74	0.38	48.76	0.36
Towns with 200,000-500,000 inhabitants	16-34	61.47	0.51	64.28	0.30	65.53	0.29
	35-44	55.48	0.95	58.84	0.61	59.95	0.54
	45 and above	42.26	0.53	43.01	0.38	45.85	0.39
Towns with 100,000-200,000 inhabitants	16-34	60.15	0.61	62.22	0.38	60.71	0.41
	35-44	51.29	1.08	55.59	0.82	57.07	0.71
	45 and above	41.14	0.54	42.04	0.41	43.03	0.41
Towns with 20,000-100,000 inhabitants	16-34	58.98	0.37	59.84	0.28	60.97	0.23
	35-44	49.65	0.70	53.46	0.46	55.75	0.41
	45 and above	39.66	0.35	40.03	0.25	41.62	0.24
Towns with up to 20,000 inhabitants	16-34	55.12	0.55	58.12	0.34	59.81	0.30
	35-44	46.93	0.80	49.86	0.60	51.69	0.58
	45 and above	37.77	0.42	38.62	0.29	40.10	0.29
Rural areas	16-34	52.45	0.33	55.06	0.21	56.80	0.19
	35-44	40.25	0.42	43.90	0.30	45.95	0.31
	45 and above	32.91	0.20	33.84	0.14	34.84	0.15
Status on the labour market							
The employed	16-34	56.59	0.28	58.66	0.18	60.34	0.16
	35-44	48.92	0.36	52.01	0.25	53.91	0.23
	45 and above	44.93	0.29	45.65	0.19	46.93	0.18
The unemployed	16-34	52.83	0.74	54.27	0.52	57.97	0.40
	35-44	39.93	1.05	45.14	0.70	48.94	0.95
	45 and above	35.68	0.58	37.35	0.53	41.97	0.62
Professionally inactive	16-34	58.82	0.27	60.69	0.18	60.67	0.18
	35-44	40.11	0.73	43.19	0.59	45.38	0.57
	45 and above	33.52	0.16	34.07	0.11	35.31	0.12
Social and professional status							
Public sector employees	16-34	63.62	0.48	64.34	0.33	64.35	0.31
	35-44	55.05	0.60	58.45	0.41	60.90	0.39
	45 and above	50.52	0.51	51.66	0.34	52.71	0.33
Private sector employees	16-34	55.04	0.37	58.30	0.23	58.85	0.21
	35-44	46.67	0.52	51.14	0.36	52.35	0.31
	45 and above	43.98	0.47	44.69	0.31	45.27	0.28
Private entrepreneurs	16-34	59.51	0.82	60.28	0.57	62.72	0.53
	35-44	53.37	1.10	55.99	0.68	55.75	0.61
	45 and above	50.23	0.81	52.08	0.61	51.24	0.55
Farmers	16-34	43.59	0.94	44.16	0.73	48.93	0.81
	35-44	37.80	0.68	40.86	0.55	41.99	0.64
	45 and above	34.75	0.49	35.56	0.39	36.36	0.36
Pensioners	16-34	57.47	1.12	59.74	0.82	50.68	1.63
	35-44	37.18	1.30	39.97	0.90	44.95	1.20
	45 and above	32.86	0.28	33.20	0.21	34.77	0.24
Retirees	45 and above	33.90	0.20	34.84	0.14	36.30	0.16
School and university students	15-34	62.60	0.21	64.33	0.14	64.14	0.13
The unemployed	16-34	48.79	0.71	53.58	0.49	56.33	0.38
	35-44	39.51	0.85	44.76	0.73	46.94	0.80
	45 and above	36.12	0.48	36.45	0.38	39.56	0.51
Other professionally inactive	15-34	49.93	0.66	50.07	0.39	54.50	0.41
	35-44	41.37	0.88	43.39	0.52	46.55	0.58
	45 and above	35.95	0.59	36.29	0.33	37.99	0.36

All observed differences in the level of human capital between women and men in the mentioned social and professional status groups were statistically significant³⁰. Only two exceptions to this rule were observed concerning the group of the unemployed and private entrepreneurs. In 2007, the differences between women and men were statistically insignificant and to the advantage of women.

Men were characterised by a higher level of human capital than women in the following groups: farmers (in 2007 and 2009), retirees and pensioners. However, the differences in the level of human capital were statistically significant only in the group of retirees and pensioners.

With regard to the social and professional status, in each period under analysis the highest level of human capital was recorded for female school and university students, then for male school and university

³⁰ At the level of significance of 0.01.

students and women employed in the public sector, working as private entrepreneurs and employed in the private sector. The lowest level of human capital was observed among female retirees and pensioners as well as among male retirees and pensioners.

Analogical analyses were conducted with regard to age in order to examine how the level of human capital was shaped in different age groups, as well as in relation to the place of residence class, status on the labour market and social and professional status. The results were presented in table 4.5.4.

Again, the highest level of human capital was observed among the youngest persons (aged 25-34) and the lowest among persons aged 45 and above. This rule was true for all cross sections + with respect to the class of residence, status on the labour market and the social and professional status.

In order to examine the joint influence of the examined characteristics; that is gender, age, place of residence class and the status on the labour market in Poland in 2011, a two-level regression model with random intercept was estimated. The first level of analysis consisted of the household members and the second of the households. The use of the two-level model was necessary as it had been presumed that the levels of human capital of the members in one household were visibly correlated with each other. In order to verify this assumption an interclass correlation coefficient was calculated for the human capital index in 2011. The obtained value at the level of 0.595 is a significant one and implies that the impact of belonging to a household on the level of human capital is sufficiently high in order not to be ignored. Moreover, in such a situation application of a classical (one-level) regression model may lead to incorrect results. The estimates of the parameters of the intercepts' effects in the final model³¹ have been presented in table 4.5.5.

Table 4.5.5. Assessments of the parameters of the constants' effects in the two-level regression model with a random absolute term³², Social Diagnosis 2011

Variables	Estimation	Standard error	Significance
Constant	33.39	0.20	0.00
Status on the labour market			
The employed	6.05	0.17	0.00
The unemployed	4.63	0.36	0.00
Professionally inactive	ref.		
Age			
15-34	18.48	0.13	0.00
35-44	8.72	0.20	0.00
45 and above	ref.		
Status on the labour market and gender			
Employed man	-1.58	0.14	0.00
Employed woman	ref.		
Unemployed man	-2.56	0.48	0.00
Unemployed woman	ref.		
Professionally inactive man	0.83	0.18	0.00
Professionally inactive woman	ref.		
Place of residence class			
Towns with more than 500,000 inhabitants	11.58	0.35	0.00
Towns with 200,000-500,000 inhabitants	10.07	0.37	0.00
Towns with 100,000-200,000 inhabitants	6.76	0.40	0.00
Towns with 20,000-100,000 inhabitants	5.98	0.29	0.00
Towns with 20,000 and fewer inhabitants	4.27	0.33	0.00
Rural areas	ref.		

The obtained results correspond to the results of earlier descriptive analyses. Thus, they confirm that in terms of human capital there are considerable differences between persons of various status on the labour market (the highest level of human capital was observed among persons who are employed, lower among the unemployed and the lowest among professionally inactive persons), professionally active women (both employed and unemployed) are characterised by a higher level of human capital than professionally active men, and men however are characterised by a higher level of human capital among persons who are professionally inactive. There are also differences between age groups; the younger the person, the higher the level of human capital, and between the place of residence classes; the larger the place of residence, the higher the level of human capital among the household members.

³¹ Multi-level regression models are estimated in an iterative way. This means that we start with a model with only constant and at further stages other variables are included, at the same time decisions are made on taking into account the constant and/or random effects. The quality of estimated models is assessed on the basis of the information criteria and with a likelihood ration test.

³² The parameters have been estimated with the residual maximum likelihood method (REML).

4.6. Culture

Tomasz Panek, Janusz Czapinski

For financial reasons, between 20 and 13 per cent of examined households were forced to forgo a trip to the cinema, theatre, opera, operetta, not attend a concert, visit a museum or an exhibition or purchase a book, newspaper or magazine in 2011. The situation occurred most often with purchasing a book (20.4 per cent of households), while least often with visiting museums or exhibitions (12.6 per cent). However, a notable improvement was observed here in the last four years³³ (Figure 4.6.1). In the panel sample, the number of households which had to refrain from participating in cultural events or from purchasing books, magazines and newspapers has decreased since 2007 by almost 6 percent in the case of the theatre, to over 3 percentage points in the case of museums. However, it should be emphasised that the financial reasons decrease resulted mainly from falling interest in these forms of cultural participation. Since 2007, the interest in participating in cultural events increased by 8 percent in the case of museum and exhibitions, to 2.5 percent in the case of the press.

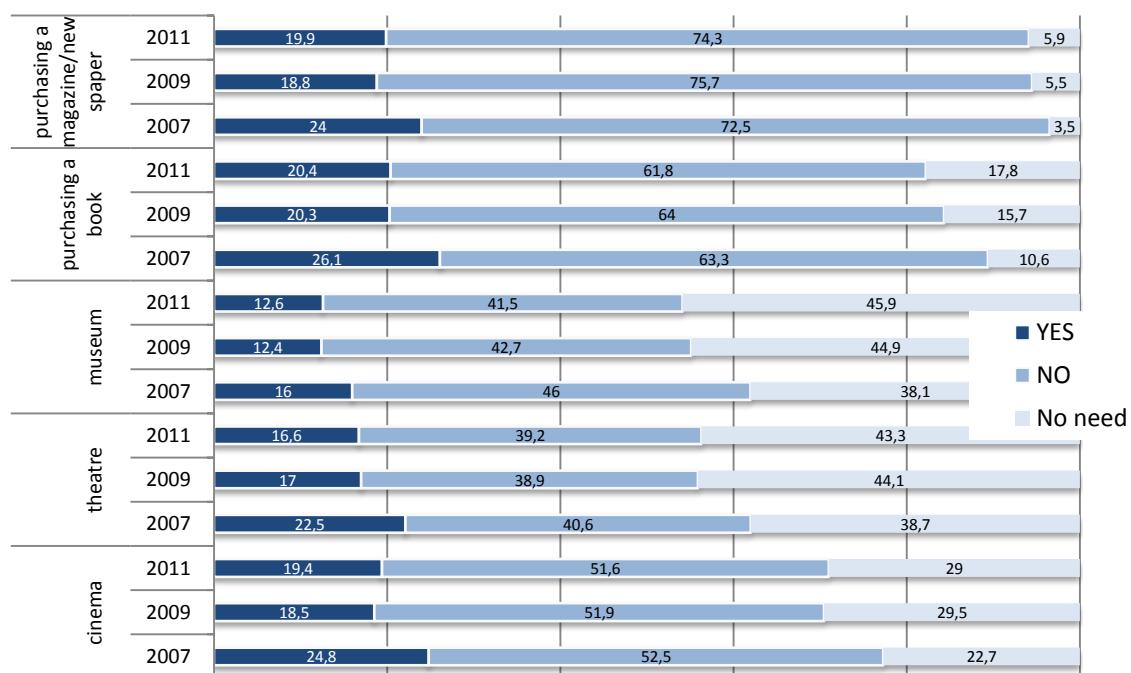


Figure 4.6.1. Were any of the household members forced to refrain from the following activities due to a lack of money last year (data from panel samples from years 2007-2011 in per cent)?

In March 2011, the highest percentage of households (even more than 57 per cent in the case of the theatre, opera, operetta or a concert) forced to forgo participation in selected forms of cultural events was reported for the poorest households, living on passive sources of income, while the lowest percentage (about 16 per cent or less) concerned self-employed households. However at the same time, in the first group of households the number of withdrawals increased significantly in 2001 compared to 2009 (from almost 4 percent in the case of cinema to over 9 percent in the case of theatre, opera, operetta, concert, museum or exhibition). Another group of households where an increase in withdrawals was reported were households of employees (by almost 2 percent in the case of theatre, opera, operetta or a concert and by more than 1 percent in the case of museum or exhibition).

Among groups of households broken down by type, forgoing selected forms of participation in cultural events mostly concerned single-parent families and families with 3 or more children, where cancellation frequency exceeded even 40 per cent. In 2011, no significant changes in the frequency of cultural event attendance cancellations were observed in the analysed types of households compared to the situation reported two years ago.

³³ All changes in household participation in cultural events in 2007-2011 relate to the panel samples from those years; i.e. to households participating in the survey in 2007, in 2009 and in 2011.

In 2011, the differences between respective groups of households broken down by classes of place of residence in terms of their need to forgo attendance at selected forms of cultural events for financial reasons were not very significant. In terms of voivodeships, households which most often reported such a need were households from the Łódzkie voivodeship. In the last two years, a fall in cancellations of attendance at cultural events for financial reasons was observed in the largest towns (by over 3 percent in the case of theatre, opera, operetta, concert, museum or exhibition) and in towns with 100,000-200,000 inhabitants (by over 3 percent in the case of museum or exhibition). Reduced opportunities to attend cultural events in that period were reported by households from the opolskie (increase in responses from almost 3 percent to over 5 percent), podlaskie (increase from over 1 percent to almost 7 percent), dolnośląskie (increase from almost 5 percent to over 11 percent) and małopolskie voivodeship (increase in responses from over 2 percent to over 6 percent).

Almost 23 per cent of analysed households were forced to abstain from purchasing a book for financial reasons last year. The number of abstentions decreased in 2011 by almost 5 percent with respect to 2007 (Figure 4.6.1). In the last two years, the percentage of abstentions from purchasing a book for financial reasons dropped by 1 percentage point (Figure 4.6.2).

In 2011, resignations from book purchase were clearly the most frequent in households living on passive sources of income (nearly 53% of those households), households of single-parent families, and non-family one-person households (nearly 33% and almost 29%, respectively), as well as in households with the unemployed (nearly 38%). Only in the group of households living on passive sources of income did the proportion of financially-motivated resignations from book purchase increase in 2011 as compared to 2009 (by nearly 13 percentage points).

The necessity to abandon the purchase of a book was reported by households in rural areas as often as by those in urban areas. The differences across voivodeships in terms of households that had to forgo buying a book for financial reasons were likewise insignificant. The necessity to make such a decision was most often reported by households in the Łódzkie voivodeship (nearly 32%). In 2011, only households from the largest cities had to forgo buying a book significantly more often than in 2009 (an increase by nearly 4 percentage points). In terms of voivodeships, a significant increase in the number of such situations was only recorded in the Dolnośląskie (by nearly 3 percentage points) and Opolskie (by nearly 2 percentage points) voivodeships.

In 2011, over 19% of households had to stop buying newspapers and magazines for financial reasons. The number of resignations dropped by more than 4 percentage points in 2011 as compared to 2007 (Figure 4.6.1). On the other hand, over the last two years there have been no significant changes concerning financial difficulties with buying newspapers and magazines (Figure 4.6.2).

Households living on passive sources of income experienced the greatest limitations to buying newspapers in 2011 (more than 45% of them stopped buying newspapers). Financial restraints on buying newspapers were reported the least often by the households of the self-employed (approx. 11% of such households). The frequency of withdrawals from buying newspapers increased significantly in 2011 as compared to 2009 in the group of households living on passive sources of income (an increase by nearly 6 percentage points).

In terms of household type, in 2011 the lack of funds for newspapers most often affected families with several children and single-parent families (more than 28% and over 25% of households, respectively). No significant changes occurred over the last two years in the scale of withdrawals from the purchase of newspapers in any of the household types.

In 2011, the purchase of newspapers was abandoned for financial reasons most often by households living in small towns with 20,000-100,000 inhabitants (more than 20% of households). The lack of money for the purchase of newspapers was experienced the most often by households in the Łódzkie, Zachodniopomorskie and Dolnośląskie voivodeships (by more than 25%, nearly 24% and more than 23% of households respectively). An increase in the number of such withdrawals over the last two years was found in the largest cities and in small towns with 20,000-100,000 inhabitants (by nearly 2 percentage points) and in the Dolnośląskie and Podkarpackie voivodeships (by over 5 and nearly 4 percentage points respectively).

In 2011, apart from the financially motivated withdrawals of households from cultural participation, the survey also looked at the non-experience of such a need. The lack of need to purchase newspapers is declared the least frequently (6% of households), with the need to go to museums or exhibitions not felt the most often (44% of households). The lack of the need to go to the theatre, opera, operetta, concert hall or concert is reported by nearly 42% of households; almost 27% of households do not feel the need to go to the cinema and 11% to buy a book.

Between 2007 and 2011, the percentage of households that did not feel the need to engage in any of the forms of cultural participation discussed here increased considerably (Figure 4.6.1). The greatest increase in the lack of interest on the part of households in the forms of cultural participation discussed here concerned

buying books (an increase by over 7 percentage points), while the smallest increase pertained to purchasing newspapers (an increase by more than 2 percentage points).

In terms of socio-economic groups, the greatest proportion of those not interested in buying newspapers was found among households living on passive sources of income (nearly 14% of households), with the smallest proportion found among the households of employees (less than 4% of households). The least interested in buying books are the households of pensioners (more than 34% of households declare the lack of such a need) and those living on passive sources of income (29% of households); the most interested are households of the self-employed (only 4% declare the lack of the need to buy books) and of employees (more than 8% of households are not interested).

The theatre, opera, operetta, or concerts most often fall outside the scope of interest of the households of pensioners (more than 61% of households), of farmers and retirees (54% and nearly 53% of households respectively), and the least often of the households of the self-employed (less than 26% of households) and of employees (more than 33% of households). Similar differences pertain to the need of visiting a museum or an exhibition, or going to the cinema.

In the cross-section by household type, the lack of the need of cultural participation is most often reported by non-family households (both one-person and multi-person households) and those of married couples with no children, and the least often by those of married couples with two children.

The smaller the town, the more frequent the lack of cultural needs. Books and newspapers are an exception, as they are an object of interest of residents of large and small towns, and of rural areas. Cultural needs are also not very diversified in terms of regions. With the exception of books and newspapers, the least interested in cultural participation are the households from eastern voivodeships, while the inhabitants of the Pomorskie and Wielkopolskie voivodeships are the most interested.

The cultural participation of households is also indirectly revealed, *inter alia* by the size of their book collections. The size of book collections has remained at a similar level since 2007 (Table 4.6.1). Although the number of collections of more than 100 volumes has increased, the number of the larger ones (of more than 100 volumes) has declined.

Table 4.6.1. Percentage of households with book collections of specific size in 2007, 2009, and 2011

Number of volumes	2011	2009	2007
0	12.5	12.8	10.1
Up to 25	21.9	22.3	23.1
26-50	22.1	21.6	21.5
51-100	21.2	20.7	20.6
101-500	16.9	17.2	19.8
More than 500	5.4	5.5	5.9

In March 2011, the lack of a book collection was most often reported by the households of pensioners and of those living on passive sources of income (more than 27% of households in each of these socio-economic groups). The largest collections, of more than 500 volumes, were held by the households of the self-employed. The past two years have seen a significant increase (by more than 3 percentage points) in the percentage of households living on passive sources of income that reported not having a book collection. At the same time, the same period brought an increase in the percentage of the households of farmers and pensioners who owned book collections (by more than 4 and more than 2 percentage points respectively).

Among the household types analysed within the study, in March 2011 book collections were absent the most often from non-family one-person households (nearly 25% of households from this group). The largest book collections (more than 500 volumes) were the most common among households of married couples with no children and of married couples with one child (nearly 7% and more than 6% of households respectively).

Households in rural areas do not have book collections much more often than households in urban areas (more than 20% of households in rural areas, against less than 5% of households in the largest cities). Households with the largest book collections most often lived in the largest cities (more than 14% of households from that group). In recent years, changes in the percentage of households without book collections were not significant in any of the particular household types and for none of their places of residence. In March 2011, the greatest number of households did not have any book collection in the Świętokrzyskie and Lubelskie voivodeships (more than 20% and more than 19% of households from those voivodeships respectively).

Households most often were of the opinion that the extent to which their cultural needs were satisfied did not change over the last two years (more than 79% of households). By contrast, nearly 17% of households think that the situation in this respect has deteriorated and only 4% think that it has improved.

The percentage of households that negatively evaluate the extent to which their cultural needs are met decreased significantly (by more than 3 percentage points) in comparison with March 2009.

As of March 2011, households living on passive sources of income were the most pessimistic in evaluating the changes in the extent to which their cultural needs were satisfied (approx. 29% reported a decrease in that respect). In terms of household types, single-parent families are the most likely to formulate negative opinions about the changes (nearly 23% of negative opinions). In the group of households with the unemployed, nearly 25% provided negative answers, while in the group of households without the unemployed that ratio only amounted to more than 15%. Negative opinions on the changes in the extent to which their cultural needs are satisfied were the most often formulated by households living in the largest cities (nearly 22% of households from those cities). The greatest percentage of households that are pessimistic in evaluating the changes in the extent to which their cultural needs are met live in the Łódzkie, Dolnośląskie and Lubuskie voivodeships (more than 20% and then 19% each among households from those voivodeships respectively).

The size of the book collection, similarly to the forms of cultural participation discussed above, is related to material well-being (income and household equipment) and to its correlate civilisation level (the number of modern communication devices). Since both material well-being and civilisation level depend on educational attainment, one may expect that many forms of cultural participation will correlate with the educational attainment of household members. And this indeed is the case. Nearly all households where the household head has higher education have a book collection of some sort, most often (33%) comprising between 100 to 500 volumes, and the lack of interest in buying newspapers, books, going to exhibitions, the theatre and the cinema is the least frequent there.

Obviously, this is not to say that those with low civilisation indicators (low educational attainment, low income and poor equipment of households in modern communication technologies) do not participate in culture at all. They do, but almost exclusively by watching television. Table 4.6.2. proves that the relationship between the degree to which a household is equipped in modern communication devices and the amount of time its members spend watching television is inversely proportional. Out of the members of the most poorly equipped households, 31% watch television for more than three hours a day while among the best-equipped households that ratio amounts to 27%. On the other hand, 47% of the members of the best-equipped households watch television for less than two hours a day, while among households with the poorest culture-related electronic equipment that ratio amounts to 33%. A similar but even stronger relationship is found with regard to educational attainment (Table 4.6.3). Twice as many people with primary and lower education as those with higher and post-secondary education watch television for more than three hours a day (43% and 20%, respectively).

Table 4.6.2. Percentage of respondents who spend various amounts of time on watching TV, by the number of culture-related devices owned by their households

Number of culture-related devices in household	Average amount of time spent daily on watching television					
	Do not watch TV	Less than an hour	One to two hours	Two to three hours	Three to four hours	More than four hours
0-2	3.7	6.4	22.5	26.2	18.3	22.9
3-4	4.5	10.2	28.4	25.2	15.1	16.6
5-7	2.4	11.6	32.6	26.8	13.5	13.1
Total	3.4	10.2	29.4	26.1	14.9	16.0

Chi-square = 522.480, df = 10, p < 0.000.

Table 4.6.3. Percentage of respondents who spend various amounts of time on watching television by educational attainment

Educational attainment	Average amount of time spent daily on watching television					
	Do not watch TV	Less than an hour	One to two hours	Two to three hours	Three to four hours	More than four hours
Primary and lower education	2.7	6.4	23.4	24.6	19.1	23.7
Basic vocational/lower secondary	2.4	8.6	28.5	27.1	15.8	17.6
Secondary	3.0	10.8	29.7	26.7	14.7	15.2
Higher and post-secondary education	6.0	14.6	34.5	24.7	10.8	9.3

Chi-square = 907.811, df = 15, p < 0.000

Also the Internet is becoming an increasingly common carrier of cultural content, replacing concerts or paper editions of newspapers and magazines (Figure 4.6.2).

In general, the financial restraints on cultural participation, the lack of expectation related to that participation, the assessment of the extent to which one's cultural expectations are met, and the size of the book collection largely depend on the financial situation and educational attainment and civilisation level. Only the television and increasingly the Internet are commonly available as carriers of cultural content, with

the TV more in use among those who do not have other cultural needs (see section 5.11 for a discussion of the role of television).

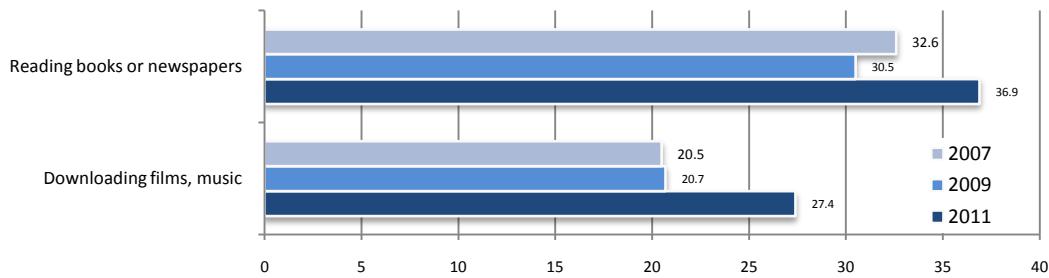


Figure 4.6.2. Percentage of individuals in the panel sample who used the Internet for selected purposes over the last week in 2007 and 2011

4.7. Healthcare

Janusz Czapinski, Tomasz Panek

4.7.1. Use of the healthcare system

As reported by households in March 2011, more than 91% used healthcare facilities funded by the National Health Fund (*Narodowy Fundusz Zdrowia, NFZ*), but also nearly half took advantage of services provided by establishments for which they paid themselves, and more than 6% took advantage of the services paid for by employers who purchased subscription or insurance. The percentage of households that took advantage of subscription increased significantly as compared to the previous years (Table 4.7.1).

Table 4.7.1. Percentage of households that use healthcare facilities, by the source of funding of the services

Study year	Public funds	Private funds	Subscriptions
2000	86.4	38.6	4.9
2003	89.6	35.6	4.5
2005	91.2	37.4	4.3
2007	92.4	44.0	5.0
2009	92.0	49.0	5.1
2011	91.5	49.1	6.3

Between 2007 and 2011³⁴, the percentage of households that used services paid for on an individual basis increased considerably (by approx. 4 percentage points, Figure 4.7.1), while the percentage of households that use NFZ services slightly decreased (by less than 2 percentage points).

The use of NFZ-funded healthcare services is poorly differentiated in terms of socio-demographic cross-sections. Only households living on passive sources of income and non-family households, both one and multi-person, stand out as using such services less frequently.

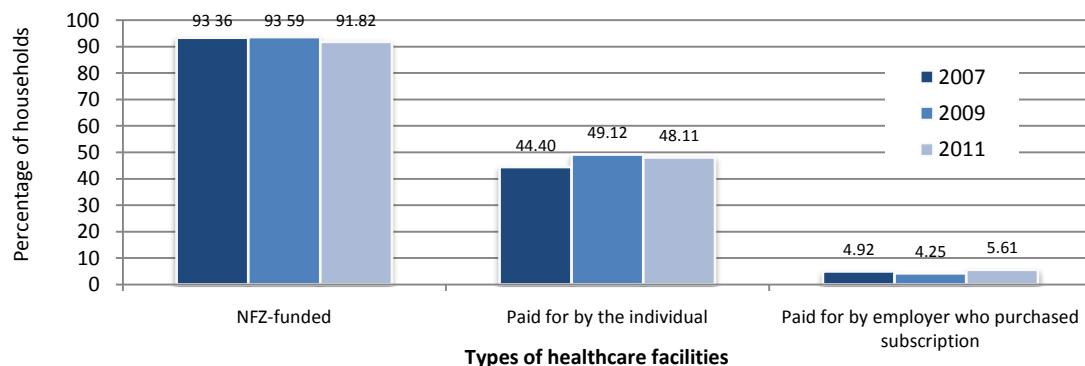


Figure 4.7.1. The extent of healthcare service use between 2007 and 2011 in the panel sample

On the other hand, the variation to the use of services paid for by the households themselves is considerable. These are used the most often by the households of the self-employed (more than 70%), married couples with one child or two children (approx. 60%), households with income per equivalent unit above the upper quartile (more than two-thirds), and households that live in the largest cities (60%). Such services are used the least often by the households of pensioners (29%), retirees (42%), non-family one-person households (34%), households with income below the bottom quartile (30%) and households from the Warmińsko-Mazurskie voivodeship (27%).

Subscription is most often purchased by households of employees (11%), married couples with children (6% to 9%), and mainly those that live in the largest cities (17%, an increase by 5 percentage points over the last two years) and in the Mazowieckie voivodeship (13%, mainly owing to the residents of Warsaw), and households with income above the upper quartile (14.5%).

Members of one in four households stayed in hospital for reasons other than pregnancy during the past year. The households recruited mainly from those of pensioners (31%) and retirees (28%), and in the cross-section by household type: from multi-family households (34%) and households of married couples with 3

³⁴ Changes in respect of healthcare between 2007 and 2011 pertain to the panel sample for those years; i.e. the households that were subject to the study in both 2007, 2009, and in 2011.

or more children. The class of the place of residence and voivodeship differentiate the use of hospital care to a lesser extent.

In comparison with the previous edition of the *Diagnosis*, the frequency of hospital care use changed slightly both in general terms and in terms of various socio-demographic cross-sections.

4.7.2. Withdrawal from healthcare

A lack of funds forced the largest group of households to forgo purchasing medicines and dental treatment (Figure 4.7.2). The lack of resources to cover the costs of hospital treatment forced 0.8% of households to stay away from hospital. A much greater group of households was forced to forgo doctor's services (14%) and medical examinations (7.5%). We did not ask whether in these circumstances respondents gave up using medical services altogether or rather only the services that required paying out of one's own resources (as some of the patients from this group could have received publicly funded services). Here we were more interested in the scale of barriers encountered by households that perceived certain subjective health needs and would have satisfied them in the private sector if they had sufficient resources to do so.

In 2011, the scale of financially-induced withdrawals from particular types of medical services was almost exactly the same as two years before. The ratio of withdrawals from purchasing medicines and obtaining dentures from sanatoriums dropped only slightly by not more than 2 percentage points, while the ratio of withdrawals from consultations with physicians increased at a similar scale.

Households of the self-employed did not use any kind of medical services the least often, while households of pensioners and those living on passive sources of income do so the most often. These differences mainly follow from the differences in level of affluence.

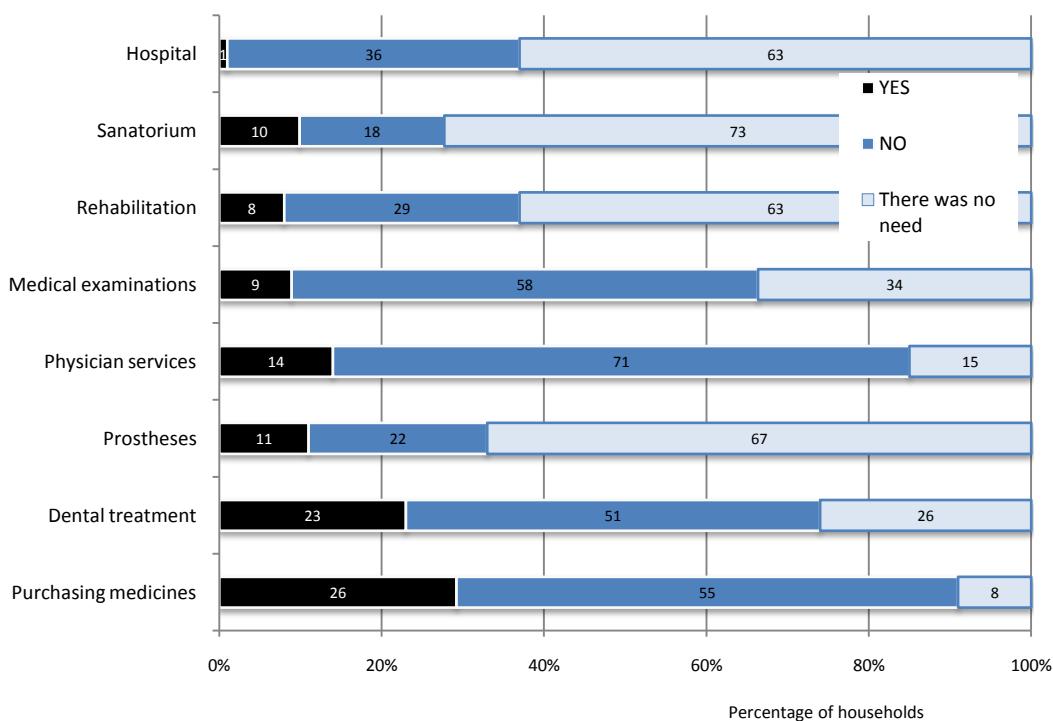


Figure 4.7.2. Percentage of households that did not use particular types of healthcare services due to financial difficulties

Married couples with children, especially with fewer children, are less likely to withdraw. Among married couples with more children (3 and more) the needs are certainly not lesser, yet the financial resources definitely are.

4.7.3. Household expenditure on healthcare services

We have already mentioned that already nearly half of households pay for some healthcare services out of their own resources. Let us see now what this money was spent during just one quarter prior to the study, and in what amounts (Table 4.7.2).

On average, the greatest amount was spent by households on outpatient treatment and examinations (PLN 550), then on the purchase of medicines (PLN 375). So-called “expressions of gratitude”, i.e. bribes, used in attempts to obtain better or quicker healthcare (e.g. a greater interest in the patient’s problems, more care for their health, choice of surgeon or the physician taking care of the patient in hospital, accelerating the service, etc.) amounted to PLN 311 on average. The average payment in a public hospital did not exceed PLN 300, and the amount of a true expression of gratitude for care already received amounted to PLN 142 on average.

Table 4.7.2. Percentage of households that paid for healthcare within one quarter, and average amount of that expenditure in entire samples between 2007 and 2011

	Medicines and pharmaceuticals			Purchase of outpatient healthcare services			Informal payments, “expressions of gratitude” (bribes)			Gifts as expressions of true gratitude			Payments in public hospitals		
	2011	2009	2007	2011	2009	2007	2011	2009	2007	2011	2009	2007	2011	2009	2007
Percentage of households that incur such expenditure	87	89	87	39	35	32	1.7	1.3	1.8	1.6	1.9	2.4	2.1	1.6	1.7
Average amount of expenditure in PLN	375	379	307	550	524	384	311	308	265	142	136	114	285	198	119

4.7.4. Evaluation of changes in the satisfaction of healthcare needs

Despite the unabated criticism of the healthcare system, the percentage of negative retrospective evaluations of change how much healthcare needs are satisfied continues to decline systematically from 41% in 2000 to 26% at present (Table 4.7.3). However, the percentage of positive opinions is not rising, only the number of households that do not see any change is growing.

In comparison with 2009, in the group of households with the unemployed there were significantly more negative opinions about the changes in the extent of satisfaction of healthcare needs than in the group of households without the unemployed (nearly 31% and less than 25% of them respectively expressed negative opinions about the changes). In terms of the household types adopted here, negative opinions were formulated the most often in the households of single-parent families and in non-family one-person households (in nearly 30% and nearly 29% respectively). The households that negatively evaluated the changes in the extent to which their healthcare needs were satisfied lived mostly in small towns of 20,000-100,000 inhabitants (approx. 27%), and in the Warmińsko-Mazurskie, Łódzkie and Świętokrzyskie voivodeships (approx. 32%, and more than 30% each, respectively).

Table 4.7.3. Assessment of the change in how much healthcare needs are satisfied over the last years (since the last wave) in subsequent waves (%)

How much healthcare needs are met has	2000	2003	2005	2007	2009	2011
worsened	41	38	38	27	25	26
improved	3	4	3	4	3	2
remained unchanged	57	58	59	69	72	72

4.8. The labour market

Pawel Strzelecki, Irena E. Kotowska

The economic slowdown was the most noticeable in Poland towards the end of 2009, and contributed to a rapid reduction in employment and a decline in the demand for labour. The second half of 2010 and the beginning of 2011 brought a deceleration of dismissals and a gradual increase in the demand for labour and in the number of job opportunities (CSO, 2011). Apart from economic factors, in 2011 also the number of job opportunities available in labour offices decreased, which was partly due to fewer funds being earmarked for active forms of combating unemployment (including the co-financing for new job creation). The most important structural change between 2009 and 2011 involved the continued growth in professional activity, especially among those aged 45-59, unprecedented since the beginning of the transition.³⁵ Another important component of the changes in the Polish labour market is the gradually increasing significance of contracts for a specified period of time. It appears, however, that this phenomenon should be evaluated in the context of the assessment of the intensity of jobseeking and its effectiveness, especially in the case of young people.

These are the issues this section will deal with. First, the general trends in the labour market are presented in the light of the results of this edition of the *Social Diagnosis*. Second, we analyse in more detail those who work on the basis of various types of contract and at the same time look for another job, and then we discuss the sources of increased professional activity of those aged 45-59. Furthermore, similarly to the previous report, we separately discuss the opinions of respondents concerning the solutions aimed to facilitate reconciling parenthood with professional activity.

4.8.1. General trends

Table 4.8.1. presents a comparison of the results of the 2009 and 2011 surveys. Despite the economic slowdown, the employment rate increased, while the parallel increase in unemployment rate resulted from a marked increase in the number of those active in the labour market (employment or seeking employment).

The results of the Labour Force Survey (LFS), the fundamental source of data concerning the labour market also reveal those tendencies. According to the LFS, the employment rate however started to grow only as late as in the second half of 2010, and it only managed to compensate for the decrease caused by the slowdown, which reached its peak towards the end of 2009.

Table 4.8.1. Basic labour market indicators (%) in Social Diagnosis surveys between 2000 and 2011

Labour market indicators	2000	2003	2005	2007	2009	2011
Labour market indicators of the <i>Social Diagnosis</i> *%						
Unemployment rate	17.6	18.6	13.4	10.6	8.8	9.7
Labour market participation	61.3	56.8	56.8	56.3	56.3	58.3
Employment rate	50.5	46.2	49.3	50.4	51.3	52.6
Labour market indicators according to the LFS (2nd quarter of each year)						
Unemployment rate	16.3	19.4	18.1	9.6	7.9	9.5
Labour market participation	56.4	54.6	54.5	53.5	54.7	55.6
Employment rate	47.2	44.0	44.6	18.3	50.4	50.7

*Labour market indicators from the *Social Diagnosis* are calculated in a way comparable to the LFS; the unemployment rate is calculated for a group of people aged 15 and above, based on the definition of the International Labour Organisation.

According to the data on the activity of household members, the increase in unemployment was probably less noticeable on the scale of entire households than would follow from the tendency as evaluated on the basis of individual data (Table 4.8.2). In comparison to 2009, the increase in the number of the unemployed affected households whose other members had a job that secured an income. On the other hand, the percentage of households where all members active in the labour market were unsuccessfully looking for a job continued to decline systematically (approx. 3% in 2011). Furthermore, the growing professional activity also reduced the number of households where none of the members participated in the labour market (to approx. 18%).

An analysis of the changes in the overall structure of occupations of those employed indicates a systematic increase in the share of professionals and a decrease in the share of clerical support workers, which confirms the hypothesis that technological progress will reduce the role of back-office occupations (Table 4.8.3). Furthermore, the restructuring of Polish agriculture is decreasing the share of individuals

³⁵ More information about the changes in the Polish labour market may be found in (Cichocki, Paweł Strzelecki, Tyrowicz, & Wyszynski, 2011).

employed in agriculture. The recession that affected Poland's trade partners has influenced export enterprises in the first place. They reduced employment to the greatest extent, which may explain the decline in the share of persons in worker positions among all of the employed. The economic slowdown was relatively less noticeable in the service sector, and this is what may explain the significant increase in the percentage of those employed in personal services in 2011.

*Table 4.8.2. The share of individuals from households classified by the professional activity of their members between 2003 and 2011**

Group of households	2003	2005	2007	2009	2011
Without the unemployed or the employed	15.6	19.9	17.3	19.3	17.8
With the unemployed, without the employed	6.9	5.4	3.3	3.2	2.9
Without the unemployed, with the employed	57.7	60.4	67.7	68.1	67.3
With the unemployed and with the employed	19.7	14.2	11.7	9.4	12.0

*Only those unemployed who were registered were taken into account.

Table 4.8.3. Composition of those employed by groups of occupations between 2005 and 2011 (%)

Groups of occupations	2005	2007	2009	2011
Managers, senior officials	5.1	5.5	5.7	5.1
Professionals	14.3	15	16.5	17.9
Technicians and associate professionals	12.7	11.1	11.7	10.5
Clerical support workers	8.2	7.6	7.5	7.3
Service and sales workers	12.8	12.5	11.5	13.3
Skilled agricultural, forestry and fishery workers	14.4	13.3	12.8	11.5
Craft and related trades workers	16	17.5	18	16.2
Plant and machine operators and assemblers	8.6	8.3	8.8	10.3
Elementary workers	7.9	9.1	7.6	8.0

In comparison with the results of 2009, the proportion of occupations among the unemployed did not change significantly. Due to the high staff turnover maintained by employers, most of the unemployed are workers, elementary workers, and service workers (Table 4.8.4). One novelty as compared to 2009, related probably to the weaker demand for labour and the higher supply of high-skilled labour from the well-educated generation of the population boom, is the increased share of the unemployed who previously worked in occupations that require high qualifications, such as managers and professionals.

Table 4.8.4. Composition of the unemployed by their occupation as last pursued, between 2005 and 2011 (in % of the unemployed who previously worked)

Occupation last pursued	2005	2007	2009	2011
Managers, senior officials	1.8	1.7	0.5	1.3
Professionals	3.5	3.0	3.0	6.1
Technicians and associate professionals	9.1	6.3	7.2	6.3
Clerical support workers	8.3	11.1	8.2	10.2
Service and sales workers	15.7	23.6	20.1	21.9
Agriculture, gardening, forestry, fishery	2.9	3.9	1.4	1.3
Craft and related trades workers	30.5	21.8	29.4	23.8
Plant and machine operators and assemblers	9.6	8.9	8.5	6.8
Elementary workers	18.6	19.6	21.6	22.2

Comparing registered unemployment with unemployment according to LFS definitions leads to the conclusion that since 2007 the percentage of those registered that really seek work and are ready to start has remained at close to 60% (Table 4.8.5). On the other hand, the data of 2011 point to a continued decline in the percentage of those who are registered in labour offices yet do not seek work. In 2007, such people accounted for more than 38% of all registered unemployed individuals, in 2009 30%, while in 2011 for approx. 24%. On the other hand, the percentage of those who declare they work and are registered in a labour office is growing systematically (to 14%), which may be related either to the unofficial economy, or to errors in classification due to the large number of entities involved in activation (the unemployed referred by labour offices in 2009 and 2010 to places of occupational activation were formally removed from the register maintained by labour offices, but they may have related their current professional activity to the previous registration in the labour office).

Table 4.8.5. Unemployment and registration at a labour office between 2003 and 2011 (total unemployed persons registered in a given year = 100)

Groups according to the definition of unemployed person	2003	2005	2007	2009	2011
Registered persons who fall under the LFS definition of unemployed person*	69.9	56.6	60.6	62.0	61.9
Registered persons who do not seek work	21.3	31.9	38.6	30.1	23.7
Registered persons who nevertheless perform gainful activities	8.8	11.5	0.8	7.9	14.4
Non-registered persons who fall under the LFS definition of unemployed person*	17.0	24.6	27.6	29.1	21.7

* The LSF definition of the unemployed person does not make reference to registration and covers those without work, seeking work and available to commence it in the next week of the study.

4.8.2 Seeking work and types of contract

The unemployed are not the only people who seek employment. According to the 2011 *Social Diagnosis* data, registered unemployed persons who are actively seeking work constitute approx. 44% of all jobseekers (Figure 4.8.1). Another 16% are those who do not register at labour offices but seek employment and are available to take it up. Furthermore, approx. 40% of jobseekers are not unemployed. The fact that the boundary between unemployment and professional inactivity is vague is evidenced by the fact that some individuals, despite remaining outside the labour market do seek work, although they would not be able to start immediately. They constitute 7% of all those who seek work. Some studies indicate that persons who "wait" outside the labour market for attractive job opportunities clearly stand out among other inactive persons, and their behaviour could also influence the labour market (Jones & Riddell, 1999) and as such should be taken into account in labour market analyses. Another important phenomenon involves already employed persons who look for another job, who account for 33% of all jobseekers.

An interesting issue is the question of the factors that differentiate the intensity of jobseeking despite being already employed. It appears that they depend on the individual situation in the labour market. On the one hand, those with stable employment who look for alternative opportunities may be motivated by the willingness to find a job with better conditions (with a better pay or a more stable one). On the other, those with an unstable employment very often have to look for another job due to the limited duration of the current contract. *Social Diagnosis* data indicate that the share of persons looking for another job among those employed amounts to approx. 4-6%, and that the percentage has increased over the recent years (Figure 4.8.2).

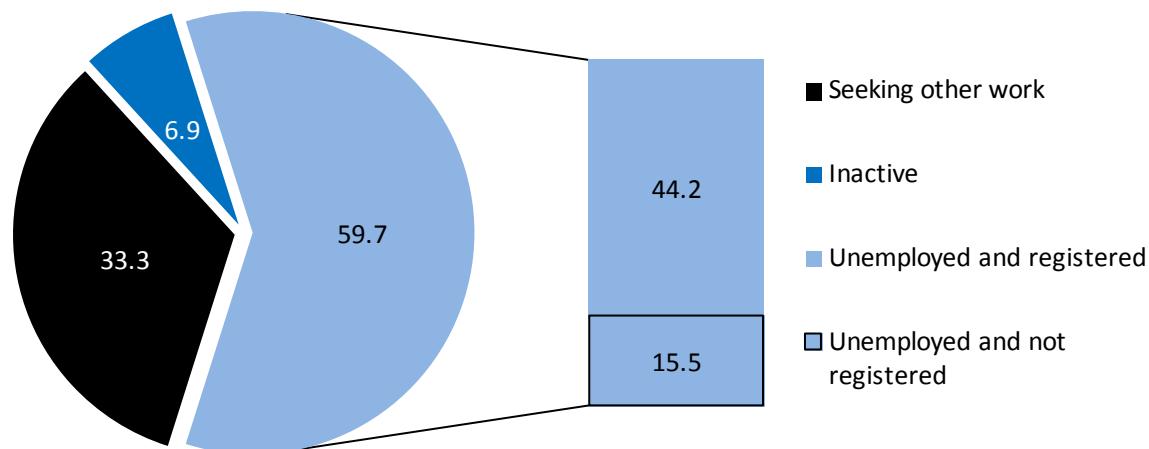


Figure 4.8.1. Structure of those looking for a job in 2011 (% of total jobseekers)

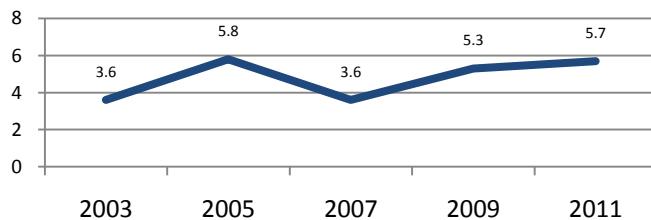


Figure 4.8.2. Employed persons who seek work (% of those employed)

Referring to the 2011 *Social Diagnosis* data, one may confirm that employment insecurity is the most important factor that increases the share of jobseekers among those employed. The ranking of the least stable forms of employment at the same time reflects the disposition to seek additional employment (Figure 4.8.3). Among casual workers with various types of civil-law or short-term contracts, or even without a formal contract, the percentage of those who seek another job amounts to more than 20%. Only approx. 3% of those employed for an unspecified period of time undertake the effort of looking for another job, as compared with approx. 6% of those employed for a specified period of time and looking for another job.

The results concerning the factors that influence the intensity of job search on the part of those employed are consistent with the findings from other countries as far as contract type, gender and age are concerned (Pissarides & Wadsworth, 1994). Without more detailed analyses of the impact of various factors it is difficult to find confirmation for another regularity described in the literature; i.e. that employed persons with higher education more often seek work. According to *Social Diagnosis* data rather the opposite appears to be true; the higher the educational attainment, the greater the stability of employment and the lesser the stimuli to look for another job (Figure 4.8.4). The highest percentage of the employed who look for another job is found among those of the lowest educational attainment and among young people, who are the most likely to be employed on the least stable contracts. Furthermore, regardless of age and educational attainment, women seek another job much less often, with the exception of women aged 35-44, who do so more often than men (Figures 4.8.5, 4.8.6).

Thus, the results of analyses based on the 2011 *Social Diagnosis* data indicate that contract instability, including that of the contracts of young people, is positively correlated with the intensity of seeking work. Among persons under 25 years of age, employment contracts for an unspecified period of time constitute a definite minority (30% among men and 23% among women). However, it is worth mentioning that in a majority of cases, age brings stabilisation of employment conditions; in the 25-34 age group the percentage of those employed for a specified period of time amounts to 53% among men and 60% among women. This may suggest that gaining experience in the labour market enhances the stability of employment. This conclusion is not strong enough to allow coming to conclusions about the role of the less stable forms of employment in the professional career. However, *Social Diagnosis* makes it possible to analyse the subsequent labour market situation of those employed on the basis of various types of contracts and that of the unemployed.

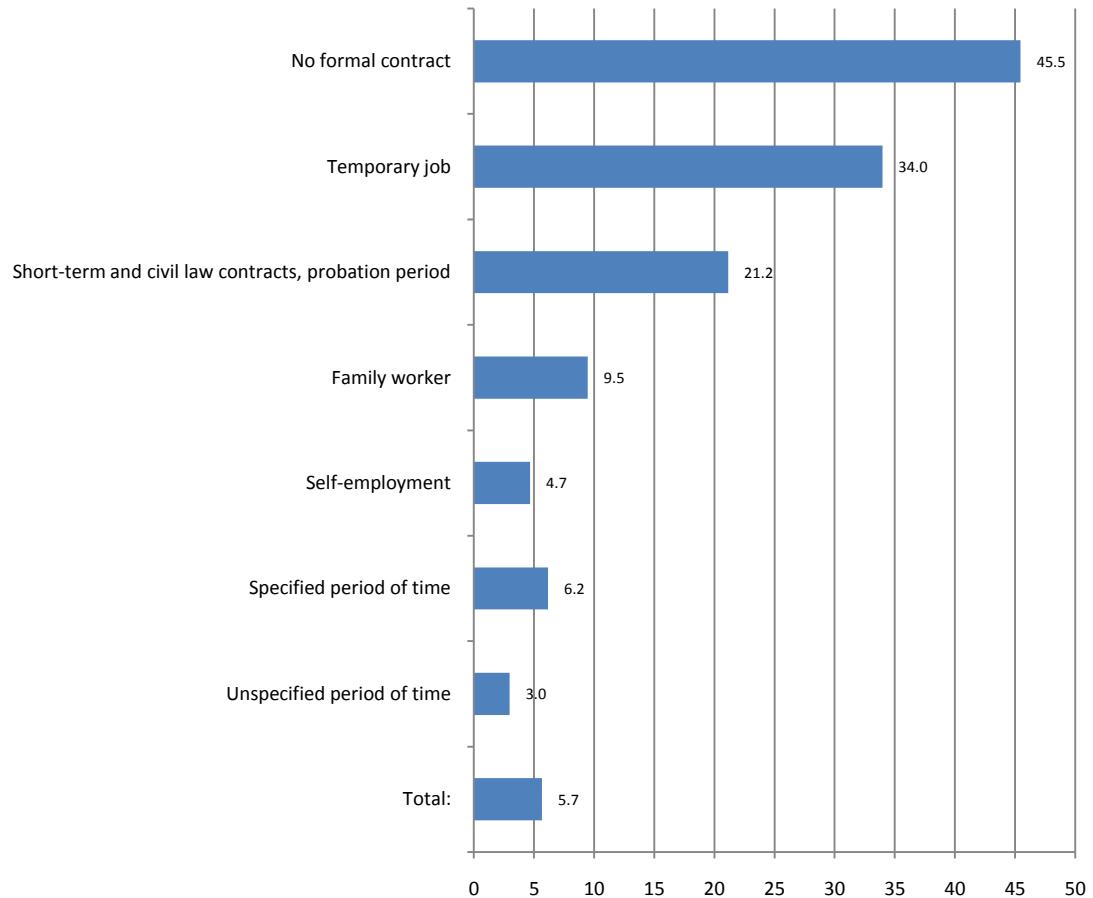


Figure 4.8.3. The share of jobseekers among those employed by work type

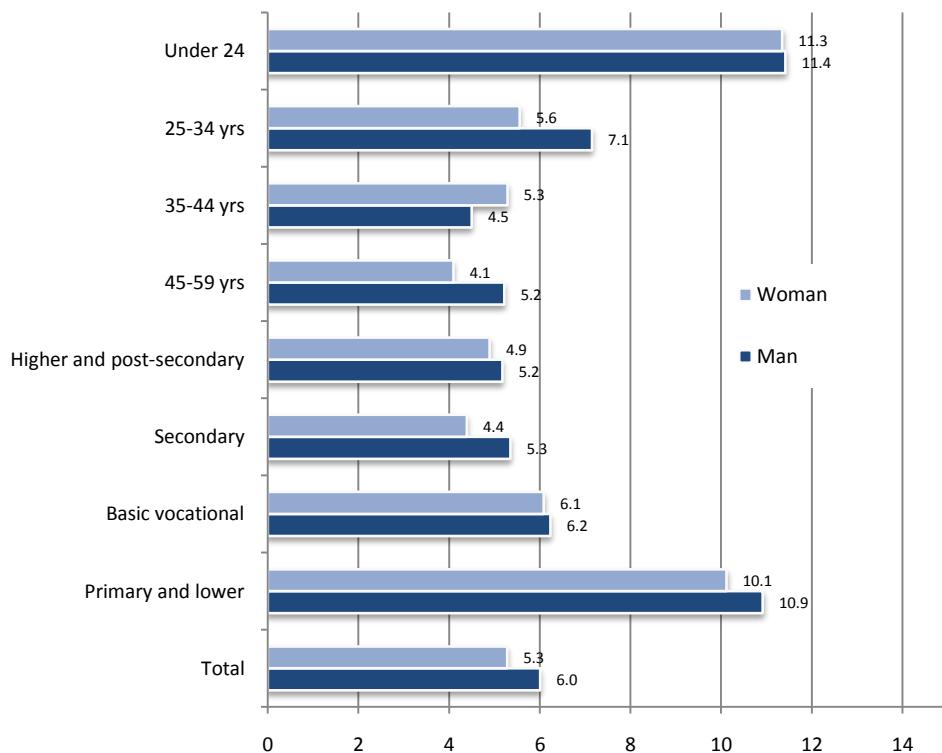


Figure 4.8.4 Share of jobseekers among those employed, by gender, age, and educational attainment

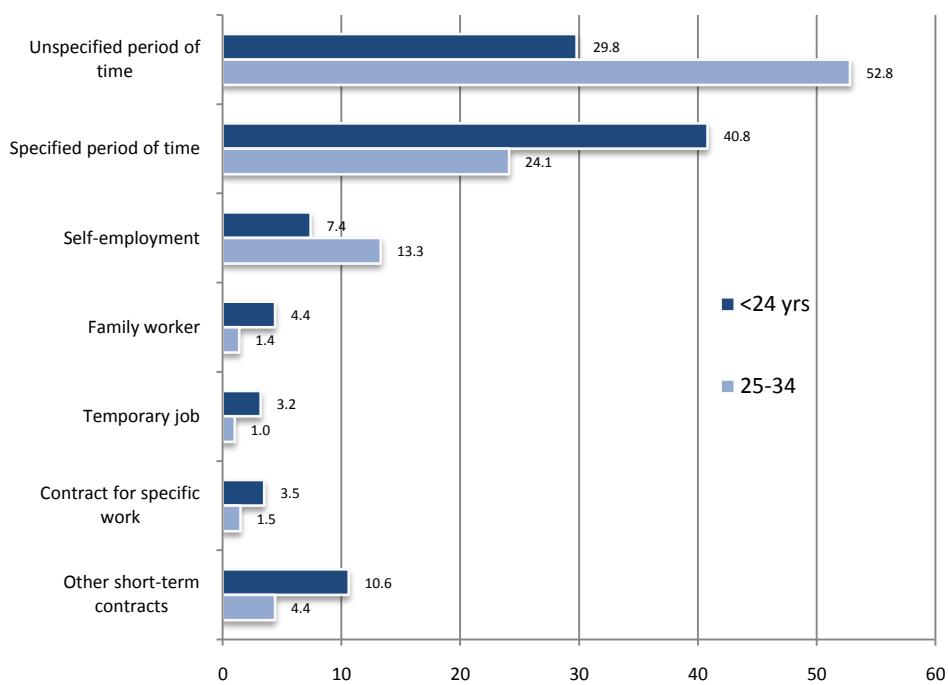


Figure 4.8.5. Percentage of employed men, by type of contract

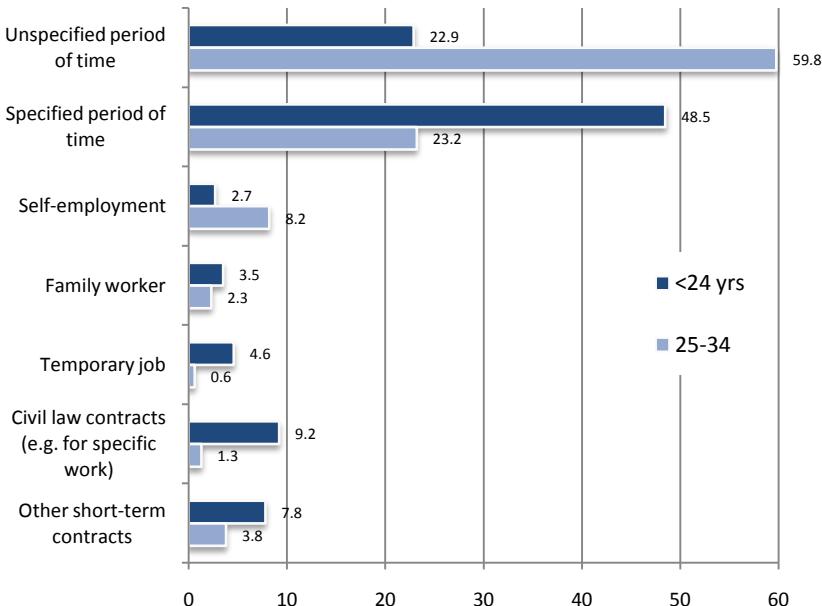


Figure 4.8.6. Percentage of employed women, by type of contract

An analysis of the 2011 situation of persons with different employment status in 2009 (Table 4.8.6) indicates that each of the forms of temporary employment entailed a greater chance of being employed for an unspecified period of time two years later (a chance of approx. 40%) than in the case of persons who started out as unemployed (a chance of 13%) or inactive (6%). On the other hand, most employment contracts as well as self-employment also decreased the risk of becoming unemployed two years later, to a greater extent than seeking work without undertaking an initially even less stable form of employment. It is also worth noting that moving from unemployment to a contract for a specified period of time is relatively easy as compared to shifting to a contract for an unspecified period of time, which means that temporary contracts give an actual chance of finding a job to those for whom finding a more stable form of

employment is more difficult. These results are consistent with the findings of the analyses by Baranowska and Lewandowski (2008) concerning the impact of working on a contract for a specified period of time on the chances of remaining employed, which were conducted on the basis of LFS data for the years 2004-2006. The chances are greater for those working on contracts for a specified period of time than the chances for the unemployed or inactive persons to start work. The two researchers even stated that “temporary jobs appear to function as a “bridge” for the unemployed towards employment” (p.59). The unemployed aged 15-29 who undertook work for a specified period of time were more likely to find permanent employment as compared to those who remained unemployed (p. 62).

However, more in-depth analyses by Baranowska (2010) showed that professional experience gained during employment for a specified period of time does not unambiguously translate to greater chances of finding a permanent job. At the same time, temporary employment was not found to be a “trap”; i.e. the longer the period of working on a contract for a specified period of time, the lesser the chances of undertaking permanent work and the higher the risk of losing the job. Rather, the rapid increase in the chances of commencing permanent work after 10-12 months of work for a specified period of time appears to suggest the existence of a “screening effect”; i.e. contracts for a specified period of time are offered by employers so that they can verify the skills of the potential employee and their suitability for a particular position before they are employed for an unspecified period of time.

In the light of these data, it may be worth rethinking the recommendations formulated in the widely discussed Szafraniec report (2011). This is because an alternative to the non-permanent forms of employment for young persons, most of whom look for ever better opportunities even though employed, is to remain unemployed, which makes it even more unlikely to find a better stable job in the future.

Table 4.8.6. Changes of labour market status between 2009 and 2011 among persons aged 15-34 (% of persons with a specific status in 2009)

Status in 2009	Chances of employment for an unspecified period of time in 2011, by status in 2009	Chances of reaching specific status in 2011 by those unemployed in 2009	Risk of unemployment in 2011 by status in 2009
Contract for an unspecified period of time	75.6	13.0	3.4
Contract for a specified period of time	40.3	22.3	7.8
Entrepreneur-employer	12.5	0.0	0.0
Self-employment	7.1	3.8	2.7
Family worker	5.3	0.0	6.7
Temporary job	27.3	1.4	18.2
Other short-term employment contract	28.8	2.1	13.6
Trial period	53.8	0.0	15.4
Contract for specific work	30.0	3.1	10.0
No formal contract	10.0	4.1	36.7
Other forms of work	14.3	0.3	0.0
Unemployed	13.0	31.8	31.8
Inactive	6.1	18.2	9.8

4.8.3. Increased professional activity of persons in pre-retirement age

Between 2008 and 2011, LFS data documented an increase in the number of those professionally active that was unprecedented since 1989³⁶. The *Social Diagnosis* data confirm this trend and indicate that the main cause of the increase was the growing professional activity of persons aged 45-59 (Figure 4.8.7).

In this section, we will try to identify the factors that may have influenced that increase such as legal, demographic and economic changes. The starting point for explaining the growing activity of persons in this age group is finding out whether the changes in the age structure, related to the ageing of high and low birth-rate generations, may have influenced that increase (Figure 4.8.8). However, data on the age structure of the population indicate that since 2003 there has been a systematic decline in the percentage of younger people (aged 45-49) in the 45-59 age group to the advantage of those aged 50-59. Furthermore, between 2009 and 2011 there were so many people around the age of 60 that ageing-related outflow from the age group under discussion exceeded the ever less abundant inflow of those who celebrated their 45th birthday in subsequent years. The demographic structure of those in pre-retirement age not only did not have a positive impact on the increase in activity, but it presumably rather curbed the observed growth.

³⁶ A broader analysis of this subject may be found in (Cichocki et al., 2011, p. 11)

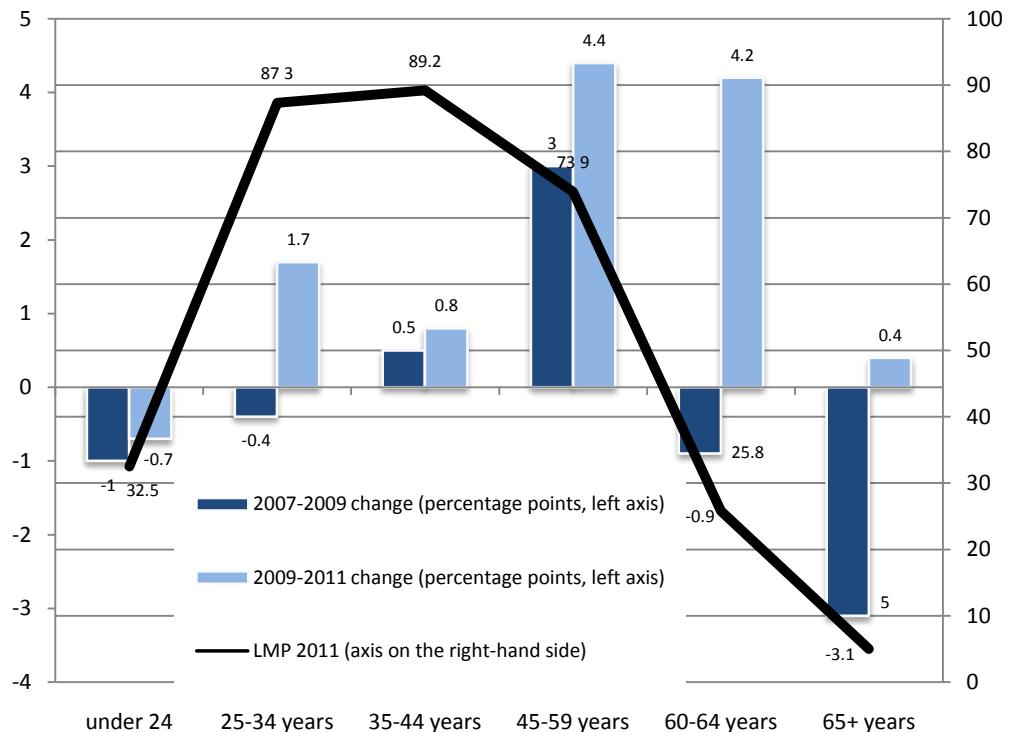


Figure 4.8.7. Changes in labour market participation (LMP) by age

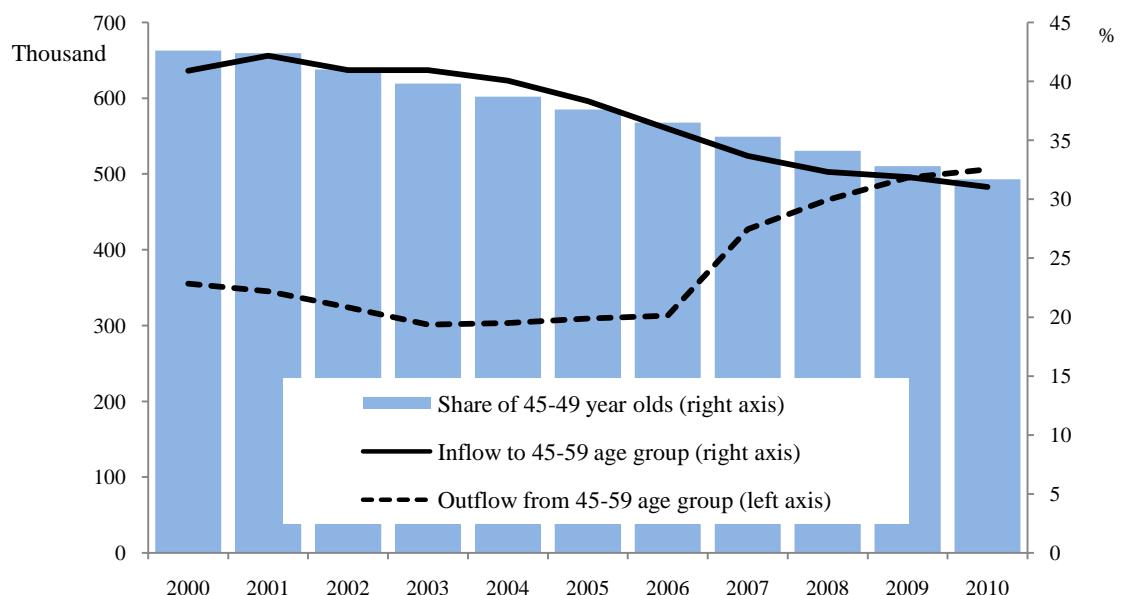


Figure 4.8.8. Changes in the number of people aged 45-59 – inflows and outflows related to the fluctuations of population age structure – and the percentage share of people aged 45-49 in the 45-59 age group

When looking for the sources of the increased professional activity among those aged 45-59, it is worth looking at the situation of that age group in the labour market and at the sources of their income if they are professionally inactive (Table 4.8.7). The increase in professional activity between 2007 and 2011 in the 45-49 age group was related to the greater share of those employed at that age, while the unemployment rate changed relatively little, which reflected the changes of the situation in the labour market. One may see,

therefore that the increased activity of people in the age group under consideration, including those in pre-retirement age, did not entail those people becoming unemployed.

Table 4.8.7. Structure of population aged 45-59 by activity in the labour market and sources of income between 2007 and 2011 (%)

Labour market status and sources of income	2007	2009	2011
Employed	61.0	64.4	68.3
Unemployed	5.5	5.0	5.6
Inactive, by source of income:			
Income from work	0.4	0.5	0.3
Retirement pension	10.2	9.9	6.9
Disability benefit and survivor's pension	12.6	10.3	9.3
Other benefits (transfers from the State)	4.4	3.5	3.1
Other income (excluding transfers from the State)	0.4	0.7	0.6
Maintained by other household members	5.4	5.7	5.9
Total	100.0	100.0	100.0

The decrease in the number of those inactive was also related to the decline in the share of individuals for whom transfers from the State were the main source of income, including the percentage of those who declared that their main source of income was a retirement pension. That indicator decreased from nearly 10% to almost 7% between 2009 and 2011, which may be deemed mainly as following from the limited possibility to retire early. It is also worth pointing out that also the limited possibility to take the disability benefit contributed to the increase in professional activity. The operation of that factor may already be perceived in 2005, and it may be connected with the stricter principles for certifying disability and with changes in legislation concerning the control of the health condition of those who take disability benefits. Similarly, the share of those who declared that other benefits were their main source of income is also systematically decreasing. On the one hand, this could result from the labour market situation, which was improving until 2009 (fewer individuals received unemployment benefits). On the other hand, one may note that the ever lower value of those benefits as compared to wages (low valorisation rate) created stimuli for additional activity in the labour market.

Among the probable factors that influence the decline in the share of those who declare disability benefit as the main source of income one may indicate the lesser availability of that type of benefit, the improving health condition or greater opportunities for disabled persons to find a job that ensures a greater income than the disability benefit. *Social Diagnosis* data authorise a statement that the increased professional activity between 2007 and 2011 was unlikely to result from the improving health condition (Table 4.8.8), as the percentage of those who held a certificate of disability in the 45-59 age group did not change significantly in one direction. On the other hand, the percentage of those employed among the disabled increased significantly, while the percentage of inactive persons reporting disability benefit as the main source of income declined.

Finally, the positive change in professional activity appears on the one hand to be related to limited access to disability benefits, although the fact that the percentage of the unemployed remains relatively low indicates that it was relatively easy for disabled persons to find work that would enable them to replace disability benefits with income from work. On the other hand, the percentage of those who received other benefits is growing only slightly, which leads to the conclusion that the phenomenon of finding other benefits to replace disability benefits has not been a serious problem. The data show that the percentage of the disabled for whom the retirement pension is main source of income remained almost unchanged, while the proportion of those who took advantage of other benefits increased between 2007 and 2011 by 3.7 percent, with the share of those who took the disability benefit or survivor's pension dropping by 14.8 percent.

Table 4.8.8. Professional activity and sources of income of the disabled (%)

	2007	2009	2011
Percentage of the disabled in the 45-59 population	13.4	14.5	13.4
Percentages among the disabled aged 45-59:			
Employed	18.6	24.6	28.7
Unemployed	5.4	3.3	4.5
Professionally inactive retirees	3.9	3.8	3.7
Professionally inactive pensioners	68.8	61.0	54.0
Professionally inactive with other benefits as sources of income	2.6	5.2	6.3
Professionally inactive with other sources of income	0.6	2.1	2.7

Since the *Social Diagnosis* is a panel study, it is possible to track the process of retiring and obtaining pensions or the disability benefit within the period under examination with reference to individual behaviours. In the subsequent years of 2007, 2009, and 2011, the following categories were identified in the 45-59 age group, determined by the labour market status and the source of income of those professionally inactive: employees, the unemployed, and professionally inactive, with the following sources of income: retirement pension, pension or disability benefit, other type of benefit and other type of income or maintained by the family. The analysis focused on the transitions between the defined categories in the periods of 2007-2009 and 2009-2011. The estimated probabilities for transition from the “employed” and “unemployed” categories to the category of inactivity due to the availability of various kinds of benefits are presented in Table 4.8.9, while the probabilities for transitions from inactivity to activity are presented in Table 4.8.10.

The results of the analysis of the inflows into the category of inactivity show that in the period of 2009-2011 there was a very marked decline in the probability of early retirement, both among the employed and the unemployed, as compared to the period of 2007-2009. The probability of leaving the labour market due to availability of a disability benefit or other type of pension or benefit decreased only among the unemployed, which may have been caused by the significant increase in the chances for persons in pre-retirement age to find employment (the probability of an unemployed person finding a job increased from approx. 0.25 to 0.30), despite the worse situation in the labour market and the markedly greater risk of job-loss (the probability of employed persons moving to unemployment increased from 0.025 in the period of 2007-2009 to 0.032).

Thus, the analyses carried out indicate that limiting access to retirement pensions was the most significant factor that prevented outflows to the “inactive” category. Continued activity was also enhanced by the relatively high and still growing chances for persons aged 45-59 of finding employment.

Table 4.8.9. Estimated probabilities of persons aged 45-59 leaving the labour market (employment or unemployment) to other sources of income (shaded area) or changing their labour market status in the two periods of 2007-2009 and 2009-2011

Initial status		Final status (2 years later)					
		Retirement pension	Disability benefit or other pension	Other benefit	Other type of income	Maintained by the family	Unemployed
Employed	2007-2009	0.050	0.014	0.008	0.010	0.014	0.025
	2009-2011	0.017	0.018	0.011	0.003	0.007	0.032
Unemployed	2007-2009	0.083	0.050	0.083	0.033	0.157	0.347
	2009-2011	0.037	0.041	0.046	0.041	0.146	0.388

* The lines sum up to 100.

Table 4.8.10, which illustrates the inflow into the labour force from the category of professional inactivity, shows that between 2009 and 2011 retirees returned to the labour force and pensioners took employment less often than in the period of 2007-2009. In terms of the frequency-oriented interpretation of the estimates obtained, we may state that only 6.3% of those who received retirement pension in 2009 declared that they worked in 2011 (as compared to 7.8% shifting to employment between 2007 and 2009). Only 5.6% of those who received pensions in 2009 declared that they worked in 2011, while two years before that percentage amounted to 14.2%. One may guess that in “harder times” in the labour market, those who became entitled to that type of benefit in a satisfactory amount were less willing to forgo it in part or in whole by returning to the labour market.

However, it is worth noting that there was an increase in the likelihood that persons who received other types of benefits would shift to inactivity, which may have been the result of the gradual expiration of the rights to some of the benefits granted before; e.g. a large number of the unemployed registered as of the end of 2009 lost their right to unemployment benefit towards the end of 2010. One may say, therefore, that returns of persons aged 45-59 to the labour market also depend on the situation on the labour market. They concern those who obtained the right to long-term benefits such as retirement pension or disability benefit only to a limited extent, yet they are relatively more frequent among those who receive short-term benefits.

Table 4.8.10. Estimated probabilities for persons aged 45-59 who were previously professionally inactive or lived on various types of benefits in the two periods of 2007-2009 and 2009-2011 to return to the labour market (to employment or to unemployment)

Source of income in the initial period	Activity in the labour market 2 years later			
	Employed		Unemployed	
	2007-2009	2009-2011	2007-2009	2009-2011
Retirement pension	0.078	0.063	0.0	0.014
Disability benefit or pension	0.142	0.056	0.014	0.016
Other benefit	0.071	0.097	0.024	0.062
Other type of income	0.250	0.320	0.0	0.280
Maintained by the family	0.114	0.120	0.076	0.060

4.8.4. Labour migration – the situation of migrants upon return to the country

According to CSO data, the years 2009-2011 did not bring a significant increase in the number of labour migrants. In the main countries of destination of Polish labour migration, the labour market situation stabilised (United Kingdom, Germany) or continued to deteriorate (Ireland, Spain). *Social Diagnosis* makes it possible to obtain information about those who were in Poland at the time of the survey, which makes it difficult to draw conclusions on the extent of migration at present. However, information from those who returned indicates that job loss was quoted as the cause of return from labour migration much less frequently (Table 4.8.11.).

Table 4.8.11. Reasons for the return from labour migration (%)

Reasons for the return from migration	2009		2011	
	Economic reasons			
Finishing/losing employment		31.9		23.3
Decrease in the income level abroad in comparison to the income level in the country		4.8		2.5
Could not find a job abroad		1.6		1.3
Other reasons				
As had been planned before going abroad		28.5		33.5
Due to family reasons		17.3		14.6
Due to health reasons		3.2		3.6
Only temporarily to deal with certain matters in the country		3.8		9.0
Other reason/Hard to say/Had completed education		7.9		11.5

Those who returned from migration between 2009 and 2011 pointed to economic reasons less frequently (Table 4.8.11). More often than in 2009, the returns were part of the plans both in the case of those who returned for a longer period of time, and of those whose return was only temporary to sort out various matters. One may therefore say that migrants have already absorbed the shock of the crisis in western European countries and have adjusted their plans accordingly.

The migration processes after Poland's accession to the EU has made experiences of labour migration part of the biography of a considerable number of Poles. At the moment when the study was conducted, some of the migrants were still abroad, yet the interesting question discussed in more detail further in this section is the impact of the experience of migration on those who returned and on their behaviour in the labour market and other areas.

Among those who were in Poland, the largest share of persons with experience of migration was found among those with basic vocational education (nearly 5.5%) (Table 4.8.12). Analyses of the panel sample indicate that in this group more than 40% of those who declared having experience of migration in the period between 2005 and 2007 went abroad again to work in 2007-2011. Slightly more repetitive (approx. 45%) was the migration of individuals with secondary education: approx. 5% of individuals from this group migrated between 2007 and 2011. It is also worth noting that in the period between 2005 and 2007 more than 4% of those with higher education had experience of labour migration, but the percentage dropped below 4% in the subsequent years, one reason presumably being that those who gained that experience between 2005 and 2007 were relatively little interested in migrating again.

The group of those who were aged less than 24 in 2011 and were able to go abroad on their own between 2005 and 2007 and gain experience of migration was relatively small. However, 4.8% out of that group experienced migration between 2007 and 2011. Nearly 10% of those now aged 25-34 migrated between 2005 and 2007, which usually was not continued between 2007 and 2011 (22% of those individuals migrated again). On the other hand, a relatively smaller number of older people who migrated between 2005 and 2007 definitely more often adopted the strategy of short-term or circular migration and migrated again in 2007-2011.

Previous migration experience correlates with labour market status. First and foremost, those with the experience of migration are more active in the labour market (Table 4.8.13). However, it is difficult to establish cause-and-effect relationships here without a more in-depth analysis, as this observation may follow both from the impact of migration on the attitude of those persons in the labour market, as well as from the possibility that it is the individuals predisposed to be more active in the labour market that migrate and then return, and if they had not migrated, they would have enhanced the activity of those who stayed in Poland.

Table 4.8.12. Share of persons with 2005-2007 and 2007-2011 migration experience in the 2011 population

Migrants' features	2005-2007 migrant experiences	2007-2011 migrant experiences	Percentage of those who migrated again after 2005-2007*
Educational attainment			
Men	5.8	5.5	55.2
Women	2.8	2.3	30.0
Educational attainment			
Primary	2.6	2.8	0.0
Basic vocational education	5.3	5.4	41.2
Secondary	4.1	4.9	45.5
Higher education	4.2	3.9	22.2
Age			
Under 24	0.9	4.8	0.0
25-34	9.9	6.7	21.9
35-44	6.5	6.1	37.5
45-59	4.1	3.3	45.5
60-65	1.0	0.4	0.0
Place of residence			
Towns with 500,000 and more inhabitants	3.9	3.2	11.1
Towns with 200,000-500,000 inhabitants	5.7	4.9	92.3
Towns with 100,000-200,000 inhabitants	4.5	3.7	50.0
Towns with 20,000-100,000 inhabitants	4.8	4.0	52.6
Towns with fewer than 20,000 inhabitants	5.6	5.6	26.1
Rural areas	5.8	5.2	23.8

* - percentage based on the panel sample. The results should be treated with caution due to the risks related to the relatively small numbers of individuals in some of the cross-sections, and due to selection-gaps in measurements due to migration continuing at the moment when the study was conducted, or due to other reasons that reduce the panel sample.

Table 4.8.13. Migration experience of persons in the working age and their labour market status in 2009 and 2011

Labour market status in 2011	Percentage of those with migration experience over the last 4 years		Percentage of all persons in working age in 2011
	2009	2011	
Men			
Employed	75.9	80.1	71.0
of which self-employed	7.9	9.3	7.5
Unemployed	16.2	14.8	6.8
Professionally inactive	7.9	5.1	22.2
Women			
Employed	56.3	54.4	57.6
of which self-employed	4.2	2.7	3.3
Unemployed	16.9	22.8	7.1
Professionally inactive	26.8	22.8	37.7

A comparison of data concerning those who had experience of migration in the four years prior to the study of 2009 and in 2011 leads to a conclusion that both surveys reveal clear differences between men and women who migrated over the past four years. Among men, previous experiences of migration were connected not only with unemployment higher than the average, but also with greater employability and a greater than average percentage of the self-employed. In the case of women, the percentage of the employed among women with migration experiences was even slightly smaller than average, their involvement in own economic activity was also smaller, while the higher result in respect of professional activity followed from the fact that the percentage of women who remained unemployed was three times as high as that for the entire female population.

In comparison with 2009, the differences in the positions of men and women in the labour market with migration experience have become significantly greater. Despite the growth in unemployment in Poland in the period of 2009-2011, the percentage of former migrants now unemployed decreased among men. Among women who worked abroad, it increased considerably.

Since 2009, the labour market situation in a majority of EU countries has stabilised, and countries with relatively low unemployment and a growing demand for labour lifted the last barriers for workers from Poland. Nevertheless, the percentage of those who during the survey declared willingness to migrate within the next two years amounted to 8.2% and differed little from the 7.6% observed two years before. In comparison with the data of 2007, when 13.5% of respondents declared willingness to migrate, such declarations are now much less frequent. This may suggest that the "migration fever" of the period following Poland's accession to the European Union will not be repeated. This may be because of the economic slowdown, which affected Western Europe already in 2008.

The structure of those willing to migrate has changed slightly (Table 4.8.16). In 2011, similarly to 2009, the intention to seek work abroad within the next two years was declared by approx. one-fifth of the unemployed, approx. 8% of those professionally inactive and approx. 7% of the employed. The main difference in comparison with the 2009 results is the greater willingness to migrate on the part of the unemployed with basic vocational education; i.e. those for whom working abroad may bring relatively the greatest increase in potential wages.

Table 4.8.14. Individuals who planned labour migration, by labour market status and education in 2007, 2009, and 2011

Educational attainment	Employed	Unemployed	Inactive
	Declaration of migration in 2011		
Higher and post-secondary	5.1	16.3	6.7
Secondary	7.4	23.5	10.0
Basic vocational/lower secondary	8.1	22.1	9.0
Primary and lower education	5.9	14.4	3.1
Total	6.8	20.5	8.3
	Declaration of migration in 2009		
Higher and post-secondary	4.2	17.4	7.0
Secondary	6.5	24.2	9.2
Basic vocational/lower secondary	7.7	17.8	8.8
Primary and lower education	6.8	15.5	3.0
Total	6.2	19.5	7.9
	Declaration of migration in 2007		
Higher and post-secondary	8.3	19.3	14.0
Secondary	13.0	31.9	18.2
Basic vocational/lower secondary	14.3	23.0	15.5
Primary and lower education	8.1	21.5	3.8
Total	11.7	25.4	14.5

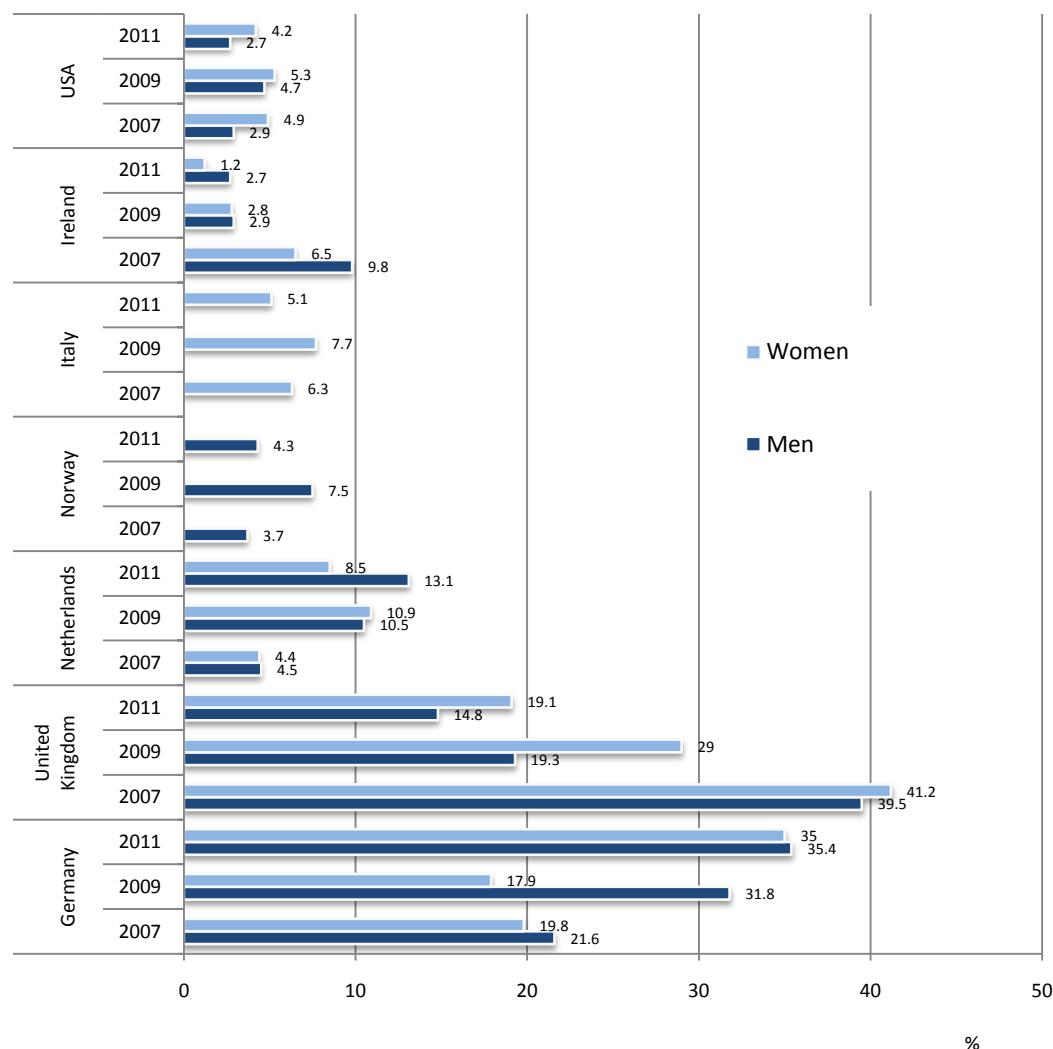
A majority (74.5%) of those who declared migration had not experienced migration over the past four years. However, it is precisely among those who had worked abroad between 2007 and 2011 that approx. 46% planned yet another excursion, while the ratio among other people was approx. 6%. These results confirm the earlier observation that migration experiences contribute to migration being perceived as a potential choice and increase the frequency of subsequent trips.

In comparison to 2007 and 2009, the share of those who declared short-term (less than one year) migration, and the share of men declaring migration for less than two years, was significantly smaller (Table 4.8.15). On the other hand, there was an increase in those who declared that they would leave for ever. It also appears that during the last survey, some of the men who had so far declared short-term migration may have selected the answer "it depends". This may mean, along with the increasing willingness to migrate forever, that after a period when some people appreciated the advantages of living in between Poland and the country of destination for migration, now more people are beginning to treat migration as a long-term decision related to other events in their lives, such as setting up a family, being around friends and family, settlement etc.

Table 4.8.15. Planned length of stay abroad for persons who declared willingness to migrate in 2007, 2009, and 2011

Planned length of stay abroad	Percentage of answers among those declaring labour migration within the next two years					
	Men		Women			
2007	2009	2011	2007	2009	2011	
Less than 1 year	33.4	35.1	27.4	37.1	42.9	38.3
1-2 years	10.8	11.7	6.9	7.7	8.4	8.4
More than 2 years	6.6	6.2	6.8	7.4	3.6	5.8
For ever	6.0	6.7	9.4	5.3	3.7	5.0
It depends	43.1	40.4	49.5	42.5	41.3	42.5

The economic situation in the particular countries of destination is highly important for declarations of migration. In 2011, those who indicated their potential destination selected Germany the most often (Figure 4.8.9). The opening up of labour markets in Germany and Austria may have made these destinations additionally attractive, yet econometric analyses (Strzelecki & Wyszyński, 2011) indicate that the main factor that has influenced migration from Poland to EU countries over the time span of several years concerns the differences in unemployment rates between the countries, and increased migration related to the effects of „novelty” of the newly opened labour markets of subsequent western European countries after 2005 was usually limited.



NOTE: there are no data concerning Norway for women and Italy for men, as those destinations were not attractive for the respective genders

Figure 4.8.9. Destinations of planned labour migration most popular with men and women in 2007, 2009, and 2011

Due to the insecure situation in the labour market in the United Kingdom and the disastrous economic situation in Ireland, fewer and fewer people are declaring plans to migrate there. However, men are increasingly interested in migrating to the Netherlands. On the other hand, the percentage of those who declared migration to countries which in 2009 were perceived as safe alternatives to the crisis-stricken typical migration destinations decreased following an increase in 2009. Norway was such a country for men, Italy for women. The percentage of those willing to migrate to the USA remained at a stable level of several per cent (with a higher value among women).

It is worth closing the discussion of migration declarations with the conclusion that the decreased number of migration declarations in 2009 was connected with their improved reliability. Out of the respondents who declared the willingness to migrate and about whom information was again obtained in 2011, approx. 19.5% implemented those plans and returned, while the degree to which the 2007 declarations had been implemented amounted to 14.4% in 2009, with a further 2.5% still abroad when the interview was conducted³⁷.

³⁷ That percentage may be even higher due to information about entire migrating households not being taken into account...

5. INDIVIDUAL QUALITY OF LIFE

5.1. General psychological well-being

Janusz Czapiński

The choice of type of instrument to assess psychological well-being depends to a considerable extent on the model of the quality of life one employs and whether it is hedonistic or eudemonistic (Czapiński, 2004a). Generally, within the hedonistic model adopted in the *Diagnosis* one can differentiate two basic dimensions of psychological well-being: the emotional (the balance of emotional experiences, at present or over a longer period of time or separately, the positive and negative affect) and the cognitive (evaluation of one's own life at present, in the past and in the future) (cf. Diener, 1984; Veenhoven, 1994). The model is sometimes extended to include satisfaction with particular domains of life (domain satisfactions, Diener, Suh, Lucas, Smith, 1999). The purely emotional aspect was disregarded within this project. An indicator that comes closest to that dimension is the four-degree scale of sense of happiness (Annex 1, Individual questionnaire, question 35). The scale of depression symptoms (question 57) also includes items related to emotions, more precisely to moods and motivations. The cognitive dimension of general psychological well-being was measured on two scales: assessment of life-as-a-whole (question 3), and of the past year (question 59). In addition, in line with the "onion theory of happiness" (Czapiński, 1992, 2001a, 2004b, 2011a), two indicators of yet another dimension of psychological well-being were taken into account; i.e. of the will-to-live (suicidal tendencies and the desire to live, questions 37 and 41), which runs deeper than the two preceding factors and conditions the person's long-term resistance to stress in life³⁸.

Most indicators of general psychological well-being were in the form of simple one-question scales. The scale of depression is an exception, as it comprises 7 items-symptoms, taken from the well-known 21-item Beck's Depression Inventory (Beck et al., 1961), often applied in psychological and epidemiological research. The choice of those particular items was motivated by psychometric considerations; in previous studies they had shown the greatest correlation with the objective determinants of living conditions (especially with age – cf. Czapiński, 1996, 1998, 2001b). The sum of responses to all seven questions was an indicator of depression. It could be treated as a measure of the degree of psychological inadaptability, which reflects the inefficiency of coping with problems or stress in life. Under no circumstances should the indicators based on this scale be interpreted as a diagnostic of the level of clinical depression disorders in the population³⁹.

5.1.1. Data for entire samples

The assessment of life-as-a-whole was found to have continued to improve (Table 5.1.1)⁴⁰. The percentage of those who evaluated their entire life as at least good increased considerably (by 1.2 percentage points as compared to 2009 and by more than 20 percentage points as compared to 1991). This result is the highest in the entire period covered by research and more than twice as high as in 1993, which was the worst in this respect. It is also worth stressing that starting from 1994 a strong feature has been an improvement in the assessment of life-as-a-whole.

Similarly, two indicators of the will-to-live – the most important aspect of psychological well-being – are among the highest in the entire period since 1991 (Tables 5.1.2 and 5.1.3).

The symptoms of depression were the least frequent in the entire period under examination (Table 5.1.4). Also, the sense of happiness increased as compared to 2009 to an 80% rate of response, which is the best result since the beginning of measurements (Table 5.1.5). In comparison with 2003, the percentage of unhappy individuals decreased nearly three times (from 4.5 to 1.6%).

Although the changes in the assessment of life-as-a-whole and in the sense of happiness are significant and have shown an extremely consistent growth trend since 1994, two other indicators of psychological well-being – suicidal tendencies and the desire to live – were subject to considerably smaller and non-systematic fluctuations over that period. This is consistent with the fundamental assumption of the "onion theory of happiness" (Czapiński, 1992, 2001a, 2004b, 2011a). At the deepest level of well-being – the will-to-live, reflected in suicidal tendencies and the desire to live - there is an internal stabilisation mechanism (called the attractor of happiness), which makes that level much more resistant to the changes in the

³⁸ These indicators are analysed in detail in Czapiński (2000a).

³⁹ In Poland, the correlation between our depression indicator and age is very high and ranges from 0.65 to 0.70.

⁴⁰ All the analyses of the quality of life presented below in this section concern persons aged 18 years and above, i.e. a population similar to the earlier studies of the 90s in terms of that criterion.

objective aspects of life as compared to the more surface level of general subjective well-being, measured by the assessment of life-as-a-whole and of the past year, and by the sense of happiness (in some analyses also the indicator of depression). The empirical test for this assumption is discussed in further detail in section 5.4.2.

Table 5.1.1. Percentage distribution and average median for answers to the question “How do you perceive your entire life?” and the size of samples of persons aged 18 and above between 1991 and 2011

Answers	1991	1992	1993	1994	1995	1996	1997	2000	2003	2005	2007	2009	2011
1. Delighted	1.1	1.2	0.9	1.2	1.4	1.8	1.5	2.7	3.0	2.7	3.5	4.0	3.9
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	40.0
3. Mostly satisfying	34.6	34.7	33.3	34.7	35.5	31.9	35.8	35.9	34.7	35.9	35.8	33.9	34.3
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	16.0
5. Mostly dissatisfying	9.6	10.3	10.9	8.3	7.4	8.6	9.0	7.1	6.7	6.3	5.3	5.4	4.8
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	0.7
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	0.3
N	4187	3402	2306	2302	3020	2333	2094	6403	9254	8376	12378	25609	25801
Average	3.35	3.38	3.43	3.30	3.23	3.27	3.24	3.09	3.05	2.99	2.88	2.86	2.81

Source of data: Czapinski, 1998 for the years 1991-1997; Social Diagnosis for the years 2000-2011.

Table 5.1.2. Percentage distribution of answers to the question “In the recent months, how often have you been so depressed you have thought about suicide?” in samples of persons aged 18 and above between 1991 and 2011

Answers	1991	1992	1993	1994	1995	1996	1997	2000	2003	2005	2007	2009	2011
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	0.6
2. Rather 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	2.1
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	8.7
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	88.6

Source of data: Czapinski, 1998 for the years 1991-1997; Social Diagnosis for the years 2000-2011.

Table 5.1.3. Percentage distribution and median average of answers to the question “At present, how strong is your will to live?” between 1991 and 2011 in a sample of persons aged 18 and above

Answers*	1991	1992	1993	1994	1995	1996	1997	2000	2003	2005	2007	2009	2011
I do not 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	0.5
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	0.3
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	1.0
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	1.6
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	5.2
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	5.6
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	9.9
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	16.6
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	17.2
I very strongly want to live	25.7	30.1	33.6	30.9	36.0	40.3	37.0	44.4	44.5	40.3	41.7	41.6	42.1
Average	7.62	7.68	7.86	7.82	8.21	8.41	8.25	8.34	8.32	8.20	8.33	8.34	8.48

Source of data: Czapinski, 1998 for the years 1991-1997; Social Diagnosis for the years 2000-2011.

* Between 1991 and 2000 this scale was valued from 0 to 9. For the purpose of comparison, it was changed to a 1-10 scale as in subsequent studies.

Table 5.1.4. Average incidence of symptoms of depression (for seven items) between 1992 and 2011 in a sample of persons aged 18 and above

1992	1993	1994	1995	1996	1997	2000	2003	2005	2007	2009	2011
5.2	5.2	5.0	4.7	4.7	4.5	4.7	4.6	4.5	4.3	4.2	4.1

Source of data: Czapiński, 1998 for the years 1992-1997; *Social Diagnosis* for the years 2000-2011.

Table 5.1.5. Percentage distribution of answers to the question “All considered, how would you assess your life in the recent times? Would you say you are...?” between 1991 and 2011 in a sample of persons aged 18 and above

Answers*	1991	1992	1993	1994	1995	1996	1997	2000	2003	2005	2007	2009	2011
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	9.5
Rather 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	70.5
Rather unhappy			36.4						30.5	27.9	22.1	21.9	18.4
Unhappy	35.3	42.1	5.4	31.6	35.3	32.3	27.2	35.4	4.5	3.3	2.2	2.4	1.6

Source of data: Czapiński, 1998 for the years 1991-1997; *Social Diagnosis* for the years 2000-2011.

* In the years 1991-1992 and 1994-2000 the scale of answers ended with „Rather unhappy”.

5.1.2. Data for 2007-2011 panel samples

In order to answer the question of how indicators of general psychological well-being change in time; i.e. with the age of respondents and with all the changes in their lives, we need to consider panel samples (the same respondents) from two waves or more. The results of comparisons for selected well-being indicators from different waves are shown in Table 5.1.6. The statistically significant increase of the depression indicator in the panel sample in comparison with the data from previous editions of the *Diagnosis* is easily explained by the extremely strong relationship between depression and age⁴¹. In 2011 respondents were two or four years older, and this is the only reason why they showed more symptoms of depression than in 2009 and especially in 2007.

Table 5.1.6. Comparison of values of general psychological well-being indicators for 2007 and 2011 in panel samples (the same respondents)

Variable	Study year	Average	Standard deviation	Average difference	t	Degrees of freedom	Statistical significance	Correlation
Depression	2007	4.44	4.007	-0.188	-5.177	7377	0.000	0.710*
	2009	4.62	4.180					
	2009	4.34	4.048	-0.095	-3.795	15755	0.000	0.707*
	2011	5.43	4.159					
Desire to live	2007	4.56	3.994	-0.312	-6.308	4598	0.000	0.667*
	2011	4.87	4.211					
	2007	8.32	1.948	-0.023	-0.967	7586	Not significant	0.433*
	2009	8.35	1.915					
Suicidal thinking	2009	8.38	1.905	-0.088	-5.652	16145	0.000	0.429*
	2011	8.46	1.811					
	2007	8.34	1.950	-0.065	-2.195	4708	0.028	0.427*
	2011	8.40	1.844					
Assessment of life	2007	3.84	0.474	-0.010	-1.522	7606	Not significant	0.308*
	2009	3.84	0.469					
	2009	3.84	0.479	-0.012	-2.625	16167	0.009	0.271*
	2011	3.85	0.448					
Sense of happiness	2007	3.84	0.474	-0.012	-1.543	4723	Not significant	0.305*
	2011	3.85	0.448					
	2007	2.89	1.009	0.036	3.090	7620	0.002	0.483*
	2009	2.85	0.980					
Sense of happiness	2009	2.85	1.016	0.004	0.460	16213	Not significant	0.525*
	2011	2.85	0.993					
	2007	2.90	1.023	0.031	2.094	4723	0.036	0.483*
	2011	2.87	0.987					
Sense of happiness	2007	2.20	0.585	0.008	1.102	7597	Not significant	0.412*
	2009	2.19	0.597					
	2009	2.17	0.603	0.036	7.242	16181	0.000	0.417*
	2011	2.14	0.566					
Sense of happiness	2007	2.21	0.600	0.037	3.999	4715	0.000	0.402*
	2011	2.17	0.566					

* p < 0.000

The assessment of life-as-a-whole improved as compared to 2007, and the sense of happiness was greater in comparison with both 2009 and 2007.⁴²

As mentioned before, the onion theory of happiness (Czapiński, 1992, 2001a, 2004b, 2011a) stipulates that at the deepest level of the will to live, psychological well-being should be the most stable over time independent of age, and should return to a constant level after deviations caused by negative events in life. And indeed, two measures of the will to live – the desire to live and suicidal tendencies – were subject to the least changes in time.

We may therefore say that Poles' psychological well-being has increased considerably over recent years, and that it is not (just) a generational change, because it occurred also in the same individuals despite their growing old and the increase in the depression indicator strongly correlated with age.

⁴¹ In five studies from different parts of the world, which covered a total of 39,000 individuals, it was established that young people are much more at risk of experiencing at least one episode of depression than older generations (Nesse and Williams, 1994). This is explained, *inter alia*, by civilisation processes (the risk of depression grows with the level of economic development of the country) which affect the psyche of the younger generations much more strongly than that of the older people, who grew up in the "age of fear" after the Second World War.

⁴² The changes in the evaluation of the past year are described in section 5.10.2.

5.2. Satisfaction with particular areas and aspects of life

Janusz Czapinski

According to the onion theory of happiness (Czapinski, 1992, 2001a, 2004b, 2011a), the most peripheral (and the most realistic in its evaluations) level of well-being is the dimension of domain satisfactions; i.e. satisfaction with particular areas and aspects of life. This year, the scale of domain satisfactions covered 16 different areas and aspects of life, exhausting nearly the entire scope of interests and activities of an average person (Annex 1, individual questionnaire, Question 63). These may be divided into:

- social aspects (satisfaction with relationships with the loved ones in the family, with relationships with friends, with marriage, children, sexual life),
- material aspects (satisfaction with the financial situation of the family and with housing conditions),
- environmental aspects (satisfaction with the situation in the country, the place of residence, the level of safety in the place of residence),
- health-related aspects (satisfaction with one's health condition), and
- other aspects, related to self-assessment (satisfaction with one's own achievements, prospects for the future, educational level, the way of spending leisure time, work).

5.2.1. Data for entire samples

People are more and more satisfied with most aspects of life (Table 5.2.1). In general, the average level of satisfaction with nearly all aspects has been the highest since the beginning of measurements in 1991. Furthermore, there is not the least sign of domain satisfactions being in any way affected by the world economic crisis.

Table 5.2.1. Average level of satisfaction with particular areas and aspects of the life of persons aged 18 and above along a scale from „1-very satisfied, 6-very dissatisfied” between 1991 and 2011 from the highest to the lowest in 2011

Satisfaction with:	1991	1992	1993	1994	1995	1996	1997	2000	2003	2005	2007	2009	2011
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	1.78
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	2.02
Relationships with close family members	2.11	2.34	2.20	2.23	2.24	2.15	2.13	2.25	2.22	2.17	2.16	2.16	2.16
Relationships with friends (group of 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	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	2.50
Safety in the place of residence	n.d.	n.d.	n.d.	3.61	n.d.	n.d.	n.d.	3.48	3.08	2.98	2.73	2.69	2.56
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	2.68
Sexual 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	2.70
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	2.76
Manner of spending leisure time	3.20	3.26	3.29	3.26	3.19	3.21	3.05	3.30	3.10	3.03	2.95	2.88	2.79
Own life 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	2.90
Own educational level	3.14	3.28	3.34	3.30	3.29	3.35	3.30	3.35	3.18	3.20	3.01	2.98	2.92
Own health condition	3.18	3.41	3.38	3.28	3.20	3.19	3.15	3.24	3.14	3.09	3.13	3.00	2.93
The 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	3.32
Future prospects	4.14	4.43	4.34	4.20	3.97	3.95	3.81	4.02	4.17	4.03	3.55	3.49	3.46
The situation in 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	4.32
The 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	n.d.
Possibility to satisfy one's nutritional needs	n.d.	3.33	3.22	3.24	2.89	2.86	n.d.						
Moral standards in one's environment	3.56	3.73	3.62	n.d.	n.d.	n.d.	n.d.	3.58	3.43	3.43	3.21	3.18	n.d.
Current income of the family	n.d.	4.16	4.05	3.96	3.51	3.49	n.d.						

Source of data Czapinski, 1998 for the years 1991-1997; Social Diagnosis for the years 2000-2011.

NOTE n.d. – no data; the size of the sample for particular categories of satisfaction could change due to the fact that some aspects did not apply to all respondents.

5.2.2. Panel sample data

The comparison of domain satisfactions in panel samples in the years 2009-2011 and 2007-2011 shows that in the longer horizon of four years, statistically significant increases occurred in 10 domains, decreases occurred in four of them and no changes were observed in two (Table 5.2.2). Over the past two years there were eight positive changes, six negative ones and there was no change in respect of two types of satisfaction. The greatest increase was observed in respect of safety in the place of residence, the manner of spending one's leisure time and in one's own educational level. The greatest declines affected satisfaction with sexual life, relationships with friends and close family members, marriage and thus with a majority of social aspects of the quality of life. Over the last period, satisfaction with personal health improved, even though respondents were two years older. Satisfaction with the situation in the country declined following a significant positive change in the previous period.

Table 5.2.2. Differences in particular domain satisfactions in panel samples in the years 2009-2011 and 2007-2011, ordered by the degree of change between 2009 and 2011 (from the most positive change to the most negative)

Satisfaction with:	2009 - 2011		2007 - 2011	
	Degree of change	Statistical significance	Degree of change	Statistical significance
Safety in place of residence	0.129	0.000	0.286	0.000
Manner of spending leisure time	0.064	0.000	0.099	0.031
Own educational level	0.038	0.000	0.144	0.000
Own health condition	0.026	0.006	0.034	ns
Own housing conditions	0.024	0.008	0.038	0.036
Own life achievements	0.023	0.015	0.085	0.000
Children	0.022	0.011	0.045	0.005
Place of residence	0.018	0.035	0.070	0.000
The financial situation of one's family	-0.008	ns	0.107	0.000
Future prospects	-0.009	ns	0.101	0.000
Work	-0.031	0.025	0.024	ns
Marriage	-0.034	0.000	-0.043	0.029
Relationships with close family members	-0.035	0.000	-0.055	0.001
Relationships with friends (group of friends)	-0.037	0.000	-0.064	0.000
Sexual life	-0.047	0.000	-0.093	0.000
The situation in the country	-0.051	0.000	0.248	0.000

NOTE a positive value means greater satisfaction, a negative is a decrease in satisfaction; ns means that the change is not statistically significant.

5.2.3. Local patriotism

The answer to the question about place of residence satisfaction may be treated as an indicator of attachment to the place where one lives, to one's "little homeland". This is all the more so as most Poles live where they were born or somewhere in the vicinity.

The results presented in Tables 5.2.2 and 5.2.3 show an increased level of satisfaction with place of residence. The percentage of those very satisfied and satisfied has been increasing since the beginning of the century with the exception of 2007 (Figure 5.2.1). The increase amounted to 16% as compared to 2000.

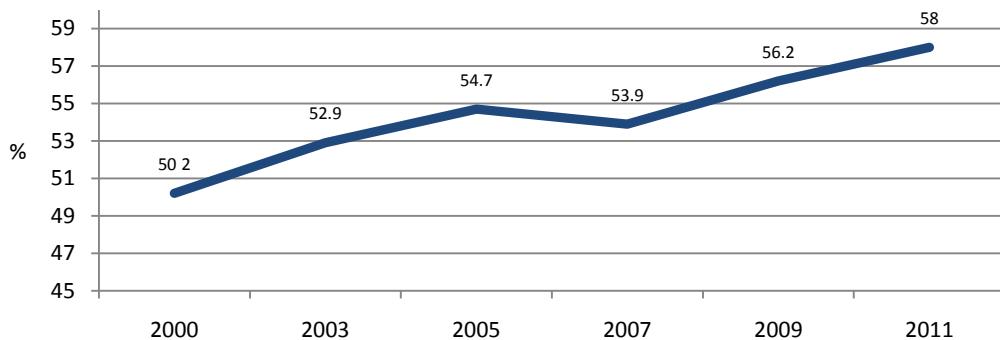


Figure 5.2.1. Percentage of residents who were very satisfied and satisfied with their place of residence between 2000 and 2011

Let us see how the best opinions (very satisfied with the place of residence) are distributed in terms of towns, voivodeships and subregions (Tables 5.2.3-5.2.5). The greatest variation concerns towns, which is understandable, since we asked about towns. The greatest number of those very satisfied with where they live may be found in Gdynia (41%), which by far outpaces Wrocław (22%), Kraków (21%) and Gdańsk (20%). The smallest proportions of those very satisfied with where they live are in Kętrzyn (0%), Radom (1%), Sosnowiec (3%), Kielce (4%) and Jaworzno (4%).

In the cross-section by voivodeship, the differences are much smaller. The number of those very satisfied with where they live is the greatest in the Pomorskie Voivodeship (Gdynia), and the smallest in the Podkarpackie Voivodeship.

In terms of subregions, the Słupsk subregion is in the lead (31% are very satisfied), followed by the Gdańsk subregion (22%), Wrocław (16%) and Nowy Sącz (16%). At the other extreme are the following subregions: the Sandomierz-Jędrzejów, Tarnobrzeg, Przemyśl, and Tarnów (each with 4% very satisfied with where they live).

Thus, the greatest numbers of “local patriots” are in large cities (excluding Łódź) and in the Pomorze region.

Table 5.2.3. Percentage of town residents very satisfied with where they live

Rank	Town	Average	N
1	Gdynia	41	138
2	Wrocław	22	484
3	Kraków	21	571
4	Gdańsk	20	352
5	Warszawa	16	1241
6	Toruń	15	142
7	Bydgoszcz	14	267
8	Białystok	14	200
9	Poznań	14	324
10	Bielsko-Biała	13	190
11	Katowice	11	225
12	Olsztyn	10	128
13	Częstochowa	9	190
14	Zabrze	9	101
15	Gorzów Wlkp.	8	119
16	Szczecin	8	284
17	Lublin	7	250
18	Gliwice	7	132
19	Walbrzych	5	176
20	Łódź	5	618
21	Kędzierzyn-Koźle	5	75
22	Jaworzno	4	144
23	Kielce	4	160
24	Sosnowiec	3	173
25	Radom	1	182
26	Kętrzyn	0	69

Table 5.2.4. Percentage of voivodeship inhabitants very satisfied with where they live

Rank	Voivodeship	Average	N
1	Pomorskie	21	1533
2	Małopolskie	13	2226
3	Podlaskie	12	819
4	Dolnośląskie	11	2010
5	Lubuskie	11	671
6	Zachodniopomorskie	11	1173
7	Kujawsko-Pomorskie	10	1383
8	Mazowieckie	10	3605
9	Śląskie	10	3313
10	Świętokrzyskie	10	882
11	Lubelskie	9	1467
12	Łódzkie	9	1771
13	Warmińsko-Mazurskie	9	968
14	Wielkopolskie	9	2338
15	Opolskie	8	710
16	Podkarpackie	7	1437

Table 5.2.5. Percentage of subregion residents very satisfied with where they live

Rank	Subregion	Average	N
1	Slupski	31	330
2	Gdański	22	860
3	Wrocławski	16	796
4	Nowosądecki	16	502
5	Sieradzki	15	272
6	Krakowski	15	1028
7	Białostocki	14	359
8	Bydgosko-Toruński	13	529
9	Zielonogórski	13	373
10	Bytomski	13	270
11	Kielecki	13	556
12	Pilski	13	265
13	Koszaliński	13	449
14	Skiermiewicki	12	243
15	Warszawski	12	2059
16	Suwalski	12	192
17	Rybnicki	12	325
18	Jeleniogórski	11	423
19	Grudziądzki	11	299
20	Puławski	11	349
21	Chełmsko-Zamojski	11	429
22	Rzeszowski	11	365
23	Łomżyński	11	266
24	Bielski	11	536
25	Gliwicki	11	316
26	Leszczyński	11	411
27	Katowicki	10	544
28	Tyski	10	251
29	Elbląski	10	385
30	Poznański	10	704
31	Stargardzki	10	276
32	Bialski	09	226
33	Oświęcimski	09	375
34	Opolski	09	424
35	Szczeciński	09	448
36	Gorzowski	08	299
37	Piotrkowski	08	415
38	Ciechanowsko-Płocki	08	444
39	Krośnieński	08	442
40	Częstochowski	08	466
41	Ełcki	08	151
42	Olsztyński	08	432
43	Kaliski	08	523
44	Legnicko-Głogowski	07	307
45	Wałbrzyski	07	479
46	Włocławski	07	559
47	Lubelski	07	464
48	Łódzki	07	840
49	Nyski	07	286
50	Starogardzki	07	342
51	Radomski	06	509
52	Sosnowiecki	06	610
53	Koniński	06	435
54	Ostrołęcko-Siedlecki	05	588
55	Tarnowski	04	321
56	Przemyski	04	302
57	Tarnobrzeski	04	328
58	Sandomiersko-Jędrzejowski	04	326

5.3. Selected determinants of living conditions as predictors of the subjective quality of life

Janusz Czapinski

In order to determine which of the so-called objective predictors (factors that differentiate the situation of respondents) are actually related to psychological well-being (regardless of the direction of that relation), and where the relationship is only spurious (apparent) and only follows from its relation to the actual predictor and thus to isolate actual correlates in the differences in well-being, a multiple regression analysis was carried out which involved a generous set of objective indicators of the quality of life. The results of the multiple regression analysis for particular measures of general psychological well-being are presented below (Table 5.3.1).

The most important factor which explains the general psychological well-being of Poles in the present study turns out to be age, which is similar to the previous survey. The older a person, the worse their mental condition is, especially when it comes to the symptoms of inadaptability (depression). In respect of depression, age (after the effects of all other factors have been excluded) specifically explains 13% of the variation of symptoms, and approx. 40% of it when other factors are not excluded (an unprecedented value in social studies). Moreover, in contrast with western societies (the U.S., Canada), in Poland the dependence between age and depression (several times stronger here than in those countries) is positive rather than negative. In the United States, it is the younger people who suffer from depression more often than older individuals⁴³, while in Poland the opposite is the case with the incidence of symptoms of depression increasing with nearly every year of life⁴⁴.

The second factor in terms of significance for general psychological well-being is marriage, the fourth being the number of friends, which together with marriage may be treated as an indicator of social support. Political transition has disturbed fundamental social bonds, which makes it all the more valuable to feel the support and disinterested kindness on the part of other people, especially in the face of personal problems. A friend in need is a friend indeed is precisely what the study proves. The role of friends is particularly significant for the fundamental aspect of well-being – the will-to-live. It is mainly friends who sustain our will to live and help us abandon suicidal thoughts in difficult situations in life (cf. section 5.9). The third position as two years ago belongs to alcohol abuse. This is an important hint for prevention in the area of the quality of life. The significance of household per capita income moved from the sixth to the third position. This means that given the slower increase in affluence, material living conditions have once again become one of the more important determinants of psychological well-being.

Psychological well-being indicators are generally influenced to a lesser extent by factors such as drug use (which is mainly due to the very low popularity of that phenomenon in Poland; see section 5.10.4.3), social and professional status, smoking, bringing up children, housing conditions and class of place of residence.

⁴³ We do not know the causes of this Polish phenomenon of the reversed relationship between age and depression as compared to developed countries. It may result from the differences in adaptability between generations: those who practised the rules for life effective in the times of the People's Republic of Poland now find it more difficult to assimilate the new rules in effect after system transition. The elderly feel more at a loss and less useful (e.g. in the labour market) in the new reality. However, why does this reversed and unusually strong connection between age and depression not abate with time? After all, those aged 30 also entered adulthood in the Third Republic of Poland, yet they are much more depressive than those aged 20, similarly to the 30-year-olds in 1992. This remains a secret of both the transition and of the Poles.

⁴⁴ The percentage of variation was calculated as the second power of the partial correlation multiplied by 100.

Table 5.3.1. Percentage of variation of individual indicators of general psychological well-being specifically explained by each predictor, excluding the effect of other predictors, and the rank of individual predictors in terms of the average proportion of explained variance of all general psychological well-being indicators in 2009 and 2011⁴⁵

Predictor	Assessment of life-as-a-whole		Sense of happiness		Suicidal tendencies		Desire to live		Assessment of the past year		Depression		Average value of predictor		Predictor rank	
	2009	2011	2009	2011	2009	2011	2009	2011	2009	2011	2009	2011	2009	2011	2009	2011
Age	1.1	1.0	2.5	2.1	0.0	0.1	0.7	0.7	0.6	0.8	15.0	13.3	3.3	3.0	1	1
Marriage	4.9	4.0	2.6	1.7	0.2	0.1	0.8	0.8	0.9	0.5	0.3	0.2	1.6	1.2	2	2
Alcohol abuse	0.5	1.1	0.4	0.6	1.2	1.3	1.0	1.0	0.6	0.6	0.8	1.2	0.8	1.0	3	3
Per capita income	0.9	2.0	1.0	1.5	0.1	0.3	0.4	0.9	0.5	0.9	0.2	0.2	0.5	1.0	6	3
Number of friends	1.0	1.3	0.5	0.9	0.2	0.3	1.2	1.2	0.4	0.4	0.6	0.7	0.7	0.8	4	4
Unemployment	1.2	0.8	1.0	0.8	0.1	0.1	0.1	0.1	0.6	0.8	0.0	0.1	0.5	0.5	6	5
Gender	0.1	0.1	0.0	0.0	0.3	0.1	0.2	0.1	0.0	0.0	2.2	1.9	0.6	0.4	5	6
Educational level	0.9	0.5	0.5	0.1	0.2	0.0	0.4	0.1	0.4	0.2	1.2	1.2	0.6	0.4	5	6
Religious practices	0.3	0.6	0.2	0.5	0.0	0.1	0.2	0.3	0.2	0.4	0.2	0.2	0.2	0.4	8	6
Smoking	0.8	0.5	0.6	0.4	0.2	0.2	0.1	0.2	0.3	0.4	0.0	0.0	0.3	0.3	7	7
Being a pensioner	1.0	0.5	0.6	0.3	0.1	0.1	0.1	0.0	0.3	0.2	0.7	0.5	0.5	0.3	6	7
Being an other non-working person	0.9	0.6	0.4	0.3	0.0	0.0	0.0	0.0	0.3	0.2	0.0	0.0	0.3	0.2	7	8
Work in the private sector	0.8	0.6	0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.3	0.2	0.2	8	8
Work in the public sector	0.6	0.4	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.2	0.1	8	9
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	9
Being a retiree	0.3	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	9	9
Being an entrepreneur	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.1	0.1	9	9
Drug use	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1	9	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	0.1	0.1	0.0	9	
Maintaining children	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0		
Class of the 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	0.1	0.0	0.0		
Total percent of variation explained (adjusted $R^2 \times 100$)	16.7	17.6	15.5	14.6	4.1	4.4	8.6	9.1	8.7	8.9	47.5	46.9				

⁴⁵ The percentage of variation was calculated as the second power of partial correlation multiplied by 100.

5.4. Verifying the onion theory of happiness

Janusz Czapiński

A panel study is a perfect opportunity for verifying the accuracy of the basic tenets of the onion theory of happiness (Czapiński, 1992, 2001a, 2004b, 2011a). It assumes that psychological well-being is stratified: the layers that lie ‘deeper’, closer to the core of the “onion”, are more strongly conditioned by the DNA; other layers, more peripheral and less essential for survival in critical situations in life, are more easily influenced by the situation, although these too have a sort of hierarchy; overall satisfaction is less “realistic” than domain satisfactions. According to that theory, everyone has an innate “attractor of happiness”, which is characterised by its pursue of a “predetermined” level of well-being (characteristic of a particular individual) irrespective of life developments. It is not resistant to negative developments; i.e. it does not guarantee good psychological well-being under all circumstances. Rather, it spontaneously restores the level of well-being “typical” of a given individual, irrespective of whether or not the person objectively managed to cope with the difficult situation. The attractor of happiness should in the first place restore the “proper” level of the most important aspect of well-being, its core, referred to as the will-to-live, as it is the latter that determines the subjective response to the fundamental question of “to be or not to be” and radiates (positively or negatively, in line with the “top-down” model) to the more peripheral layers of well-being – the overall satisfaction with life, a sense of the purposefulness of life, the balance of emotions experienced, ability to mobilize, etc. (“overall subjective well-being”) and further on to the satisfaction with particular areas or aspects of life (“domain satisfactions”).

The “onion” theory of happiness presents four hypotheses, which we would like to verify now against the data from the *Diagnosis*:

1. external factors (life events, change in the standard of living, change in the level of stress, in health condition and other factors) exert a smaller degree of influence on the positive change in psychological well-being than the internal mechanism of the attractor, and the deeper the layer of well-being, the greater the disproportion. It is the greatest for the will-to-live, and the smallest for domain satisfactions.
2. external factors have a greater influence on decline than on improvement of psychological well-being, and the disproportion becomes greater for deeper layers of well-being. It is the greatest for the will-to-live and the smallest for domain satisfactions.
3. the weakening of the internal mechanism of the attractor, which progresses with age, is less intensive for the deepest layer of well-being – the will-to-live – than for the intermediate layer of overall subjective well-being. For domain satisfactions, changes in which are the most sensitive to changes in external circumstances, the internal mechanism of the attractor is generally much weaker.
4. the improvement in living conditions that depend on the individual (e.g. increase in income, finding a partner) influences the level of psychological well-being to an extent that is not greater than the reverse; i.e. the influence of psychological well-being on the improvement in the living conditions that depend on the individual.

These hypotheses have already been partially corroborated by the results of the previous panel surveys (Czapiński, 2004c, Czapiński, Panek, 2007, 2009), yet the present edition of the *Diagnosis* provides data for much larger samples, which enhances the reliability of verification.

The first hypothesis is fully corroborated (Figures 5.4.1-5.4.2). Given a two-year time span, the change in well-being indicators depends more on the internal mechanism (a greater proportion of variance is explained by the initial level of well-being indicators) than on external factors such as the initial level of stress in life, the incidence of pathological symptoms, serious disease, equivalent household income and changes in those factors between the two waves. The internal mechanism plays a greater role for the will-to-live than for domain satisfactions, while the above-mentioned factors more strongly influence domain satisfactions than the will-to-live.

However, the essential test for the first hypothesis requires that the positive and negative changes in the indicators of the three layers of well-being be separated. When we divided the panel samples according to the direction of changes in well-being indicators, it turned out that in the two-year time span between 2009 and 2011, the improvement in the indicator of the will-to-live was 70% determined by the initial level of that indicator (the lower it was, the greater the improvement) (Figure 5.4.2).

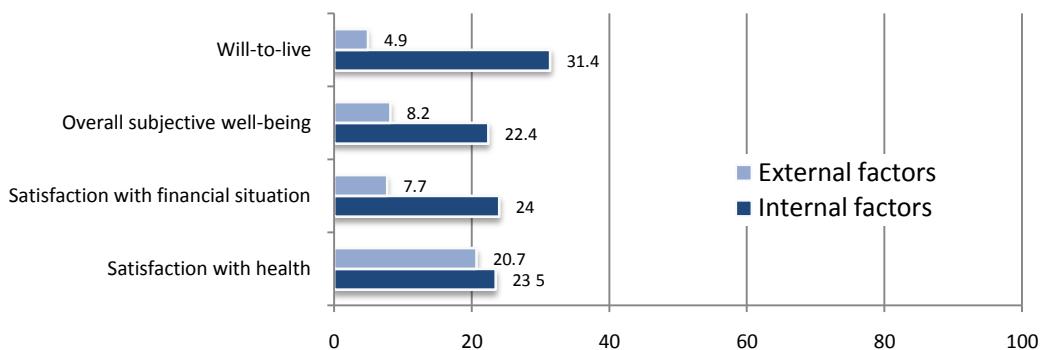
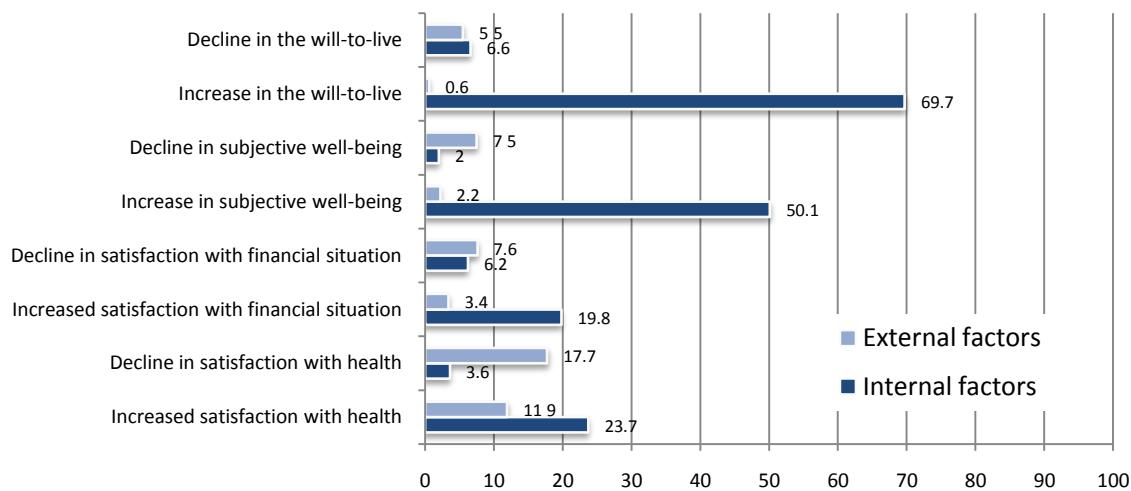


Figure 5.4.1. Predictive value (percentage of specifically explained variance) of external factors (change in life stress intensity, stress level in 2009, change in income and the level of income in 2009, change in the incidence of somatic symptoms and the level of somatic symptoms in 2009, changes in patient status due to serious disease and a serious disease in 2009) and of internal factors (the level of the relevant well-being indicators in 2009) for the decline and increase in two synthetic indicators of psychological well-being (the will-to-live and overall subjective well-being) and for domain satisfactions (satisfaction with the family's financial situation, and with one's health) between 2009 and 2011, for the panel sample (N=12700) (internal factors go first in the regression equation)

This proves the extreme efficiency of the mechanism of the internal attractor at the deepest level of well-being. At the intermediate level – that of the overall subjective well-being – the mechanism proves much less efficient, as it accounts for 50% of positive changes, and at the most peripheral level (that of satisfaction with health and the family's financial situation), the one-directional adaption mechanism of the “happy” attractor changes into a two-directional mechanism of adaptation and motivation. Therefore, greater satisfaction with the family's financial situation depends on its initial level to a much lesser extent than does the increase in overall subjective well-being and the will-to-live, and to a much greater extent on external factors than the deeper layers of well-being. This two-directional mechanism is even better visible for satisfaction with health; its decline is mostly conditioned by external factors (disease), while its growth by the internal mechanism, aided to a considerable extent by external factors (improved health condition).

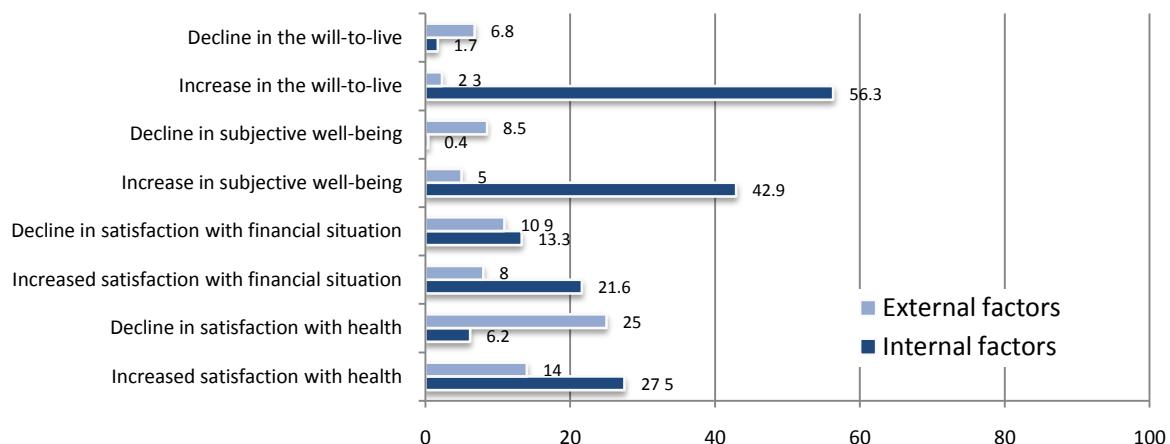


NOTE: The indicator of the will-to-live is a sum of standardized values for the scales of the desire to live and suicidal tendencies. The indicator of overall subjective well-being is the sum of standardized values for the scales of the sense of happiness, assessment of live-as-a-whole and assessment of the past year. Values in excess of 0.5 are significant.

Figure 5.4.2. Predictive value (percentage of specifically explained variance) of external factors (change in life stress intensity, stress level in 2009, change in income and the level of income in 2009, change in the incidence of somatic symptoms and the level of somatic symptoms in 2009, changes in patient status due to serious disease and a serious disease in 2009) and of internal factors (the level of relevant well-being indicators in 2009) for the decline and increase in two

synthetic indicators of psychological well-being (the will-to-live and overall subjective well-being) and for domain satisfactions (satisfaction with the family's financial situation, and with one's health) between 2009 and 2011, for the panel sample (N=12700) (internal factors enter first in the regression equation)

Thus, the change in well-being at its deeper levels, especially in the will-to-live, has an internal source and depends on external factors only to a limited extent, yet the decline in well-being here is mainly determined by the deterioration in personal situation. Domain satisfactions are less "protected" by the attractor, and their change reflects the changes in external circumstances to a much greater extent. Owing to the fact that for domain satisfactions the attractor works in two directions, both weakening their unusually high level and raising their unusually low level, it prevents dissatisfaction with important areas of life from persisting for too long, which could permanently diminish well-being also at deeper levels. On the other hand, it motivates raised aspirations and action to fulfil them, being thus responsible for the illusion of hedonistic progress ("you will be happier when you achieve even more").



NOTE: The indicator of the will-to-live is a standardized value of the sum of standardized values for the scales of the desire to live and suicidal tendencies; the indicator of overall subjective well-being is a standardized value of the sum of standardized values for the scales of the sense of happiness, assessment of live-as-a-whole and assessment of the past year; values in excess of 0.5 are significant.

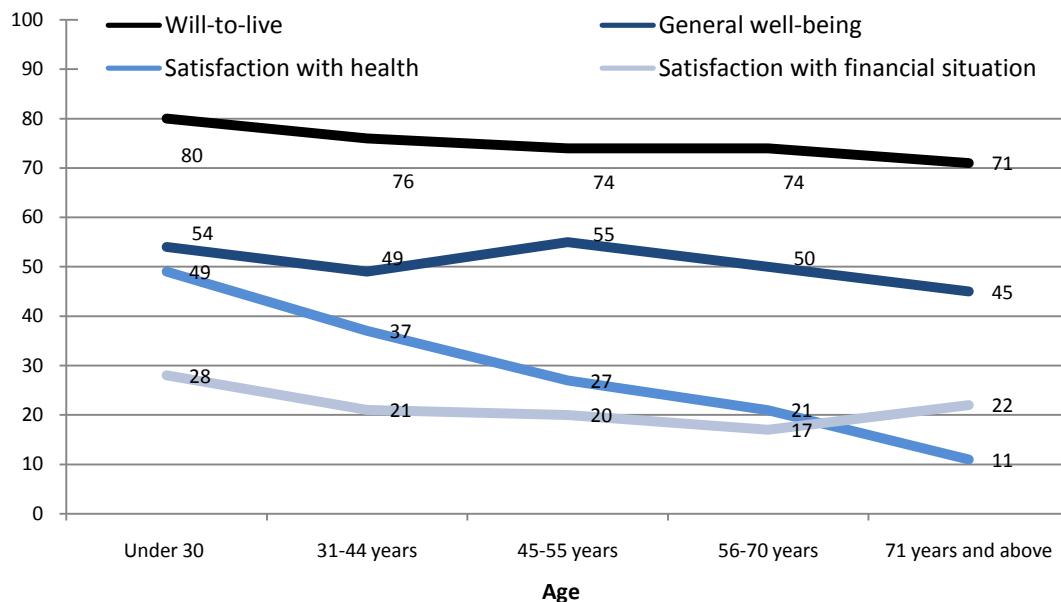
Figure 5.4.3. Predictive value (percentage of specifically explained variance) of external factors (change in life stress intensity, initial level of stress, change in income and initial level of income) and of internal factors (the initial level of relevant well-being indicators) for the decline and increase in two synthetic indicators of psychological well-being (the will-to-live and overall subjective well-being) and for domain satisfactions (satisfaction with the family's income) between 2003 and 2011 for the panel sample (N=1261) (internal factors enter first in the regression equation)

With a longer (eight-year) time span between the measurements, that pattern of dependence of changes in well-being at different levels on external and internal factors is equally clear as with the two-year time span (Figure 5.4.3). In the case of domain satisfactions, the double role of the internal mechanism is even better visible than with the two-year time span. This is meant to prevent us from rejoicing about particular achievements or advantages for too long, but also from suffering failures and losses for too long. If you get rich, you can enjoy your financial situation but if you rejoice for too long, you will lose motivation to become even wealthier. If you got poorer, you may despair for some time but despairing for too long will kill the motivation to make up for the loss.

The second hypothesis is also corroborated. With both the two-year and a six-year time span, external factors have a greater influence on the decline rather than on an increase in psychological well-being at the two deepest levels. In the external layer of the "onion" of happiness the disproportion between the influence of external and internal factors is the smallest although here too, the level of satisfaction (with the family's financial situation and with health) is to a greater extent influenced by internal rather than external factors (5.4.2 and 5.4.3).

Diagnosis data provide full support for hypothesis No. 3. Figure 5.4.4 proves that in principle, the effectiveness of the internal attractor mechanism does not subside with age for the deepest level of

psychological well-being; i.e. the will-to-live. This is lower though still stable throughout life, in respect of overall subjective well-being. Domain satisfactions (satisfaction with one's health and the family's financial situation) are much less influenced by the internal attractor mechanism throughout life, and in the case of satisfaction with one's health, the effectiveness of the attractor rapidly declines with age. This is obviously a result of accumulating somatic disorders of all kinds, whose influence on satisfaction with life becomes increasingly stronger than the influence of the internal attractor of psychological adaptation.



NOTE The indicator of the will-to-live is the sum of standardized values for the scales of the desire to live and suicidal tendencies; the indicator of overall well-being is the sum of standardized values for the scales of the sense of happiness, assessment of life-as-a-whole and assessment of the past year.

Figure 5.4.4. Effectiveness of the “happy” attractor in respect of different psychological well-being indicators; i.e. the predictive value (percentage of variance explained) of the initial level of well-being measures for the positive change of four well-being indicators (will-to-live, general subjective well-being, satisfaction with one's health and with the family's financial situation) between 2009 and 2011 in different age groups (by age in 2011) (N= 1 age group of 1930, 2 - 2215, 3 - 2028, 4 - 2093, 5 - 1106)

Let us recall that the last hypothesis states that the improvement in living conditions that depend on the individual (e.g. higher income or finding a partner) influences the level of psychological well-being to an extent that is not larger than the reverse; the influence of psychological well-being on the improvement of those circumstances. In other words, the life of the happy is better than that of the unhappy precisely because the former are happy.

We checked whether the level of well-being differentiates unmarried persons in terms of the chances of getting married within 11 years⁴⁶. A regression analysis proved that those with a higher indicator of overall psychological well-being are significantly more likely to get married. A reverse relation is significant too, although it is much weaker; marriage slightly increases the level of overall psychological well-being (Tables 5.4.1 - 5.4.2). The level of well-being in 2000 explains 6.5% of the differences in marital status between 2000 and 2011 among those unmarried in 2000, and getting married explains 2.9% of the increase in the level of well-being.

⁴⁶ The cause-and-effect relationship between mental well-being and later interpersonal relationships, including the likelihood of marrying, was observed earlier by other researchers (Harker, Keltner, 2001; Stutzer, Frey, 2006). However, on the basis of data from panel surveys in Russia with a five-year time span between subsequent waves, Graham, Eggers and Sukhtankar (2004) did not establish any statistically significant impact of well-being on the likelihood of marrying.

Table 5.4.1. Predictive value of psychological well-being in 2000 for getting married within the next 11 years

Predictors	Non-standardized indicators		Standardized indicators	t	p
	B	Standard deviation	Beta		
Constant	0.906	0.064		14.051	0.000
Well-being in 2000	-0.050	0.011	0.255	4.533	0.000

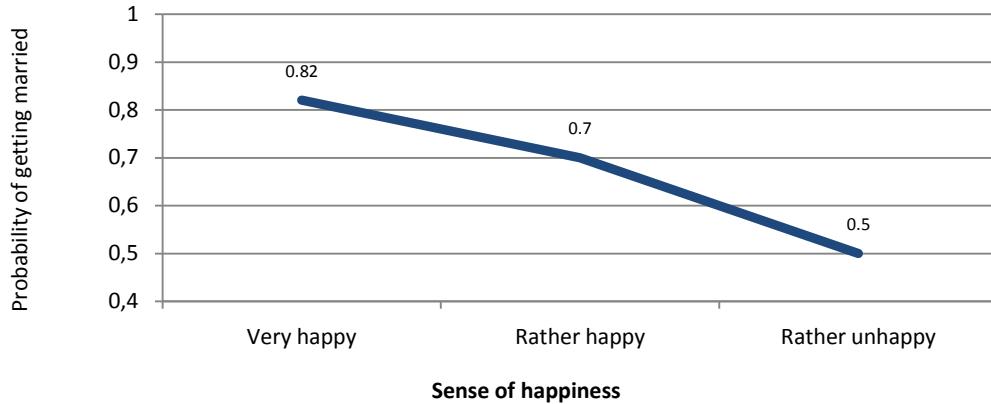
R² for well-being = 0.065

Table 5.4.2. Predictive value of marriage after 2000 for changes in psychological well-being between 2000 and 2011

Predictors	Non-standardized indicators		Standardized indicators	t	p
	B	Standard deviation	Beta		
Constant	-3.763	0.546		-6.891	0.000
Well-being in 2000	0.626	0.083	0.550	7.519	0.000
Getting married	1.073	0.456	-0.172	-2.354	0.020

R² for getting married = 0.029

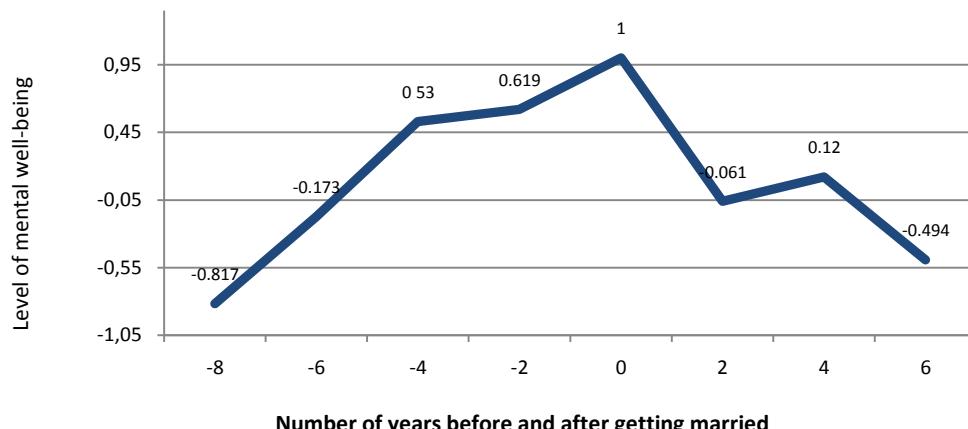
Figure 5.4.5 illustrates the size of the psychological well-being effect in terms of the chances to find a partner for life. Those who were very happy in 2000 were 1.6 times more likely to marry in the next 11 years than those who felt rather unhappy.



NOTES The main effect of happiness $F(3, 231) = 3.168, p < 0.05, \eta^2=0.040$.

Figure 5.4.5. Probability of marrying between 2000 and 2011 among those unmarried in 2000 depending on the sense of happiness in 2000 in the panel sample

The effect of getting married in respect of psychological well-being is not durable, as has already been shown by other studies (Easterlin, 2005). The general pattern is that psychological well-being improves as the date of the wedding approaches, and then it declines in the subsequent years to the level from the period of many years before the wedding (Figure 5.4.6). The level of well-being declines rapidly within the first two years of marriage, and then stabilises over the next two years, only to start declining again after the fourth year to the level experienced the same number of years before marriage. In other words, there is an almost ideal asymmetry of the changes in psychological well-being before and after getting married. This suggests that the significant difference in terms of various psychological well-being indicators between those who are married and those who did not get married or got divorced, consistently found in many surveys (Myers, 2004), may follow not from the “happiness-giving” role of marriage but rather from individual differences in the level of psychological well-being: those who are happy get married more often than those who are unhappy and get divorced less often.



NOTE Well-being consisted of the sum of standardised values of the assessment of life-as-a-whole, the sense of happiness and the assessment of the past year, the figure presents the means after excluding the effects of gender, age, second power of age and education.

Figure 5.4.6. The level of psychological well-being in different moments before and after getting married

Well-being conditions changes in personal income in all time spans between measurements (of two, four, and six years) to a much greater extent than change in income influences well-being (Figure 5.4.7). Thus, those in a better mental condition have chances of getting richer in the subsequent years faster than those who feel worse, but the increase in affluence is unlikely to entail improvement in psychological well-being. Money brings happiness to a lesser extent than happiness brings money.⁴⁷

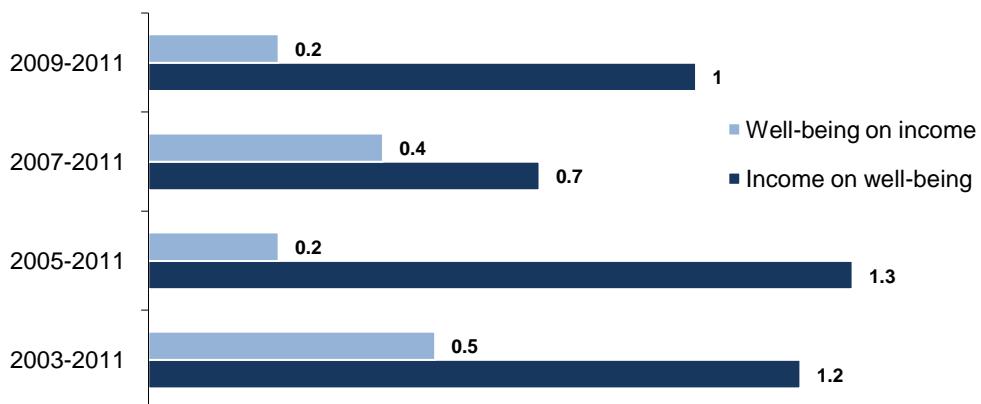


Figure 5.4.7. Percentage of variance in the change of overall subjective well-being explained by change in personal income, after excluding the effect of subjective well-being in the first measurement, and the percentage of variance in change of personal income explained by subjective well-being in the first measurement after excluding the effect of level of income in the first measurement in 2003-2011, 2005-2011, 2007-2011 and 2009-2011 (all values are statistically significant)

If well-being conditions affluence, then in a given period of time that dependence should be much greater among those who already got more affluent thanks to that regularity. Figure 4.5.8 shows that this indeed is the case. Among those relatively wealthy in 2009, the level of well-being exerts a much stronger influence on the increase of income in the subsequent two years than among poor individuals. In the group of those who had not become wealthy until 2009, well-being has a slight influence on the later income growth, much smaller than the influence of the increase in income on the improvement in psychological well-being.

⁴⁷ However, there are a lot of data that prove that money does indeed bring happiness but only to the poor. After a certain threshold of affluence is achieved, only the dependence of well-being on money is left (Czaplański, 2004c).

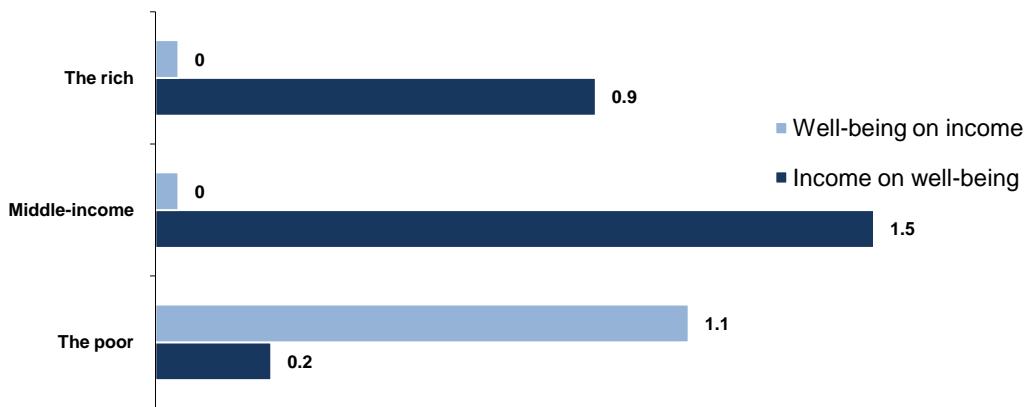


Figure 5.4.8. Percentage of variance in the change of overall subjective well-being explained by the change in personal income, after excluding the effect of subjective well-being in the first measurement, and the percentage of variance in the change of personal income explained by subjective well-being in the first measurement after excluding the effect of level of income in the first measurement in 2009-2011, with respondents divided into groups of the richest 10%, the poorest 10%, and middle-income 80%, by income in 2009 (values greater than zero are statistically significant)

Thus, the main hypotheses that follow from the “onion” theory of happiness have been corroborated again. Events in life may negatively affect well-being also at its deepest level, that of the will-to-live, but the internal mechanism of the attractor mitigates this effect within a shorter rather than longer period of time. Time is a great healer – this old adage is perfectly true. Although the ageing process diminishes the ability to regenerate well-being, it affects adaptability at the deepest level – that of the will-to-live – only to a limited extent. Psychological well-being depends on success in life as much as success in life depends on psychological well-being (with the latter relationship sometimes even stronger). Those who succeed in some aspects of life are happier, but it is the happier people that generally succeed more often.

5.5. Personal finance and trust in financial institutions

5.5.1. Personal income: present and expected in two years

Janusz Czapinski

Average monthly net personal income reported for the last quarter amounted to PLN 1811 in the entire sample, and in the panel sample to somewhat less to PLN 1749. In comparison to 2009 it increased by 10.8% in the entire sample (by a 2.8% in real terms) and in the panel sample by 10.3% (2.3% in real terms).

The distribution of average income in the social cross-sections is very diverse. Personal income reported by men is 34.2% higher than that of women (in 2009 the difference was 33.2%); people with higher education declare income that is nearly two and a half times higher than that of people with primary education. Personal income increases with age until 35-44, and then systematically decreases. The growth is linear in terms of the size of place of residence; residents of rural areas earn 57% (in 2009 the difference was 52%) of the income of those who live in the largest cities. Income is the highest in the Mazowieckie, Pomorskie, Dolnośląskie and Śląskie Voivodeships, and the lowest in the Podkarpackie (64% of income in the Mazowieckie Voivodeship), Świętokrzyskie and Lubelskie Voivodeships.

In terms of social and professional status, entrepreneurs are in the lead, and the bottom of the income hierarchy is occupied by unemployed persons, pensioners and other professionally inactive persons with school and university students omitted; retiree incomes are higher than those of farmers.

We also asked about net income expected in two years' time. Respondents expect that their income will grow by an average of 33% (two years ago it was 42%).

The amount of expected income is mainly determined by the current level of income and by factors that are strongly correlated with it; the higher the income at present, the higher the income expected. However, the size of the difference between the current and expected income in percentage terms depends on slightly different socio-demographic factors, while in relation to the current financial situation that relation is partly reversed; the lower the current income, the higher its expected growth in percentage terms. Similarly to 2009, the greatest financial improvement in percentage terms is expected by unemployed persons, school and university students, and the youngest in general (by over 100%). The expectations of entrepreneurs and farmers are greater than those of employees, especially of those who work in the public sector. The smallest growth in income is expected by retirees (15% and 20% two years ago) and pensioners (by 27% and 36% two years ago). In terms of the class of the place of residence and in terms of voivodeship, expectations are rather similar. A factor that strongly differentiates the amount of expected income growth is age; the older the respondents, the lower the expectations.

In terms of particular occupations, farmers and IT specialists have proven to be the most optimistic (an expected income growth of 80%). Budget sector employees, teachers especially, have the most modest expectations (less than 30%).

We are able to check the accuracy of expectations from two years ago. It turns out that this time they proved more unrealistic than in the previous editions of the *Diagnosis* (Table 5.5.1). This is due to a significant decrease in the growth rate of personal income in the past two years. The increase in personal income between 2009 and 2011 was by more than two and a half times smaller than respondents had expected, and that discrepancy was much greater than in previous years, although the optimism of expectations was already weaker than in 2007.

Let us see then who was more and less wrong. School and university students, the youngest persons, unemployed persons, private entrepreneurs and other professionally inactive people were excessively optimistic in their expectations to the greatest extent (78%, 63%, 51%, 43% and 41% respectively). The oldest persons, retirees and pensioners proved to be the greatest realists (an error of not more than 10%) and those are the groups who have already finished their professional career.

Approximately 30% had the opportunity to get "positively disappointed" having achieved a higher income than they had expected. This is much less than in 2009 (43% were "positively disappointed" then). However, they are not visible in our breakdowns as unrealistic optimists are a majority in each of the groups defined.

Do previous errors in estimating future income teach us anything? Do they make us adjust our expectations? In the present study, the average expected income growth proved to be lower than the analogous indicator from two years before (48% and 52% in entire samples respectively). However, it is possible that those who made the greatest errors in over-evaluating their income growth possibilities are now more cautious in their estimates and expect less economic advancement in the years to come, while those that underestimated their growth of income or made a slight error of unrealistic optimism are willing to adjust their expectations upwards, expecting a significantly greater income growth now. If this were the

case, then the correlation between the relative size of the error in expectations from before two years and the percentage difference between the currently reported income and income expected in the next two years' time should be negative. However, the opposite is the case; the size of the overestimation error made two years ago positively correlates with the growth rate of personal income as expected at present (in 2007, $r=0.24$, $p < 0.000$; in 2009, $r=0.23$, $p<0.000$; in 2011, $r=0.27$, $p<0.000$). The Poles' unrealistic optimism is not significantly adjusted for real changes.

Table 5.5.1. Personal net income at present and as expected in two years in the entire sample in 2011, and the expected percentage growth of personal income in 2009 and 2011

Social category	Income at present		Income expected in two years' time		Expected percentage growth of income in 2011*	Expected percentage growth of income in 2009*
	Average	Standard deviation	Average	Standard deviation		
Total	1811	1547	2417	2434	48	52
Gender						
Men	2082	1800	2840	2906	52	57
Women	1551	1201	2011	1779	48	47
Age						
Under 24	1243	1088	2482	3870	150	118
25-34 years	2052	1517	2931	2428	65	75
35-44 years	2302	2199	3131	2958	53	59
45-59 years	1846	1543	2351	2132	39	44
60-64 years	1534	1096	1740	1279	19	23
65 and above	1417	919	1548	943	15	20
Place of residence						
Towns with more than 500,000 inhabitants	2597	2250	3442	3404	48	50
Towns with 200,000-500,000 inhabitants	2001	1481	2620	1978	39	56
Towns with 100,000-200,000 inhabitants	1812	1101	2374	1544	49	47
Towns with 20,000-100,000 inhabitants	1808	1365	2375	2376	41	50
Towns with fewer than 20,000 inhabitants	1802	1736	2479	2976	61	51
Rural areas	1478	1206	2005	1932	50	54
Voivodeship						
Dolnośląskie	1893	1313	2494	1806	45	50
Kujawsko-Pomorskie	1678	1594	2198	2176	40	52
Lubelskie	1484	1044	2044	1824	56	55
Lubuskie	1763	1246	2404	2015	61	53
Łódzkie	1588	1013	2128	1499	42	57
Małopolskie	1772	1250	2393	1792	51	54
Mazowieckie	2286	2434	3043	4084	55	54
Opolskie	1585	991	2399	2289	61	50
Podkarpackie	1461	1344	1936	1718	52	57
Podlaskie	1654	1317	2120	1707	37	58
Pomorskie	1993	1585	2718	3028	54	48
Śląskie	1860	1160	2428	1763	42	47
Świętokrzyskie	1478	1046	1911	1346	40	53
Warmińsko-Mazurskie	1579	998	2011	1352	36	45
Wielkopolskie	1871	1823	2562	2866	51	49
Zachodniopomorskie	1807	1317	2319	1578	40	52
Educational level						
Primary and lower education	1124	726	1426	1411	30	36
Basic vocational/lower secondary	1514	1106	2116	2461	59	60
Secondary	1792	1311	2380	1905	47	56
Higher and post-secondary	2682	2188	3519	3083	49	50
Per capita income						
Lower quartile	1085	806	1650	2234	67	72
Median 50%	1571	907	2108	1769	43	48
Upper quartile	2873	2265	3648	3101	37	46
Social and professional status						
Public sector	2342	1465	2917	1951	30	43
Private sector	2134	1747	2892	2483	46	56
Private entrepreneurs	3260	2924	4875	4406	69	67
Farmers	1381	1310	2011	2356	62	81
Pensioners	1149	691	1395	967	27	36
Retirees	1498	959	1646	1029	15	20
School and university students	1330	1199	2769	4196	174	179
Unemployed persons	949	980	2070	2101	189	134
Other professionally inactive	1030	920	1843	2286	98	95

* These are averages of individual percentage differences between personal income in 2011 and that expected in two years for persons whose income in 2011 exceeded PLN 0 if their expected income also exceeded PLN 0. The total average in this table is higher than the percentage difference in actual and expected average income for the entire sample (33%) because the average of individual differences is made excessively high by instances where a very low initial level is accompanied by considerable changes (cf. footnote 7).

5.5.2. Attitudes to financial institutions

Tadeusz Szumlicz

Using the services of financial institutions is very important not only for enterprises, but also for households, which when managing their personal finance use those institutions more and more often and in an economic sense depend on them to a considerable extent. Opinions about the activity of financial institutions are especially important in times of economic crisis. Thus, the question of the level of confidence in them appears even more important in the *2011 Diagnosis*. The opportunity to compare opinions in this respect over a longer period is also interesting, although in the present situation data from the *Diagnoses* of 2007, 2009 and 2011 are particularly important.

Tables 5.5.2 to 5.5.8 illustrate in detail the different level of confidence in particular financial institutions as expressed by adult household members, broken down by features like gender, age, place of residence, educational level, income, and social and professional status.

Table 5.5.2. Confidence in financial institutions (among those who have an opinion on this subject) in 2011

		Description	The NBP	Banks	Open pension funds	Insurance companies	The stock exchange	Social Insurance Institution	(%)
Total			73.7	40.9	21.7	26.3	19.5	33.3	
Gender	Men		71.6	41.3	21.8	26.1	22.9	28.9	
	Women		75.8	40.4	21.6	26.5	15.7	37.6	
Age	Under 24		70.6	46.9	28.5	29.5	25.9	21.6	
	25-34 years		71.8	50.6	26.9	27.5	25.0	20.3	
	35-44 years		73.9	45.0	23.8	27.1	20.4	20.7	
	45-59 years		74.1	33.8	18.6	24.1	15.4	31.1	
	60-64 years		78.2	35.2	10.8	23.3	13.8	49.1	
	65 and above		75.0	33.0	12.3	26.8	12.1	62.3	
Place of residence	Towns with more than 500,000 inhabitants		77.0	53.4	25.4	29.0	35.0	25.6	
	Towns with 200,000-500,000 inhabitants		73.7	46.8	24.7	24.8	20.3	29.5	
	Towns with 100,000-200,000 inhabitants		70.9	46.8	23.8	26.3	20.6	31.9	
	Towns with 20,000-100,000 inhabitants		73.8	39.4	21.3	26.6	19.3	36.0	
	Towns with fewer than 20,000 inhabitants		75.9	35.4	19.9	24.5	16.1	36.2	
	Rural areas		72.0	35.1	19.5	26.2	13.6	35.3	
Voivodeship	Dolnośląskie		73.6	44.3	24.3	25.8	20.6	28.8	
	Kujawsko-Pomorskie		73.9	41.9	17.9	26.7	17.5	34.1	
	Lubelskie		77.2	38.3	20.2	29.8	21.1	38.3	
	Lubuskie		73.1	39.5	15.3	26.7	18.2	33.9	
	Łódzkie		74.7	41.5	16.6	31.5	27.2	30.3	
	Małopolskie		73.7	42.4	24.4	23.9	18.8	29.7	
	Mazowieckie		72.1	41.5	21.2	25.5	22.0	30.1	
	Opolskie		76.0	43.7	21.2	24.4	11.4	40.4	
	Podkarpackie		80.6	36.2	19.5	33.3	15.9	36.1	
	Podlaskie		74.0	33.9	18.5	20.7	11.9	29.0	
	Pomorskie		76.6	48.9	27.2	28.4	22.3	35.8	
	Śląskie		67.8	39.6	19.7	20.2	16.9	33.4	
	Świętokrzyskie		77.9	41.7	22.6	28.0	18.3	33.3	
	Warmińsko-Mazurskie		81.4	44.3	25.5	31.7	18.8	47.2	
	Wielkopolskie		69.2	38.3	22.8	27.4	18.2	32.7	
	Zachodniopomorskie		74.7	32.2	27.4	25.4	22.0	37.7	
Educational level	Primary and lower education		65.7	29.1	16.8	24.3	10.0	50.7	
	Basic vocational/lower secondary		69.4	33.2	19.6	25.6	14.0	32.8	
	Secondary		75.6	40.4	21.0	25.8	18.0	31.0	
	Higher and post-secondary		79.7	54.5	26.4	28.5	30.6	26.7	
Per capita income	Lower quartile		66.9	34.4	20.4	24.9	11.7	29.3	
	Median 50%		73.6	37.5	19.9	24.6	17.4	35.5	
	Upper quartile		79.6	50.0	24.7	30.6	28.3	34.6	
Social and professional status	Public sector		77.6	43.4	24.6	28.5	22.3	24.6	
	Private sector		70.6	44.5	25.3	25.3	21.2	20.4	
	Private entrepreneurs		75.9	49.5	24.3	27.3	27.6	21.2	
	Farmers		77.6	35.4	18.1	32.7	12.2	26.1	
	Pensioners		68.7	29.8	14.7	22.4	10.3	53.3	
	Retirees		76.8	33.8	11.5	25.0	13.2	58.8	
	School and university students		75.4	52.0	27.6	29.9	29.8	19.0	
	Unemployed persons		65.4	33.0	20.0	21.9	13.7	25.2	
	Other professionally inactive		73.5	40.5	20.8	27.9	16.6	29.2	

This time, the *Diagnosis* looked at the level of confidence in the National Bank of Poland, commercial banks, open pension funds, insurance companies, the stock exchange and the Social Insurance Institution ZUS. Substantial comments on the statistical results of the study focus mainly on the most significant trends in the changes. One can say at once that in Poland the attitude towards financial institutions has been and still is fairly critical, but – and this is worth stressing – between 2003 and 2007 one could observe an increase in confidence. Since 2009, we have been observing a dramatic fall in that confidence, primarily due to the serious instability of financial markets.

It turns out (Table 5.5.2) that the National Bank of Poland enjoys the greatest confidence at present (73.7%). Other financial institutions enjoy much less confidence and it is also more diversified. Commercial banks stand out *in plus*, with 40.9% of respondents trusting them, while the stock exchange stands out *in minus*, with 19.5% of respondents declaring confidence in it.

Table 5.5.3. Confidence in the National Bank of Poland

(%)

	Description	Yes	No	No opinion
Total		45.2	16.2	38.6
Gender	Men	46.3	18.4	35.3
	Women	44.2	14.2	41.6
Age	Under 24	32.9	13.7	53.4
	25-34 years	45.2	17.8	37.0
	35-44 years	47.1	16.7	36.2
	45-59 years	49.1	17.2	33.7
	60-64 years	52.5	14.6	32.9
	65 and above	44.0	14.7	41.3
Place of residence	Towns with more than 500,000 inhabitants	54.0	16.2	29.8
	Towns with 200,000-500,000 inhabitants	48.2	17.2	34.6
	Towns with 100,000-200,000 inhabitants	43.4	17.9	38.7
	Towns with 20,000-100,000 inhabitants	46.6	16.5	36.9
	Towns with fewer than 20,000 inhabitants	47.7	15.2	37.1
	Rural areas	40.4	15.7	43.9
Voivodeship	Dolnośląskie	45.1	16.2	38.7
	Kujawsko-Pomorskie	44.4	15.7	39.9
	Lubelskie	47.3	13.9	38.8
	Lubuskie	42.4	15.5	42.1
	Lódzkie	47.1	15.9	37.0
	Małopolskie	46.0	16.5	37.5
	Mazowieckie	46.2	17.9	35.9
	Opolskie	45.7	14.4	39.9
	Podkarpackie	45.6	11.0	43.4
	Podlaskie	47.7	16.8	35.5
	Pomorskie	47.5	14.5	38.0
	Śląskie	40.2	19.1	40.7
	Świętokrzyskie	46.8	13.2	40.0
	Warmińsko-Mazurskie	54.2	12.4	33.4
	Wielkopolskie	42.3	18.8	38.9
	Zachodniopomorskie	45.2	15.3	39.5
Educational level	Primary and lower education	33.3	17.4	49.3
	Basic vocational/lower secondary	39.3	17.3	43.4
	Secondary	48.8	15.7	35.5
	Higher and post-secondary	56.6	14.4	29.0
Per capita income	Lower quartile	36.3	17.9	45.8
	Median 50%	45.3	16.2	38.5
	Upper quartile	55.2	14.2	30.6
Social and professional status	Public sector	53.3	15.3	31.4
	Private sector	46.2	19.3	34.5
	Private entrepreneurs	54.7	17.3	28.0
	Farmers	48.7	14.1	37.2
	Pensioners	39.2	17.9	42.9
	Retirees	48.3	14.6	37.1
	School and university students	35.0	11.4	53.6
	Unemployed persons	35.6	18.8	45.6
	Other professionally inactive	40.7	14.7	44.6

Obviously, the level of society's confidence in particular institutions is much diversified in the cross-sections by specific demographic, social and economic groups (Table 5.5.2). In terms of gender, the greatest differences can be seen in confidence in the stock exchange (a higher level of confidence among men) and ZUS (a greater confidence among women). In terms of age, the largest differences can be found in confidence in ZUS (greater among older persons) and open pension funds (a higher level of confidence among the younger generation). In terms of place of residence, the greatest differences concern confidence

in banks and the stock exchange (in either case, the level of confidence is higher among residents of larger towns than in rural areas). In terms of income, the largest differences likewise pertain to confidence in banks and the stock exchange (in either case, better-off households show greater confidence). Social and professional status is a factor that most strongly differentiates confidence in ZUS (it is greater among retirees and pensioners, and lesser among school and university students).

Confidence in the National Bank of Poland is the least diversified. It is the greatest among the residents of the Warmińsko-Mazurskie Voivodeship at 81.4%, and the lowest among unemployed persons at 65.4% (which is fairly difficult to explain, considering that this voivodeship has the highest level of unemployment). However, it may be observed that confidence in the NBP is somewhat higher among women than among men; it increases with age, and is considerably higher among those with higher levels of educational and with higher income (see detailed data in Table 5.5.2).

The question “*Do you trust commercial banks?*” elicited a positive response from 41% of the respondents who had an opinion on that matter. In 2009, such responses constituted 63%, in 2007 77%, in 2005 70% and in 2003 68%, but then we asked about banks and now about commercial banks; it is therefore difficult to decide whether we are dealing with a decline in confidence in banks, or with an effect of the pejorative meaning of the adjective “commercial”.

Table 5.5.4. Confidence in commercial banks

(%)

	Description	Yes	No	No opinion
Total		20.8	30.0	49.2
Gender	Men	22.8	32.4	44.8
	Women	18.9	27.9	53.2
Age	Under 24	18.2	20.6	61.2
	25-34 years	28.9	28.2	42.9
	35-44 years	24.8	30.3	44.9
	45-59 years	17.9	35.1	47.0
	60-64 years	18.0	33.2	48.8
	65 and above	14.8	30.0	55.2
Place of residence	Towns with more than 500,000 inhabitants	31.9	27.8	40.3
	Towns with 200,000-500,000 inhabitants	26.2	29.8	44.0
	Towns with 100,000-200,000 inhabitants	25.0	28.4	46.6
	Towns with 20,000-100,000 inhabitants	20.5	31.5	48.0
	Towns with fewer than 20,000 inhabitants	17.5	32.0	50.5
	Rural areas	16.1	29.7	54.2
Voivodeship	Dolnośląskie	22.5	28.3	49.2
	Kujawsko-Pomorskie	21.3	29.7	49.0
	Lubelskie	17.7	28.4	53.9
	Lubuskie	18.1	27.6	54.3
	Lódzkie	21.1	29.8	49.1
	Małopolskie	21.5	29.2	49.3
	Mazowieckie	22.5	31.7	45.8
	Opolskie	21.3	27.2	51.5
	Podkarpackie	14.4	25.4	60.2
	Podlaskie	16.2	31.4	52.4
	Pomorskie	27.2	28.4	44.4
	Śląskie	21.4	32.6	46.0
	Świętokrzyskie	19.5	27.3	53.2
	Warmińsko-Mazurskie	25.4	32.0	42.6
	Wielkopolskie	19.8	31.9	48.3
	Zachodniopomorskie	15.2	32.1	52.7
Educational level	Primary and lower education	11.7	28.5	59.8
	Basic vocational/lower secondary	15.4	31.0	53.6
	Secondary	21.1	31.1	47.8
	Higher and post-secondary	33.8	28.3	37.9
Per capita income	Lower quartile	15.4	29.3	55.3
	Median 50%	18.6	30.9	50.5
	Upper quartile	29.8	29.7	40.5
Social and professional status	Public sector	24.6	32.1	43.3
	Private sector	26.0	32.4	41.6
	Private entrepreneurs	30.4	31.1	38.5
	Farmers	18.6	33.8	47.6
	Pensioners	13.4	31.5	55.1
	Retirees	16.3	31.9	51.8
	School and university students	20.1	18.5	61.4
	Unemployed persons	14.4	29.2	56.4
	Other professionally inactive	18.2	26.7	55.1

The level of confidence in banks still varies the most in terms of the educational level of those who use banking services (Table 5.5.2). At present, the diversification ranges from 55% (the highest level of confidence among persons with higher and post-secondary education) to 29% (the lowest level of confidence among those with primary and lower education). It can also be observed that confidence in banks is not diversified by gender, diminishes with age, is greater among residents of larger towns, increases with income, and its level is markedly higher among those professionally active and among students. It is worth recalling here the comment of 2009, that “the diversification of the level of confidence in banks is considerable and meaningful”. The highest level of confidence (53% of “yes” answers) was then expressed by farmers (presumably thanks to receiving timely EU subsidies), which was fairly surprising then, with private entrepreneurs placed at the other extreme (33% of them expressed a definitive lack of confidence), who presumably were the most affected by the effects of the financial crisis. At present, this particular type of variation is no longer to be found.

Table 5.5.5. Confidence in open pension funds

(%)

	Description	Yes	No	No opinion
Total		10.4	37.5	52.1
Gender	Men	11.3	40.5	48.2
	Women	9.6	34.9	55.5
Age	Under 24	11.6	29.1	59.3
	25-34 years	16.0	43.6	40.4
	35-44 years	13.4	43.0	43.6
	45-59 years	9.5	41.6	48.9
	60-64 years	4.4	36.2	59.4
	65 and above	3.6	25.5	70.9
Place of residence	Towns with more than 500,000 inhabitants	14.2	41.8	44.0
	Towns with 200,000-500,000 inhabitants	13.1	40.1	46.8
	Towns with 100,000-200,000 inhabitants	11.9	38.1	50.0
	Towns with 20,000-100,000 inhabitants	10.5	38.7	50.8
	Towns with fewer than 20,000 inhabitants	9.8	39.4	50.8
	Rural areas	8.2	34.1	57.7
Voivodeship	Dolnośląskie	12.5	39.0	48.5
	Kujawsko-Pomorskie	8.5	39.2	52.3
	Lubelskie	8.0	31.9	60.1
	Lubuskie	7.5	41.3	51.2
	Lódzkie	8.0	40.1	51.9
	Małopolskie	11.5	35.6	52.9
	Mazowieckie	9.9	37.0	53.1
	Opolskie	10.1	37.6	52.3
	Podkarpackie	8.0	33.1	58.9
	Podlaskie	9.1	40.3	50.6
	Pomorskie	13.4	35.7	50.9
	Śląskie	9.4	38.6	52.0
	Świętokrzyskie	10.5	36.0	53.5
	Warmińsko-Mazurskie	14.7	42.9	42.4
	Wielkopolskie	11.9	40.3	47.8
	Zachodniopomorskie	12.8	33.9	53.3
Educational level	Primary and lower education	5.1	25.5	69.4
	Basic vocational/lower secondary	8.8	36.0	55.2
	Secondary	10.6	40.0	49.4
	Higher and post-secondary	15.9	44.2	39.9
Per capita income	Lower quartile	9.0	35.2	55.8
	Median 50%	9.3	37.2	53.5
	Upper quartile	13.4	40.8	45.8
Social and professional status	Public sector	14.6	45.0	40.4
	Private sector	15.1	44.5	40.4
	Private entrepreneurs	15.5	48.4	36.1
	Farmers	7.3	32.6	60.1
	Pensioners	5.0	29.2	65.8
	Retirees	3.9	30.2	65.9
	School and university students	11.1	29.1	59.8
	Unemployed persons	9.7	38.7	51.6
	Other professionally inactive	9.3	35.5	55.2

Answers to the question about confidence in open pension funds – and thus in general pension fund management companies that manage them – were not much more positive in 2011 than they were in the previous years. The current result may have been influenced by the fierce debate on the decrease in the amount of premium transferred to open pension funds, which was unfolding precisely at the time when the survey was carried out. Currently, confidence is expressed by 20% of respondents, while in 2009 it was

18%, in 2007 35%, in 2005 and 2003 30%). Confidence in open pension funds is therefore still very low, and not what could have been expected at the moment when capital financing was being introduced in the pension system when this solution was the most important argument in the social support for the radical reform of retirement security.

At present, the variation in confidence depending on demographic, social and professional features ranges from 29% among those under 24 to 12% among pensioners, which is an extremely accurate reflection of the interests of the current and future pensioners. Confidence in open pension funds is still the most diversified depending on age, place of residence and educational level. Among those aged less than 24 it amounts to 29%, while among those aged 65 and above to 12%. Among residents of towns with more than 500,000 inhabitants it amounted to 25%, while among residents of rural areas to 20%. Among individuals with higher and post-secondary education it amounts to 26%, while among those with primary and lower education to 17%. One may also observe greater confidence in open pension funds on the part of those professionally active rather than inactive (with the obvious exclusion of school and university students).

Table 5.5.6. Confidence in insurance companies

(%)

	Description	Yes	No	No opinion
Total		14.1	39.6	46.3
Gender	Men	15.3	43.2	41.5
	Women	13.1	36.3	50.6
Age	Under 24	12.9	30.9	56.2
	25-34 years	16.8	44.3	38.9
	35-44 years	16.4	44.3	39.3
	45-59 years	13.6	42.9	43.5
	60-64 years	12.1	40.0	47.9
	65 and above	11.1	30.4	58.5
Place of residence	Towns with more than 500,000 inhabitants	17.4	42.5	40.1
	Towns with 200,000-500,000 inhabitants	14.8	44.6	40.6
	Towns with 100,000-200,000 inhabitants	14.4	40.4	45.2
	Towns with 20,000-100,000 inhabitants	14.7	40.7	44.6
	Towns with fewer than 20,000 inhabitants	13.2	40.7	46.1
	Rural areas	12.8	36.1	51.1
Voivodeship	Dolnośląskie	14.5	41.7	43.8
	Kujawsko-Pomorskie	14.5	39.8	45.7
	Lubelskie	14.7	34.6	50.7
	Lubuskie	13.9	38.3	47.8
	Łódzkie	17.6	38.2	44.2
	Małopolskie	12.3	39.2	48.5
	Mazowieckie	14.0	40.8	45.2
	Opolskie	13.7	42.3	44.0
	Podkarpackie	14.1	28.1	57.8
	Podlaskie	10.9	41.9	47.2
	Pomorskie	15.9	40.3	43.8
	Śląskie	11.0	43.5	45.5
	Świętokrzyskie	15.2	39.3	45.5
	Warmińsko-Mazurskie	19.3	41.6	39.1
	Wielkopolskie	14.8	39.4	45.8
	Zachodniopomorskie	13.4	39.2	47.4
Educational level	Primary and lower education	9.6	30.0	60.4
	Basic vocational/lower secondary	13.0	37.9	49.1
	Secondary	14.4	41.5	44.1
	Higher and post-secondary	18.2	45.6	36.2
Per capita income	Lower quartile	12.1	36.6	51.3
	Median 50%	12.9	39.7	47.4
	Upper quartile	18.5	41.8	39.7
Social and professional status	Public sector	17.7	44.3	38.0
	Private sector	15.6	46.1	38.3
	Private entrepreneurs	18.7	49.7	31.6
	Farmers	17.4	35.9	46.7
	Pensioners	9.6	33.2	57.2
	Retirees	11.6	34.6	53.8
	School and university students	13.1	30.6	56.3
	Unemployed persons	11.3	40.4	48.3
	Other professionally inactive	14.0	36.2	49.8

The percentage of positive answers to the question "Do you trust insurance companies?"⁴⁸ in this year's survey amounted to 26% of those who had an opinion (see more detailed data in Table 5.5.2). The previous study of 2007⁴⁹ showed confidence in life insurance companies at 49% (in 2005 43%, 2003 39%), and confidence in property insurance companies at 34% (2005 28%, 2003 27%). One may say therefore that confidence in insurance companies has decreased significantly. It is difficult to establish however what influence on this general image is exerted by particular branches of insurance activity.

It is worth emphasising that confidence in insurance companies is the least diversified in terms of demographic, social and professional features as compared to other financial institutions (it is the highest at 33% for farmers and the lowest at 22% for unemployed persons).

Table 5.5.7. Confidence in the stock exchange

(%)

	Description	Yes	No	No opinion
Total		8.4	34.5	57.1
Gender	Men	10.9	36.7	52.4
	Women	6.0	32.5	61.5
Age	Under 24	10.2	29.1	60.7
	25-34 years	13.1	39.3	47.6
	35-44 years	9.8	38.1	52.1
	45-59 years	6.8	37.3	55.9
	60-64 years	5.4	33.4	61.2
	65 and above	3.5	25.5	71.0
Place of residence	Towns with more than 500,000 inhabitants	17.4	32.3	50.3
	Towns with 200,000-500,000 inhabitants	10.0	39.6	50.4
	Towns with 100,000-200,000 inhabitants	9.5	36.7	53.8
	Towns with 20,000-100,000 inhabitants	8.4	35.3	56.3
	Towns with fewer than 20,000 inhabitants	6.9	36.0	57.1
	Rural areas	5.1	32.6	62.3
Voivodeship	Dolnośląskie	9.3	35.7	55.0
	Kujawsko-Pomorskie	7.4	35.0	57.6
	Lubelskie	8.2	30.9	60.9
	Lubuskie	7.4	33.7	58.9
	Lódzkie	11.4	30.5	58.1
	Małopolskie	7.8	33.7	58.5
	Mazowieckie	9.5	33.6	56.9
	Opolskie	4.7	35.9	59.4
	Podkarpackie	5.6	29.4	65.0
	Podlaskie	4.6	34.5	60.9
	Pomorskie	9.7	33.8	56.5
	Śląskie	7.7	38.1	54.2
	Świętokrzyskie	7.4	32.9	59.7
	Warmińsko-Mazurskie	9.8	42.2	48.0
Educational level	Wielkopolskie	8.4	37.7	53.9
	Zachodniopomorskie	9.2	32.5	58.3
	Primary and lower education	4.6	34.6	60.8
	Basic vocational/lower secondary	7.3	34.7	58.0
	Secondary	13.6	34.5	51.9
	Higher and post-secondary	4.6	34.6	60.8
Per capita income	Lower quartile	4.6	34.6	60.8
	Median 50%	7.3	34.7	58.0
	Upper quartile	13.6	34.5	51.9
Social and professional status	Public sector	11.3	39.4	49.4
	Private sector	10.9	40.5	48.6
	Private entrepreneurs	15.8	41.4	42.8
	Farmers	4.1	29.4	66.5
	Pensioners	3.2	28.4	68.4
	Retirees	4.4	28.9	66.7
	School and university students	11.8	27.8	60.4
	Unemployed persons	5.8	36.5	57.7
	Other professionally inactive	6.7	33.5	59.8

Answers to the question "Do you trust the stock exchange?" remain the least favourable. Confidence is expressed by 20% of those who have an opinion. In 2007, confidence in the stock exchange amounted to 22%, in 2005 to 19%, while in 2003 to 15%. It must be pointed out once again however that owing to the

⁴⁸ The 2011 *Diagnosis* does not account for the division into life insurance companies (Section I – life insurance) and property insurance companies (Section II – other personal insurance and property insurance), and informal terminology for insurance companies was used ("insurance companies"), which, however, appears to be generally more comprehensible.

⁴⁹ The 2009 study did not cover insurance companies at all.

more marked decline in the confidence in other financial institutions, the level of confidence in the stock exchange appears to have relatively increased.

Obviously, the variation of confidence in the stock exchange according to demographic, social and professional features is considerable (Table 5.5.2). It must be noted that confidence in the stock exchange is markedly greater among men than among women. Its level is clearly declining with age. It is also greater among those with higher levels of education. It is much greater among those with a higher income, as well as among those professionally active and among school and university students.

Table 5.5.8. Confidence in the Social Insurance Institution

(%)

	Description	Yes	No	No opinion
Total		23.0	45.9	31.1
Gender	Men	20.5	50.3	29.2
	Women	25.2	42.0	32.8
Age	Under 24	11.2	40.5	48.3
	25-34 years	14.2	55.5	30.3
	35-44 years	14.4	55.1	30.5
	45-59 years	21.9	48.8	29.3
	60-64 years	36.3	37.5	26.2
	65 and above	47.6	28.7	23.7
Place of residence	Towns with more than 500,000 inhabitants	19.7	57.2	23.1
	Towns with 200,000-500,000 inhabitants	22.0	52.5	25.5
	Towns with 100,000-200,000 inhabitants	22.7	48.6	28.7
	Towns with 20,000-100,000 inhabitants	26.2	46.5	27.3
	Towns with fewer than 20,000 inhabitants	25.6	45.0	29.4
	Rural areas	21.8	39.9	38.3
Voivodeship	Dolnośląskie	21.7	53.7	24.6
	Kujawsko-Pomorskie	22.9	44.1	33.0
	Lubelskie	24.7	39.8	35.5
	Lubuskie	24.0	47.0	29.0
	Łódzkie	21.0	48.4	30.6
	Małopolskie	20.6	48.7	30.7
	Mazowieckie	20.8	48.1	31.0
	Opolskie	28.3	41.9	29.8
	Podkarpackie	22.5	39.8	37.7
	Podlaskie	19.6	48.1	32.3
	Pomorskie	24.8	44.4	30.8
	Śląskie	23.3	46.4	30.3
	Świętokrzyskie	23.1	46.1	30.8
	Warmińsko-Mazurskie	34.5	38.7	26.8
Educational level	Wielkopolskie	21.8	44.9	33.3
	Zachodniopomorskie	25.9	42.7	31.4
	Primary and lower education	33.9	32.9	33.2
	Basic vocational/lower secondary	20.9	42.8	36.3
	Secondary	21.7	48.3	30.0
Per capita income	Higher and post-secondary	20.2	55.6	24.2
	Lower quartile	18.2	43.9	37.9
	Median 50%	24.6	44.9	30.5
Social and professional status	Upper quartile	25.9	49.1	25.0
	Public sector	17.8	54.7	27.5
	Private sector	14.6	56.9	28.5
	Private entrepreneurs	16.6	62.1	21.3
	Farmers	13.8	39.0	47.2
	Pensioners	39.3	34.4	26.3
	Retirees	44.7	31.2	24.1
	School and university students	9.9	42.2	47.9
	Unemployed persons	16.1	47.8	36.1
	Other professionally inactive	17.8	43.3	38.9

For the third time *Social Diagnosis* included a question concerning confidence in ZUS, which administers the Social Insurance Fund from which most social benefits are paid out. Answers to the question “*Do you trust ZUS?*” prove to be interesting as compared to those concerning strictly financial institutions. Among those who have an opinion on the subject, 33% of respondents have confidence in ZUS (Table 5.5.2). In 2009, the expressed degree of confidence in ZUS amounted to 32%, while in 2007 it was 39% respectively. Thus, the level of confidence in ZUS is relatively stable and not insignificant. Although confidence in that institution is less than as compared with confidence in the NBP and still less than

confidence in commercial banks, it is markedly greater than confidence in other financial institutions (1.5 times greater than that towards open pension funds).

In 2011, the variation of confidence in ZUS according to demographic, social and professional features was considerable. Women, the elderly, residents of smaller towns, persons with lower educational level, those with lower incomes and retirees and pensioners have more confidence in ZUS. The greatest level of confidence among those that have an opinion is expressed by those aged 65 and above (62%), retirees (59%) and pensioners (53%); i.e. those that directly take advantage of the benefits from the Social Insurance Fund. It may be observed that in the case of the above-mentioned groups, the level of confidence is slightly higher than in 2009. The smallest degree of confidence in ZUS is expressed by those employed in the private sector (20%) and private entrepreneurs (21%), placed on the other side of the social insurance system (they pay part of retirement pension and social security premiums for their employees, finance accident and sickness benefits, and perform their obligations of premium payers). It is worth noting that the opinion of private entrepreneurs concerning ZUS stands out in the entire survey of confidence in financial institutions with the smallest proportion of response avoidance (only 21% did not have an opinion) and the largest proportion of negative answers (62% for "No").

The degree of social confidence in financial institutions commonly taken advantage of continues to remain at a very low level. The highest level of confidence is enjoyed by the "neutral" NBP ("Yes" responses markedly dominate over negative ones). It is meaningful that for other financial institutions, only in several cases is the percentage of "Yes" responses higher than that of negative ones (see Tables 5.5.2 to 5.5.7). In the case of banks, this concerns people with higher and post-secondary education, as well as school and university students, while in the case of ZUS it is people aged 65 and above, retirees and pensioners. It must be pointed out that (commercial) banks still enjoy much greater confidence than other financial institutions, but they are also the most affected by the decline in that confidence. As a result of the decline in the level of confidence in banks, the differences in the degree of confidence in particular financial institution have clearly levelled out.

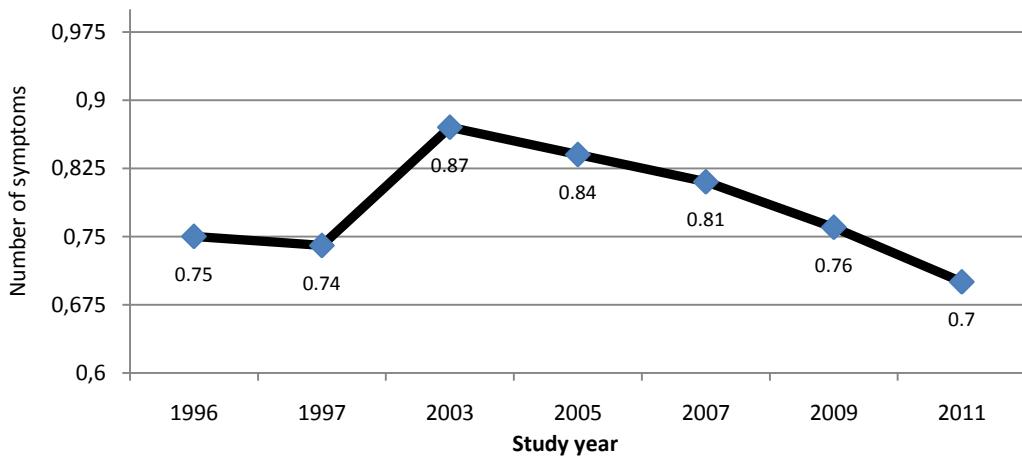
In most general terms, the dramatic situation in financial markets implies a significant decline in the confidence in financial institutions, and this not only concerns institutions that offer savings and investment products. Changes in that attitude take time, as proven by the comparison of data for 2009 and 2011. This mostly concerns residents of larger towns, those with the highest levels of education, better-off people, private entrepreneurs and public sector employees, whose relatively higher confidence in financial institutions was disturbed the most. If confidence in financial institutions is not gradually restored, the functioning of economy and social development will be seriously hindered.

5.6. Health

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5.6.1. Somatic symptoms

In 2003, the individual questionnaire of the *Diagnosis* was extended to include a scale of health that measures the incidence of 15 somatic symptoms used also in previous studies in Poland. A comparison of the 2003-2011 *Diagnosis* results with the previous reveals a statistically significant increase in the incidence of symptoms at the beginning of the century, followed by a gradual decline to the lowest level in the entire period (Table 5.6.1).



Source of data Czapinski, 1998 for the years 1996-1997; Social Diagnosis for the years 2003-2011.

Figure 5.6.1. Average number of psychosomatic symptoms experienced in the preceding month for at least two weeks in the years 1996-2011 in samples of respondents aged 18 years and above

The percentage of respondents who experienced particular symptoms for at least half a month decreased over the past two years for the entire scale with the exception of the very rare nosebleeds. The largest decreases concerned the frequency of pains in the chest or heart, pressure on the bladder and strong headaches (Table 5.6.1). We have not recorded an increase in the frequency of any of the 15 symptoms since 2003.

Table 5.6.1. Percentage of respondents aged 18 and above who experienced diverse somatic symptoms for at least half a month in seven surveys

Symptoms	1996 N=2193	1997 N=1943	2003 N=8977	2005 N=8765	2007 N=12568	2009 N=25404	2011 N=25716
Strong headaches	8.1	9.3	8.1	7.9	7.2	6.5	5.9
Stomach aches or flatulence	4.9	4.5	5.9	6.3	6.0	5.5	5.2
Painful or tense neck or shoulders	8.3	9.8	9.9	10.1	9.7	9.5	8.9
Pain in the chest or heart	7.1	7.1	6.8	5.7	5.5	5.2	4.5
Dryness in mouth or throat	5.0	4.0	5.3	5.3	5.3	5.0	4.6
Excessive sweating	5.6	6.0	5.9	5.8	5.5	5.0	4.6
Feeling of stuffiness	6.0	5.8	5.5	4.9	4.5	4.2	3.7
Pain in bones and in the entire body	9.1	8.9	9.2	8.7	8.0	8.0	7.3
Accelerated heartbeat (palpitations)	5.3	4.9	5.2	4.6	4.5	4.0	3.5
Shivers or convulsions	0.8	1.0	1.2	1.2	1.3	1.2	0.9
Pressure on the bladder and more frequent urinating	4.0	3.3	6.4	6.1	5.5	5.4	4.8
Feeling of tiredness not connected with work	7.9	7.2	8.8	8.1	8.1	7.4	6.9
Constipation	2.7	2.4	4.4	4.1	3.7	3.5	3.2
Nosebleeds	0.3	0.4	0.9	0.9	1.0	0.8	0.8
Sudden changes of blood pressure	n.d.	n.d.	7.8	7.2	6.9	6.2	5.8

Source of data: Czapinski, 1998 for the years 1996-1997; Social Diagnosis for the years 2003-2011.

The main effect of gender is significant, which is consistent with the worse self-evaluation of the health condition on the part of women found consistently in all studies. In the panel sample, the difference between the genders is similar in all five waves. The lack of a significant effect of the year of measurement

means that the 2003-2011 panel sample retained persons for whom the incidence of psycho-somatic symptoms did not change despite them getting eight years older. Given the very strong age effect, this means that in fact the health of the entire population may have improved significantly in this period.

5.6.2. Disability

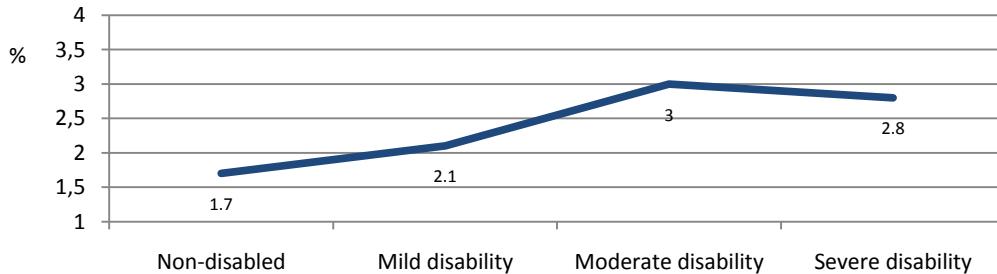
The 2011 sample included a similar percentage of the disabled as in 2009, and the proportions of persons with different degrees of disability were similar (Table 5.6.2). Slight differences, especially in terms of the degree of disability result from the changes in the panel sample, which constituted a majority in the samples in either year. For example, the decline in the share of disabled children resulted from the fact that some of them turned 16 in the period between the two waves. The increased share of the disabled with a certificate of moderate disability resulted from the change in the ruling in respect of a numerous group of persons with mild disability.

Table 5.6.2. Share of the disabled in entire samples and of the disabled with a different degree of disability in the samples of the disabled in 2009 and 2011

Category	2009		2011	
	N	%	N	%
The disabled	4105	11.1	4105	11.3
A ZUS ruling	2741	7.4	2661	7.3
A ruling issued by the Disability Ruling Panel of the Regional Family Care Centre	542	1.5	704	1.9
Both rulings	162	0.4	205	0.6
According to a subjective assessment	358	1.0	298	0.8
Children under 16 years of age	210	0.6	129	0.4
Other cases	93	0.3	108	0.3
Non-disabled	32837	88.9	32147	88.7
Degree of disability*				
Severe	1069	31.1	1058	31.1
Moderate	1319	38.4	1407	41.4
Mild	1047	30.5	933	27.5

* Only individuals with a ruling in confirmation of disability

In Poland, the disabled are objectively discriminated in a number ways if only because of the architectural barriers that force them to stay at home. It is therefore astounding that they do not feel much more discriminated against than the non-disabled (Figure 5.6.2).



NOTE: the main effect of disability $F(3, 25217)=5.307, p<0.01, \eta^2= 0.001$; age effect $F(1, 25217)=141.330, p<0.000, \eta^2= 0.006$; gender effect $F<1$, ns.

Figure 5.6.2. The feeling of being discriminated against, depending on disability status, controlled for age and gender

Table 5.6.3. Percentage of the disabled and percentage of persons with various degrees of disability among the disabled

Socio-demographic group	Percentage of the disabled*	Percentage of the disabled with different degrees of disability **		
		Severe	Moderate	Mild
Total	9.7	31.1	41.4	27.5
Gender				
Men	9.9	29	43	28
Women	9.5	33	40	27
Age				
18-24 years	2.8	27	47	26
25-34 years	4.3	39	41	21
35-44 years	4.8	23	45	32
45-59 years	13.5	20	42	38
60-64 years	21.7	21	48	31
65 and above	24.6	46	37	17
Place of residence				
Towns with more than 500,000 inhabitants	8.5	31	44	25
Towns with 200,000-500,000 inhabitants	10.4	32	38	30
Towns with 100,000-200,000 inhabitants	9.9	31	41	27
Towns with 20,000-100,000 inhabitants	10.6	29	44	27
Towns with fewer than 20,000 inhabitants	11.7	34	36	31
Rural areas	8.6	31	42	26
Voivodeship				
Dolnośląskie	10.2	27	40	33
Kujawsko-Pomorskie	10.5	37	42	21
Lubelskie	10.3	36	31	33
Lubuskie	17.0	23	51	27
Łódzkie	10.1	23	47	30
Małopolskie	10.9	36	42	22
Mazowieckie	6.9	34	46	20
Opolskie	7.8	37	24	39
Podkarpackie	9.8	28	37	35
Podlaskie	8.3	24	41	35
Pomorskie	9.3	41	39	19
Śląskie	8.1	28	39	33
Świętokrzyskie	10.9	31	45	25
Warmińsko-Mazurskie	9.8	44	33	23
Wielkopolskie	11.4	25	46	29
Zachodniopomorskie	10.4	33	45	22
Educational level				
Primary and lower education	17.9	43	35	22
Basic vocational education	11.6	25	44	32
Secondary	9.3	28	43	29
Higher and post-secondary	5.1	24	48	28
Social and professional status				
Public sector	2.4	5	44	51
Private sector	2.4	5	40	55
Private entrepreneurs	1.3	6	35	59
Farmers	0.5	13	50	38
Pensioners	68.6	32	41	28
Retirees	18.5	41	39	20
School and university students	2.5	24	47	29
Unemployed persons	4.9	3	39	58
Other professionally inactive	6.5	31	52	17

* The disabled with a ruling, and disabled children

** The disabled with a ruling only

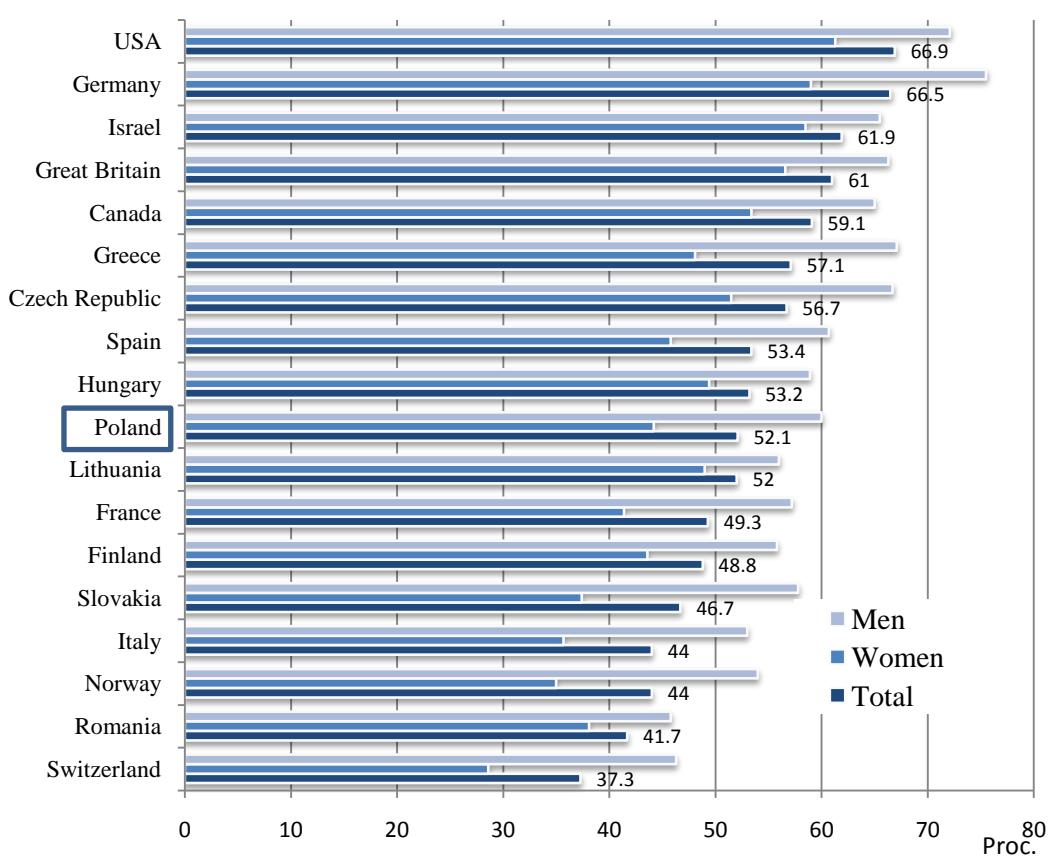
5.6.3. Lifestyle and health risk factors

One of the risk factors for obesity related health disorders which can be easily estimated in surveys, is the proportion between weight and height (the *Body Mass Index*, BMI). It is calculated by dividing body mass expressed in kilograms by the second power of height expressed in metres. In this year's edition of the *Diagnosis* we asked about weight and height, and we calculated the BMI for each respondent. Table 5.6.4. shows the distribution of that indicator, divided into eight categories adopted for white people. Less than half of respondents aged 16 and above had the appropriate body mass and there are one-third more women than men in this group. Furthermore, more women are underweight or have the second degree of obesity, while more men are overweight and have the first degree of obesity. In general, men in Poland – similarly as in other countries (Figure 5.6.3) – are obese more often than women.

The value of that indicator for Poland does not look very bad as compared to several other countries (Figure 5.6.3). The greatest numbers of people are overweight in the U.S. and Germany, the smallest in Switzerland and Romania. As compared to our region, in the Czech Republic there are more, and in Slovakia fewer overweight people than in Poland, while Poles do not differ from Hungarians or Lithuanians in this respect.

Table 5.6.4. Percentage distribution of men, women and in general across eight categories of the BMI

Category by BMI value	Gender		Total
	Men	Women	
Starvation (<16.0)	0.1	0.2	0.2
Emaciation (16.0-17.0)	0.1	0.7	0.4
Underweight (17.00-18.5)	0.8	3.7	2.3
Normal, correct weight (18.5-25.0)	39.0	52.0	45.8
Overweight (25.0-30.0)	43.5	29.0	35.9
1st degree obesity (30.0-35.0)	13.9	11.1	12.5
2nd degree obesity (clinical obesity) (35.0-40.0)	1.9	2.7	2.3
3rd degree obesity (extreme obesity) (>=40.0)	0.7	0.7	0.7



Source of data: WHO Global Database on Body Mass Index (2011 Social Diagnosis for Poland)

Figure 5.6.3. Percentage of overweight (BMI >= 25) women and men and residents of particular countries in general, aged 18 and above

If the BMI were indeed an indicator of health risk (even if not a very precise one, as many researchers claim), we could expect it to be related with other health condition indicators. Table 5.6.5 presents the results of the analysis of variance for 18 health indicators (15 detailed symptoms, the general incidence of symptoms, satisfaction with health condition and a serious disease in the past year). Within the scope of those indicators we checked the main effects of the categorised BMI and gender and the effect of interaction of the BMI and gender controlled for age ($(df\ 3, 24730)$).

As expected, the strongest BMI effect concerns circulation problems (sudden changes of blood pressure). Also the effect of the interaction of the BMI and gender is the largest in respect of that indicator. Figure 5.6.4 illustrates the form of these effects. In the underweight group, this ailment affects men

insignificantly more often. In all other groups with BMI beyond normal, women suffer from pressure changes more often. In general, the greater is the obesity, the more frequent the changes in blood pressure.

The dependence is similar in the case of the general indicator of somatic disorders, although the overweight group does not differ from the group with normal weight; only obesity and underweight significantly increase the risk of disorders (Figure 5.6.5).

Table 5.6.5. Results of the multi-factor analysis of variance for 18 health condition indicators controlled for age and gender

Independent variable	Dependent variable	F	p	Partial eta-square
BMI	Strong headaches	18.019	0.000	0.002
	Stomach aches or flatulence	22.095	0.000	0.003
	Painful or tense neck or shoulders	22.707	0.000	0.003
	Pain in the chest or heart	27.717	0.000	0.003
	Dryness in mouth or throat	33.344	0.000	0.004
	Excessive sweating	72.318	0.000	0.009
	Feeling of stuffiness	43.818	0.000	0.005
	Pain in bones and in the entire body	28.612	0.000	0.003
	Accelerated heartbeat (palpitations)	21.106	0.000	0.003
	Shivers or convulsions	6.213	0.000	0.001
	Pressure on the bladder and more frequent urinating	32.339	0.000	0.004
	Feeling of tiredness not connected with work	22.534	0.000	0.003
	Constipation	1.851	0.136	0.000
	Nosebleeds	7.524	0.000	0.001
	Sudden changes of blood pressure	133.186	0.000	0.016
	General indicator of somatic disorders	85.076	0.000	0.010
	Satisfaction with one's health condition	65.540	0.000	0.008
	Serious disease	24.650	0.000	0.003
Interaction of the BMI and gender	Strong headaches	3.408	0.017	0.000
	Stomach aches or flatulence	0.663	0.575	0.000
	Painful or tense neck or shoulders	4.848	0.002	0.001
	Pain in the chest or heart	1.682	0.169	0.000
	Dryness in mouth or throat	3.565	0.014	0.000
	Excessive sweating	5.468	0.001	0.001
	Feeling of stuffiness	8.962	0.000	0.001
	Pain in bones and in the entire body	12.587	0.000	0.002
	Accelerated heartbeat (palpitations)	4.151	0.006	0.001
	Shivers or convulsions	0.976	0.403	0.000
	Pressure on the bladder and more frequent urinating	3.920	0.008	0.000
	Feeling of tiredness not connected with work	2.005	0.111	0.000
	Constipation	10.442	0.000	0.001
	Nosebleeds	1.071	0.360	0.000
	Sudden changes of blood pressure	14.889	0.000	0.002
	General indicator of somatic disorders	9.964	0.000	0.001
	Satisfaction with one's health condition	3.624	0.012	0.000
	Serious disease	3.775	0.010	0.000

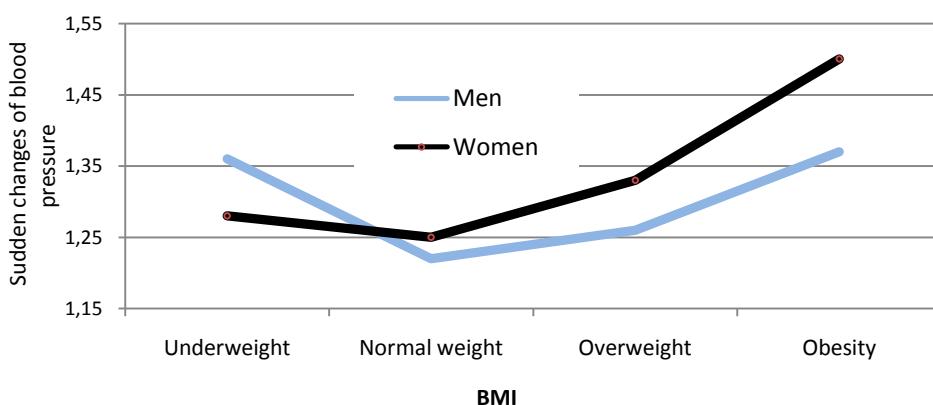


Figure 5.6.4. Intensity of sudden changes in blood pressure depending on the BMI and gender

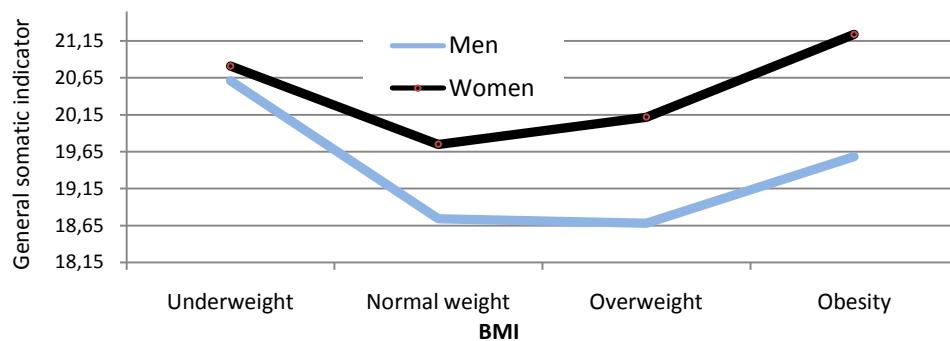


Figure 5.6.5. General indicator of somatic symptoms depending on the BMI and gender

NOTE: The scale of satisfaction with one's health is inversely valued (1 – very satisfied, 6 – very dissatisfied)

Table 5.6.6. Results of the multi-factor analysis of variance for 18 health condition indicators controlled for age and gender

Independent variable	Dependent variable	F	p	Partial eta-square
Smoking	Strong headaches	9.911	0.002	0.000
	Stomach aches or flatulence	5.437	0.020	0.000
	Painful or tense neck or shoulders	66.314	0.000	0.003
	Pain in the chest or heart	21.950	0.000	0.001
	Dryness in mouth or throat	35.827	0.000	0.001
	Excessive sweating	100.560	0.000	0.004
	Feeling of stuffiness	50.673	0.000	0.002
	Pain in bones and in the entire body	41.638	0.000	0.002
	Accelerated heartbeat (palpitations)	33.322	0.000	0.001
	Shivers or convulsions	29.407	0.000	0.001
	Pressure on the bladder and more frequent urinating	2.378	0.123	0.000
	Feeling of tiredness not connected with work	17.280	0.000	0.001
	Constipation	0.374	0.541	0.000
	Nosebleeds	0.082	0.775	0.000
	Sudden changes of blood pressure	0.203	0.652	0.000
	General indicator of somatic disorders	59.556	0.000	0.002
	Satisfaction with one's health condition	85.800	0.000	0.003
	Serious disease	0.301	0.583	0.000
Interaction of smoking and gender	Strong headaches	0.735	0.391	0.000
	Stomach aches or flatulence	8.919	0.003	0.000
	Painful or tense neck or shoulders	24.897	0.000	0.001
	Pain in the chest or heart	1.129	0.288	0.000
	Dryness in mouth or throat	4.548	0.033	0.000
	Excessive sweating	22.175	0.000	0.001
	Feeling of stuffiness	7.575	0.006	0.000
	Pain in bones and in the entire body	0.065	0.799	0.000
	Accelerated heartbeat (palpitations)	9.725	0.002	0.000
	Shivers or convulsions	4.472	0.034	0.000
	Pressure on the bladder and more frequent urinating	9.014	0.003	0.000
	Feeling of tiredness not connected with work	5.500	0.019	0.000
	Constipation	5.192	0.023	0.000
	Nosebleeds	1.868	0.172	0.000
	Sudden changes of blood pressure	0.000	0.992	0.000
	General indicator of somatic disorders	15.167	0.000	0.001
	Satisfaction with one's health condition	1.214	0.271	0.000
	Serious disease	0.358	0.550	0.000

Another risk factor: i.e. smoking, is similarly connected with many symptoms of health disorders, although to a slightly lesser extent (Table 5.6.6, (df 3, 24730)). The general indicator of somatic symptoms is worse for smokers (Figure 5.6.6), and they are less satisfied with their health condition (Figure 5.6.7), but in contrast with the effect of obesity, smoking does not increase the risk of a serious disease over the period of one year.

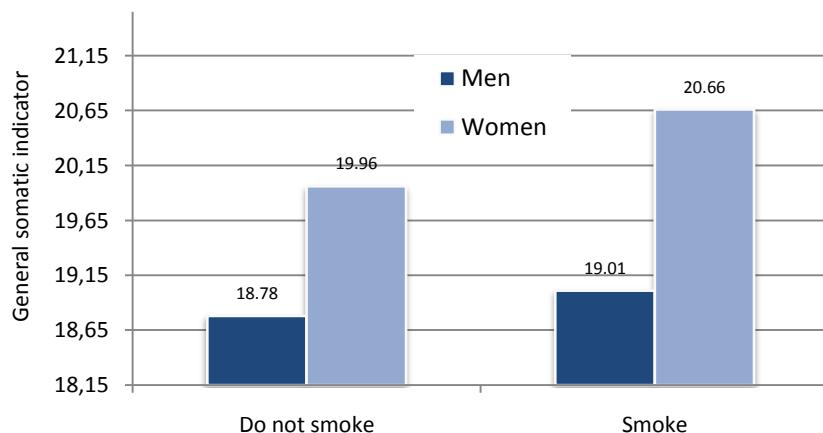
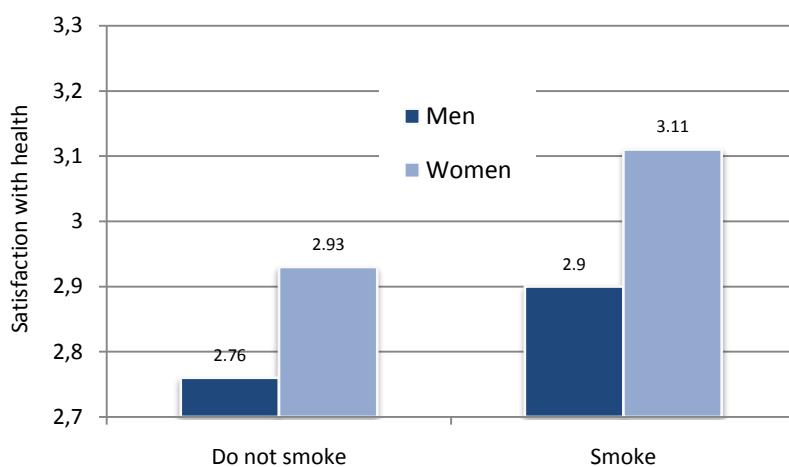


Figure 5.6.6. Intensity of somatic symptoms depending on smoking and gender



NOTE: The scale of satisfaction with one's health is inversely valued (1 – very satisfied, 6 – very dissatisfied)

Figure 5.6.7. Satisfaction with one's health depending on smoking and gender

Alcohol abuse is a risk factor in respect of all 18 measures of health condition (Table 5.6.7, ($df\ 3$, 24730)). It affects the subjective assessment of one's own health the most (Figure 5.6.8), but it also adversely affects objective indicators: the incidence of disorder symptoms (Figure 5.6.9) and the likelihood of a serious disease.

The three risk factors listed above appear to be rather separable. Obesity does not correlate with alcohol abuse, and although it does correlate with smoking, it is only a very subtle, negative correlation ($r=-0.039$, $p<0.000$).

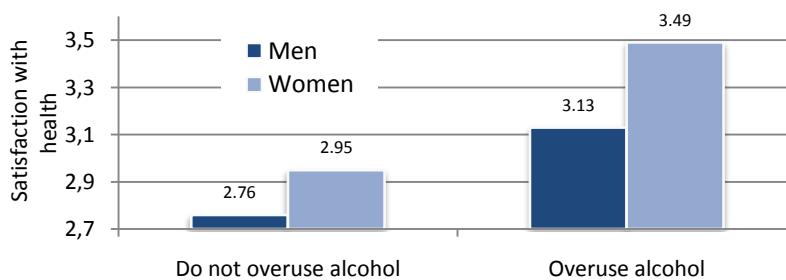
While risk factors deteriorate health condition, a suitable life style should serve it well. Healthy life style is understood to mean a sports-intensive one. A great number of studies prove the health advantages that follow from physical exercise (Penedo, Dahn, 2005; Ross, Hayes, 1988). The influence of an active lifestyle may be multifaceted. One of the aspects may be the improvement of physical fitness and prevention of obesity. Indeed, the BMI negatively correlates with an active lifestyle ($r=-0.101$, $p<0.000$).

Let us see whether those who practise some form of sports or physical activity in general are indeed healthier. Nearly two-thirds of Poles do not practice any physical activity (Table 5.6.8, ($df\ 3$, 24730)). The greatest proportion of people ride a bicycle (21.4%), with the second rank being football or other team sports in the case of men (13.6%); women prefer aerobics (7.1%).

Physical activity, although it provides weaker effects than the risk factors, serves people's health in significant way (Table 5.6.9). It is most strongly connected with the subjective indicator (satisfaction with one's health, Figure 5.6.10). Both men and women, when they actively practise some kind of sport, see their health as better.

Table 5.6.7. Results of the multi-factor analysis of variance for 18 health condition indicators controlled for age and gender

Independent variable	Dependent variable	F	p	Partial eta-square
Alcohol abuse	Strong headaches	131.621	0.000	0.005
	Stomach aches or flatulence	78.459	0.000	0.003
	Painful or tense neck or shoulders	42.853	0.000	0.002
	Pain in the chest or heart	114.215	0.000	0.005
	Dryness in mouth or throat	50.501	0.000	0.002
	Excessive sweating	64.281	0.000	0.003
	Feeling of stuffiness	120.019	0.000	0.005
	Pain in bones and in the entire body	37.730	0.000	0.002
	Accelerated heartbeat (palpitations)	40.467	0.000	0.002
	Shivers or convulsions	29.136	0.000	0.001
	Pressure on the bladder and more frequent urinating	153.449	0.000	0.006
	Feeling of tiredness not connected with work	6.451	0.011	0.000
	Constipation	248.893	0.000	0.010
	Nosebleeds	131.621	0.000	0.005
	Sudden changes of blood pressure	78.459	0.000	0.003
	General indicator of somatic disorders	42.853	0.000	0.002
	Satisfaction with one's health condition	114.215	0.000	0.005
	Serious disease	50.501	0.000	0.002
Interaction of alcohol abuse and gender	Strong headaches	0.238	0.625	0.000
	Stomach aches or flatulence	9.080	0.003	0.000
	Painful or tense neck or shoulders	13.385	0.000	0.001
	Pain in the chest or heart	5.965	0.015	0.000
	Dryness in mouth or throat	0.474	0.491	0.000
	Excessive sweating	0.044	0.834	0.000
	Feeling of stuffiness	3.077	0.079	0.000
	Pain in bones and in the entire body	2.199	0.138	0.000
	Accelerated heartbeat (palpitations)	5.947	0.015	0.000
	Shivers or convulsions	0.130	0.719	0.000
	Pressure on the bladder and more frequent urinating	19.085	0.000	0.001
	Feeling of tiredness not connected with work	11.746	0.001	0.000
	Constipation	6.724	0.010	0.000
	Nosebleeds	0.046	0.830	0.000
	Sudden changes of blood pressure	2.985	0.084	0.000
	General indicator of somatic disorders	5.450	0.020	0.000
	Satisfaction with one's health condition	0.603	0.437	0.000
	Serious disease	9.742	0.002	0.000



NOTE: The scale of satisfaction with one's health is inversely valued (1 – very satisfied, 6 – very dissatisfied)

Figure 5.6.8. Satisfaction with one's health depending on alcohol abuse and gender

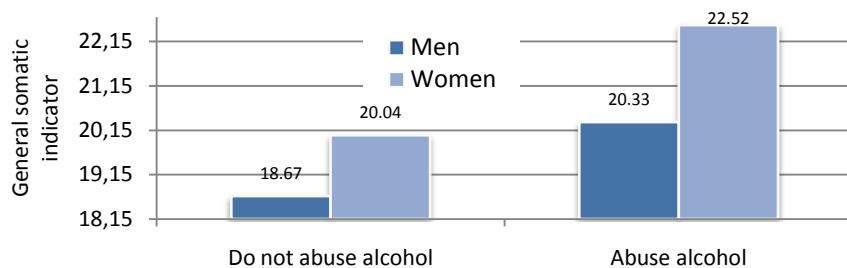


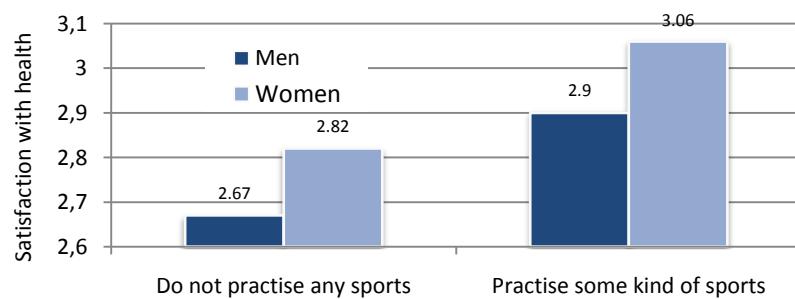
Figure 5.6.9. Incidence of disease symptoms depending on alcohol abuse and gender

Table 5.6.8. Percentage distribution of men, women and the general population in terms of the type of physical activity

Type of physical activity	Gender		
	Men	Women	Total
No physical activity practised	57.6	64.6	61.3
Aerobics	0.5	7.1	4.0
Running/jogging/Nordic walking	6.2	6.8	6.5
Gym	9.9	2.5	6.1
Cycling	22.8	20.1	21.4
Skiing/other winter sports	5.4	3.4	4.3
Swimming	8.8	6.7	7.7
Football/other team sports	13.6	2.3	7.7
Yoga	0.3	1.2	0.8
Martial arts	1.9	0.4	1.2
Other forms	8.7	7.8	8.2

Table 5.6.9. Results of the multi-factor analysis of variance for 17 health indicators controlled for age and gender

Independent variable	Dependent variable	F	p	Partial eta-square
Physical activity	Strong headaches	71.172	0.000	0.003
	Stomach aches or flatulence	1.122	0.289	0.000
	Painful or tense neck or shoulders	0.384	0.535	0.000
	Pain in the chest or heart	37.856	0.000	0.002
	Dryness in mouth or throat	16.695	0.000	0.001
	Excessive sweating	1.856	0.173	0.000
	Feeling of stuffiness	21.406	0.000	0.001
	Pain in bones and in the entire body	89.506	0.000	0.004
	Accelerated heartbeat (palpitations)	8.630	0.003	0.000
	Shivers or convulsions	0.369	0.543	0.000
	Pressure on the bladder and more frequent urinating	32.792	0.000	0.001
	Feeling of tiredness not connected with work	14.661	0.000	0.001
	Constipation	11.762	0.001	0.000
	Nosebleeds	1.817	0.178	0.000
	Sudden changes of blood pressure	4.024	0.045	0.000
	General indicator of somatic disorders	9.426	0.002	0.000
Interaction of physical activity and gender	Satisfaction with one's health condition	212.732	0.000	0.009
	Serious disease	0.107	0.744	0.000
	Strong headaches	1.235	0.266	0.000
	Stomach aches or flatulence	1.182	0.277	0.000
	Painful or tense neck or shoulders	0.000	0.991	0.000



NOTE: The scale of satisfaction with one's health is inversely valued (1 – very satisfied, 6 – very dissatisfied)

Figure 5.6.10. Satisfaction with one's health depending on physical activity

5.7. Stress in life

Janusz Czapinski

Seven categories of stress in life have been established: marital stress (Annex 1, individual questionnaire, questions 5-7), parental stress due to problems with children (questions 8-12), financial stress (questions 14-15), work-related stress (questions 15-18), environmental stress related to housing conditions, neighbours and safety in the vicinity of the place of residence (questions 18-20), health-related stress (questions 22-23) and administrative („Kafkaesque”) stress (questions 24-27).

The intensity of stress in life is treated in the quality-of-life literature as the major, or at least the most direct, factor that differentiates psychological well-being. In our study, each of the seven specific categories of stress in life covered several different types of events or life experiences, with the category of general stress making up the total intensity of all the seven categories. Obviously, not each specific type of stress is common; that is it concerns the entire population. Some of the categories (e.g. marital, parental, or work-related stress) are typical of specific groups of people (married persons, those that have children, those that work).

The overall level of stress in life was definitely lower in 2011 than two years before and the lowest since 2000 (Figure 5.7.1). As shown by the data from panel samples, the decline was statistically significant (Table 5.7.1).

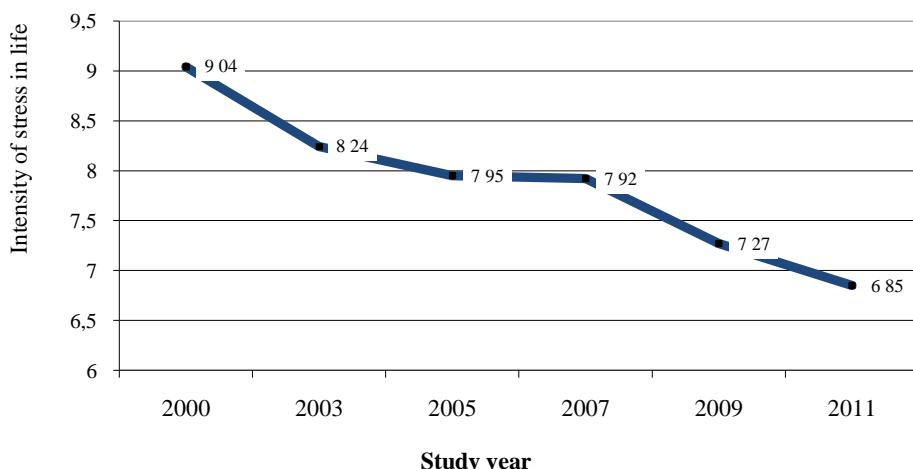


Figure 5.7.1. Average intensity of stress in life in entire samples in 2000, 2003, 2005, 2007, 2009, and 2011

Table 5.7.1. Comparison of intensity of general stress in life from five waves in 2000, 2003, 2005, 2007 and 2009 with the result of the last measurement in 2011 in panel samples (the same respondents in the years under comparison)

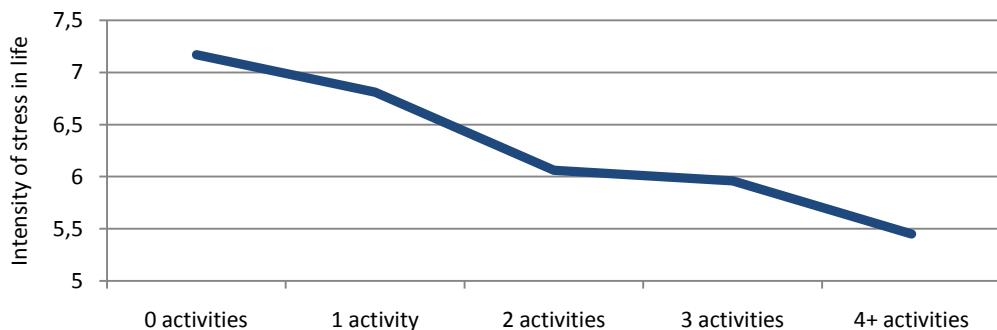
Variable	Study year	Average	Standard deviation	Average difference	T test	Degrees of freedom	Statistical significance	Correlation
Intensity of stress in life	2000	9.58	5.26					
	2011	7.71	4.67	1.868	10.419	1739	0.000	0.284*
	2003	8.87	5.20					
	2011	7.84	4.92	1.045	8.478	1938	0.000	0.426*
	2005	8.45	5.46					
	2011	7.58	4.97	0.872	7.744	2225	0.000	0.484*
	2007	8.31	5.38					
	2011	7.45	4.95	0.862	11.545	4482	0.000	0.534*
	2009	7.47	5.04					
	2011	7.09	4.93	0.376	10.170	14894	0.000	0.582*

* $p < 0.000$

When we only analyse those respondents who participated in all six waves, it turns out that there is no statistically significant effect of interaction between the time of measurement and gender; the decline in the level of stress was the same for women and men, with the intensity of stress similar in men and in women throughout the entire study.

Earlier in the text we stated that physical activity positively influenced physical and psychological well-being. Since stress is connected with either of these types of well-being, we may expect to find a connection

between physical activity and stress as well. Indeed, those who practise some type of sport or exercise demonstrate a lower level of stress in life (Figure 5.7.2). This, of course, does not determine the direction of the dependence.



NOTE: the main effect of physical activity $F(4, 24590) = 45.168, p < 0.000, \eta^2 = 0.007$; the gender effect $F <$, ns; effect of interaction of physical activity and gender $F < 2$, ns.

Figure 5.7.2. Average intensity of stress in life depending on the number of physical activity types controlled for age

5.8. Personality and lifestyle

Janusz Czapinski

5.8.1. The system of values

Studying the system of personal values is one of the most difficult tasks of the psychology of the quality of life. Although there are several measures that are better or worse standardised and verified for accuracy and reliability (the scale of Rokeach or Schwartz), none of them has been used in large surveys where what counts is brevity, simplicity of questions and ease of providing answers. Based on these criteria, we used the *scale of conditions for a happy life* (Annex 1, individual questionnaire, question 2), which lists 13 specific values and one non-specific value. Since all of the 13 values are commonly accepted, we limited respondents' choices to three that are the most important for them.

Table 5.8.1 proves that the value system of the Poles is very stable. However, it is worth emphasising the significant increase in the importance of friends (a percentage of indications more than double the amount of 2000, when – as we may remember – there was a deep crisis of friendship relationships, manifested in the decline of the average number of friends). The importance of education also increased as compared with the 1990s, although still both friends and education seem to be undervalued, given their real impact on the quality of life.

The quick increase in the Poles' affluence is also reflected in the decline of the frequency of the choice of money as one of the three most important values (by 28% as compared to 2000). The importance of God (providence) is also declining, which corresponds to the decline in the frequency of religious practices (cf. section 5.8.3).

Similarly to all the previous years, the following are indicated as values: health (64.1% of respondents), then a successful marriage (a slight decline), children and work. The values that are indicated the least often are freedom, strong personality, education and kindness and being respected.

Table 5.8.1. Percentage of respondents aged 18 and above who in subsequent years indicated particular values as the most important conditions for a happy, successful life

Value	1992 N=3402	1993 N=2306	1994 N=2302	1995 N=3020	1997 N=2094	2000 N=6632	2003 N=9397	2005 N=8560	2007 N=12365	2009 N=23784	2011 N=26221
Money	37.2	39.8	32.1	36.1	39.3	39.2	33.3	32.9	30.7	30.3	28.2
Children	52.3	50.0	55.0	51.0	50.3	43.4	43.3	45.1	45.9	48.8	47.6
Successful marriage	56.3	57.6	56.5	55.9	58.8	58.0	53.7	55.6	55.8	56.6	53.4
Work	26.6	30.1	29.2	29.6	28.9	30.8	35.5	34.7	30.2	31.9	30.7
Friends	4.7	4.8	4.2	5.6	5.0	4.6	5.9	8.0	8.6	10.4	10.4
Providence, God	16.7	13.2	13.1	16.4	15.6	16.0	15.4	15.6	15.1	15.4	13.3
Cheerfulness, optimism	8.5	7.8	8.2	9.0	7.9	7.8	8.2	9.1	9.5	10.7	10.2
Honesty	12.3	10.6	10.0	10.0	9.0	8.8	9.0	10.2	9.7	11.1	9.9
Kindness and being respected	9.0	7.5	9.3	7.4	6.0	7.8	5.9	6.7	6.9	8.4	7.1
Freedom	3.6	3.3	3.6	3.8	1.9	3.0	3.3	3.5	4.1	4.7	4.4
Health	59.6	62.9	65.8	59.6	60.2	62.9	63.7	64.9	65.1	67.8	64.1
Education	1.9	2.4	1.3	3.7	4.2	4.6	5.1	6.0	6.2	6.3	5.6
Strong personality	4.0	3.5	4.5	4.1	5.5	3.4	4.5	4.9	5.0	5.8	5.3
Other	0.5	0.4	1.3	0.7	0.4	0.6	0.7	1.2	1.0	1.0	0.9

Source of data: Czapinski, 1998 for the years 1992-1997; *Social Diagnosis* for the years 2000-2011.

5.8.2. The style of causal attribution

The style of causal attribution is the tendency to search for the causes of one's own condition, behaviours and the effects of actions or condition and other people's behaviours in particular factors. Here we were interested in whether the ways of attributing the causes responsible for the respondent's life were the same as in the past year. The scale of causal attribution used in the study (Annex 1, individual questionnaire, questions 59-60) was meant to provide an answer to the question of who (or what) the Poles see as responsible for the quality of their own lives: themselves, the authorities, other people or fate/providence. The question is connected with a self-serving attributional bias, confirmed in many studies ("the good things are me, the bad things are not me"), and with the theory of social ingratitudo (Czapinski, 2000, 2002a), which says that the social perception of changes at the macro level is non-symmetrical; those who gain on the changes from the very beginning, demonstrate gratitude to their authors only to a limited extent,

seeing themselves as the main causes of improvement in their living conditions, and the change for good is not felt very strongly itself, while those who consider themselves victims of the implementation of reforms put the blame for their worsening living conditions on the authors of reforms, and feel the change for the worse much more strongly.

The number of people who consider the past year as good has been increasing systematically (Figure 5.8.1). This does not mean however that the self-serving attributional bias is weakening, although the main recipients of the blame for failure are changing to a great extent.

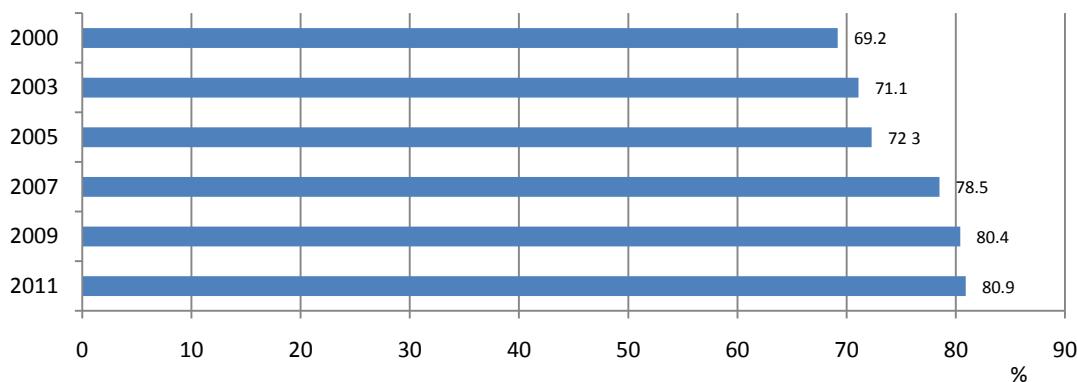


Figure 5.8.1. The percentage of respondents who considered the past year a good one for them

Table 5.8.2 shows the distribution of responsibility for the past year between four entities: the respondent themselves, other people, authorities (i.e. the State) and fate (providence). A significant (triple) decline concerns the frequency of pointing to the authorities ($t=11.760, p<0.000$). This means that the Poles see the connection between their quality of life and the actions of politicians as weaker and weaker.

The choice of factor depends on the direction the perceived change in the quality of one's own life. Similarly as in the previous years, one can notice a clear effect of the self-serving attributional bias and the effect of social ingratitude (cf. the frequency of attribution to "oneself" and to authorities depending on whether the past year was seen as good or not - Figure 5.8.2). Respondents attribute a good year mainly to themselves (81.7%), at an insignificant rate (4.4%) to authorities, while an unsuccessful year is more often attributed to authorities (22%), and less often to themselves (30.2%). The contribution of other people and providence to one's own fate is also acknowledged more often when the year was unsuccessful than when it was successful. Although the system of dependencies has been preserved, some changes have occurred within it since the year 2000. The frequency of attribution to authorities declined, especially in respect of responsibility for an unsuccessful year (by 30 percentage points)⁵⁰, while the frequency of attribution to other people and to fate for an unsuccessful year increased.

Table 5.8.2. Percentage of indications in six studies concerning who or what was responsible for the last year being successful or unsuccessful for the respondent (in samples of adults)

Who or what had an impact on the last year being a good one or a bad one for you	1997 N=2094	2000 N=6635	2003 N=9420	2007 N=12365	2009 N=24531	2011 N=25408
Myself	69.0	67.3	61.3	65.8	70.0	71.6
Other people	17.2	24.9	23.4	26.5	25.7	25.7
Authorities	19.6	24.3	15.2	9.0	7.4	7.9
Fate (providence)	33.0	44.5	42.0	39.0	40.8	41.8

Source of data: Czapinski, 1998 for the year 1997; Social Diagnosis for the years 2000-2011.

⁵⁰ The responsibility of the authorities was already so little in the previous years that the "floor" effect made it impossible for that value to drop.

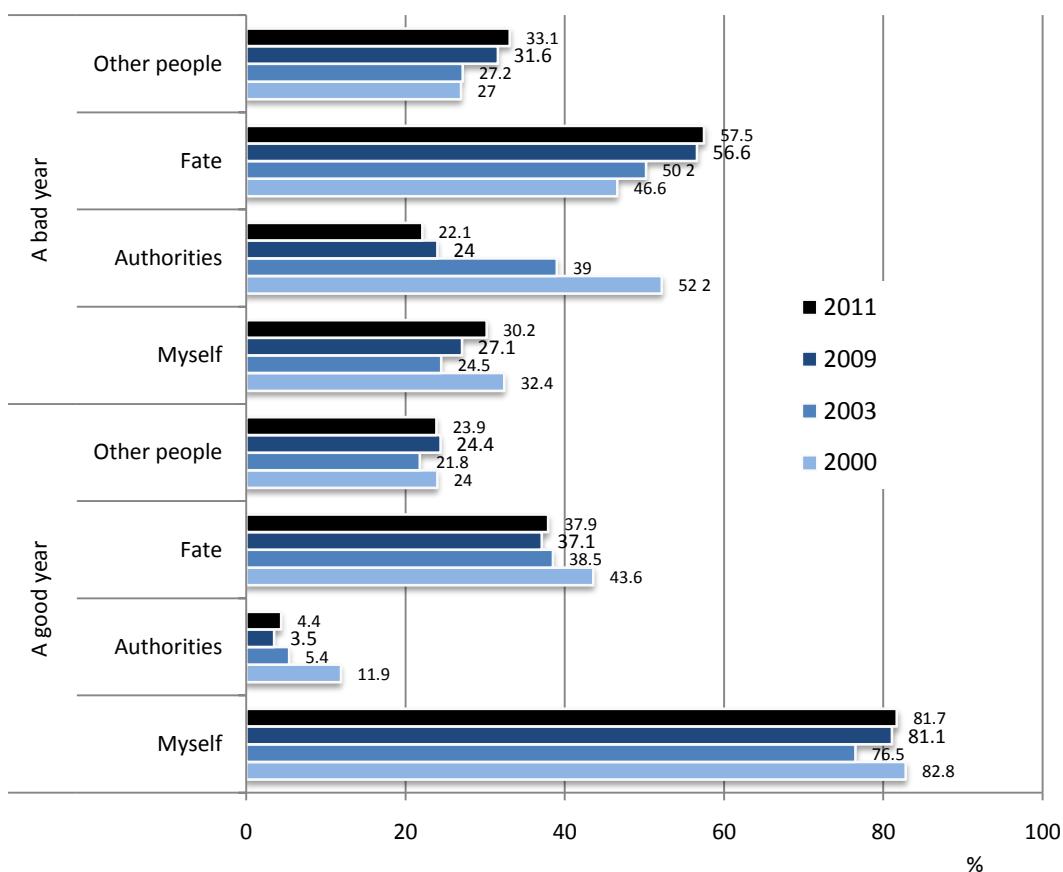


Figure 5.8.2. Who or what had an impact on the last year being a good one or a bad one? (percentage of indications of oneself, authorities, fate and other people among those who deemed the past year good or bad in 2003, 2009 and 2011)

5.8.3. Religious practices

In 2011, 42.7% of adults declared that they systematically participated in services and other religious ceremonies (Table 5.8.3). This is 1 percentage point less than in 2009 and 3.4 percentage points less than in 2007, and the least in the entire period since 1992.

Until 2005, the diminishing participation in services and other religious ceremonies was accompanied by an increase in the percentage of people who prayed in difficult situations in life (Table 5.8.3). In other words, Poles went to church less often, but prayed increasingly more often. This suggested a de-institutionalisation (privatisation) of faith and was consistent with the process observed in western countries, where religious behaviours were becoming more private and institutional forms in the relations between man and God were losing in significance. However, since 2007 the downward trend in institutional religious behaviours was joined by a decline in the frequency of prayer in difficult situations in life, and the decline was ever deeper in subsequent waves in 2009 and 2011. This may mean that after a period when faith was becoming more private, a process of secularisation has begun.

Table 5.8.3. Percentage of adults who participate in services and other religious ceremonies at least 4 times a month and pray to God in difficult situations between 1992 and 2011

Behaviour	1992 N=3384	1993 N=2304	1995 N=3018	1997 N=2097	2000 N=6635	2003 N=9420	2005 N=8566	2007 N=12365	2009 N=23594	2011 N=26453
Participation in services 4 times a month and more	55.7	51.8	50.3	51.4	50.1	46.4	46.4	46.1	43.7	42.7
Recourse to prayer	No data available	No data available	27.4	30.4	31.9	32.1	33.8	30.5	28.3	25.5

Source of data Czapinski, 1998 for the years 1992-1997; Social Diagnosis for the years 2000-2011.

The groups of people that are the most religious in terms of institutional forms are women, the elderly (aged 65 and above), residents of rural areas (including farmers), retirees and pensioners, and those with primary education, while the lowest behavioural indicators of religious activity concern men, people up to 44 years of age, residents of the largest cities, those with the highest education and highest income, unemployed persons, private sector employees and private entrepreneurs (Table 5.8.4).

In regional terms, the most "religious" are the Podkarpackie, Małopolskie, Opolskie and Lubelskie Voivodeships, which are dominated (with the exception of the Opolskie Voivodeship) by people who have lived there for many generations. The least "religious" are the Zachodniopomorskie, Łódzkie, Warmińsko-Mazurskie and Dolnośląskie Voivodeships; i.e. the north-western regained territories, dominated by immigrant population. The Podkarpackie Voivodeship varies the most from the national average; more than 12% of its residents only do not go to church there at all, and nearly three-thirds participate in services at least 4 times a month. At the other extreme there is the Zachodniopomorskie Voivodeship, where nearly a half the inhabitants (49%) do not go to church at all, and every third only participates in religious ceremonies at least 4 times a month (with double difference in the average frequency of participation in services between these two voivodeships). The largest cities (with more than 500,000 residents) are the least religious (49% do not go to church at all, compared with 21% of residents of rural areas).

In comparison with 2009, the greatest increase in the percentage of those who do not participate in religious services at all was among the youngest people, residents of medium-sized towns, the richest, school and university students and unemployed persons. In terms of voivodeships it was among the residents of the Zachodniopomorskie, Warmińsko-Mazurskie, Pomorskie, Mazowieckie, Łódzkie and Kujawsko-Pomorskie Voivodeships. However, in some groups – farmers, other professionally inactive and residents of Wielkopolska and of the Lubuskie Voivodeship – the percentage of those who do not participate in religious services slightly decreased.

The average frequency of participation in religious services increased only among those professionally inactive (but not among unemployed persons, retirees and pensioners) and among the residents of the Wielkopolska and Małopolska regions. In the majority of other groups it diminished.

When we track the changes in religious practices in Poland in recent years, we may observe that they follow a certain pattern. First, the group of "devout" people (more than 4 visits in church per month) diminishes, to the advantage of the group of those who practise "ritually" (4 visits in church per month), and at the same time some people from the group of those who practise sporadically (1-3 times in church per month) move to the group of those who do not engage in religious practices at all. At the second stage, the group of those who practice "ritually" diminishes to the advantage of the group of those who practise sporadically. Yet another cycle brings a further increase in the number of those who do not practise at all and a temporary increase in the number of those who practise "ritually". Since this trend is very stable in Poland, the result will be the secularisation of society, albeit slower than in other Catholic countries (e.g. Ireland or Spain), but fairly certain. And, in my opinion, this has nothing to do with the more or less publicised issues that undermine the prestige and reliability of the Catholic Church and its priests, although the behaviour of priests, and especially of bishops, may accelerate or slow down the process of secularisation. However, this process cannot be stopped let alone reversed.

Table 5.8.4. Percentage of those who participate in services and other religious gatherings with different frequency and the average frequency of participation in services per month in different social and demographic cross-sections in 2009 and 2011

Socio-demographic group	Percentage of those who participate in services, per month:								Frequency of participation in services per month	
	0 times		1-3 times		4 times		More than 4 times			
	2011	2009	2011	2009	2011	2009	2011	2009	2011	2009
Total	32.6	30.8	24.7	25.6	31.9	31.5	10.8	12.2	2.61	2.76
Gender										
Men	38.7	36.3	25.6	26.8	28.3	28.1	7.4	8.8	2.15	2.31
Women	27.1	25.8	24.0	24.5	35.0	34.5	13.9	15.3	3.02	3.16
Age										
16-24 years	34.9	31.2	27.8	29.2	26.8	27.9	10.4	11.8	2.43	2.66
25-34 years	41.6	40.0	28.1	28.4	24.4	24.8	6.0	6.8	1.92	1.98
35-44 years	33.4	30.5	26.5	26.9	29.9	31.4	10.1	11.2	2.35	2.55
45-59 years	31.1	30.3	23.8	24.8	33.8	32.3	11.2	12.6	2.66	2.72
60-64 years	27.2	24.6	21.4	24.1	38.7	36.4	12.8	14.9	2.98	3.17
65 and above	23.1	22.5	18.8	19.1	41.7	39.9	16.4	18.5	3.64	3.93
Place of residence										
Towns with more than 500,000 inhabitants	49.4	50.6	21.3	19.9	22.0	22.1	7.2	7.4	1.87	1.98
Towns with 200,000-500,000 inhabitants	43.9	39.9	20.3	21.6	23.9	27.0	11.9	11.5	2.42	2.57
Towns with 100,000-200,000 inhabitants	43.1	39.7	19.8	21.0	28.7	27.1	8.5	12.2	2.18	2.41
Towns with 20,000-100,000 inhabitants	35.1	32.4	25.5	26.6	29.0	29.2	10.4	11.8	2.51	2.69
Towns with fewer than 20,000 inhabitants	32.5	29.6	24.2	25.8	32.4	31.1	10.9	13.4	2.58	2.86
Rural areas	20.8	19.5	27.8	28.8	39.0	37.9	12.4	13.8	3.04	3.12
Voivodeship										
Dolnośląskie	44.9	41.1	22.2	24.1	25.9	25.6	7.0	9.3	2.02	2.37
Kujawsko-Pomorskie	36.3	30.7	25.5	28.8	28.9	30.6	9.2	9.9	2.31	2.58
Lubelskie	20.7	19.8	32.9	32.1	35.6	33.6	10.8	14.5	3.06	3.16
Lubuskie	42.3	44.1	21.5	22.9	28.7	22.4	7.4	10.7	2.11	2.28
Łódzkie	43.6	41.3	29.6	30.5	21.2	22.3	5.6	5.9	1.93	1.92
Małopolskie	16.4	16.9	17.8	17.4	47.5	47.3	18.3	18.3	3.70	3.59
Mazowieckie	37.3	35.5	28.3	27.9	27.4	28.4	7.0	8.3	2.19	2.45
Opolskie	28.4	26.4	15.9	16.1	32.2	30.7	23.5	26.8	3.46	3.88
Podkarpackie	12.6	11.4	15.5	19.4	51.5	49.1	20.4	20.0	3.94	4.05
Podlaskie	28.3	28.5	33.7	30.4	28.6	30.5	9.4	10.6	2.57	2.67
Pomorskie	35.2	30.0	19.6	23.4	30.4	31.7	14.7	14.9	2.95	3.09
Śląskie	33.2	31.9	23.1	21.5	30.9	31.7	12.8	14.9	2.61	2.86
Świętokrzyskie	29.0	29.4	34.6	34.5	30.0	26.5	6.4	9.6	2.40	2.42
Warmińsko-Mazurskie	33.4	29.8	32.0	35.3	29.7	27.1	4.9	7.8	2.12	2.38
Wielkopolskie	29.8	31.1	26.4	26.6	33.0	31.9	10.9	10.5	2.61	2.57
Zachodniopomorskie	48.6	42.4	19.1	25.9	26.2	23.0	6.1	8.7	1.89	2.12
Educational level										
Primary and lower education	27.5	26.2	23.9	24.6	36.3	34.6	12.3	14.6	3.02	3.27
Basic vocational/lower secondary	30.2	28.2	26.6	27.7	32.6	32.0	10.6	12.1	2.59	2.78
Secondary	34.0	32.2	24.1	25.0	31.3	30.6	10.6	12.1	2.56	2.67
Higher and post-secondary	37.6	36.8	23.4	23.7	28.6	29.0	10.4	10.5	2.41	2.42
Per capita income										
Lower quartile	30.6	29.0	28.7	26.8	30.2	32.7	10.5	11.5	2.58	2.78
Median 50%	29.8	27.6	24.1	26.2	34.3	32.8	11.8	13.5	2.78	2.96
Upper quartile	40.6	37.4	22.3	23.9	27.8	28.1	9.4	10.6	2.28	2.36
Social and professional status										
Public sector	32.9	30.6	24.6	26.8	31.1	31.1	11.4	11.4	2.52	2.57
Private sector	38.5	38.6	27.4	27.7	27.1	26.1	7.0	7.6	2.07	2.06
Private entrepreneurs	41.3	41.1	23.1	24.5	27.9	24.7	7.6	9.7	2.08	2.12
Farmers	13.3	15.2	33.8	32.5	42.7	40.9	10.2	11.4	3.09	3.02
Pensioners	29.6	27.5	21.3	22.1	34.9	36.0	14.1	14.4	3.18	3.28
Retirees	24.4	22.5	19.6	21.2	40.6	38.9	15.3	17.5	3.40	3.67
School and university students	34.9	26.7	26.3	27.8	27.2	30.6	11.6	14.9	2.51	3.04
Unemployed persons	41.7	39.6	28.7	26.3	23.2	25.0	6.4	9.1	1.95	2.28
Other professionally inactive	30.3	34.1	23.3	25.2	34.7	29.1	11.6	11.6	2.65	2.49

The frequency of institutional religious practices, recourse to prayer in difficult situations in life and perceiving God (providence) as one of the three major conditions for a good, successful life (see section 5.8.1) may all be treated as different manifestations of religiousness. Such an assumption is justified by the high correlation coefficients of those indicators in the cross-section by voivodeship (Table 5.8.5) and the statistically significant correlation coefficients at the individual level (Table 5.8.6).

Table 5.8.5. Correlations between the position of God in the hierarchy of values, frequency of going to church, percentage of those who pray in difficult situations and the synthetic indicator of religiousness in 2009 and 2011 in cross-section by voivodeship

	2	3	4	5	6	7	8
1. Practices 2011	0.976(**)	0.885(**)	0.817(**)	0.877(**)	0.843(**)	0.983(**)	0.939(**)
2. Practices 2009		0.879(**)	0.884(**)	0.816(**)	0.870(**)	0.978(**)	0.929(**)
3. Prayer 2011			0.876(**)	0.828(**)	0.806(**)	0.940(**)	0.888(**)
4. Prayer 2009				0.713(**)	0.877(**)	0.844(**)	0.941(**)
5. God 2011					0.757(**)	0.927(**)	0.789(**)
6. God 2009						0.850(**)	0.935(**)
7. Religiousness 2011							0.932(**)
8. Religiousness 2009							

** Correlation is significant at the level of 0.01 (two-sided test).

Table 5.8.6. Correlations between the position of God in the hierarchy of values, frequency of going to church, percentage of those who pray in difficult situations and the synthetic indicator of religiousness in 2009 and 2011 at the individual level

	2	3	4	5	6	7	8
1. Practices 2011	0.688(**)	0.338(**)	0.279(**)	0.292(**)	0.254(**)	0.738(**)	0.547(**)
2. Practices 2009		0.297(**)	0.326(**)	0.254(**)	0.306(**)	0.555(**)	0.736(**)
3. Prayer 2011			0.468(**)	0.389(**)	0.327(**)	0.764(**)	0.490(**)
4. Prayer 2009				0.311(**)	0.402(**)	0.484(**)	0.765(**)
5. God 2011					0.386(**)	0.751(**)	0.422(**)
6. God 2009						0.424(**)	0.757(**)
7. Religiousness 2011							0.650(**)
8. Religiousness 2009							

** Correlation is significant at the level of 0.01 (two-sided test).

Therefore, we created a synthetic indicator of religiousness, which consists of the sum of standardised values of three partial indicators. Table 5.8.7. shows the distribution of that indicator in the cross-section by voivodeship and larger towns in the 2009-2011 panel sample. According to that indicator, in 2011 the most religious were the residents of the Podkarpackie, Małopolskie, Opolskie, Lubelskie and Pomorskie Voivodeships, while the least religious were the inhabitants of the Zachodniopomorskie, Łódzkie and Lubuskie Voivodeships. The ranking has not changed much since 2009. The only changes were the Opolskie Voivodeship moving from the first to the third position, and a significant decline in religiousness in the Zachodniopomorskie and Lubuskie Voivodeships as compared to other voivodeships. In cross-section by town, the most religious were the residents of Rzeszów, Częstochowa and Lublin, while the least religious were the inhabitants of Wałbrzych, Łódź and Zielona Góra.

American and European studies consistently prove that those who have faith and engage in religious practices report a greater degree of happiness and satisfaction with life than non-believers, and demonstrate a slightly lesser risk of developing depression (Beckman and Houser, 1982; Czapinski, 1992; Myers, 1993). Furthermore, faith also alleviates the effects of traumatic experiences; the so-called buffer effect (Ellison, 1991).

In 2009, religious practices were the eighth predictor of psychological well-being, out of twenty in 2011, their predictive value increased further and they moved to the sixth position.

Institutional religious practices are connected with a higher level of psychological well-being, regardless of age and gender (Figures 5.8.3-5.8.5). They also alleviate the impact of stress in life on psychological well-being (Figure 5.8.6). On the other hand, prayer as a way of dealing with stress and indicating God as one of the cardinal values do not have a favourable impact on psychological well-being that would be independent of age and gender (Figures 5.8.6-5.8.12), and in respect of depression they even have a strong negative effect, when controlled for age and gender; i.e. factors that differentiate the incidence of the symptoms of depression to the greatest extent (the main effect of indicating God $F(1, 25009)=67.746$, $p<0.000$, $\eta^2=0.003$; and the main effect of prayer $F(1, 24901)=241.946$, $p<0.000$, $\eta^2=0.010$)⁵¹. The lack of a positive main effect of prayer and indication of God as a value for a majority of well-being indicators follows from the fundamentally different role that prayer and faith in general play for women and men; it is positively connected with well-being in men, and is not connected at all or is connected negatively in women. Women who make recourse to prayer in difficult situations in life and treat God as an important condition for a good life, when compared to those women who do not pray and do not include God among

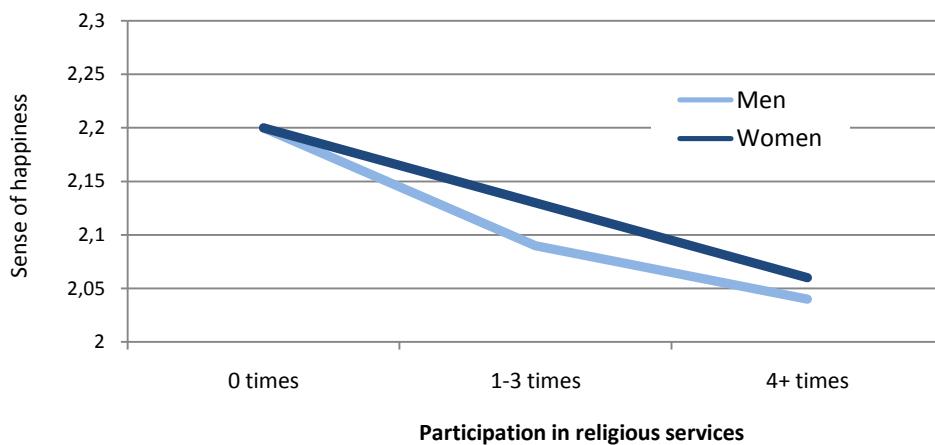
⁵¹ Which is in contrast with the effect of the frequency of participation in services, which is clearly positive with regard to depression, similarly as for other well-being indicators, also independently of age and gender ($F(1, 25128)=75.446$, $p<0.000$, $\eta^2=0.006$).

the three cardinal values, are less satisfied with life, more unhappy and have less of the desire to live, and the proportion may be statistically significant or not. The reverse is true for men; those who look to God for help and include God among cardinal values, are more satisfied with life, are happier and they have a greater desire to live. This could also be interpreted to mean that misfortunes in life bring women closer to God and men away; i.e. faith has a sort of therapeutic role for women but not for men.

The difference between the positive effect of going to church in respect of various well-being indicators and the lack of such a gender-independent effect in the case of prayer and indicating God as a value suggest that going to church plays a fundamentally different role than prayer; it is an activity that enhances the sense of support, not only from God, but also from other people. And social support is of a crucial importance for psychological well-being. It is also presumably not without significance that we asked about praying in difficult situations only, although the similar pattern of dependence in the case of including God as one of the three major values in life proves that we are dealing with a universal dependence between gender and the role of religious faith.

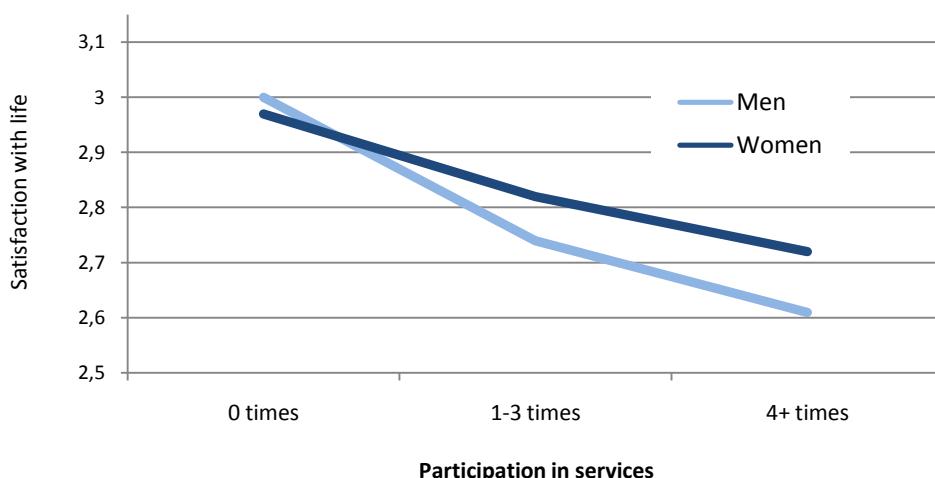
Table 5.8.7. Frequency of religious practices per month, percentage of those who make recourse to prayer in difficult situations in life, percentage of those who indicate God as a chief value in their lives, and the value of the synthetic indicator of religiousness by voivodeship and by capitals of voivodeships

Group	Frequency of religious practices		Percentage of those who pray		Percentage of those who indicate God as the chief value		Religiousness	
	2011	2009	2011	2009	2011	2009	2011	2009
Total	2.69	2.92	27	30	14	16	-0.05	0.00
Voivodeship								
Podkarpackie	4.00	4.29	0.35	0.39	0.19	0.21	0.71	0.77
Małopolskie	3.76	3.75	0.32	0.34	0.20	0.21	0.57	0.47
Opolskie	3.83	4.54	0.35	0.42	0.16	0.26	0.55	1.02
Lubelskie	3.21	3.40	0.35	0.36	0.17	0.21	0.37	0.45
Pomorskie	3.18	3.44	0.27	0.32	0.14	0.17	0.11	0.20
Podlaskie	2.59	2.93	0.31	0.36	0.16	0.18	0.06	0.09
Śląskie	2.82	3.09	0.26	0.30	0.14	0.15	-0.01	0.02
Wielkopolskie	2.69	2.79	0.28	0.26	0.14	0.12	-0.02	-0.24
Kujawsko-Pomorskie	2.62	2.83	0.25	0.27	0.14	0.17	-0.09	-0.06
Mazowieckie	2.20	2.46	0.25	0.31	0.13	0.16	-0.28	-0.13
Warmińsko-Mazurskie	2.27	2.54	0.27	0.28	0.10	0.11	-0.28	-0.26
Świętokrzyskie	2.36	2.41	0.25	0.26	0.10	0.14	-0.30	-0.30
Dolnośląskie	2.08	2.36	0.22	0.26	0.13	0.12	-0.38	-0.36
Lubuskie	2.13	2.34	0.23	0.28	0.10	0.15	-0.44	-0.23
Lódzkie	1.87	1.96	0.20	0.21	0.10	0.13	-0.58	-0.55
Zachodniopomorskie	1.88	2.29	0.20	0.28	0.09	0.12	-0.61	-0.29
Town*								
Rzeszów	3.64	4.08	0.35	0.40	0.25	0.31	0.76	0.99
Częstochowa	3.08	3.35	0.44	0.47	0.22	0.25	0.69	0.66
Lublin	3.32	3.60	0.33	0.39	0.17	0.19	0.38	0.59
Bielsko Biała	3.24	2.77	0.23	0.22	0.17	0.14	0.15	-0.27
Gdynia	3.35	2.79	0.26	0.32	0.13	0.10	0.12	-0.21
Kraków	3.18	3.05	0.24	0.27	0.15	0.20	0.08	0.07
Gdańsk	2.72	3.76	0.30	0.34	0.15	0.21	0.06	0.55
Bydgoszcz	2.52	3.08	0.28	0.33	0.18	0.20	0.01	0.24
Toruń	2.94	3.88	0.16	0.27	0.19	0.19	-0.04	0.22
Białystok	3.04	2.97	0.22	0.26	0.15	0.17	-0.04	-0.06
Wrocław	2.00	2.07	0.25	0.31	0.19	0.16	-0.16	-0.21
Opole	2.43	2.56	0.26	0.45	0.11	0.19	-0.24	-0.14
Poznań	2.11	2.18	0.24	0.21	0.13	0.11	-0.34	-0.55
Szczecin	1.83	2.36	0.29	0.39	0.12	0.15	-0.34	0.15
Kielce	2.15	1.94	0.24	0.23	0.11	0.09	-0.36	-0.61
Katowice	1.81	2.53	0.20	0.21	0.15	0.09	-0.45	-0.50
Olsztyn	1.66	1.51	0.28	0.35	0.09	0.07	-0.47	-0.51
Warszawa	1.69	1.66	0.22	0.28	0.12	0.15	-0.54	-0.51
Sosnowiec	1.89	2.09	0.20	0.20	0.11	0.19	-0.55	-0.51
Zielona Góra	1.41	1.52	0.16	0.22	0.12	0.18	-0.73	-0.55
Lódź	1.40	1.37	0.14	0.14	0.08	0.10	-0.93	-0.98
Walbrzych	1.16	1.22	0.11	0.09	0.01	0.01	-1.28	-1.39



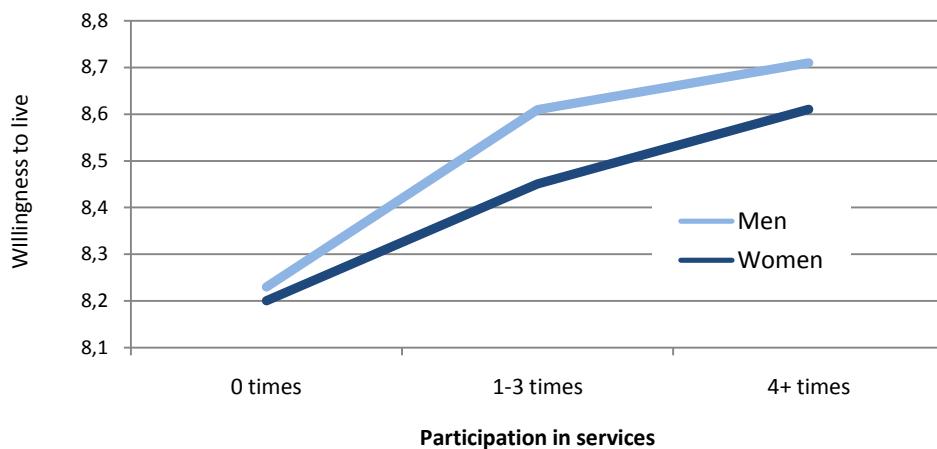
NOTE: the scale of the sense of happiness is inversely valued: the lower the median, the greater the sense of happiness; main effects: of participation in services $F(1, 25460)=171.339, p<0.000, \eta^2= 0.013$, of gender $F(1, 25460)=6.470, p<0.05, \eta^2=0.000$, the effect of interaction of participation in services and gender $F(1, 25460)<3$, ns, age was the control variable $F(1, 25460)=1409.625, p<0.000, \eta^2=0.052$.

Figure 5.8.3. Sense of happiness depending on gender and on the frequency of participation in religious services



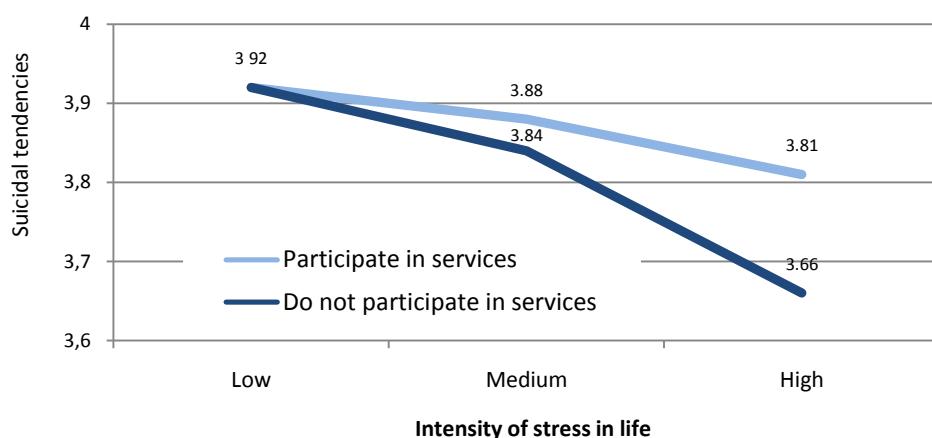
NOTE: the scale of the assessment of life is inversely valued: the lower the median, the greater the satisfaction with life; main effects: of participation in services $F(2, 25469)=239.490, p<0.000, \eta^2= 0.018$, of gender $F(1, 25469)=16.237, p<0.000, \eta^2=0.001$, the effect of interaction of participation in services and gender $F(2, 25469)=12.415, p<0.000, \eta^2= 0.001$, age was the control variable $F(1, 25469)=825.625, p<0.000, \eta^2=0.031$.

Figure 5.8.4. Assessment of life-as-a-whole depending on gender and on the frequency of participation in religious services



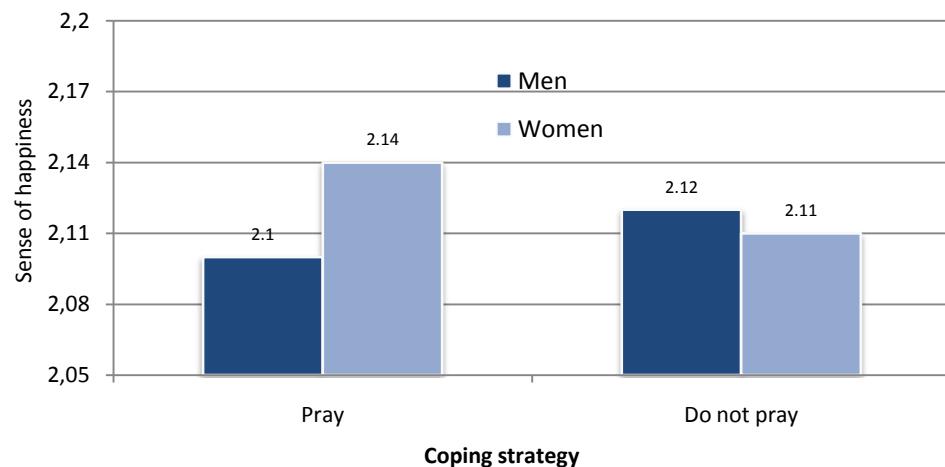
NOTE: main effects: of participation in services $F(1, 25426)=139.839, p<0.000, \eta^2=0.011$, of gender $F(1, 25426)=16.470, p<0.000, \eta^2=0.001$, the effect of interaction of participation in services and gender $F(1, 25426)<3, ns$, age was the control variable $F(1, 25426)=434.625, p<0.000, \eta^2=0.017$.

Figure 5.8.5. Desire to live depending on gender and on the frequency of participation in religious services



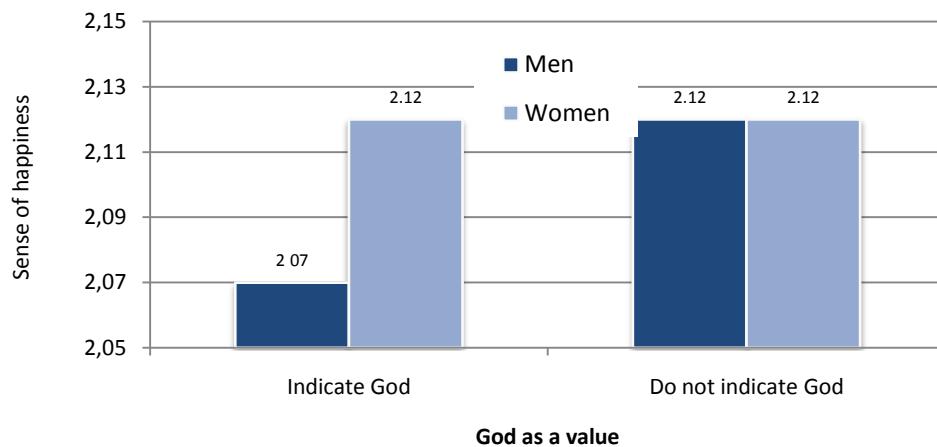
NOTE: the scale of suicidal tendencies is inversely valued: the lower the median, the lesser the suicidal tendencies; main effects: of participation in religious services $F(1, 24370)=100.339, p<0.000, \eta^2=0.0004$, intensity of stress $F(1, 24370)=269.736, p<0.000, \eta^2=0.022$, of gender $F(1, 24370)=11.770, p<0.01, \eta^2=0.000$, the effect of interaction of participation in services and the intensity of stress $F(1, 24370)=37.794, p<0.000, \eta^2=0.003$; age was the control variable $F(1, 24370)=21.925, p<0.000, \eta^2=0.001$.

Figure 5.8.6. Suicidal tendencies depending on the intensity of stress in life and participation in religious services



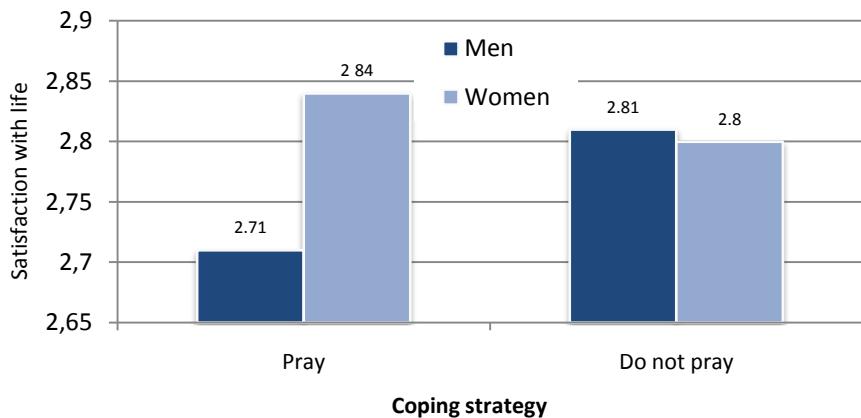
NOTE: the scale of the sense of happiness is inversely valued: the lower the median, the greater the sense of happiness; main effects: of prayer $F(1, 25310)<1$, ns, of gender $F(1, 25310)<2$, ns, the effect of interaction of prayer and gender $F(1, 25310)=9.938$, $p<0.005$, $\eta^2=0.000$, age was the control variable $F(1, 25310)=1149.252$, $p<0.000$, $\eta^2=0.043$.

Figure 5.8.7. Sense of happiness depending on gender and praying in difficult situations in life



NOTE the scale of the sense of happiness is inversely valued the lower the median, the greater the satisfaction with life; main effects of indicating God as a value $F(1, 25358)=5.939$, $p<0.05$, $\eta^2=0.000$, of gender $F(1, 25358)=4.070$, $p<0.05$, $\eta^2=0.000$, the effect of interaction of indicating God and gender $F(1, 25358)=7.265$, $p<0.01$, $\eta^2=0.000$, age was the control variable $F(1, 25358)=1200.625$, $p<0.000$, $\eta^2=0.045$.

Figure 5.8.8. Sense of happiness depending on gender and indicating God as one of the major values



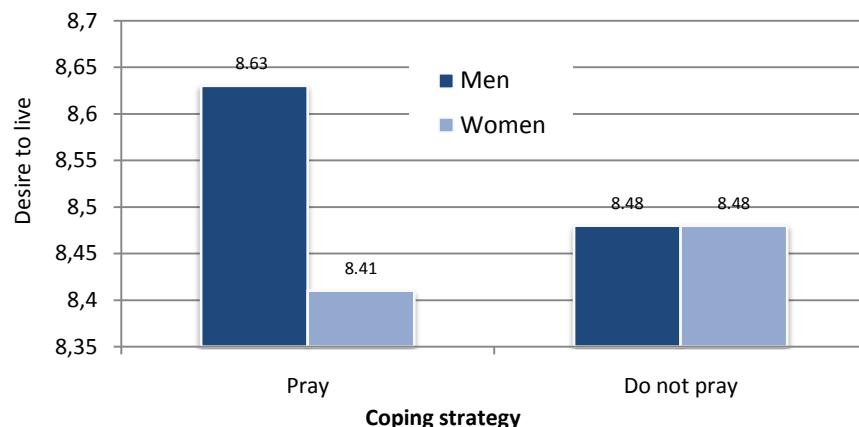
NOTE: the scale of the assessment of life is inversely valued: the lower the median, the greater the satisfaction with life; main effects: of prayer $F(1, 25317)=4.846, p<0.03, \eta^2= 0.000$, of gender $F(1, 25317)=15.612, p<0.000, \eta^2=0.001$, the effect of interaction of prayer and gender $F(1, 25317)=18.882, p<0.000, \eta^2= 0.001$, age was the control variable $F(1, 25317)=646.108, p<0.000, \eta^2=0.025$.

Figure 5.8.9. Assessment of life-as-a-whole depending on gender and praying in difficult situations in life



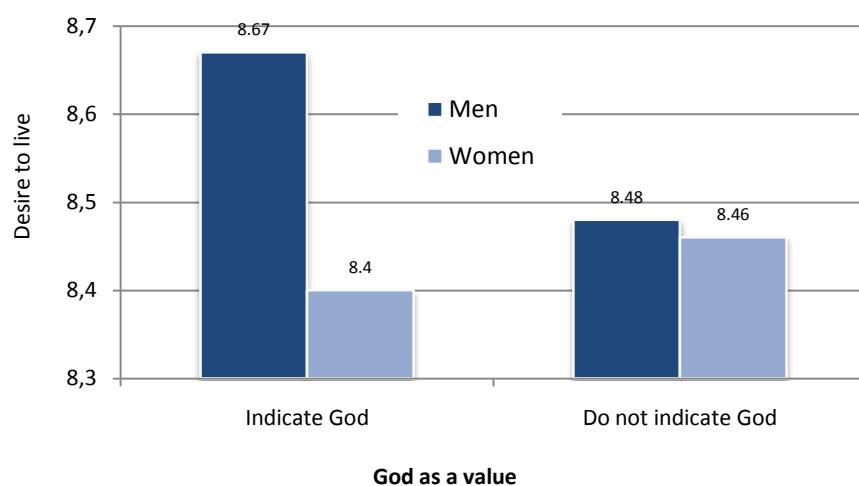
NOTE the scale of the assessment of life is inversely valued. the lower the median, the greater the satisfaction with life; main effects of indicating God $F(1, 25369)=6.195, p<0.05, \eta^2=0.000$, of gender $F(1, 25369)=24.573, p<0.000, \eta^2=0.001$, the effect of indicating God and gender $F(1, 25369)=25.349, p<0.000, \eta^2=0.001$, age was the control variable $F(1, 25369)=658.570, p<0.000, \eta^2=0.025$.

Figure 5.8.10. Assessment of life-as-a-whole depending on gender and indicating God as one of the major values



NOTE: main effects: of prayer $F(1, 25272)<3$, ns, of gender $F(1, 25272)=15.158$, $p<0.000$, $\eta^2=0.001$, effect of the interaction of prayer and gender $F(1, 25272)=14.378$, $p<0.000$, $\eta^2=0.001$, age was the control variable $F(1, 25272)=350.901$, $p<0.000$, $\eta^2=0.013$.

Figure 5.8.11. Desire to live depending on gender and praying in difficult situations in life



NOTE main effects of indicating God $F(1, 25311)<4$, ns, of gender $F(1, 25311)=16.476$, $p<0.000$, $\eta^2=0.001$, effect of the interaction of indicating God and gender $F(1, 25311)=12.272$, $p<0.000$, $\eta^2=0.000$, age was the control variable $F(1, 25311)=337.845$, $p<0.000$, $\eta^2=0.013$.

Figure 5.8.12. Desire to live depending on age and indicating God as a major value

5.8.4. Self-destructive behaviour

5.8.4.1. Smoking

On average, slightly more than every fourth adult Pole smokes less than 16 cigarettes a day. It is comforting that both the percentage of smokers and the number of cigarettes smoked is systematically decreasing (Table 5.8.8). As compared to 1995, the percentage of smokers decreased by as much as 11 percentage points, and in comparison with the beginning of the 1990s by approx. 15 percentage points. The number of cigarettes smoked decreased by as many as 2 compared with 1996.

Table 5.8.8. Percentage of smokers, former smokers among current non-smokers and average number of cigarettes smoked daily in samples of persons aged 18+ between 1995 and 2011

Variable	1995 N= 3042	1996 N=2350	2000 N=6617	2003 N=9602	2005 N=8788	2007 N=12629	2009 N=26134	2011 N=26378
Percentage of smokers	37.9	35.9	32.3	30.7	29.3	29.6	27.8	27.2
Percentage of former smokers among non-smokers	32.2	No data available	34.2	35.6	38.9	36.1	36.1	35.8
Average number of cigarettes smoked daily	No data available	17.27	16.48	16.22	15.88	15.99	15.81	15.43

Source of data: Czapiński, 1998 for the years 1995-1996; *Social Diagnosis* for the years 2000-2011.

Smokers are mostly men, the middle-aged, people with basic vocational education and poorer individuals (Table 5.8.9). Definitely the highest percentage of smokers is found among unemployed persons and those employed in the private sector. The lowest percentage of smokers is found among the elderly (65 and above at 12%), pensioners (17%), school and university students (13%), those with higher education (18%) and women (21%). Between 2000 and 2011, the percentage of smokers declined in a definite majority of socio-demographic groups. The most spectacular decrease occurred among entrepreneurs (from 42% to 28%), then the youngest including school and university students, public sector employees, those with higher education and residents of large towns.

In terms of voivodeships, the greatest proportion of smokers is found in the north-western region, while the smallest in the south-eastern region. The decline in that percentage was the greatest in the Lubelskie, Kujawsko-Pomorskie, Świętokrzyskie and Podlaskie Voivodeships. In none of the voivodeships did the percentage of smokers increase.

There are more „mild” smokers (up to 10 cigarettes a day) among women than men, younger people than middle-aged people (35-44 years); among those aged 45-64 the percentage of addictive smokers (more than 20 cigarettes a day) is very high. In this respect they are only outstripped by farmers (an average of 18 cigarettes, the most among all groups) and entrepreneurs. A relatively large percentage of "mild" smokers is found among those with higher education in comparison with those with primary and basic vocational education and among school and university students as compared especially to farmers.

In order to see which socio-demographic features are significantly related to the chance of being a smoker, with other controlled features, we performed a logistic regression analysis, the results of which are shown in Table 5.8.10. The likelihood of meeting a smoking woman is half as big as that of meeting a smoking man. Regarding the youngest people, the number of smokers is greater in all other age groups in a statistically significant way, with the exception of the eldest people (65 years and above) where smoking is by half less common than in the youngest group. The lower is the class of place of residence, the lower the chances of meeting a smoker, with the lowest in rural areas. Among those with higher education, the chance of meeting a smoker is two-thirds less than among those with the lowest level of educational level all other features being equal (here mostly age is in question). As compared to public sector employees, the chance of meeting a smoker is less among school and university students and greater among private sector employees, other professionally inactive people and especially unemployed persons (twice as likely). In terms of marital status, divorce and separation determine smoking to the greatest extent, while marriage to the smallest extent. Obviously, stress in life is conducive to smoking.

Table 5.8.9. Average number of cigarettes smoked daily by smokers in 2011, percentage of smokers in various socio-demographic groups between 2000 and 2011, and the change in the percentage of smokers between 2000 and 2011

Socio-demographic group	Number of cigarettes	2011	2009	2007	2005	2003	2000	Percentage change 2000-2011
Total	15.46	27.2	28.3	29.6	29.3	30.7	32.4	-16
Gender								
Men	17.06	33.6	35.5	37.7	38.0	40.5	43.3	-22
Women	13.09	20.5	20.8	22.9	21.7	22.2	22.7	-10
Age								
18-24 years	11.93	19.4	21.6	22.7	21.4	23.3	28.3	-31
25-34 years	14.52	27.3	28.8	32.0	33.1	35.2	35.6	-23
35-44 years	15.91	33.0	34.7	39.8	39.5	41.5	46.4	-29
45-59 years	16.48	36.7	37.7	37.3	37.6	38.5	37.3	-2
60-64 years	16.96	27.9	27.1	26.8	24.3	21.7	21.7	29
65 and above	14.90	12.1	12.3	12.2	11.4	12.9	12.4	-2
Place of residence								
Towns with more than 500,000 inhabitants	14.80	26.4	29.4	31.8	31.7	32.9	31.3	-16
Towns with 200,000-500,000 inhabitants	13.95	27.4	29.6	31.1	32.0	33.2	37.0	-26
Towns with 100,000-200,000 inhabitants	15.45	30.8	30.9	32.3	29.2	33.1	35.0	-12
Towns with 20,000-100,000 inhabitants	15.64	28.5	28.5	29.6	31.0	31.4	31.3	-9
Towns with fewer than 20,000 inhabitants	15.18	28.8	30.9	31.6	32.6	32.6	34.7	-17
Rural areas	16.14	24.2	24.8	27.2	25.7	27.9	29.0	-17
Voivodeship								
Dolnośląskie	15.23	31.1	32.8	30.2	31.2	33.7	33.0	-6
Kujawsko-Pomorskie	15.50	29.1	28.4	34.7	37.9	38.8	38.8	-25
Lubelskie	15.17	24.1	24.9	28.7	31.1	30.5	32.4	-26
Lubuskie	15.52	30.7	30.8	32.7	29.2	32.0	38.5	-20
Łódzkie	17.09	25.1	28.3	28.0	29.2	30.0	29.8	-16
Małopolskie	14.88	22.3	22.0	28.1	24.1	24.5	28.2	-21
Mazowieckie	16.21	27.6	28.0	29.6	29.7	29.8	32.2	-14
Opolskie	14.43	24.6	28.4	31.1	33.9	30.1	34.1	-28
Podkarpackie	13.74	20.1	22.1	25.0	22.8	24.4	24.4	-18
Podlaskie	15.33	24.1	27.6	29.2	28.1	31.6	31.3	-23
Pomorskie	15.02	27.4	28.7	30.2	25.6	32.3	32.7	-16
Śląskie	14.97	27.8	28.6	29.5	29.7	32.2	34.8	-20
Świętokrzyskie	14.99	23.6	23.7	21.6	25.6	24.4	31.2	-24
Warmińsko-Mazurskie	15.91	29.5	33.6	31.0	30.3	33.3	33.0	-11
Wielkopolskie	15.65	27.3	27.6	29.4	30.5	31.0	32.4	-16
Zachodniopomorskie	16.01	32.0	32.9	36.6	31.9	34.8	33.0	-3
Educational level								
Primary and lower education	17.02	28.0	27.0	27.5	26.6	25.1	27.0	4
Vocational education	16.35	34.5	36.1	36.9	36.3	41.5	44.1	-25
Secondary	14.67	26.5	27.1	28.9	28.1	29.2	30.4	-13
Higher and post-secondary	13.11	17.7	19.1	20.5	21.7	23.1	23.6	-24
Household income per equivalent unit								
Lower quartile	16.25	32.4	32.3	37.4	39.0	37.0	39.9	-19
Above lower quartile	15.47	27.1	27.1	32.3	27.1	30.9	35.2	-23
Below upper quartile	15.25	24.3	27.1	28.6	26.7	28.2	29.0	-16
Upper quartile	14.57	23.9	25.6	24.5	25.6	27.1	30.3	-21
Social and professional status								
Public sector	15.12	25.7	27.3	29.1	28.9	31.1	34.4	-25
Private sector	15.81	36.1	36.5	41.9	38.6	39.8	43.7	-17
Private entrepreneurs	16.30	28.3	29.0	33.5	34.0	44.2	42.2	-33
Farmers	18.22	31.4	33.4	30.7	30.2	34.2	33.3	-6
Pensioners	16.42	26.6	26.5	27.4	27.6	28.9	28.8	-7
Retirees	15.28	17.1	17.3	17.2	17.5	16.4	17.1	0
School and university students	10.73	13.3	13.8	13.9	13.6	15.5	17.4	-24
Unemployed persons	15.71	43.0	42.6	41.9	46.6	44.2	46.0	-7
Other professionally inactive	14.73	29.3	36.0	37.7	36.7	38.6	36.0	-19

Table 5.8.10. Results of logistic regression analysis for being a smoker

Predictor	p	Exp(B)
Men	Ref.	
Women	0.000	0.532
Aged 16-24 years	Ref.	
Aged 25-34 years	0.000	1.447
Aged 35-44 years	0.000	1.697
Aged 45-59 years	0.000	1.843
Aged 60-64 years	0.005	1.350
Aged 65+ years	0.000	0.454
Towns with more than 500,000 inhabitants	Ref.	
Towns with 200,000 to 500,000 inhabitants	0.344	0.940
Towns with 100,000 to 200,000 inhabitants	0.940	0.995
Towns with 20,000 to 100,000 inhabitants	0.158	0.924
Towns with fewer than 20,000 inhabitants	0.003	0.832
Rural areas	0.000	0.600
Primary and lower education	Ref.	
Basic vocational/lower secondary education	0.000	0.826
Secondary education	0.000	0.589
Higher and post-secondary	0.000	0.303
Public sector employees	Ref.	
Private sector employees	0.000	1.335
Private entrepreneurs	0.101	0.875
Farmers	0.513	1.059
Pensioners	0.351	0.930
Retirees	0.549	1.049
School and university students	0.000	0.468
Unemployed persons	0.000	2.006
Other professionally inactive	0.007	1.205
Unmarried men/women	Ref.	
Married women/men	0.000	0.731
Widower/widow	0.871	0.987
Divorced	0.000	1.772
Separated	0.006	1.594
Stress in life – low level	Ref.	
Stress in life – medium level	0.000	1.338
Stress in life – high level	0.000	1.734
Total percentage of explained variation		11.3
Cox & Snell $R^2 \times 100$		
Total percentage of explained variation		16.5
Nagelkerke $R^2 \times 100$		

* Ref. stands for the reference group

5.8.4.2. Alcohol abuse

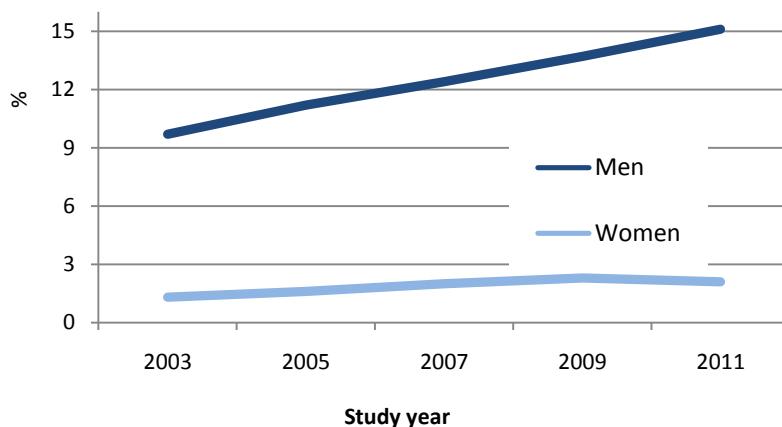
Two questions in the individual questionnaire concerned alcohol. One was related to the usual reaction to problems or difficult situations in life and included the statement "*I drink alcohol*" as one of the options, the other one made a straightforward reference to alcohol abuse "*In the last year I drank too much alcohol*". The percentage of persons who react to problems by drinking alcohol is lower (3.4%, against 4.4% two years earlier) than the percentage of persons who admit to abusing alcohol (6.8%, against 6.5% two years earlier) (Table 5.8.11). The percentage of those who abuse alcohol has been the greatest since the beginning of measurements (since 1991).

Table 5.8.11. Percentage of those who admit to abusing alcohol and drinking alcohol in difficult situations in life between 1991 and 2011 in the population of adult Poles

Variable	1991 N=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	2011 N=23076
Alcohol abuse	6.6	6.4	6.3	5.4	5.3	4.4	6.0	5.8	6.5	6.8
Alcohol as a solution to problems in life	no data	no data	4.3	3.9	3.9	3.4	3.9	3.5	4.4	3.4

Source of data: Czapinski, 1998 for the years 1991-1997; Social Diagnosis for the years 2000-2011.

In the 2003-2011 panel sample, the percentage of men who abuse alcohol increased from 9.7% to 15.1%, while among women it grew from 1.3% to 2.1% (Figure 5.8.13). This increased the difference between women and men from 8.4 to 13 percentage points.



NOTE: main effects: of study year $F(4, 1820)=4.047, p<0.005, \eta^2=0.009$, of gender $F(1, 1823)=168.392, p<0.000, \eta^2=0.085$, effect of the interaction of study year and gender $F(4, 1820)=3.165, p<0.05, \eta^2=0.007$, age was the control variable $F(1, 1823)=8.340, p<0.01, \eta^2=0.005$.

Figure 5.8.13. Percentage of women and men who abused alcohol in five waves in the panel sample (persons who participated in the survey in all three waves)

Men admit that in the past year they drank too much alcohol 5 times more often than women (nearly six times more often six years ago). The inhabitants of large towns drink too much alcohol more often than the residents of small towns and rural areas (though these differences have decreased considerably), middle-aged persons more often than older and younger persons, the rich more rarely now than the poor (in the past the opposite was true), private entrepreneurs slightly more often than employees hired by them (an increase in either group), unemployed persons more than twice as often as public sector employees, farmers more often than private sector employees, but more often than public sector employees, school and university students more often than public sector employees and 50% more often than in 2005 (Table 5.8.12).

The distribution of those who drink alcohol in difficult situations in life in terms of socio-demographic groups is similar to the distribution of the percentage of those who abuse alcohol.

In order to see which socio-demographic features are significantly related to alcohol abuse, with other features controlled, we performed a logistic regression analysis, the results of which are shown in Table 5.8.13. The likelihood of abusing alcohol is more than 5 times less among women than among men. In comparison with the youngest respondents (16-24 years), the probability of the incidence of the problem with alcohol is significantly greater in the 34-44 age group and by half less in the eldest group (65 and above). A factor that strongly differentiates the frequency of alcohol abuse is the class of place of residence. In smaller towns and especially in rural areas, the problem is much less common than in large agglomerations. Those with higher education are less likely to abuse alcohol than those with primary education. Alcohol abuse is more common among unemployed persons than in other social and professional groups, with other features controlled for, and then among other professionally inactive people, among entrepreneurs, school and university students and private sector employees. Married and widowed persons abuse alcohol half or nearly half as often as single persons. Stress in life is extremely strongly correlated with alcohol abuse. Those who experience high levels of stress abuse alcohol 4.5 times more often as compared to those who experience little stress. Obviously, the cause-and-effect relationship may be reversible here; stress may be conducive to drinking, and alcohol abuse may cause various problems in life.

Table 5.8.12. Percentage of those aged 16 and above who admit they drank too much alcohol in the past year and drink alcohol in difficult situations in life in socio-demographic cross-sections

Group	Drink too much alcohol				Drink alcohol when experiencing problems			
	2011	2009	2007	2005	2011	2009	2007	2005
Total	6.84	6.45	5.78	5.96	3.42	4.38	3.45	3.81
Gender								
Men	11.80	10.91	10.37	10.66	5.88	7.55	6.34	7.04
Women	2.35	2.38	1.80	1.84	1.19	1.49	1.06	0.97
Age								
Under 24	7.11	7.25	5.38	4.91	2.14	3.45	2.32	4.14
25-34 years	7.56	6.61	5.62	6.87	3.20	4.33	2.77	4.02
35-44 years	9.59	8.39	7.97	8.67	4.28	4.87	5.30	4.41
45-59 years	7.82	7.78	6.93	6.89	4.91	6.29	4.65	2.51
60-64 years	5.61	5.11	4.86	5.54	3.51	3.63	3.96	4.81
65 and above	1.97	1.80	1.96	1.78	1.60	1.95	1.51	3.45
Place of residence								
Towns with more than 500,000 inhabitants	7.67	8.41	7.07	7.14	2.63	4.92	4.00	4.28
Towns with 200,000-500,000 inhabitants	8.10	8.45	6.91	6.60	3.44	4.80	3.46	4.45
Towns with 100,000-200,000 inhabitants	8.14	7.67	5.58	4.90	3.85	4.06	2.79	3.12
Towns with 20,000-100,000 inhabitants	6.85	5.39	4.69	6.72	3.28	3.81	3.07	3.89
Towns with fewer than 20,000 inhabitants	6.75	5.78	5.77	7.05	3.36	3.97	3.74	3.93
Rural areas	6.00	5.75	5.39	4.81	3.67	4.59	3.53	3.53
Voivodeship								
Dolnośląskie	8.31	5.92	4.94	7.34	3.09	3.51	3.18	4.14
Kujawsko-Pomorskie	5.16	6.54	5.43	6.60	2.84	5.72	3.31	4.02
Lubelskie	7.28	6.02	6.06	7.05	3.92	4.86	3.57	4.41
Lubuskie	8.57	9.18	5.89	4.41	4.06	4.38	4.23	2.51
Łódzkie	4.50	5.68	5.61	7.81	2.72	3.69	2.32	4.81
Małopolskie	6.23	4.90	5.38	3.45	2.78	3.17	3.24	3.45
Mazowieckie	6.76	7.82	6.01	6.51	3.64	5.63	4.19	3.33
Opolskie	6.13	6.36	4.24	5.25	3.72	4.99	1.88	2.89
Podkarpackie	5.39	4.64	6.07	4.16	2.36	3.14	3.50	2.44
Podlaskie	7.63	7.58	7.81	7.05	2.72	4.49	4.44	4.08
Pomorskie	8.14	6.00	5.96	5.68	3.67	3.57	3.34	3.85
Śląskie	6.95	7.02	5.16	6.31	3.67	4.33	3.26	3.88
Świętokrzyskie	7.88	5.24	3.88	6.35	5.45	4.94	3.47	5.06
Warmińsko-Mazurskie	7.73	5.56	9.23	9.52	5.70	6.78	6.82	7.30
Wielkopolskie	7.29	6.36	4.66	3.39	2.67	3.18	1.89	2.16
Zachodniopomorskie	6.85	8.28	6.48	5.81	3.78	6.50	4.22	4.92
Educational level								
Primary and lower education	6.36	5.14	4.79	5.03	4.03	4.88	4.00	434
Basic vocational/lower secondary	8.33	7.61	6.97	6.93	4.33	5.42	3.46	439
Secondary	6.31	6.18	5.18	6.03	2.83	3.79	2.79	347
Higher and post-secondary	5.74	6.00	5.18	5.16	2.49	3.15	3.07	254
Per capita income								
Lower quartile	8.08	6.81	6.96	8.44	4.64	5.99	4.75	5.85
Median 50%	6.32	5.78	5.20	5.83	3.25	3.93	3.29	3.43
Upper quartile	6.96	7.66	5.59	6.25	2.64	4.21	2.80	3.20
Social and professional status								
Public sector	5.18	5.48	5.00	5.81	2.59	3.59	3.02	3.25
Private sector	9.79	8.36	8.83	7.39	4.26	5.08	5.23	4.19
Private entrepreneurs	11.33	9.69	9.79	9.27	5.10	5.42	5.23	6.94
Farmers	7.28	8.89	6.34	6.09	4.74	6.87	3.97	3.96
Pensioners	5.05	5.23	5.09	6.78	2.75	4.45	3.02	4.94
Retirees	2.60	2.67	2.24	2.60	1.99	2.28	1.80	1.66
School and university students	6.27	6.35	3.78	4.22	2.00	3.04	1.50	1.34
Unemployed persons	12.19	11.24	8.54	11.52	6.95	7.87	5.35	8.06
Other professionally inactive	6.52	6.81	4.45	4.84	3.93	5.86	3.37	3.90

Table 5.8.13. Results of logistic regression analysis for alcohol abuse

Predictor	<i>p</i>	Exp(B)
Men	Ref.	
Women	0.000	.187
Aged 16-24 years	Ref.	
Aged 25-34 years	0.433	1.093
Aged 35-44 years	0.002	1.468
Aged 45-59 years	0.066	1.260
Aged 60-64 years	0.163	1.279
Aged 65+ years	0.010	.571
Towns with more than 500,000 inhabitants	Ref.	
Towns with 200,000 to 500,000 inhabitants	0.824	0.977
Towns with 100,000 to 200,000 inhabitants	0.714	0.958
Towns with 20,000 to 100,000 inhabitants	0.038	0.823
Towns with fewer than 20,000 inhabitants	0.011	0.766
Rural areas	0.000	0.662
Primary and lower education	Ref.	
Basic vocational/lower secondary education	0.000	0.703
Secondary education	0.000	0.624
Higher and post-secondary	0.000	0.584
Public sector employees	Ref.	
Private sector employees	0.000	1.540
Private entrepreneurs	0.000	1.616
Farmers	0.309	1.175
Pensioners	0.914	1.016
Retirees	0.864	1.029
School and university students	0.001	1.646
Unemployed persons	0.000	2.508
Other professionally inactive	0.000	1.826
Unmarried men/women	Ref.	
Married women/men	0.000	0.498
Widower/widow	0.002	0.573
Divorced	0.320	1.139
Separated	0.772	0.915
Stress in life – low level	Ref.	
Stress in life – medium level	0.000	2.133
Stress in life – high level	0.000	4.586
Total percentage of explained variation		6.8
Cox & Snell $R^2 \times 100$		
Total percentage of explained variation		17.3
Nagelkerke $R^2 \times 100$		

* Ref. stands for the reference group

5.8.4.3. Drug use

The percentage of persons who admit to using drugs increased until 2005. In this year's study it increased slightly again as compared with 2009 (Table 5.10.14) and is significantly higher than in the entire period covered by research until 2005 (an increase of more than three times as compared to 1992).

Table 5.8.14. Percentage of adult Poles who between 1991 and 2011 admitted to using drugs

1992 N=3396	1993 N=2307	1994 N=2298	1995 N=3024	1996 N=2329	1997 N=2100	2000 N=6608	2003 N=9620	2005 N=8609	2007 N=12323	2009 N=23573	2011 N=25768
0.4	0.3	0.3	0.7	0.9	0.9	1.0	0.9	1.3	1.0	1.2	1.3

Source of data Czapinski, 1998 for the years 1991-1997; Social Diagnosis for the years 2000-2011.

At present, persons who are most at risk of drug addiction include men, school and university students (younger persons in general), inhabitants of large towns, unemployed persons and other professionally inactive persons, persons with basic vocational and secondary education and in terms of territorial differences the residents of the Zachodniopomorskie and the Lubuskie Voivodeships (Table 5.8.15).

Table 5.8.15. Have you tried drugs in the last year? (in % of positive answers in entire samples of those aged 16 and above)

Group	2011	2009	2007	2005	2003	2000
Total	1.27	1.16	1.03	1.31	0.96	0.96
Gender						
Men	2.11	1.78	1.67	1.91	1.51	1.59
Women	0.51	0.58	0.51	0.79	0.48	0.42
Age						
Under 24	4.61	3.75	3.67	3.83	3.91	3.75
25-34 years	1.91	2.14	1.54	2.45	1.31	1.77
35-44 years	0.89	0.47	0.53	0.48	0.05	0.30
45-59 years	0.15	0.14	0.05	0.27	0.08	0.30
Place of residence						
Towns with more than 500,000 inhabitants	2.17	2.60	1.54	2.64	2.03	1.66
Towns with 200,000-500,000 inhabitants	2.29	0.93	1.91	1.80	1.91	1.97
Towns with 100,000-200,000 inhabitants	1.46	1.74	1.28	1.91	0.60	1.03
Towns with 20,000-100,000 inhabitants	1.40	1.09	0.65	1.44	0.68	1.00
Towns with fewer than 20,000 inhabitants	1.19	1.18	1.54	0.99	0.80	0.73
Rural areas	0.64	0.66	1.91	0.72	0.63	0.51
Voivodeship						
Dolnośląskie	1.48	1.21	0.92	1.04	1.57	1.05
Kujawsko-Pomorskie	1.74	1.13	1.63	1.25	1.64	0.68
Lubelskie	1.27	0.53	1.58	0.47	1.08	1.38
Lubuskie	1.86	1.26	1.17	1.15	1.24	1.19
Lódzkie	0.84	1.13	0.85	1.23	0.68	1.35
Małopolskie	0.48	0.81	0.87	1.33	0.43	1.22
Mazowieckie	1.03	2.07	0.84	2.20	1.01	0.63
Opolskie	0.96	1.20	1.11	0.96	0.66	0.72
Podkarpackie	1.07	0.97	0.98	1.44	0.89	0.44
Podlaskie	1.02	0.44	1.18	0.97	0.61	0.19
Pomorskie	0.90	0.81	1.77	2.17	1.49	2.53
Śląskie	1.31	1.06	0.91	1.23	1.15	0.55
Świętokrzyskie	0.81	0.44	1.00	1.07	0.80	0.31
Warmińsko-Mazurskie	1.50	0.80	0.55	1.04	0.58	1.33
Wielkopolskie	1.52	1.34	0.83	0.70	0.41	0.00
Zachodniopomorskie	3.57	1.59	1.08	1.53	0.96	2.19
Educational level						
Primary and lower education	0.53	0.55	0.34	0.74	1.02	0.69
Basic vocational/lower secondary	1.61	1.15	1.47	1.51	0.67	1.16
Secondary	1.61	1.43	1.16	1.55	1.41	0.98
Higher and post-secondary	0.85	1.26	0.70	1.17	0.55	1.04
Per capita income						
Lower quartile	1.02	0.88	1.39	0.96	0.53	0.54
Median 50%	1.31	1.16	0.98	1.25	1.15	1.14
Upper quartile	1.38	1.47	0.86	1.95	1.27	1.29
Social and professional status						
Public sector	0.72	0.19	0.32	0.43	0.38	0.66
Private sector	1.20	1.39	1.58	1.47	1.23	1.29
Private entrepreneurs	1.18	2.07	1.44	1.53	0.34	0.65
Farmers	0.22	0.14	0.14	0.17	0.00	0.22
Pensioners	0.17	0.59	0.59	0.87	0.44	0.44
Retirees	0.07	0.03	0.00	0.10	0.23	0.00
School and university students	4.26	3.38	3.37	4.31	4.06	5.76
Unemployed persons	1.87	2.65	1.05	2.03	1.42	1.09
Other professionally inactive	1.95	1.46	1.06	1.28	0.55	1.20

Results of logistic regression (Table 5.8.16) show that women use drugs four times less often than men, older people (aged more than 44) 20 times less often than the youngest (under 24), residents of small towns and rural areas two to four times less often than the residents of the largest agglomerations (more than 500,000 inhabitants), other professionally inactive people more than twice as often as public sector employees, unmarried persons nearly three times as often as married people and those with higher education nearly two times less often than those with primary education.

The high risk of drug addiction is differentiated by the level of stress in life, but similarly as in the case of alcohol, it is difficult to say what the direction of the relationship is; drugs may intensify problems in life, but also stress may be conducive to using drugs.

Table 5.8.16. Results of logistic regression for using drugs

Predictor	<i>p</i>	Exp(<i>B</i>)
Men	Ref.	
Women	0.000	0.252
Aged 16-24 years	Ref.	
Aged 25-34 years	0.011	0.630
Aged 35-44 years	0.000	0.357
Aged 45-59 years	0.000	0.058
Aged 60-64 years	0.000	0.046
Aged 65+ years	0.000	0.016
Towns with more than 500,000 inhabitants	Ref.	
Towns with 200,000 to 500,000 inhabitants	0.746	0.940
Towns with 100,000 to 200,000 inhabitants	0.015	0.545
Towns with 20,000 to 100,000 inhabitants	0.001	0.520
Towns with fewer than 20,000 inhabitants	0.000	0.435
Rural areas	0.000	0.239
Primary and lower education	Ref.	
Basic vocational/lower secondary education	0.630	1.128
Secondary education	0.543	1.166
Higher and post-secondary	0.047	0.558
Public sector employees	Ref.	
Private sector employees	0.402	0.808
Private entrepreneurs	0.919	1.037
Farmers	0.325	0.493
Pensioners	0.398	0.593
Retirees	0.787	1.244
School and university students	0.075	1.646
Unemployed persons	0.244	1.418
Other professionally inactive	0.004	2.298
Unmarried men/women	Ref.	
Married women/men	0.000	0.383
Widower/widow	0.850	0.874
Divorced	0.147	0.440
Separated	0.995	0.000
Stress in life – low level	Ref.	
Stress in life – medium level	0.000	2.734
Stress in life – high level	0.000	4.601
Total percentage of explained variation		3.1
Cox & Snell $R^2 \times 100$		
Total percentage of explained variation		24.3
Nagelkerke $R^2 \times 100$		

* Ref. stands for the reference group

5.8.5. Criminals and victims of crime

As shown in Table 5.8.17, the number of victims of theft and burglary increased between 1993 and 2003, yet no change was observed as regards the percentage of victims of assaults and battery. In that period, there was also an increase in the percentage of persons in survey samples who had been accused in both criminal and civil law court cases. After 2003, the percentage of victims of theft decreased significantly (by half), as did the percentage of home and car burglaries (which halved between 2003 and 2011) and the percentage of victims of assaults and battery (by half in relation to 2000). This explains a high increase in the sense of safety over that period (the percentage of persons who were satisfied with the level of safety in their place of residence increased by 50% since 2000; i.e. about as much as the decrease in the number of persons falling victim to theft, burglaries and assaults).

It is interesting that a majority of such experiences are stable over time for individual persons. Someone who fell victim to theft or assault and battery in one year, was significantly more at risk of falling victim to those crimes after two, four, and in some cases even six years. What is not surprising is the stability of the criminals' experiences; being accused and detained by the police increases the risk of being accused or detained by the police many years later to a statistically significant extent (all correlations for perpetrators and victims of crimes between 2005 and 2011 are statistically significant). Thus, one may stipulate not only that there are predispositions to breaking the law, but also that there are stable – in respect of certain categories of experiences – features of the victim, which confirms the theses of victimologists; some people are more exposed to the repeated experience of falling victim to aggression than others.

Table 5.8.17. Percentage of those aged 18 and above who admit to experiences related to breaking the law, between 1993 and 2011

Experience	1993	1995	2000	2003	2005	2007	2009	2011
Victim of theft	5.1	5.4	6.8	5.6	5.7	4.3	3.3	2.8
Victim of assault and battery	1.6	1.7	1.5	1.3	1.2	1.1	0.9	0.7
Victim of home burglary	1.2	1.2	2.0	4.1*	3.5	2.1	1.7	1.5
Accused in a criminal case	0.5	0.4	1.0	1.1	1.2	1.5	1.2	1.1
Accused in a civil case	0.4	0.6	0.8	0.9	0.9	0.9	0.7	0.6
Detained by the police	no data	no data	no data	2.2	2.5	3.2	3.4	3.3
A close person was arrested or in conflict with the law	no data	no data	2.9	2.8	3.6	3.8	3.0	2.7
Caused a collision or road traffic accident	no data	1.6	1.7	1.7				

* Since 2003, the question concerned home or car burglary.

Source of data: Czapinski, 1998 for the years 1993-1995; *Social Diagnosis* for the years 2000-2011.

It is worth noting that among those accused of criminal acts or detained by the police, the percentage of victims of theft, assault and battery is much higher than in the general population (Table 5.8.18). This suggests that many crimes are committed within criminal milieus. Those who break the law are themselves more at risk of falling prey to violence on the part of other criminals than law-abiding citizens.

Table 5.8.18. Intercorrelations of experiences related to violating the law in 2011

Experience	2	3	4	5	6	7	8
1. I was robbed	0.179	0.308	0.083	0.070	0.081	0.051	0.073
2. I was mugged and beaten		0.090	0.133	0.127	0.126	0.039	0.064
3. My home or car was broken into			0.053	0.036	0.074	0.052	0.031
4. I was charged with a criminal offence				0.261	0.357	0.082	0.119
5. I was detained by the police					0.222	0.138	0.107
6. I was accused in a civil case						0.070	0.075
7. I caused a collision or road traffic accident							0.045
8. A close person was arrested or in conflict with the law							

NOTE: all correlation coefficients are statistically significant at the level of $p=0.000$.

Regardless of the nature of the experience (the role of the victim or of the criminal), experiences related to violating the law are correlated with the drinking of alcohol (Table 5.8.19). Those who abuse alcohol or drink it in difficult situations in life more often become perpetrators, but also fall victim to aggression more often.

Table 5.8.19. Correlations of experiences related to breaking the law with drinking alcohol

Experience	Alcohol abuse	Drinking alcohol when experiencing problems
I was robbed	0.065*	0.041*
I was mugged and beaten	0.130*	0.127*
My home or car was broken into	0.047*	0.005
I was charged with a criminal offence	0.101*	0.079*
I was detained by the police	0.145*	0.101*
I was accused in a civil case	0.090*	0.081*
I caused a collision or road traffic accident	0.053*	0.008
A close person was arrested or in conflict with the law	0.077*	0.054*

* statistically significant correlations at the level of $p=0.000$.

In 2007, we asked for the first time about collisions or road traffic accidents. In general, the percentage of those who caused road incidents is directly proportional to the level of motorization in individual groups (Table 5.8.20); it is the highest among young people (up to 34 years), residents of the largest towns, people with higher education, those relatively well-off and those who work (excluding farmers) especially among private entrepreneurs.

Both the percentage of victims and that of perpetrators are considerably higher among men than women (Table 5.8.20); it is also much higher in younger age groups compared to elderly people. On average, the frequency of experiences related to criminal offences is two to three times greater in the largest towns than in rural areas and small towns.

The relationship between the incidence of victims and criminals and educational level is particularly interesting. Those with higher and post-secondary education fall victim to theft and home or car burglaries the most often, which presumably results from the level of affluence of that group of citizens. This is also evidenced by the high ratio of victims of that type of offence among those with higher income and especially among private entrepreneurs, every twentieth of whom – and every fifteenth, four years ago –

was robbed, and every twenty-sixth experienced a home or car burglary. Criminals, on the other hand, are much more likely to have basic vocational education and a lower income. The greatest percentage of persons accused of criminal acts and detained by the police are found – except for graduates of vocational schools – among school and university students, unemployed persons, private sector employees and young people (under 24).

Table 5.8.20. Percentage of those who admit to having experiences related to breaking the law in the entire sample

Group	Victim of theft			Victim of assault and battery			Victim of home/car burglary			Accused in a criminal case		
	2011	2009	2007	2011	2009	2007	2011	2009	2007	2011	2009	2007
Total	2.8	3.3	4.4	0.8	0.9	1.1	1.1	1.7	2.1	1.1	1.2	1.5
Gender												
Men	3.2	3.5	4.4	1.3	1.4	1.7	1.9	2.1	2.6	1.8	2.0	2.5
Women	2.5	3.0	4.3	0.3	0.0	0.6	1.1	1.3	1.6	0.6	0.6	0.7
Age												
Under 24	3.1	4.5	5.7	1.0	1.7	2.3	1.4	1.1	1.1	1.6	2.5	2.6
25-34 years	2.1	3.3	4.8	0.6	0.8	0.9	1.6	2.1	3.3	1.3	1.2	2.0
35-44 years	2.7	2.6	4.1	0.7	0.6	0.9	1.5	2.1	2.4	1.1	1.0	1.6
45-59 years	3.0	3.0	3.6	0.8	0.8	0.7	2.0	1.7	2.2	0.6	1.2	1.4
60-64 years	2.5	2.8	3.8	0.1	0.8	1.0	0.8	1.2	1.6	0.4	0.3	0.3
65 and above	3.3	3.3	4.0	0.4	0.7	1.1	0.9	1.4	1.4	0.4	0.6	0.5
Place of residence												
Towns with more than 500,000 inhabitants	4.3	4.9	6.9	1.0	1.1	1.4	2.4	2.3	3.4	0.9	1.2	2.6
Towns with 200,000-500,000 inhabitants	4.0	6.0	7.4	1.0	1.2	1.9	2.5	3.1	3.5	1.1	1.6	1.2
Towns with 100,000-200,000 inhabitants	4.1	3.8	5.9	0.8	1.4	1.3	1.4	1.8	2.8	0.9	1.6	1.5
Towns with 20,000-100,000 inhabitants	2.8	2.6	4.1	0.7	0.8	1.1	2.0	1.5	2.0	1.2	1.1	1.7
Towns with fewer than 20,000 inhabitants	2.4	3.0	4.2	1.1	0.8	1.5	1.0	1.7	2.0	1.6	0.9	1.6
Rural areas	1.9	2.3	2.5	0.5	0.7	0.7	0.8	1.1	1.1	1.0	1.3	1.2
Voivodeship												
Dolnośląskie	3.3	3.8	3.7	0.7	1.0	1.3	1.9	1.8	2.5	0.7	1.7	1.3
Kujawsko-Pomorskie	2.6	3.3	5.3	1.0	0.8	1.7	1.6	1.6	3.3	1.0	0.7	1.6
Lubelskie	2.5	3.5	5.0	0.7	1.0	1.3	1.3	1.5	3.3	0.4	1.0	1.7
Lubuskie	2.3	3.0	5.0	0.8	1.9	0.6	1.0	2.2	0.9	1.8	2.4	1.6
Łódzkie	1.7	2.7	5.0	0.3	1.1	1.0	1.3	1.6	2.9	1.0	1.3	1.6
Małopolskie	2.1	2.3	3.7	0.5	0.8	0.7	1.0	0.9	2.3	1.1	0.8	1.0
Mazowieckie	3.7	3.6	6.0	1.3	0.7	1.3	1.4	1.9	1.5	1.0	1.3	2.2
Opolskie	2.2	2.0	3.3	1.1	0.2	1.3	1.7	1.4	1.0	1.8	0.5	1.4
Podkarpackie	1.5	2.2	3.3	0.3	0.3	1.1	0.2	0.8	1.3	1.1	0.6	1.1
Podlaskie	2.0	4.4	1.5	1.1	1.5	1.2	0.8	1.0	1.8	1.4	1.6	1.0
Pomorskie	3.5	3.8	4.1	0.6	0.9	0.8	1.6	1.4	1.6	1.0	1.2	1.0
Śląskie	3.2	3.6	6.1	0.6	1.2	1.3	2.0	2.4	2.5	1.2	1.7	1.8
Świętokrzyskie	2.3	2.2	3.0	0.6	0.9	0.7	0.8	1.1	1.7	1.6	1.4	1.3
Warmińsko-Mazurskie	2.5	3.7	3.0	1.0	1.3	1.8	0.5	1.6	0.5	1.2	0.9	1.9
Wielkopolskie	3.6	3.1	2.7	0.9	0.7	0.6	2.2	1.4	2.2	1.1	0.7	1.4
Zachodniopomorskie	3.2	4.6	3.2	0.7	0.7	1.0	2.8	3.1	1.6	2.0	2.0	1.3
Educational level												
Primary and lower education	2.1	2.8	2.7	1.1	0.8	1.3	0.7	1.1	1.1	1.4	1.1	1.4
Basic vocational/lower secondary	3.0	3.2	4.8	0.9	1.1	1.5	1.5	1.6	1.7	1.7	2.0	2.3
Secondary	2.9	3.4	4.6	0.8	1.0	1.0	1.5	1.7	2.3	0.7	0.9	1.3
Higher and post-secondary	2.9	3.5	4.7	0.3	0.5	0.6	2.0	2.1	3.2	0.7	0.6	0.7
Per capita income												
Lower quartile	2.9	3.3	3.9	1.1	1.5	1.2	1.1	1.5	1.5	1.7	1.8	2.6
Median 50%	2.6	3.2	4.1	0.7	0.8	1.0	1.4	1.6	2.0	1.1	1.2	1.4
Upper quartile	3.2	3.4	4.8	0.5	0.6	1.2	2.1	1.8	2.3	0.7	0.9	1.2
Social and professional status												
Public sector	2.2	2.4	4.3	0.2	0.4	0.4	1.7	1.6	2.4	0.8	0.9	1.1
Private sector	2.4	3.4	4.1	0.9	0.7	1.2	1.8	2.0	2.7	1.7	1.5	2.1
Private entrepreneurs	5.2	5.2	6.7	0.4	0.3	1.2	3.8	5.1	4.1	1.3	1.5	1.4
Farmers	1.5	1.3	2.1	0.4	0.6	0.3	0.6	1.0	1.9	0.8	0.9	1.1
Pensioners	3.3	4.2	4.1	0.8	1.3	1.1	1.1	1.9	1.7	0.9	1.2	1.1
Retirees	2.8	2.9	4.3	0.5	0.6	1.1	1.4	1.1	1.8	0.4	0.6	0.5
School and university students	4.0	4.1	6.1	1.5	1.5	2.0	0.8	0.8	0.8	1.4	1.7	1.3
Unemployed persons	2.8	3.2	4.1	1.5	2.2	1.9	1.2	1.8	1.4	2.2	1.9	3.6
Other professionally inactive	2.3	3.6	3.7	0.8	1.2	0.9	1.0	1.5	2.3	0.9	1.6	2.6

Table 5.8.20. continued

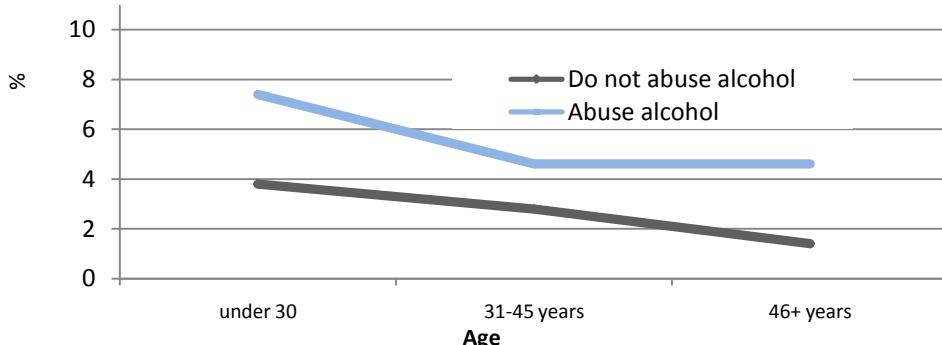
Group	Detained by the police			Accused in a civil case			Caused a collision/road traffic accident		
	2011	2009	2007	2011	2009	2007	2011	2009	2007
Total	3.3	3.4	3.3	0.6	0.7	0.9	1.7	1.7	1.6
Gender									
Men	5.8	5.9	5.8	0.9	1.2	1.6	2.4	2.6	2.5
Women	1.0	1.1	1.2	0.3	0.3	0.3	1.1	0.9	0.8
Age									
Under 24	5.6	7.3	7.9	0.7	1.4	1.3	2.6	2.2	1.7
25-34 years	3.4	4.8	4.4	0.7	0.5	0.8	2.1	2.7	3.1
35-44 years	2.2	2.8	2.6	0.8	0.7	1.1	1.5	2.1	1.7
45-59 years	1.5	2.7	2.2	0.7	0.8	1.0	0.7	1.5	1.4
60-64 years	0.4	1.2	0.5	0.6	0.5	0.2	0.4	0.8	0.9
65 and above	0.2	0.3	0.3	0.1	0.2	0.4	0.2	0.4	0.3
Place of residence									
Towns with more than 500,000 inhabitants	2.7	3.0	3.8	0.4	0.6	1.7	2.3	2.6	3.3
Towns with 200,000-500,000 inhabitants	2.5	3.8	3.4	0.3	0.5	1.1	2.1	2.2	1.6
Towns with 100,000-200,000 inhabitants	4.1	3.4	2.6	0.6	0.8	1.2	1.9	2.0	1.4
Towns with 20,000-100,000 inhabitants	3.2	3.2	3.4	0.6	0.9	0.8	1.7	1.5	1.8
Towns with fewer than 20,000 inhabitants	3.7	3.0	3.2	0.7	0.5	0.9	1.7	1.9	1.2
Rural areas	3.4	3.6	3.2	0.6	0.7	0.6	1.4	1.3	1.2
Voivodeship									
Dolnośląskie	3.5	2.8	3.7	0.9	0.6	1.1	1.8	2.1	2.0
Kujawsko-Pomorskie	2.2	2.9	2.3	0.5	0.4	0.9	1.7	1.6	2.0
Lubelskie	2.9	4.0	3.1	0.1	0.7	1.0	1.8	1.7	1.8
Lubuskie	4.0	4.3	4.3	1.4	1.1	0.9	1.3	1.6	1.9
Łódzkie	2.7	3.5	3.6	0.3	0.6	0.7	1.3	1.7	2.1
Małopolskie	1.4	2.1	3.3	0.5	0.2	1.2	1.1	1.5	1.9
Mazowieckie	3.6	3.9	3.8	0.5	1.0	1.0	1.7	2.2	1.7
Opolskie	3.4	2.6	2.6	0.9	0.9	0.6	0.9	0.9	1.7
Podkarpackie	3.6	2.2	3.5	0.4	0.3	0.4	2.0	1.2	1.5
Podlaskie	4.8	3.5	2.5	0.7	1.5	1.3	1.2	1.0	0.9
Pomorskie	3.2	4.5	4.1	0.7	0.9	1.1	3.0	2.3	1.6
Śląskie	3.5	3.1	2.6	0.6	0.8	1.0	2.4	1.3	1.3
Świętokrzyskie	3.6	4.2	2.4	1.2	0.9	0.7	1.0	1.0	0.7
Warmińsko-Mazurskie	3.3	3.3	3.7	0.5	0.7	1.3	0.6	1.4	0.8
Wielkopolskie	4.5	3.9	3.7	0.6	0.4	0.5	1.9	2.5	1.7
Zachodniopomorskie	3.1	3.8	2.7	1.0	1.2	0.7	1.3	1.6	1.3
Educational level									
Primary and lower education	3.1	2.4	1.9	0.8	0.5	0.9	0.6	0.6	0.3
Basic vocational/lower secondary	4.2	4.4	5.3	0.8	1.1	1.3	1.3	1.3	1.4
Secondary	3.2	3.2	2.7	0.4	0.7	0.6	2.0	2.0	1.7
Higher and post-secondary	2.2	2.8	2.1	0.4	0.3	0.7	2.6	2.9	2.9
Per capita income									
Lower quartile	4.4	3.8	4.6	0.9	1.2	0.15	1.4	0.9	0.9
Median 50%	2.8	3.2	2.9	0.5	0.6	0.07	1.5	1.6	1.3
Upper quartile	3.2	3.4	3.1	0.4	0.5	0.05	2.4	2.6	2.4
Social and professional status									
Public sector	2.0	2.5	2.4	0.3	0.3	0.6	2.2	2.2	2.4
Private sector	4.9	4.4	5.0	0.8	0.8	1.1	2.6	2.8	2.6
Private entrepreneurs	4.5	3.7	4.3	2.0	1.7	2.0	4.1	3.9	4.5
Farmers	3.9	4.3	2.3	0.5	1.1	0.9	0.8	1.2	0.4
Pensioners	1.7	2.3	2.1	0.4	0.9	0.7	0.8	0.7	0.6
Retirees	0.6	0.6	0.4	0.2	0.3	0.3	0.5	0.7	0.5
School and university students	5.3	6.0	6.9	0.5	0.6	0.8	1.9	1.6	1.2
Unemployed persons	5.8	5.8	4.3	1.3	1.0	2.1	2.1	1.2	1.4
Other professionally inactive	2.9	4.0	2.8	0.4	1.1	1.0	0.7	1.1	1.1

In the sample of driving licence holders, those who abuse alcohol cause collisions or road traffic accidents twice as often irrespective of age (Table 5.8.21 and Figure 5.8.14). Age itself is related to the likelihood of causing a collision or accident; collisions or accidents are three times less likely to be caused by those aged over 45 than by those aged less than 30. Gender is of marginal importance. Women cause collisions or road traffic accidents less often, yet the difference is not statistically significant.

Table 5.8.21. Results of logistic regression analysis of the probability of causing a collision or a road traffic accident due to gender and to alcohol abuse in the sample of driving licence holders

	B	S.E.	Wald	df	p.	Exp(B)
Alcohol abuse	0.682	0.149	21.057	1	0.000	1.978
Gender	-0.198	0.109	3.269	1	0.071	0.821
Age			53.093	2	0.000	
31-45 years	-0.347	0.117	8.712	1	0.003	0.707
46+ years	-0.947	0.130	53.035	1	0.000	0.388
Constant	-3.164	0.095	1117.688	1	0.000	0.042

NOTE reference groups include those who do not abuse alcohol, men, and those aged less than 30.



NOTE the effect of age $F(2, 14715)=8.139, p<0.000, \eta^2= 0.001$; the effect of alcohol abuse $F(1, 14715)=31.710, p<0.000, \eta^2= 0.002$; the effect of interaction of alcohol abuse and age $F<2, ns$.

Figure 5.8.14. Percentage of those who caused a collision/road accident among driving licence holders who abuse and do not abuse alcohol depending on age

5.8.6. General attitudes in life

In the present edition of the *Diagnosis*, similarly as in the previous three, materialist orientation was measured with the use of the abbreviated scale of Richins and Dawson (1992) (Annex 1). The factor analysis with varimax rotation for this scale shows two separate factors behind materialistic orientation (Table 5.8.22). The first, which explains 44% of variance, is materialism proper; i.e. attaching importance to material goods, the other is the passion for shopping; i.e. shopaholism, which explains 17% of variance.

Table 5.8.22. Results of factor analysis for the scale of materialism with varimax rotation

Statements from the scale of materialism	Component							
	Factor 1				Factor 2			
	2011	2009	2007	2005	2011	2009	2007	2005
I admire people who have expensive houses, cars and clothes.	0.744	0.739	0.799	0.793				
The measure of a successful life is the possession of various material goods.	0.816	0.813	0.835	0.807				
I like having things which others may be jealous of.	0.723	0.696	0.711	0.701				
I like buying things which have no practical purpose.					0.769	0.783	0.783	0.772
Shopping in itself gives me a lot of joy.					0.801	0.771	0.771	0.784
Material goods are very important to me.	0.744	0.744	0.707	*				
Percentage of explained variance	45.2	43.5	43.6	40.1	16.9	17.4	18.1	21.9

* in 2005 that statement was formulated in the negative (*I do not attribute much importance to material goods*) and achieved a loading of less than 0.4.

The indicators of materialism and shopaholism are composed of the average of the sum of inverted medians for responses to items which obtained loadings of more than 0.4 for individual factors.

Numerous studies carried out mostly in the US, prove that materialist orientation negatively affects psychological well-being (Czapiński, 2004a). Several theories have even been formed to explain the mechanisms behind that negative relationship (e.g. Kasser, 2002; Kasser, Ryan, 1996; Lane, 2000). Without going into theoretical debates, let us see whether indeed also in Poland materialism makes people less happy and more depressive. Generally speaking, it does, but the relationships are weak and inconsistent (Table 5.8.23). Persons with a materialistic attitude formulate worse opinions of their life-as-a-whole, are less happy, experience suicidal tendencies more often, have a weaker will-to-live and suffer from a greater

number of depression symptoms. Shopaholism has the opposite effect, affecting positively all those well-being indices.

Table 5.8.23. Partial correlations between indicators of psychological well-being, materialism and shopaholism, controlled for age

Orientation	Test of dependence	Assessment of life-as-a-whole*	Sense of happiness*	Suicidal tendencies*	Desire to live	Depression
Materialism	Correlation	0.055	0.049	-0.043	-0.030	0.017
	Significance (two-sided)	0.000	0.000	0.000	0.000	0.008
	N	25713	25713	25713	25713	25713
Shopaholism	Correlation	-0.055	-0.055	-0.023	0.054	-0.042
	Significance (two-sided)	0.000	0.000	0.000	0.000	0.000
	N	25713	25713	25713	25713	25713

*the indicator is inversely valued - the lower the value, the greater the strength of the measured variable.

There is a clear linear dependence of age, materialism and shopaholism; the younger the respondents, the more materialistic their attitudes and the greater their passion for shopping (this is particularly true for the youngest people, those aged 16-18). Education mitigates materialism, but enhances the passion for shopping. The higher the income is, the weaker the materialistic attitude and the greater the shopaholism. It is clear, therefore, that materialistic attitude follows from shortage; the have-nots would very much like to have, and the haves can concentrate on something else even if it is spending money. This is in line with Abraham Maslow's (1990) hierarchy of needs, which – simplifying somewhat – states that we first need to get enough food and warmth before we start wishing for a visit to the theatre (or shop in this case).

Social and professional status is a strongly differentiating factor. And again, the youngest; i.e. school and university students, have the highest indicators for shopaholism and materialism. In terms of materialism, they are matched by farmers, unemployed persons, and private sector employees. The lowest level of materialism and shopaholism is found among retirees and pensioners.

5.9. Evaluation of system transition and its impact on Poles' lives

Antoni Sulek

Changes in the political and economic system in Poland after 1989; i.e. the replacement of authoritarian with democratic government and the transition from state-planned to market economy entailed deep and extensive changes in society, altered the situation of basic social groups and changed the lives of millions. Two questions served to evaluate these changes: *In your opinion, were the reforms in Poland after 1989 in general successful or unsuccessful?* and *When was life easier for you, before 1989 or at present?* (questions 43 and 4). Answers to the first question expressed the general and direct assessment of the system transition, and responses to the other are an assessment from the perspective of the respondent's own life. The first question has been asked since 1997, the second since 2000, which makes it possible to study the changes in assessment over time. This is important, since the impact, memories and evaluation of such a great historic event as system transition in Poland have their own dynamics.

5.9.1. General assessment of reforms and its social variation

A general evaluation of the reforms after 1989 is a difficult task for respondents. Only a few of them (51.2%) are able to decide one way or another; the other half (48.8%) are in the "hard to say" category, and even among those with educational level higher than secondary the percentage is only slightly lower (44.2%) (Table 5.9.1). The number of respondents unable to give an unequivocal opinion is diminishing very slowly; they accounted for 59.8% in 1997. The trend exhibits certain fluctuations; the percentage of individuals found in that category decreased by 3.1 percentage points since the last measurement (2009), but earlier, between 2007 and 2009, it increased by 4.0 percentage points.

The difficulty with formulating that opinion is attributable to many factors related to the complex nature of the events subject to evaluation and to the process of opinion-forming. The reforms after 1989 are becoming a more and more distant past, and as the population loses the individuals who observed and experienced those changes, and the number of those who do not remember them is increasing, the share of the "hard to say" answers may grow naturally. The opinions about those reforms do not just follow from people's own observations. The new generation forms them on the basis of the narratives of older people, or directly adopts their opinions, and not without significance are also the narratives in public life. Those experiences and narratives are diverse, which makes the opinions diverse too. This is not the only reason why one cannot count on an agreed and commonly shared social opinion about the reforms after 1989. This would first require the political elite and the public-opinion shaping media to agree on a common view on the subject so that it is raised to the level of the socially binding "collective representation". Yet still for many years to come many Poles will not know what to think about the 1989 reforms, and will differ in evaluating them.

Among the respondents who assessed the reforms as successful or unsuccessful, the opinion that they were *not* successful (37.2%) is 2.5 times more common than the opinion that they were successful (14.0%). The predominant opinion that the reforms were *not* successful depends on the social situation, yet in all social categories: groups by age, educational level, income, social and professional status, among residents of all kinds of areas, it proves less common than the opinion that the reforms were successful. It is therefore the opinion of a pronounced, albeit relative, majority. However, the analysis will focus on the minority; on those in whose opinion the reforms *were* successful and the majority will serve as the background.

Table 5.9.1. Percentage distribution of responses to the question "In your opinion, were the reforms in Poland after 1989 in general successful or unsuccessful? in educational level groups of persons aged 18 and above

Educational level	They were successful	They were unsuccessful	It is hard to say	N
Higher education with at least a PhD title	36.4	29.9	33.8	155
Higher education with at least an MA degree or an equivalent degree	29.6	29.0	41.4	3686
Higher education with an Engineer or Bachelor degree	18.8	27.8	53.4	1099
Post-secondary education	12.2	41.2	46.6	847
Secondary vocational	12.7	40.0	47.4	5484
Secondary general	15.0	31.2	53.8	2668
Basic vocational education	9.2	43.5	47.4	6574
Lower secondary	8.6	10.7	80.7	1715
Primary completed	8.3	43.3	48.4	3847
No education / primary not completed	9.7	34.0	56.3	267
Total	13.9	36.4	49.7	26342

The evaluation of reforms after 1989 is significantly influenced by education (Table 5.9.1); that label stands for the number of years and the type of schooling received, as well as the type of the work performed and membership in a particular social stratum. In four major educational level groups (primary and lower, basic vocational/lower secondary, secondary, higher and post-secondary), reforms are deemed successful by 8.5%, 9.3%, 13.5%, and 25.2% respectively. The increase in the share of positive opinions ("successful") with greater educational level is slow, and there is a leap only at the level of higher and post-secondary education. Only in the upper group of educational level do the positive opinions about the reforms keep up with the negative ("unsuccessful"). Only among those with an MA degree are positive opinions equally common (29.6%) as negative (29.0%), and only in the elite PhD group do positive opinions (36.4%) clearly prevail over negative (29.9%). Theoretically speaking, one could expect that the opinions of the upper layer of society, promoted additionally by the media, would come down "in cascades" to lower strata to the group of Bachelor and Engineer degree graduates, mixing there with the opinions encountered etc. However, no such process has been observed since 2009, and probably more time is needed.

A similar direction and form are exhibited by the class of place of residence and the evaluation of the reforms (Table 5.9.2). The greater the place of residence, the larger the number of positive opinions concerning the reforms, though the increase is very slight; it is only in large cities with more than 500,000 inhabitants that their frequency rises to 23.6% although even there they are far from striking a balance.

Table 5.9.2. Percentage distribution of responses to the question "In your opinion, were the reforms in Poland after 1989 in general successful or unsuccessful?" by classes of place of residence among those aged 18 and above

Place of residence class	In your opinion, were the reforms in Poland after 1989 rather successful, or rather unsuccessful?			
	They were successful	They were unsuccessful	It is hard to say	N
Towns with 500,000 and more inhabitants	23.6	35.3	41.1	3224
Towns with 200,000-500,000 inhabitants	18.7	35.0	46.3	2589
Towns with 100,000-200,000 inhabitants	14.1	35.2	50.8	1964
Towns with 20,000-100,000 inhabitants	13.9	35.8	50.4	5217
Towns with fewer than 20,000 inhabitants	13.2	37.9	48.9	3388
Rural areas	10.0	39.2	50.8	9892
Total	13.9	36.4	49.7	26274

Opinions about the reforms are also influenced by income. In the lower quartile of household per capita income, the reforms are seen as successful by 8.5%, in the median 50 % by 11.8%, while in the upper quartile by 23.2% of respondents.

Regarding social and professional status groups, private entrepreneurs are a group where the reforms are evaluated positively the most often, 26.5% of consider the reforms successful while 31.4% as unsuccessful. Therefore, even in the group considered to have benefited the most from the market reform, their positive opinions do not prevail over the negative. Each of the other status groups express negative opinions of the reforms at least twice as often as the positive. School and university students are an exception, and evaluate them equally often as successful and unsuccessful (12.9% and 14.4%). We do not know whether in the future they will maintain their opinions or adopt the views of the social and professional groups they enter.

In general, the belief that the reforms were successful accumulates in the upper parts of the social ladder. In the lower parts it is much less frequent, and the prevalence of the opinion that the reforms were not successful is particularly strong there.

Educational level, size of place of residence and income level are positively correlated so their impact on the assessment of reforms was controlled. It turned out that:

(1) Educational level exerts a strong influence in all types of place of residence and in income quartiles.

(2) The impacts of income and the class of place of residence become markedly weaker when controlled for educational level. The differences between large cities and the rest and between the upper quartile and the rest are maintained, though not in all educational level groups. The differences observed in the evaluation of the reforms between income groups and between classes of place of residence mainly derive from the fact that in large towns and in the upper income class there are more people with higher and secondary education.

(3) There are categories where the combined impact of educational level, class of place of residence, and income makes the number of positive opinions about reforms equal to or greater than the negative evaluation. Those groups include people with higher education who live in large cities (more than 500,000 inhabitants, 33.7% as compared to 34.1%), and the same people from the upper quartile of income

(32.0% as compared to 28.9%). These categories are small in size and do not have a significant impact on the distribution of opinions in the entire society. However, they include opinion-forming groups which in the longer term may steer public opinion towards the positive evaluation of the reforms.

(4) There are also groups with cumulated factors conducive to the negative assessment of the reforms. Among the residents of rural areas with primary education, reforms are considered as unsuccessful by 45.2% and as successful only by 9.0% of respondents. Among people from the lower income quartile and with primary education, 38.0% consider the reforms as unsuccessful and 6.5% as successful. In those combined social categories, positive opinions are only exceptionally encountered, which preserves their distribution. These categories are relatively large, and influence the distribution and general "feeling" of the assessment in the entire society.

5.9.2. Factors that influence the overall assessment of the reforms

The differentiating impact of social situation features (educational level, class of place of residence and income) on the evaluation of the reforms may be explained by various factors, which as the components or correlates of social situation features influence those opinions more directly.

Personal experience of whether life is easier for someone now or was easier before 1989 when the reforms were undertaken is the first such factor. In fact, this is not as much about the change (improvement or deterioration) in one's own life, as about the *perception* of such a change after 1989. Already the previous editions of the *Social Diagnosis* showed that there was a "false awareness" in this respect in Poland – that there were discrepancies between the objective and subjective indicators of change in the Poles' situation in life, and that its improvement is underrated.

The question *When was life easier for you – before 1989 or at present?*, was answered with "before 1989" by 31.1% of respondents and by 18.8% with "at present". 20.5% were not able to say while 29.7% were too young to remember those days (Table 5.11.3). This means that 44.2% of respondents who remember those days think that life was easier for them then while 26.7% said that it is better at present. In that part and more precisely, in the half of the adult population who have an opinion in this respect, clearly more numerous are those who think that their own – and thus probably also other people's – lives were easier before 1989. Over the last two years there was an increase (by 3.0 percentage points) in the number of people who say that their life was easier before 1989.

It follows from the previous editions of the *Social Diagnosis* that the experience of change in one's own life *after* 1989 comes together with the belief that it is *related on a cause-and-effect basis* to what was taking place in Poland then. It is therefore not surprising that there is a relationship between the *subjective* improvement and deterioration in one's own life after 1989 with the evaluation of reforms that were commenced then (Table 5.9.3). Those who think that their life is easier now than it was before 1989, even though they see the reforms as unsuccessful more or less equally often as successful (30.2% against 41.4%, in 2009 31.4% against 27.9%!), sharply differ from those who think their life was easier before 1989. The latter very rarely (7.4%) evaluate reforms as successful and in principle evaluate them as unsuccessful (59.9% with 32.7% ticking the "hard to say" option).

Table 5.9.3. Percentage distribution of responses to the question "In your opinion, were the reforms in Poland after 1989 in general successful or unsuccessful?" depending on the sense that life was easier before or after 1989 among those aged 18 and above

When was life easier for you – before or after 1989?	In your opinion, were the reforms in Poland after 1989 rather successful or rather unsuccessful?			N
	They were successful	They were unsuccessful	It is hard to say	
Life was easier for me before 1989	7.4	59.9	32.7	7842
Life is easier for me at present	30.2	31.4	38.4	4788
It is hard to say	9.8	34.2	56.0	5205
I am too young to remember the times before 1989	13.1	18.0	68.8	8122
Total	13.8	36.5	49.7	25957

The experience of improvement or deterioration of the standard of living after 1989 is strongly diversified in social terms and depends primarily on educational level (Table 5.9.4) and income.

Table 5.9.4. Percentage distribution of answers to the question “When was life easier for you, before 1989 or at present?” in educational level groups among those aged 18 and above

Educational level	When was life easier for you – before or after 1989?				N
	Life was easier for me before 1989	Life is easier for me at present	It is hard to say	I am too young to remember the times before 1989	
Primary and lower education	57.0	15.1	20.3	7.6	4101
Basic vocational/lower secondary	33.5	14.2	21.7	30.6	8251
Secondary	26.7	19.5	19.9	33.9	8124
Higher and post-secondary	16.1	26.7	19.6	37.5	5778
Total	31.1	18.5	20.5	29.7	26254

Similarly as with the general assessment of reforms, the higher was the educational level, clearly the lower the percentage of respondents who believe their life was easier before 1989 and the greater the percentage of those whose life is easier at present. There is a leap between secondary education and higher and post-secondary education. Those who passed that threshold are the only educational level group where those personally satisfied with the change prevail over those who are dissatisfied.

The current material situation of respondents is likewise relevant for the personal experience of change after 1989. In the lower quartile, life is better for 8.9% of total respondents, in the median 50% for 17.7%, while in the upper quartile for 31.4%. It is only in the upper quartile that the belief that life is easier now dominates over the opinions that it was better before 1989 (23.8%); there are 34.0% of such respondents in the median 50% and the same proportion at 34.5% are in the lower quartile.

Not without significance is the class of place of residence. The belief that life is better now is gaining popularity, ranging from 15.3% in rural areas to 26.1% in large cities.

All age groups who remember the times before 1989 well (people aged 45 years and above) are definitely dominated by those for whom life was subjectively easier before 1989 than afterwards. The proportion is only reversed in the 35-44 age group. The longer one lived in the People's Republic of Poland, the more likely one is to think that life was easier for them before 1989. Table 5.11.5 shows the percentage distribution of those opinions in subsequent cohorts.

Table 5.9.5. Percentage distribution of answers to the question “When was life easier for you, before 1989 or at present?” in four age groups

	Life was easier for me before 1989	Life is easier for me at present
35-44 years	22.2	26.7
45-59 years	48.3	26.6
60-64 years	54.9	24.4
65+ years	57.8	23.3

The predominance of those for whom life is subjectively better now than it was before 1989 is only found among people less than 45 years of age, residents of cities with more than 500,000 inhabitants, people with higher education, those from the upper quartile of income, private entrepreneurs and public sector employees. In all other categories people are more likely to think that life was easier for them before 1989.

The fundamental positive relationship between the assessment of the change in one's own standard of living and the *general* assessment of reforms after 1989 was studied in educational level groups. In four major educational level groups, the differences in the frequency of positive opinions about the reforms between the respondents for whom life was easier before 1989 and those for whom life is easier at present currently amount to 6.9% - 24.1%, 6.3% - 19.6%, 8.0% - 29.3% and 12.6% - 41.0% in the group with higher education, with the difference of 7.4% – 30.2% for the entire group. The initial dependence between opinions is maintained, and follows from the parallel impact of education on either opinion only to a limited extent. One can also see an interesting interaction; in the uppermost educational level group, an individual's own and especially positive experiences influences the overall assessment of reforms after 1989 to the greatest extent.

People tend to evaluate the results of reforms on the basis of their own cases, of the consequences of the reforms for themselves. However, positive experiences are much less likely to be generalised than negative experiences; 30.2% of respondents for whom life is easier at present are of the opinion that the reforms were successful, while twice as many; i.e. 59.9% of respondents for whom life was easier *before* 1989, consider the reforms as unsuccessful. Furthermore, those who are unable to evaluate their own situation in comparison with that of others' are much closer in their opinions to those for whom life after

1989 has been more difficult; their views are thus shaped by the experiences that are more common in society. The effect is in line with Czapiński's theory of social ingratitude, which assumes that negative experiences exert a much stronger influence on us than positive ones, and have a greater impact on general opinions concerning the area of those experiences.

The political values, the conviction that democracy is a good political system, are another factor – after one's own experience – that shapes the overall assessment of reforms after 1989. On the scale of acceptance of democracy, 28.2% of the population selected the view that "democracy is a superior form of governance", 15.0% that "sometimes non-democratic rule is better than democracy", for 15.9% "it does not really matter whether the government is democratic or not" while 3.6% think that "democracy is a bad form of government". 37.3% did not provide an answer. The complete acceptance of democracy as a form of governance is therefore low in Poland, yet over the past two years it has grown markedly (4 percentage points). What is more, it has become more popular in all educational level groups.

Views on democracy are strongly related to educational level. In the four major groups of educational level, the view of the absolute superiority of democracy over other forms of government is held by 14.4% (10.9% in 2009), 20.5% (17.9%), 29.8% (26.8%) and 45.6% (41.1%) of respondents respectively. Similarly as two years before, that view had supporters among more than half of the respondents who had a clear opinion only in the uppermost educational level group.

A good personal economic situation is also favourable for the affirmation of democracy. This is absolutely accepted by 39.1% of respondents from the upper quartile of income, 26.6% from the median 50% and only by 19.5% in the lower quartile, which is half of the proportion of the upper quartile. It also grows with the size of place of residence, ranging from 22.5% in rural areas to 41.3% in large cities (with more than 500,000 inhabitants). This is also where the greatest increase (7.2 percentage points) occurs between towns with 200,000 to 500,000 inhabitants and towns with more than 500,000 residents. Thus, the influence of each of those factors – educational level, income, and the size of place of residence – changes in leaps; the marked increase in the affirmation of democracy is only found at the highest level of education, income and the size of place of residence. These three factors are correlated, but each of them has an influence of its own on the acceptance of democracy.

Such a low level of absolute acceptance for political democracy cannot be favourable for the positive social evaluation of the reforms after 1989. However, it explains part of the individual variation among those properties (Table 5.9.6). Those who consider democracy as the best form of governance differ strongly against the background of the supporters of all other views on democracy: they are several times more likely than all others taken together to consider the reforms as successful. At the other end of the scale, as many as 63.2% of those inclined to think that "democracy is a bad form of government"; i.e. all those able to evaluate the reforms after 1989, assess them as unsuccessful.

The affirmation of democracy influences opinion on the reforms at each educational level; those who accept it unconditionally consider the reforms as successful more or less twice as often as *that level* in general (20.6% against 8.4%; 19.9% against 9.0%, 25.0% against 13.5%, and 39.0% against 25.2% in the group with higher education). The situation is similar in *all* classes of place of residence and income quartiles. This therefore proves that the acceptance of democracy has a real impact on the assessment of reforms after 1989. Most probably, those who value democracy also appreciate the fact that Poland became a democratic country after 1989.

Table 5.9.6. Percentage distribution of responses to the question "In your opinion, were the reforms in Poland after 1989 in general successful or unsuccessful?" depending on the acceptance of democracy as a form of governance among those aged 18 and above

With which of the following statements on democracy do you agree the most?	In your opinion, were the reforms in Poland after 1989 rather successful or rather unsuccessful?			N=100%
	They were successful	They were unsuccessful	It is hard to say	
Democracy is a superior form of government	28.5	28.7	42.9	7265
Sometimes non-democratic rule is better than democracy	14.4	46.8	38.8	3879
It does not really matter whether the government is democratic or not	8.8	49.2	42.1	4060
Democracy is a bad form of government	5.4	63.2	31.3	927
It is hard to say	5.8	30.1	64.1	9826
Total	13.9	36.4	49.8	25957

The improvement in standard of living after 1989 and democracy considered as the best form of government, tend to be found among people with higher education, in large cities and in upper income groups. This is also where the reforms are considered successful more often than in other segments of society. These two factors also tend to co-exist at the level of individuals, which is why the reforms are most often evaluated positively by those for whom life is easier now and who at the same time affirm democracy (5.9.7).

Table 5.9.7. Percentage distribution of "successful" responses to the question "In your opinion, were the reforms in Poland after 1989 in general successful or unsuccessful?" depending on the sense that life was easier before or after 1989 and on the acceptance of democracy as a form of government among those who remember the times before 1989

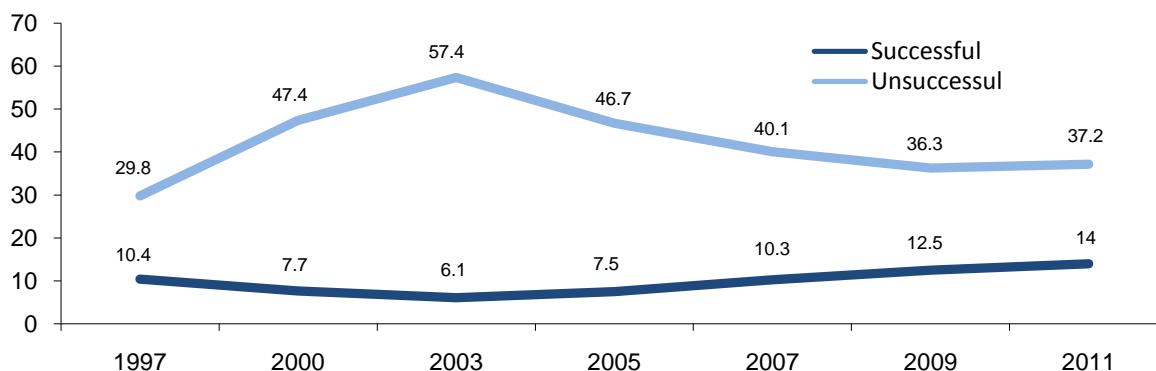
When was life easier for you, before or after 1989?	With which of the following statements on democracy do you agree the most?			
	Democracy is a superior form of government	Sometimes non-democratic rule is better than democracy	It does not really matter whether the government is democratic or not	Democracy is a bad form of government
Life was easier for me before 1989	15.5	6.6	6.7	3.3
Life is easier for me at present	44.3	30.0	19.0	17.0

Each of those factors – the improvement or deterioration in one's own situation in life after 1989, and the attitude towards democracy, even though related to the previous, has an influence of its own on the assessment of reforms. Both in the group of respondents for whom life was easier before 1989, and in the group for whom it has been easier after 1989, considering democracy the superior form of government rapidly improves the evaluation of reforms. However, for those whose life was easier before 1989 the attitude towards democracy is less important in respect of the view of the reforms. The affirmation of democracy counts more when the improvement in one's situation has already been experienced. The combination of both those factors cumulates their influence in the group of people who experienced an improvement in their lives and at the same time affirm democracy nearly half (44.3%) consider the reforms as successful. An easier life after 1989 combined with the lack of affirmation for democratic rule leads to more frequent positive opinions on reforms than the support for democracy combined with the conviction that life was easier before 1989. This provides an additional argument in favour of the fundamental significance of change in one's own situation for the assessment of social change.

5.9.3. The growth rate of reform evaluations between 1997 and 2011

The analysis of the dynamics of social evaluations of reforms after 1989 covers six waves, starting with 1997. The results are presented in Figures 5.9.1 and 5.9.2. Throughout the whole period, society was dominated by the conviction that in general, the reforms after 1989 were *not* successful; the negative opinions were always several times more common than positive ones. The statistic predominance of negative opinions about the reforms after 1989, which has prevailed for such a long time, has a tendency to transform into social predominance and to preserve itself. Furthermore, a social climate is created in which a negative opinion concerning the reforms takes on the properties of social correctness.

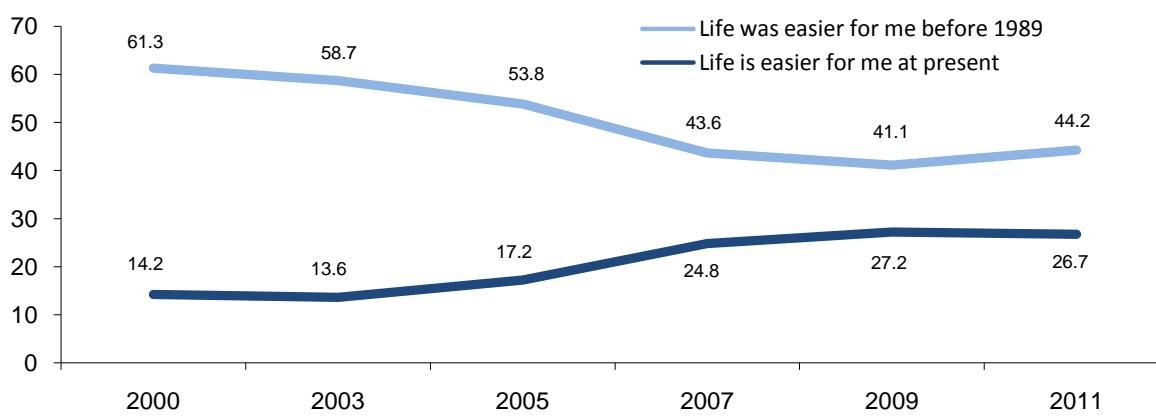
There is no single general trend in formulating opinions throughout that period, neither a constant improvement nor deterioration in them. First, between 1997 and 2003 the already small minority of those with positive opinions about the reforms diminished, and at the same time the share of those convinced that the reforms were unsuccessful as much as doubled. However, later on since 2003 the change has taken a different turn with the assessment of reforms improving systematically from 6.1% in 2003 to 14.0% in 2011. At the same time, the percentage of negative opinions has been decreasing from 57.4% to 37.2% (see Figure 5.9.1). The improvement in opinions about the reforms after 1989 may be caused by overall economic growth and its positive effects for respondents. However, that influence might be not that strong, as these two phenomena are becoming more and more distant in time; the public perception of the relationship between today's condition of the economy and the reforms of 1989 is becoming weaker and weaker, and the opinions about those changes preserved in society already have a life of their own.



Source of data: Czapiński, 1998 for the year 1997; *Social Diagnosis* for the years 2000-2011.

Figure 5.9.1. Percentage distribution of responses to the question "In your opinion, were the reforms in Poland after 1989 in general successful or unsuccessful?" between 1997 and 2011 among those aged 18 and above

Similarly durable and common as the opinion that reforms in Poland after 1989 were not successful is the view that life was easier *before* rather than after 1989. After excluding respondents who were too young to be able to draw such a comparison today, we obtain the following series for the period 2000 to 2011 (Figure 5.9.2):



Source of data: Czapiński, 1998 for the year 1997; *Social Diagnosis* for the years 2000-2011.

Figure 5.9.2. Percentage distribution of answers to the question "When was life easier for you, before or after 1989?" between 2000 and 2011 among those who remember the times before 1989

As the system transition becomes more distant in time, the opinion about the new period from the point of view of one's own life, albeit low, is getting better even though between 2009 and 2011 the trend not only stopped but was even reversed slightly, though probably only for a moment (the percentage of persons for whom life was easier before 1989 increased by 3 percentage points). If that trend persists, then perhaps with time in the minds of the shrinking group of respondents who remember those times, the positive opinion will begin to predominate over the negative one. Generally speaking, that process has three interrelated causes: new experiences, reconstruction of memories and changes in the perspective. Comparing life after 1989 with the period before 1989, we compare it with memories that are constantly subject to change; we refer those years to ever new experiences, and match them against ever higher standards.

A comparison of changes in social opinions on the reforms after 1989 and of changes in the comparative evaluations of life before and after 1989 shows that those two processes are parallel to one another. The relationship between the evaluation of changes in one's own life and the overall assessment of the reforms, established earlier at the level of the individual, is complemented by the relationship between aggregate indices for the time series. The opinions on the reforms expressed by respondents are related to their evaluation of changes in their own lives. The social opinion about the reforms improves with the

increase in the proportion of people who see favourable changes in their lives. That improvement may be related to the acceptance of democracy, which grew considerably between 2005 and 2011 from 21.6% to 28.2%.

In the opinions about the reforms and in the comparative assessment of people's own lives before and after 1989, one can not only see a stability of opinions at the level of the entire society, but also a fundamental similarity of how they are varied internally within particular groups. The patterns of impact of educational level, the class of place of residence and income are fairly durable. This makes the changes in them more interesting as they show the direction of change at the level of society. For example, even though still in 2007 the opinion that the reforms after 1989 had been successful predominated only in a narrow group of people with a PhD and the opposite view prevailed at all other levels of educational level, in 2009 the range of either view became equal also in the large group of those with an MA, although the view that the reforms had been successful did not become predominant until 2011 (Table 5.9.1).

What particularly draws attention is that general opinions about the reforms are systematically worse than the assessment of the impact of the changes since 1989 on people's own lives. In each of the surveys since 2000, there have been at least twice as many respondents who said their life was easier after 1989 as those who said that the reforms were successful. If the general opinions about the reforms were only formed on the basis of personal experience, there would not be such a great discrepancy. The question is why in 2011 the subjective deterioration in individual standards of living after 1989 entails a negative opinion about the reforms in 60% of cases, and only 6% of respondents who have suffered a deterioration say that the reforms were successful, while a subjectively perceived improvement is associated with a positive opinion of the reforms in 30% of respondents, and the same proportion (31%) of respondents who have experienced an improvement say that the reforms were not successful (Table 5.9.3).

The opinion about the changes in personal living conditions is formed by people themselves through generalisation of their own experience and comparison with others. People are better at evaluating their own situation than a complex historical process. The general opinions about the reforms after 1989 depend to a great extent on social interactions and the general social climate. The discrepancy between the assessment of one's own situation and the situation in society is familiar to social researchers; many more people talk about the threat of crime in the country than feel personally threatened, more are critical of healthcare than have had negative experiences of it etc.

The fact that general opinions about the reforms are worse than the evaluation of changes in people's own standards of living may also be psychologically motivated (Czapinski, 2000). Those whose life has been easier after 1989 may raise their self-esteem by emphasising how difficult it was to achieve success and showing that although the reforms in general were not successful, they were able to take advantage of new opportunities. Those not successful after 1989 may defend their self-esteem by maintaining that reforms did not work out *in general*, and they themselves fell victim to them, as did "everybody else". Both processes of raising self-esteem and finding excuses for oneself go in the same direction; they lower the opinion about the reforms in Poland twenty two years ago.

6. THE STATE OF CIVIL SOCIETY

6.1. Social attitudes and relations

6.1.1. Attitudes to the common good

Janusz Czapinski

In 2011, in comparison with 2007 and 2009, fewer respondents declared that they did not care at all about the common good or cared little about it (table 6.1.1.).

Polish people care least about the fact that someone does not pay for public transport or avoids paying taxes. However, in comparison with 2007 and 2009, the indifference to these forms of abusing the common good decreased. In relation to the remaining questions, a similar growth in the sensitivity to the abuse of the common good was observed. These differences are of statistical significance (table 6.1.2.). However, after 20 years of building a democratic state, almost half of its citizens are still indifferent to six forms of how the common good is abused.

Table 6.1.1. Percentage distribution of answers to questions on the abuse of the common good

Behaviour categories	Year	I do not care at all about it	I care little about it	I care about it to some extent	I care about it very much	It is hard to say
Someone pays lower taxes than he/she should	2007	27.8	28.3	24.0	13.5	6.4
	2009	28.6	27.6	22.5	13.5	7.8
	2011	24.9	26.9	26.9	16.0	6.3
Someone avoids paying the fare on public transport (e.g. buses, trains)	2007	26.6	32.3	22.5	13.3	5.3
	2009	26.9	31.7	21.7	13.5	6.2
	2011	23.6	31.2	24.4	15.8	5.0
Someone unjustly draws unemployment benefits	2007	21.3	25.1	24.2	23.3	6.0
	2009	22.2	24.5	23.1	23.2	7.0
	2011	18.5	24.5	26.9	24.5	5.6
Someone does not pay the fees for his/her apartment (though he/she is able to)	2007	22.6	25.0	21.4	24.0	7.0
	2009	23.6	24.2	20.5	24.3	7.4
	2011	20.9	24.5	22.8	25.5	6.4
Someone unjustly receives disability benefits	2011	18.7	22.8	25.6	25.8	6.9
Someone files an insurance claim under false pretences	2011	19.8	23.8	24.0	24.9	7.5

Table 6.1.2. Comparison of the attitudes to the common good between the measures in the panel samples from 2007, 2009, 2011

Variable	Study year	Average	Standard deviation	Average difference	t	Degrees of freedom	Statistical significance	Correlation
Sensitivity to the common good	2007	2.39	0.9350	-0.077	-4.506	3628	0.000	0.390*
	2011	2.47	0.9273					
	2009	2.380	0.930	-0.088	-9.362	12262	0.000.	0.392*
	2011	2.47	0.935					

*p<0,000

6.2. Civil experience, activities for the benefit of the community and civil skills

Antoni Sulek

Civil experience, activities for the benefit of the community and civil skills are indispensable to both a democratic society and its citizens. Democracy needs citizens who want and are able to make use of its mechanisms, and if the citizens are deprived of civil skills, they are unable to benefit from the opportunities democracy offers them, such as the possibility to express their preferences and fulfil their interests. The development of democracy and the increase in civil skills in society support each other. The places where citizens may gain experience and learn civil skills include voluntary organisations, activities and contacts which fill the space between an individual and the society, a citizen and the state. The network of such organisations and activities creates what we call self-organising civil society.

6.2.1. Participation and serving functions in organisations

The degree of *participation in associations*, that is the percentage of the citizens who belong to a voluntary organisation, is the simplest measure of the state of a civil society. In 2011 in Poland, 14.8 per cent of respondents belonged to some “organisations, associations, parties, committees, councils, religious groups or clubs”. 11.6 per cent of them were members of only one association, 2.2 per cent of two associations, and 1.0 per cent of two or more. 85.2 per cent did not belong to any organisation. If the question about the membership used in the research (Question 52) was broken down and respondents were asked separately about their membership in associations, parties and committees, this percentage would probably be higher. However, this demonstrates that only in the case of 15 per cent of respondents the membership in an association is important enough to recall when asked.

Serving functions in organisations constitutes a higher level of participation in the civil society. 32.2 per cent of respondents who declared membership in an organisation stated that they “serve some functions in these organisations”. This means that at present (only) 4.8 per cent of Polish people serve roles voluntarily. This experience is of double importance for them; these persons not only participate in managing the organisation, but also have been elected to do so. The remaining 95 per cent are deprived of this experience and the skills which it shapes.

In comparison with 2009, there has been an increase in the percentage of the persons participating in associations by 2 per cent; however, we have no basis to interpret this growth (table 6.2.1.). Regardless of the interpretation, this means a return to the level of 2007 (15.1 per cent). It turned out that the *decrease* in the percentage of Polish people participating in associations by 2 percent in 2009 did not mark the beginning of a tendency. In eight years of research there has been no systematic increase or decrease in interest in civil organisations. Civil society in Poland, understood as participation in voluntary organisations, has not been developing and has been failing to attract more people to its networks and structures. In 2011, a visible decrease of 5.7 percent was observed in the percentage of the persons serving functions in organisations among those who are associated in such organisations, but this is probably due to the changed question wording – in the previous years’ respondents were asked whether they had ever served in organisations and not whether they were serving in them at the moment.

Table 6.2.1. Percentage of the persons participating and serving in organisations and percentage of persons taking part in the activities for the benefit of the community in 2003, 2005, 2007, 2009 and 2011, among the respondents aged 18 and above

	2003 N=9380	2005 N=8539	2007 N=12747	2009 N=25568	2011 N=25580
Members of organisations	12.2	12.1	15.1	13.2	14.8
Persons serving in organisations, in relation to the associated	45.1	55.7	41.4	37.9	32.2
Persons serving in relation to the total respondents	5.3	6.8	6.3	5.0	4.8
Persons taking part in the activities for the benefit of the community	12.9	13.6	14.1	15.6	15.6

Participation in associations is socially stratified and the differences between the groups result from diverse organisational offers addressed to specific groups and from various degrees of their willingness to join an organisation. There are no differences in the degree of participation in associations between the age categories above 35, though the young are more rarely members of an organisation. The percentage of persons participating in associations is increasing slightly and irregularly together with the size of place of residence from 13.3 per cent in the rural areas up to 17.8 per cent in large cities. On the other hand, this

percentage increases regularly together with their educational level of achievement (from 8.4 per cent among the persons with primary and lower secondary education up to 23.5 per cent in the case of the persons with higher education, see also table 6.2.3.) and income (from 9.7 in the lower quartile, 14.7 per cent in the middle 50 per cent, to 19.9 per cent in the upper quartile of income per capita). The group with the highest percentage of persons participating in associations is the group of public sector employees (27.2 per cent) while the groups with the lowest percentage of such persons include the unemployed (6.1 per cent) and other professionally inactive (9.6 per cent).

In the case of serving functions in organisations the pattern of diversification is similar. The higher the educational attainment, the more frequently those persons have such experience. In the four main categories of educational attainment, the percentages of the respondents participating in organisations who also work in such organisations are as follows: 17.8 per cent, 27.3 per cent, 32.9 and 39.6 per cent. The difference between the groups with extreme results is almost double. On the other hand, the diversification in the income categories is not that vast: at present, in the lower quartile of income per capita 20.6 per cent of the associated serve functions in organisations, in the middle 50 per cent 30.8 per cent and in the upper quartile 34.7 per cent.

Educational attainment and income are then the basic factors of stratification, hence participation in associations depends on stratification; the strata from the upper parts of the social ladder participate in associations more often while the lower strata less often. Since educational attainment is connected with income, the impact of educational attainment alone, regardless of the income, was examined as well and vice versa (see table 2).

The group of persons serving functions in organisations is similarly socially stratified. This experience is slightly more common among men than among women (34.0 per cent in relation to 30.3 per cent of the associated) with a small difference in the degree of participation in organisations between these two groups (15.4 per cent in relation to 14.3 per cent). While bearing in mind that in 2011 respondents were asked about their jobs at the moment and not about the functions they ever served, a smaller difference between men and women should be noticed; in 2009 this difference in terms of participation in organisations was 2.4 percent and in the case of frequency of public service, in relation to the persons associated in organisations, 11.5 percent.

30.6 per cent of persons participating in organisations from the lower income quartile also worked in organisations, just as 30.8 per cent from the middle 50 per cent and 34.7 per cent from the upper income quartile. Similarly as in the case of participation in organisations alone, the impact of the attainment level is crucial here. The higher the category of educational attainment, the more persons served in organisations. 17.8 per cent of persons participating in organisations with primary education also served functions in such organisations, just as 27.3 per cent with vocational secondary education, 32.9 per cent with general secondary education and 39.0 per cent with higher and post-secondary education (see also table 4). In relation to 2009 the diversifying impact of both variables diminished: two years ago the difference between the extreme quartiles was 13.3 percent and between the extreme categories of educational level 33.9 percent.

If we compare the diversification in the case of serving functions with the differences related to participation in organisations, these differences become more visible. At present, 1.5 per cent of respondents with primary education serve in organisations, just as 3.2 per cent of respondents with vocational education, 4.9 per cent with general secondary education and 9.3 per cent with higher education. In 2009 the spread was greater, at the level of 10.0 percent and not 8.2 percent as now. Educational attainment, especially in the case of higher education, not only contributes to membership in voluntary organisations – persons with higher education are also more likely to work in such organisations. As a result, persons from the upper social strata, and in particular persons with higher education, are several times more likely to be elected and serve in civil organisations. Below the group with general secondary education such experience is very rare and at the lowest educational level even extremely rare as it is shared by only one and a half per cent of persons from this category.

6.2.2. Joint actions and work for the benefit of others

Participation in organisations is only one of the possible measures of a civil society's development. In Poland persons who want to do something for their communities are unwilling to establish formal organisations to this end. It is enough for them to initiate or join some *activities for the benefit of their own community*. However, the research shows that this phenomenon is as rare as membership in organisations. Only 15.6 per cent of respondents were involved in "any activities for the benefit of the local community (gmina, housing estate, town or neighbourhood)" (Question 47) which would be important enough to recall in answering the question. In 2009 the percentage of such persons was exactly the same (15.6 per cent), but in 2007 it was 4.1 per cent, in 2005 13.6 per cent, in 2003 12.9 per cent, and in 2000 8.0 per cent (see table

1). This systematic growth in the involvement in the works for the benefit of the community observed during the last decade halted and it is not known when this will change.

Men are more likely to get involved in local initiatives than women (17.7 per cent in relation to 13.6 per cent), as are persons aged 35-44 (18.9 per cent) and 45-59 (18.4 per cent) as well as the inhabitants of the rural areas (17.5 per cent). This kind of involvement increases together with the level of education attained. In the subsequent four main education categories the percentages of persons involved in local initiatives are as follows: 7.1 per cent, 13.7 per cent, 15.8 per cent and 23.7 per cent. In the subsequent income quartiles, 14.6 per cent, 14.1 per cent and 19.3 per cent of respondents were involved in local initiatives.

An even more informal form of taking part in the community's life is *unpaid work or services for persons outside the family or for a social organisation*, which was measured for the first time in this edition of *Social Diagnosis* (Question 50). This type of social activity covers many diverse actions, from spontaneous neighbourly help in rural areas to organised voluntary services. During the year this type of activity was performed by 19.6 per cent of respondents.

Men prevailed in this group (22.6 per cent in comparison to 16.9 per cent women). This type of activity is less frequent in the group of persons aged above 60, along with a decrease in general activity, and it is slightly more frequent in large cities (22.6 per cent in cities with 200,000-500,000 inhabitants and 24.8 per cent in cities with more than 500,000 inhabitants). In the lower income quartile such activities were initiated by 16.5 per cent, in the middle 50 per cent 18.0 per cent, and in the upper quartile 25.4 per cent of respondents. The factor which had the greatest impact on this type of activity was educational level. In the main four subsequent education categories the percentages of persons taking up such activities were as follows: 7.6 per cent, 17.2 per cent, 20.15 per cent and 30.3 per cent with a four-fold difference between the extreme groups.

Therefore, not only the membership and active participation in formal civil organisations are clearly dependent on the social group, measured by educational attainment, but also participation in work for the benefit of the community as well as work for other persons or for a social organisation. Social inactivity, avoiding grassroots initiatives for the benefit of others or social organisations are common in Poland, and among the persons with primary education the experience of social activity is very rare, several times less frequent than among the persons with higher education. The persons with higher education visibly stand out above the rest.

6.2.3. Participation in public meetings

People participate in democracy not only when they participate in organisations or do something jointly for others or for the benefit of their community, but also when they gather, discuss and decide on something together. Participation in public meetings is an easily accessible phenomenon. Such events occur in virtually every environment and the only cost the participants incur concerns their time. Participation in such meetings allows for learning about the issues outside one's life, listen to various arguments, express own opinions, influence decisions, decide on something jointly and take responsibility for one's decisions. Moreover, the participants may take part in voting, elect bodies at least for the time of the meeting, and sometimes also choose their representatives, listen to their reports and learn about the meeting's procedures and organisation. Preparing and leading meetings, commenting on a certain matter publicly as well as participating in decision making processes all constitute important civil skills. At a public meeting these skills are not only practised but also developed as this is the place where people learn how to be active citizens.

The research demonstrates that almost every fourth respondent (22.9 per cent) participated in a public meeting during last year (outside the workplace). Some meetings were probably forgotten as unimportant, though on the other hand certain earlier meetings were probably remembered as being more recent (the telescoping effect). Since 2003, this percentage has slightly increased, though it dropped in the period 2007-2009 by 1.3 percentage point, only to rise by 3 percentage points in the period 2009-2011 and return to the previous uptrend (figure 6.2.1.).

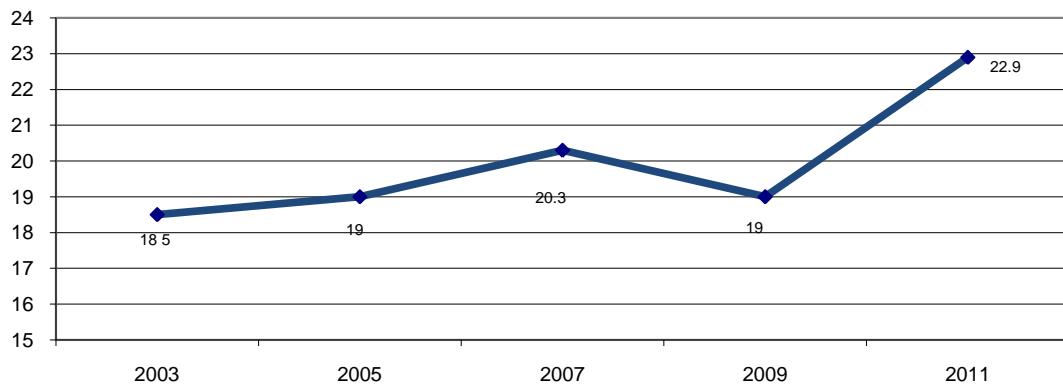


Figure 6.2.1. Percentage of persons participating in public meetings in 2003, 2005, 2007, 2009 and 2011, in relation to the respondents aged 18 and above

What is more important than just being at a meeting is one's active participation, since participants organise the meeting, help to prepare it or chair it, which are valuable and rare civil skills. They can also speak at the meeting – express their views, influence opinion and become socially recognisable with all the consequences this brings. In 2011, respondents were not asked about these forms of activity, but surely, as in 2007 and 2009, about 5 per cent of them took part in meeting preparation and chairing, while about 10 per cent spoke at such meetings (table 6.2.2.).

Table 6.2.2. Percentage of persons actively participating in public meetings in 2003, 2005, 2007, 2009, in relation to the respondents aged 18 and above

Activity	2003 N=9380	2005 N= 8539	2007 N=12747	2009 N=25568
Speaking at the meeting (in relation to the persons present at the meeting)	57.5	60.6	57.4	46.7
Speaking at the meeting (in relation to the total respondents)	10.5	11.4	11.7	8.9
Organising the meeting (in relation to the total respondents)	no data	no data	5.4	5.1

The previous editions of *Social Diagnosis* have demonstrated that persons with higher education not only participate in public meetings incomparably more often, but also organise and chair them, speak at them and express their opinions on matters that concern themselves, other persons and public issues. As they participate in social life more intensively they develop their civil skills.

6.2.4. Participation in local government elections

Participation in elections is the most common civil experience, and in local government elections – a sign of involvement in the matters of local and regional communities. When asked about the participation in the last local government elections, held on 21 November 2010, 68.3 per cent of respondents responded positively. To be precise, this is not the percentage of the persons voting in the elections in relation to the adults *then*, but the information on the share of *today's* adults who declare voting in the last elections. However, due to the small time lapse, this difference is not significant. The percentage of persons who voted in the elections resulting from the research is highly overstated in relation to the actual turnout of 47.3 per cent, as announced by the National Electoral Commission (www.pkw.gov.pl).

The retrospective overstating of the turnout by voters is common in surveys and explained by how respondents conform to the good citizen model. Approximately 2/3 of *Social Diagnosis* respondents declare their participation in elections, regardless of the election type and the actual turnout. In 2007, 65 per cent of respondents declared voting in the local government elections in November 2006, where the actual turnout was 46 per cent. Similarly, in 2009, 66 per cent of respondents declared voting in the parliamentary elections in 2007 with an actual turnout of 54 per cent. However, it may be assumed that this bias is not systematically connected with social factors and thus, in general, it does not prevent an analysis of the social conditions of participation in elections. An indirect, aggregated data argument which should be mentioned here is the high divergence of rankings of voivodeships according to the actual and the declared turnout. The Spearman's rank correlation coefficient *rho* is .81, where the majority of voivodeships (ten) have identical positions in both ranking, or differ only by one position.

Participation in elections is connected with the social status, measured by educational level of achievement. In the main four education categories the percentages of persons taking part in elections were as follows: 58.1 per cent, 61.2 per cent, 72.4 per cent and 78.7 per cent. In the lower quartile this percentage is 61.5 per cent, in the middle 50 per cent 68.0 and in the upper quartile 75.5 per cent. Generally, similar results and relations were observed in the previous editions of *Social Diagnosis*, both in 2007 when the respondents were asked about their participation in the previous local government elections and in 2009 when they were asked about their participation in the parliamentary elections.

All surveyed types of social experience and civil activities are then connected, some even considerably, with social status measured by educational attainment (see table 6.2.3.).

Table 6.2.3. Social experience and civic activities in relation to educational level (in %)

Educational attainment	Being a member of an organisation	Holding roles in an organisation (in relation to the associated)	Acting for the benefit of the community	Working for others or for a social organisation	Participating in a public meeting	Participating in the 2010 elections
Higher, with at least a PhD degree	40.8	47.7	36.8	43.8	58.6	73.3
Higher, with at least an MA degree or an equivalent degree	25.0	40.4	24.9	32.2	29.2	80.5
Higher, with an Engineer or a Bachelor degree	19.0	38.4	18.3	25.1	20.3	74.9
Post-secondary	20.0	34.0	22.6	26.0	23.6	74.0
Secondary vocational	15.5	33.4	16.6	20.2	21.5	73.5
General secondary	13.7	31.8	14.2	20.1	18.6	69.8
Basic vocational	11.2	25.0	13.4	16.6	17.6	67.4
Lower secondary	14.1	33.6	13.7	18.8	12.6	25.6
Primary completed	9.3	18.4	7.9	8.7	11.8	56.3
None / primary not completed	3.7	26.7	2.2	1.5	5.5	44.6
Total	14.9	32.0	15.5	19.5	19.1	66.7

The lower the educational attainment, the more inactive and less experienced people are as regards organised grassroots activities. The higher the educational level, the more frequently people set up organisations and become members of already existing ones or voluntarily serve functions in such organisations. Also they are more willing to take part in initiatives for the benefit of their own community or for other persons and organisations. Moreover, they more frequently participate in public meetings and, as determined in *Social Diagnosis* 2007 and 2009, they organise such meetings and speak at them, as well as are more willing to sign collective letters, protests and petitions. Furthermore, they participate in elections more often. People with higher education are better organised in social terms and better at voicing their interests. They know how to take advantage of the opportunities democracy offers them at the local level.

A summary measure of the social experiences and civic activities is presented as an index – which consists in the number of experiences where each of the six experiences was counted as one point. The index has the following distribution (table 6.2.4.):

An average value of the index for the total respondents is 1.42, and the modal value is 1 (41.6 per cent). In the last year, 25.5 per cent of respondents had no social or civil experience as defined herein. The value of the index depends highly on participation in local government elections, the figure for which is considerably overstated. If the declared turnout was corrected, the index value would be significantly higher. This considerable impact of participation in elections on the index demonstrates that elections are a special standard of civil life in Poland and also how uneventful this life is in between the elections; many Polish people take up social and civic activities only in the years of elections.

Table 6.2.4. Distribution of the index of social experiences and civic activities among the respondents aged 18 and above

Value of the index	Percentage	Cumulative percentage
0	25.6	25.6
1	41.6	67.2
2	14.9	82.1
3	7.9	90.0
4	5.1	95.1
5	2.8	97.9
6	2.1	100.0

The index demonstrates the importance of educational level in relation to social and civil experiences (fig. 6.2.2.).

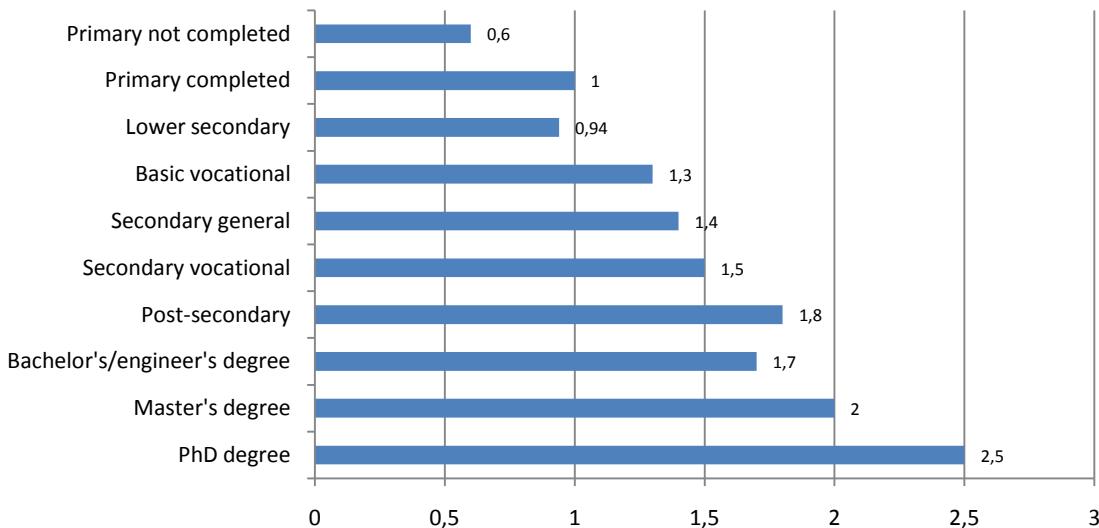


Figure 6.2.2. Index of social experiences and civic activities in relation to educational attainment, among the respondents aged 18 and above

Social experiences tend to accumulate; the persons who are members of an organisation, those who act for the benefit of the community, work for others and for social organisations and participate in public meetings are very often the same people (table 6.2.5.).

Table 6.2.5. Intercorrelations (Pearson's r) between the civic experiences, among the respondents aged 18 and above

	1	2	3	4	5
1. Voting in the 2010 elections		0.14*	0.17*	0.11*	0.10*
2. 2. Acting for the benefit of the community			0.42*	0.46*	0.31*
3. 3. Participating in a public meeting				0.37*	0.32*
4. Working for others or for social organisations					0.33*
5. 5. Being a member of an organisation					

*p=0,000

6.2.5. Acceptance of democracy and trust in other people in relation to social and civil experiences

The social experiences and civic activities of Polish people are visibly dependent on social status. Theoretically speaking, they should be also dependent on individuals' political values (acceptance of democracy) and their psychological dispositions (trust in other people). The acceptance of democracy as a form of government may include the acceptance of democracy as a general rule of living in a society as well as an idea of local democracy and civil society. It is commonly understood that trust in other people contributes to self-organisation in society and participation in collective actions, which in turn reinforces trust.

The data suggest that the acceptance of democracy increases the value of the index of social experiences and civic activities (table 6.2.6.). However, the analysis indicates that this impact is to a large extent merely apparent. Both the acceptance of democracy as well as social experiences and civic activities depend on educational attainment and the relation between the two in general results from the simultaneous impact of education. The separate impact of the acceptance of democracy alone is weak and unsystematic. For instance, only in the lower categories of educational attainment, those persons who accept democracy unconditionally have a higher index value than the respondents from all other categories. The acceptance of democracy as a political principle has no significant impact on participation in civil life at the local level and the factor behind the greater willingness of better educated persons to participate in the social and civil life is greater attachment to democracy.

Table 6.2.6. Index of social experiences and civic activities in relation to the acceptance of democracy as a form of government and trust in other people, with the consideration of educational level, among persons aged 18 and above

	Educational attainment				
	Basic and lower	Basic vocational/lower secondary	Secondary	Higher and post-secondary	Total
Attitude to democracy*					
Democracy is better than any other form of government	1.12	1.35	1.62	2.0	1.65
Sometimes non-democratic rule is better than democracy	1.05	1.32	1.76	2.27	1.58
It does not really matter whether the government is democratic or not	0.94	1.26	1.42	2.01	1.26
Democracy is a bad form of government	1.02	1.25	1.52	1.89	1.37
Total	0.94	1.23	1.50	1.42	1.42
Trust in other people					
Most people can be trusted	0.87	1.27	1.58	2.32	1.60
One cannot be too careful in dealing with people	0.98	1.27	1.65	1.85	1.42
It is hard to say	0.69	0.91	1.26	1.86	0.72
Total	0.94	1.23	1.38	1.93	1.42

* The group of respondents who answered the question about democracy with "It is hard to say" was excluded.

Participation in civil society, learning and using civil skills are more clearly related to trust in other people, expressed in the answers to the following question: "*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?*" (Question 60). In 2000, 13.3 per cent of respondents, which is the same as in 2009 but slightly more than in the previous studies, ticked the answer "most people can be trusted" (in 2007 – 11.5 per cent and in 2005 and 2003 – 10.5 per cent). 77.5 per cent chose the answer "One cannot be too careful in dealing with people" and 9.3 per cent of respondents did not have an opinion on this subject ("It is hard to say").

However, since – just as the acceptance of democracy – trust in other people is more present in the upper education categories, the question arises about its separate impact on participation in the life of civil society, independent of education. The analysis demonstrates the lack of the expected systematic impact of trust on the index of activities. Trust significantly increases the index only in the group with higher education, slightly decreases in the group with primary and secondary education, and has no impact on the group with basic vocational education.

Trust slightly increases active citizenship only after reaching or exceeding the threshold of secondary education. Other factors contributing or related to education have greater influence than trust towards other people. These factors include, for example, greater interest in public matters, a more developed network of social contacts, lifestyle with more space for motivations other than the economic, as well as organisational skills connected with knowledge of procedures and regulations. The impact of these factors is not overly high though, since the indicators of active citizenship in Poland are low and thus their diversification explained here is also slight.

6.2.6. Summary

The research shows a low level of Poles' social and civil experiences as far as participating in organisations and grassroots initiatives, public meetings or voluntary activities is concerned. Polish people participate in organisations rarely, they also infrequently act for the benefit of other people, organisations or their own communities and they are unwilling to gather to plan and act jointly. Therefore, they have few opportunities to learn how to be socially active in an organised way and gain the skills necessary for living in civil society. Polish people do not know how to organise themselves effectively and act together except for strikes or protests against the construction of a road in the neighbourhood, a waste landfill in their local area or the construction of a hospice in their town. They do not know how to act jointly because having modest experience of doing so, they have not learned how. They do not know how to act, since they do not act, and they do not act since they do not know how: a vicious circle of passive citizenship.

6.3. Social capital

Janusz Czapinski

Social capital is the essence of civil society and surely of an effectively developing society (e.g. Czapinski, 2011b; Halpern, 2001; Woolcock, 1998)⁵². Why is social capital thought to have impact on the economic development of a community? The theoretical answer is as simple, nearly obvious, as it is poorly documented by research (e.g. Sabatini, 2007): social capital facilitates negotiations, lowers transaction costs, shortens investment processes (reduces the probability that subsequent administrative decisions will be contested), reduces corruption, increases the reliability of contractors, contributes to long-term investments and diffusion of knowledge, prevents the abuse of the common good and fosters inter-group solidarity and, through the development of the third sector (see below), contributes to social control over the authorities' actions (Coleman, 1990; Halpern, 2005; Glaeser, Laibson, Sacerdote, 2002; Knack, Keefer, 1997; LaPorta et al., 1997; Putnam, 2000, 2008; Sztompka, 2007). Obviously, the advantages of social capital go beyond mere economic effects as they comprise the broadly understood quality of social life.

The term "social capital" has no precise definition. However, it is very vast – it covers all that determines sound social relations, care for the common good and cooperation⁵³.

According to Robert Putnam (2003, 2008), social capital is a cultural phenomenon and covers the civil attitude of society's members, social standards supporting joint action and interpersonal trust as well as the citizens' trust towards public institutions. The research conducted by Putnam in Italy proves that social capital is created within a long-term historical perspective and constitutes a public good. It is not a resource or a feature of specific individuals, although it depends on individuals, their approaches, beliefs and the system of values.

Francis Fukuyama (1997, 2000), similarly as Putnam, defines social capital as „a set of informal values or norms shared among members of a group that permits cooperation among them.” The cooperation for the benefit of the public good is based on the mutual trust of the group members. The principles which create social capital range from the norm of reciprocity between two friends to very complex and codified doctrines, such as Christianity or Confucianism. However, not every system of norms creates social capital.

Unlike Putnam, Pierre Bourdieu (1986, 1993) defines social capital as individual investments in the network of social relations. According to Bourdieu, social capital is a private good and not a public one, and may produce cultural capital, affluence or "symbolical capital", that is the signs of the social status. An individual's social capital is a crucial element of his or her social position.

In our research, we have assumed a definition which is more similar to the concepts of Putnam and Fukuyama than to Bourdieu's theory. Social capital is understood here as the social networks regulated by moral norms or customs (and not by formal legal regulations, or not solely) binding an individual to society in a manner which enables him or her to cooperate with others for the benefit of the common good. Based on his research conducted in Italy, Putnam argued a considerable economic importance of social capital. The level of economic development may be treated as the result of social capital or as one of its functions. Moreover, social capital contributes also to:

- social integration and solidarity, thus preventing exclusion and discrimination;
- supporting and replacing ineffective state institutions;
- the control of the government sector and enforcing the accountability of government;
- the control of the commercial sector;
- building local culture and its protection against commercialisation.

The indicators of social capital thus defined may include general interpersonal trust, voluntary (not imposed, for instance, by the nature of the professional self-government) membership in organisations and serving functions in such organisations, participation in voluntary public meetings and speaking at such meetings, organising public meetings, voluntary actions for the benefit of the local community, including unpaid work for those in need (voluntary services), participation in parliamentary elections and a positive attitude towards democracy which creates better conditions for the development of social capital and feeds onto attitudes towards minorities, e.g. sexual minorities, and in general openness towards others⁵⁴.

The space in which and through which social capital is created is the third sector (voluntary non-governmental and non-family organisations, both associations and foundations), which constitutes a network of formal relations. The network of informal relations (among the family or friends) may also create social capital, however, in the case of strong informal relations within a separated group the

⁵² Particularly in the wealthier countries (Czapinski, 2008, 2009, 2011b).

⁵³ A critical overview of various definitions of social capital can be found in Hardin (2009).

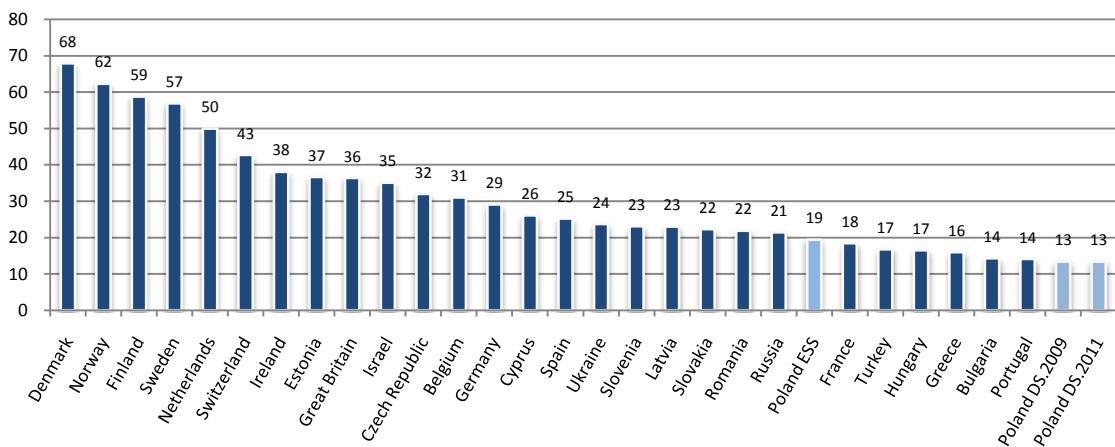
⁵⁴ The results of some of these indices will be discussed here. The majority of them were used for the purpose of the synthetic index of social capital which constitutes one of the dimensions of the quality of life (see chapter 9.1).

effectiveness of social capital is lower, due to a greater risk of putting particular benefits (of family, clique or mafia nature) first, at the expense of the common good. "Relying on informal social capital (connections), especially in the public sector, may undermine the faith in the impartial character of public institutions and distort their operation through corruption, clientelism and putting public resources in private hands." (Raiser, Haerpfer, Nowotny and Wallace, 2001). This does not mean that non-governmental organisations do not face such risk, especially in the case of corporations and trade unions.

According to Jeremy Rifkin (2000), Western civilisation is now at a turning point. With weak states and the aggressive expansion of commercialism going global, culture is losing its dynamics and diversity, which are the basic conditions of sustainable development. There are three possible scenarios: the growth of fundamentalism, the development of the fourth sector (criminal groups) or of the third sector (the renewal of civil society). The building of the third sector is the only effective scenario which guarantees sustainable development. However, this requires fulfilment of at least two conditions which define social capital as characterised by Putnam: mutual trust between people and a considerable share of voluntary work among the professionally active persons. Voluntary work, that is unpaid activity for the benefit of the community, is an essential basis for the development of non-profit non-governmental organisations; that is, the third sector perceived by Rifkin as the only positive scenario for democracy and sustainable development.

Poland does not meet any of the two criteria of civil society. As regards general trust, it is at one of the lowest positions among the countries covered by the *European Social Survey* (ESS) in 2008 (fig. 6.3.1). According to our research, only 10.5 per cent of respondents agreed that "most people can be trusted" in 2003 and 2005, 11.5 per cent in 2007, and 13.4 per cent in 2009 and in 2011. Under the ESS in 2008 as much as 19 per cent agreed with this statement. Our result is over three times worse than in Denmark, Norway and Finland, which in the ranking of the quality of life conducted among 199 countries were on the 19th, 1st and 16th position, accordingly (UNDP, 2010)⁵⁵.

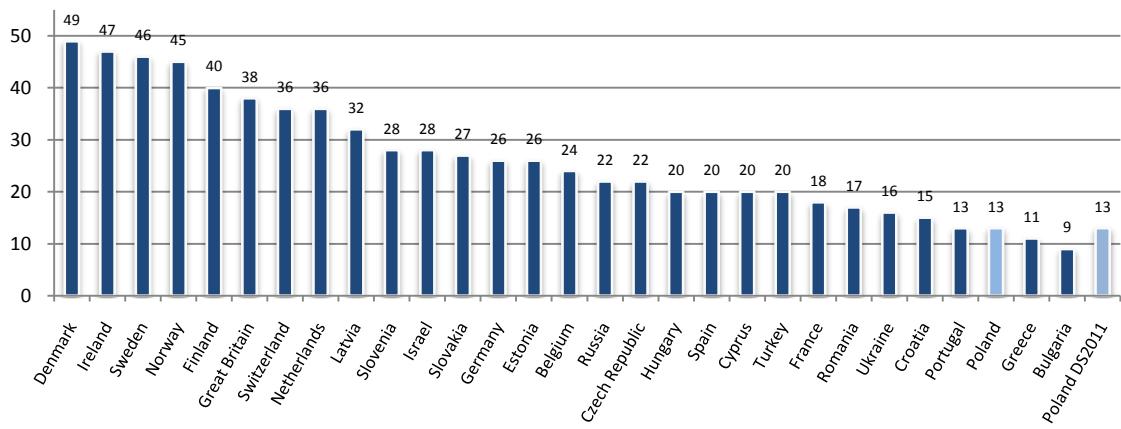
In comparison with the representatives of other societies, Polish people have also less faith in the good intentions of the others. According to the ESS of 2008 and *Social Diagnosis* of 2011, as little as 13 per cent of Polish people (lower results were recorded only for Greece and Bulgaria) is absolutely convinced that people most often try to be helpful (fig. 6.3.2).



Source of data: for all countries, including Poland, ESS - *European Social Survey* 2008 (percentage of answers from 7 to 10 on the following scale: 0—"One cannot be too careful in dealing with people", 10—"Most people can be trusted"), for Poland – *Social Diagnosis* (DS) from the period 2009-2011 (percentage of answers "Most people can be trusted" on the following scale: Most people can be trusted, One cannot be too careful in dealing with people, Hard to say).

Figure 6.3.1. Percentage of persons aged 16 and above trusting other people

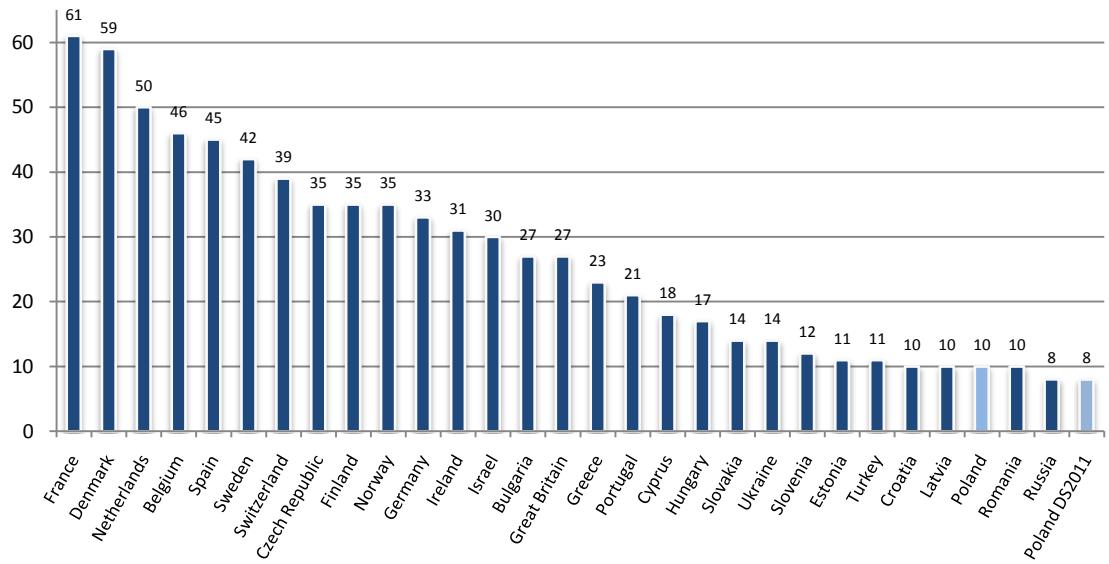
⁵⁵ In this ranking Poland was at the 41st position, which is 3 positions higher than in 1998 (UNDP, 2000).



Source: for all countries ESS - European Social Survey 2008 (percentage of answers from 7 to 10 on the following scale: 0-“People mostly look out for themselves”, 10-“Most people try to be helpful”), average for all countries in 2008 23.4.

Figure 6.3.2. Percentage of persons aged 16 and above convinced that most people try to be helpful

One of the signs of low tolerance among Polish people is their attitude towards homosexuals (fig. 6.3.3.). According to the ESS 2008, only 10 per cent (one by last position among 29 countries), and according to *Social Diagnosis* 2011 even less (8 per cent) decisively agree with the opinion that homosexuals should be allowed to live according to their beliefs.



Source: for all countries, including Poland, ESS - European Social Survey 2008, for Poland- *Social Diagnosis* (DS) 2011.

Figure 6.3.3. Percentage of persons who decisively agree with the opinion that homosexuals should be allowed to live according to their beliefs

As for the second condition of the development of civil society, that is the third sector, the data are as follows. In 2000, 64,500 associations and over 10,000 foundations were registered in the Polish register REGON. As little as 58 per cent of these operate actively, 10 per cent do not conduct any activity (<http://civicpedia.ngo.pl/x/328111;jsessionid=D907EDE1D4262E9CF20EBE5EFA54E451> [downloaded

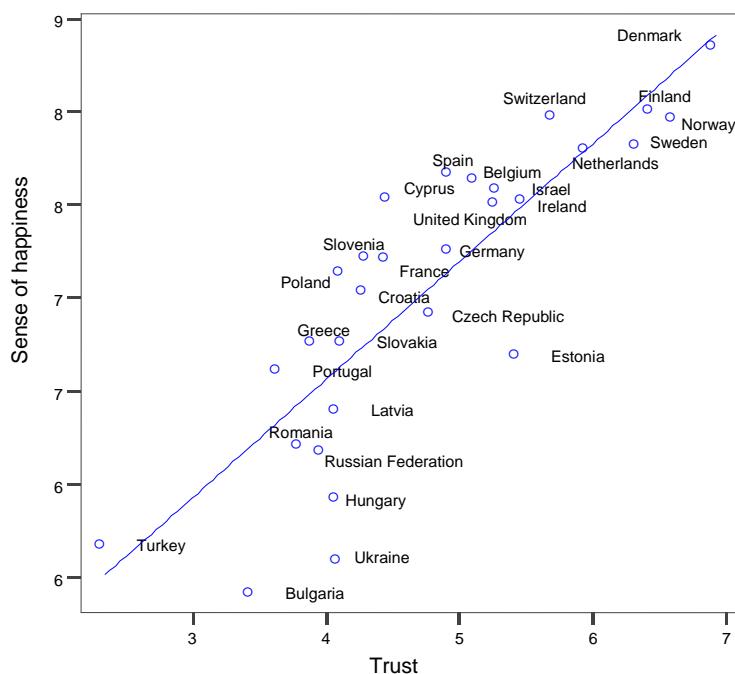
on 23 August 2011]), three in four do not have any employees and only 8 per cent employ more than 5 employees (<http://badania.ngo.pl/files/badania.ngo.pl/public/podstawowe-fakty2006>).

The willingness to participate in organisations – with membership fully voluntary after transformation of the political system – dropped from 30.5 per cent in 1989 (*World Value Survey*) to 14.8 per cent (13 per cent in 2009). In terms of this matter, just as in the case of trust, we have one of the last positions among the countries covered by the *European Social Survey* (ESS) in 2002.

So far we have mentioned the importance of social capital for the development of society and standard of living, but we have not given any evidence for this statement. Hence, below we present some information on this subject. In the international perspective, the level of interpersonal trust and the acceptance of democracy are strongly connected with psychological well-being measured by the sense of happiness (fig. 6.3.4. and 6.3.5.) as well as with material standard of living (fig. 6.3.6. and 6.3.7.).

Naturally, the relation between these two variables does not determine the direction of this dependency, as it does not indicate which of them is the cause and which is the result. We do not know whether the acceptance of democracy or general trust in other people indeed contribute to the sense of happiness or whether it is happiness that in specific countries contributes to people being more inclined to support democracy and to trust each other more. Or maybe there is yet another factor behind the sense of happiness, trust and the acceptance of democracy, for instance affluence. After all, the countries where the citizens are happy, accept democracy and trust each other are also wealthy (Denmark, Switzerland, Finland, Norway).

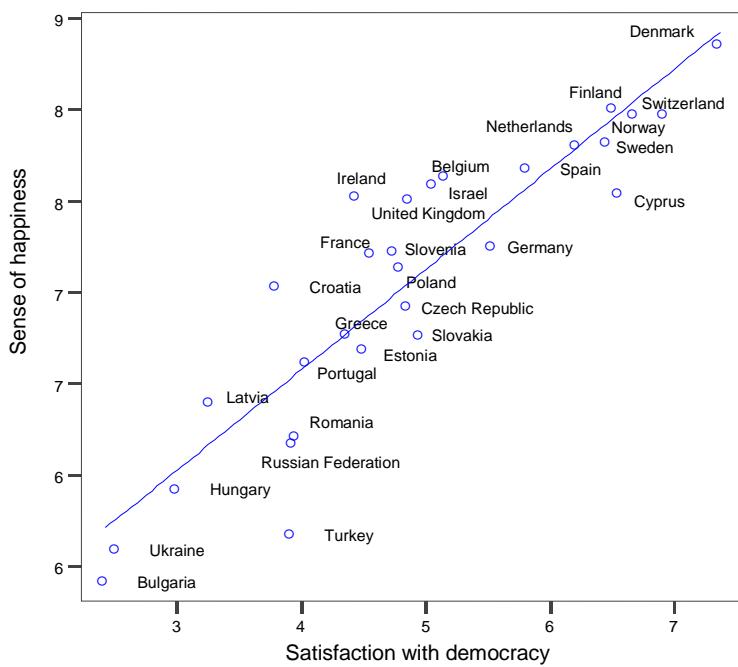
In order to pinpoint the direction of this dependency we would have to prove that one of the variables determines the change of the other over time. The easiest way to do so is to examine this in relation to the dependency between social capital and economic development measured against GDP per capita growth. It turns out that the level of social capital, analysed with various measures (trust, corporate ethics, etc.), to a great extent allows the prediction of the pace of economic growth in the subsequent 10 years (Czapiński, 2011b). However, it should be underlined that this dependency is true mainly for developed countries. In less developed countries human capital (measured by the inhabitants' average number of years in education) is a more important indicator. The relation between the sense of happiness and trust, and the acceptance of democracy, may be to a great degree related with the dependency between social capital and wealth. In wealthy countries more people are able to satisfy their basic needs and thus achieve their potential level of psychological well-being and feel happy (Czapiński, 2004b).



$$R^2 = 0.71$$

Source of data: *European Social Survey* 2008, own elaboration.

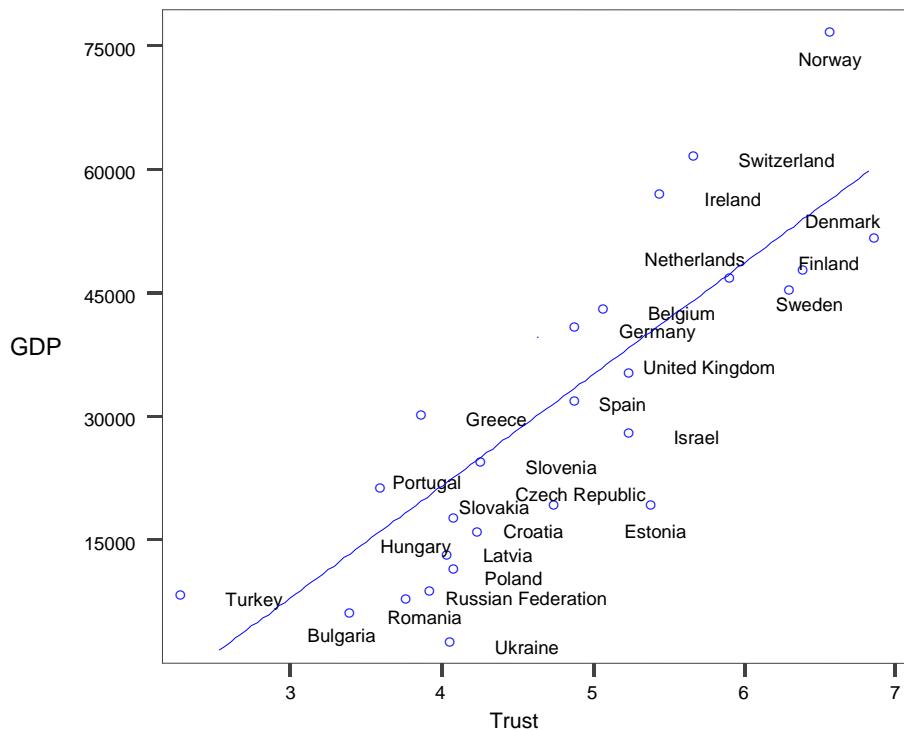
Figure 6.3.4. Interpersonal trust v. the sense of happiness by countries



$$R^2 = 0.82$$

Source of data: European Social Survey 2008, own elaboration.

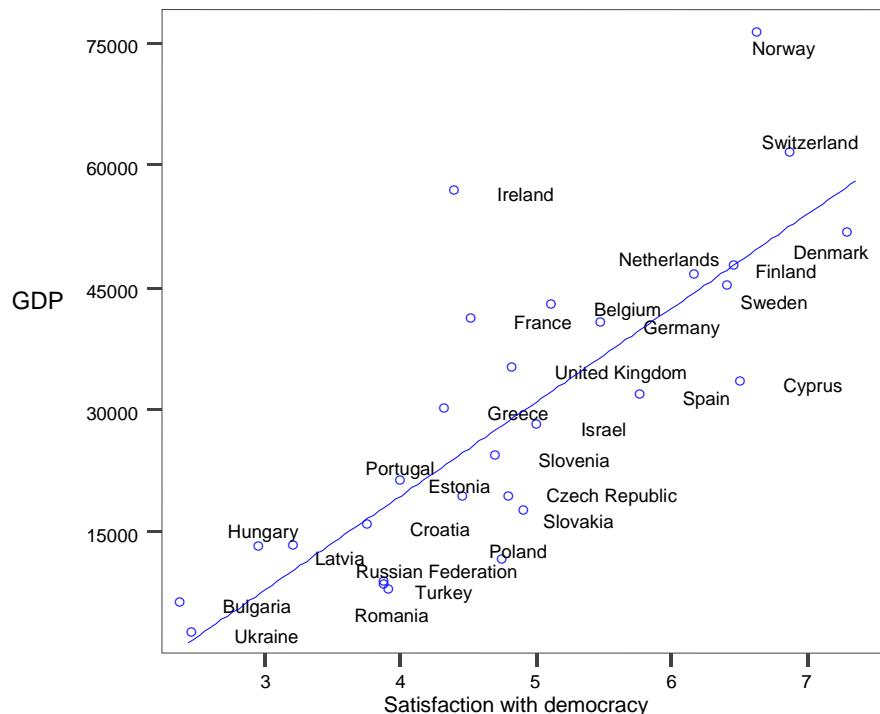
Figure 6.3.5. Satisfaction with democracy v. the sense of happiness by countries



$$R^2 = 0.69$$

Source of data: for trust – European Social Survey 2008, for GDP – World Bank, own elaboration

Figure 6.3.6. Interpersonal trust in 2008 v. GDP per capita in USD in 2009 by countries



$$R^2 = 0.64$$

Source of data: for satisfaction with democracy – European Social Survey 2008, for GDP – World Bank, own elaboration

Figure 6.3.7. Satisfaction with democracy in 2008 v. GDP per capita in USD in 2009 by countries

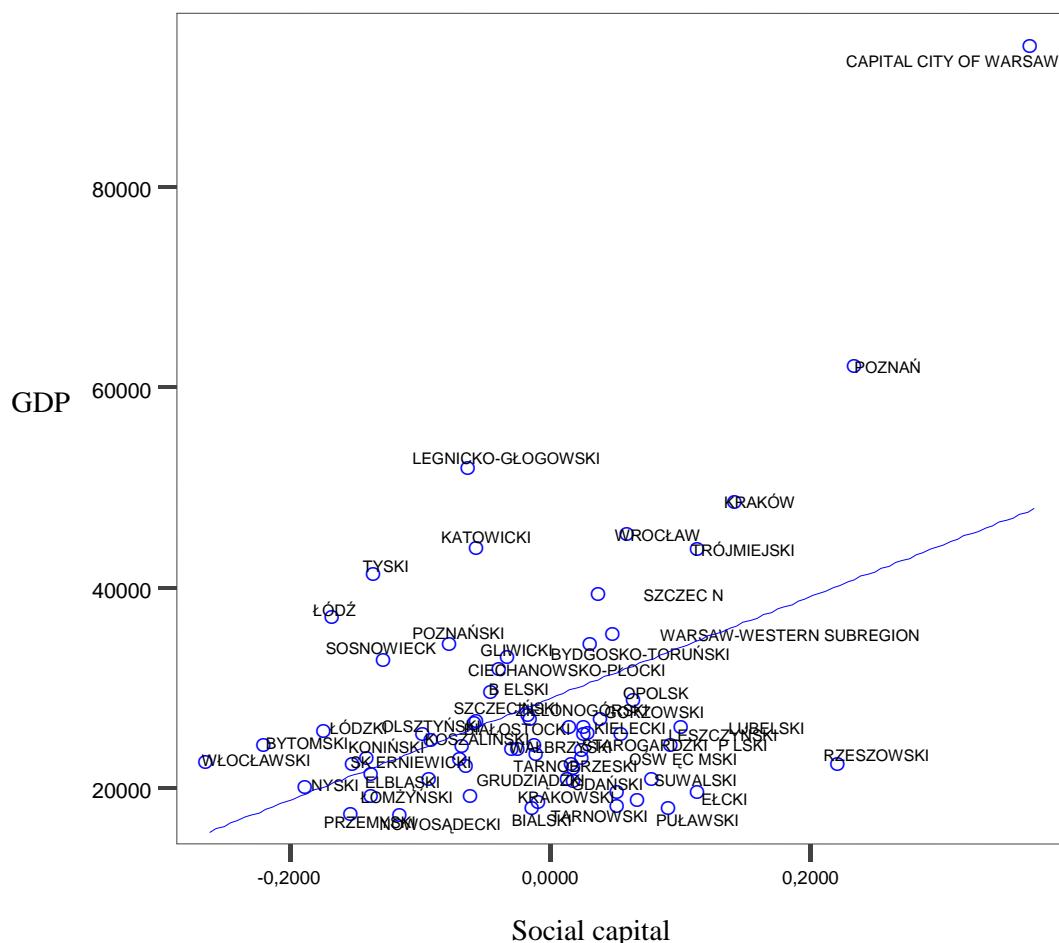
The data from *Diagnosis* also confirm the dependency between social capital, defined in accordance with the assumed indices (see above), and other dimensions of the quality of life, including the general index of the quality of life (see chapter 9.2) (table 6.3.1). All those relations are statistically significant. The correlation coefficient with the general index of the quality of life is the highest, which is not surprising since the index of social capital is one of the eight components of the general index of the quality of life. Two correlation coefficients with the indices of the standard of living come second: civilisation level and material well-being..

Table 6.3.1. Correlation coefficient of social capital with other indices of the quality of life*

	Psychologic al well-being	Physical well-being	Social well-being	Civilisatio n level	Material well-being	Life stress	Pathologies	General quality of life
Pearson's r	0.158	0.023	0.122	0.194	0.211	0.113	0.018	0.386
p	0.000	0.000	0.000	0.000	0.000	0.000	0.005	0.000
N	24,158	2,378	24,040	24,154	23,294	23,711	24,469	20,390

* For measures of the quality of life, see chapter 9.2.

Similarly as in the analysis broken down by country, we find here a significant connection between social capital and the affluence of subregions and larger cities. In the case of subregions we have the data on *per capita* GDP in 2008 (Central Statistical Office, GUS, 2010). The average level of social capital of the inhabitants of 66 subregions is explained by 21 per cent of the GDP diversification (fig. 6.3.8.). In the subregion with the highest level of social capital (Warsaw) we observe also decisively the highest GDP per capita.

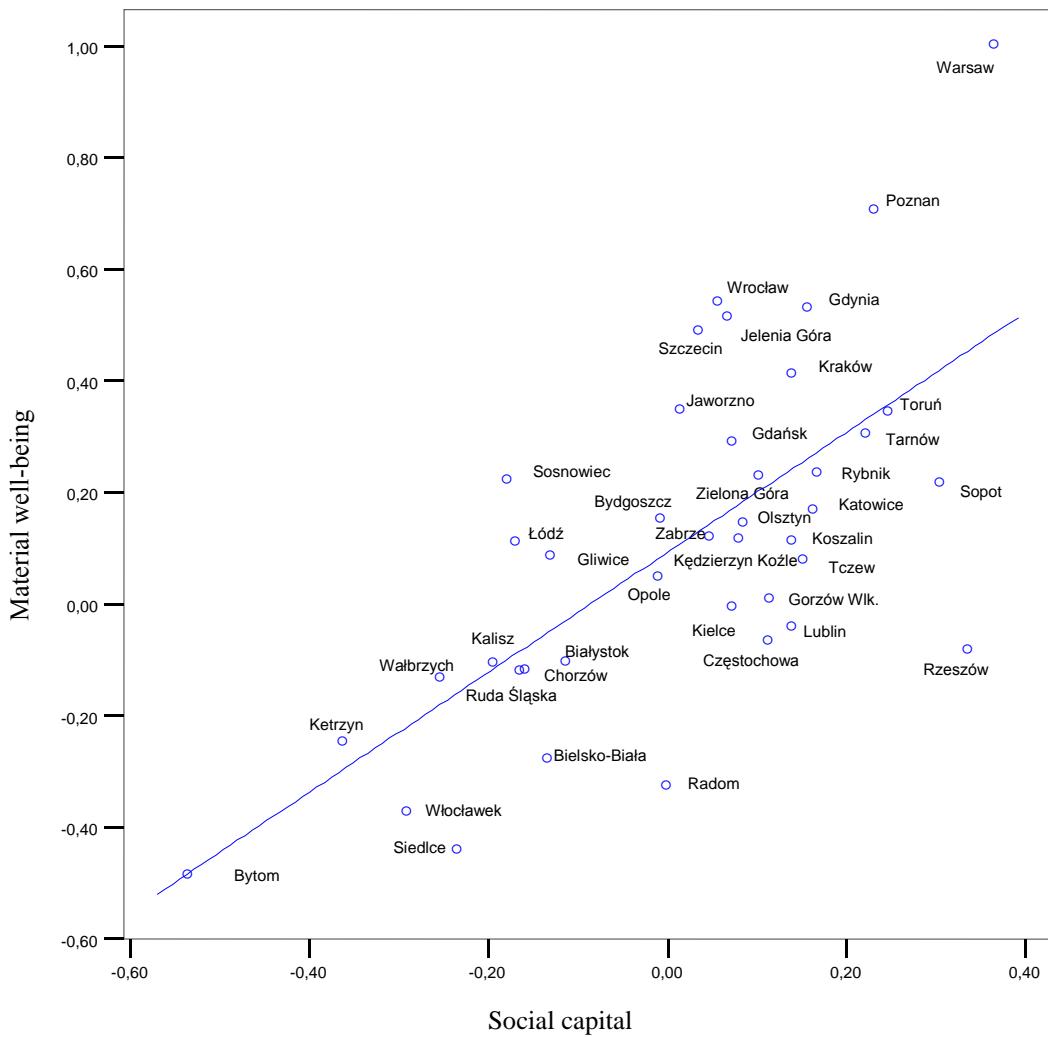


$$R^2=0.21 \quad p<0.001$$

Figure 6.3.8. Social capital v. GDP in 66 subregions according to NUTS3 in 2011

There are no relatively up-to-date data on income for cities and towns (apart from a few larger ones which constitute separate subregions), hence we have to adopt a different measure of affluence. The average level of social capital among the inhabitants of 40 cities with a sufficiently large representation in the sample explains 46 per cent of diversification in the material well-being of households (for the definition of this index, see chapter 9.2.). The linear dependency is, as shown, strong, however, there are several cities which differ from the trend. Rzeszów stands out with social capital

matching Warsaw, but with the well-being of inhabitants below the country's average at the level of Kalisz, which on the other hand has low social capital.

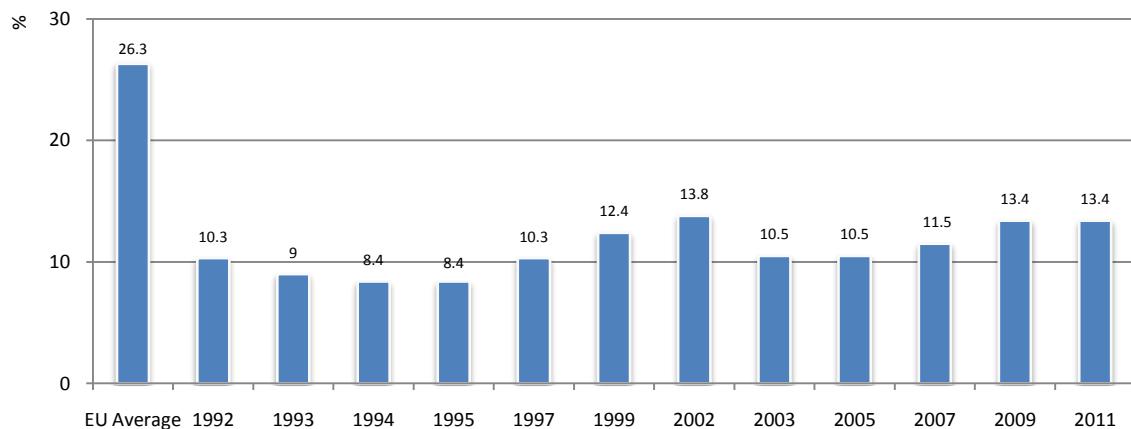


$$R^2=0.46, p<0.001$$

Figure 6.3.9. Social capital v. material well-being of the inhabitants of 40 cities and towns

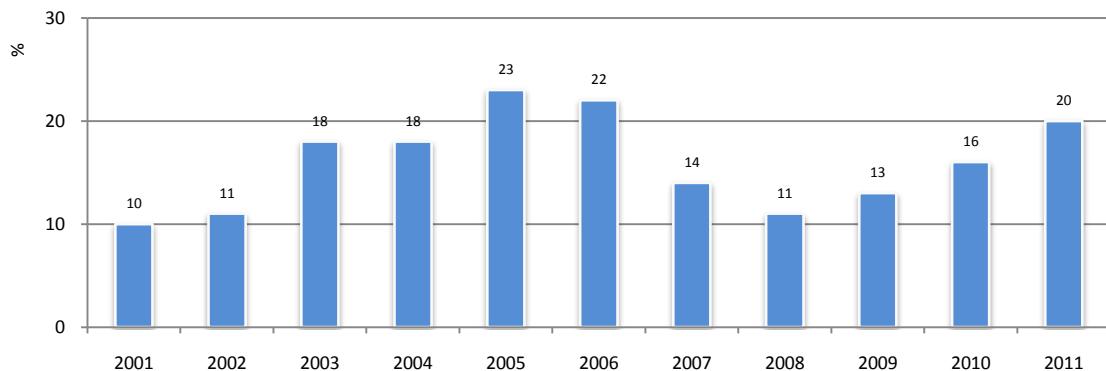
Obviously, the correlation connections do not entitle us to draw conclusions on the direction of the following dependency: do happier and more wealthy communities contribute to the development of social capital or is it social capital which contributes to the well-being and happiness of the inhabitants? However, the analyses of the data over time from various countries prove that social capital determines the further development of the country and not otherwise (Czapinski, 2008, 2011b). Still, this dependency is true only after a certain threshold of development is achieved; in poorer countries human capital is a stronger condition of economic growth than social capital. This does not mean, of course, that human capital (e.g. educational achievement) has no importance in developed countries. However, in the majority of these countries the condition of a sufficient level of human capital is already satisfied, and only then social capital gains the decisive influence on their development.

Let us now take a look at how two selected indices of social capital changed in the past years in Poland. The index of social trust changed slightly, but in the entire period from 1992 to 2011 it remained 2-3 times lower than the average in the European Union (fig. 6.3.10.). The percentage of volunteers among Polish adults grew until 2005 and then started to decrease to the level from before 2003, only to increase again to the level from the mid 90s (fig. 6.3.11.).



Source of data: the EU average – ESS - *European Social Survey* 2008, Poland in the period 1992-2002 – *Polish General Social Survey*, for the period 2003-2011 – *Social Diagnosis*, own elaboration

Figure 6.3.10. Percentage of persons trusting other people in Poland in the period 1992-2011 and the average level of trust in the EU in 2008



Source of data 2001-2010 Wolontariat, filantropia i 1 proc. (Volunteering, Philanthropy and 1 per cent) Stowarzyszenie Klon/Jawor; 2011 - *Social Diagnosis*

Figure 6.3.11. Percentage of volunteers among Polish adults in the period 2000-2011

According to the data of the Polish General Social Survey (PGSS, 1999), after a temporary growth in 1997 the number of persons satisfied with democracy in Poland started to decrease. In our research, in which we used a different scale for the assessment of democracy than the Polish General Social Survey, the percentage of those supporting the opinion that democracy is better than any other form of government is at a very low, though growing, level. In 2003 it was 17 per cent, in 2005 21 per cent, in 2007 24 per cent, in 2009 also 24 per cent and in 2011 26.8 per cent. From Poland's perspective the general question is what the source of economic development in the Third Republic of Poland is given the continuously low level of social capital. The development of Warsaw, Poznań or Gdynia may be connected with social capital which is higher there than in other agglomerations, however the material level of life has improved rather steadily in the entire population (see chapter 9.3) and also in the regions with the lowest levels of social capital. The

hypothetical answer is that we are at the stage of molecular development characteristic of less developed countries, as opposed to the community development which characterises highly developed countries (Czapiński, 2008, 2011b). A symbol of this opposition is the gap between the improved living conditions in households, furnished with various types of consumer durables (cf. chapter 4.3), and the pace of the infrastructure development, for instance in the case of roads, and all difficulties connected with implementation of public investments. The economic advancement of specific persons and families is dependent on human capital which is developing fast in Poland, and on educational attainment in particular. Collective projects, which require effective cooperation between the central and local government authorities as well as the local community and particular citizens, need social capital to be successful. Mere knowledge and health are no longer enough.

We live in a country of increasingly effective individuals and a continuously ineffective community. The common good, measured for instance as the size of the state budget, is only growing because those who are obliged to pay part of their income to this common coin bank are becoming richer. However, this brings little benefit to public investment. The fact that currently the considerable financial resources from the EU to a certain extent level this asymmetry should not put politicians at ease because soon, when the external supply has dwindled and social capital has not grown, we may face the risk of impeded development.

International studies demonstrate that human capital is more important than social capital in terms of the conditions for development in the poorer countries, to which Poland still belongs. However, after exceeding a certain threshold of affluence⁵⁶ it is social capital which becomes more important for development. This explains why so far we have developed economically at a fairly good pace, despite a very low level of social capital. Probably in about 8 years Poland will reach the threshold of affluence above which further investment in human capital will cease to suffice to maintain development. This is approximately the time left to build social capital necessary for further development (Czapiński, 2011b).

However, while human capital may be built with individual investments, which Polish people have done and still do (at present as many as 2/3 of students pay for their education from own pocket), it is impossible to build social capital in this manner. First of all, as Putnam states, social capital is dependent on the historical, long term process of the formation of a civil community, and secondly, under this historical process it is highly important what occurs in the public sphere: in politics, at schools, in local government and on the streets. This in turn to a great extent depends on the elite and on politicians in particular. At present, when looking at the educational system or parliament, it is difficult to indicate examples of a political or, more generally, institutional incentive which would encourage Polish people to trust each other more and feel a greater willingness to cooperate. The passage of time alone will not change this.

To sum up, today growing human capital, which attracts foreign investors and the financial support from the European Union, is a sufficient source of the individual development of Polish people and thus also of Poland as a whole. However, in some short time we will painfully experience the lack of social capital responsible for the development of a community without a considerable external supply.

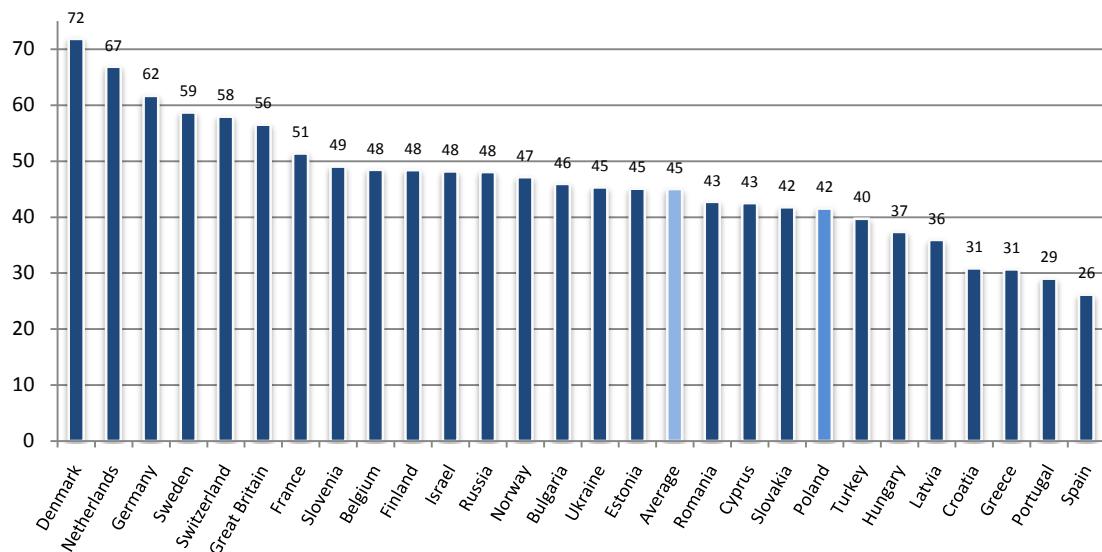
⁵⁶ The level of affluence, measured by per capita GDP, is only an index of the complexity of economic relations, technological advancement, competitiveness of economy and other indices of the society's development level available to the majority of countries.

6.4. Political identification and activity

Janusz Czapinski

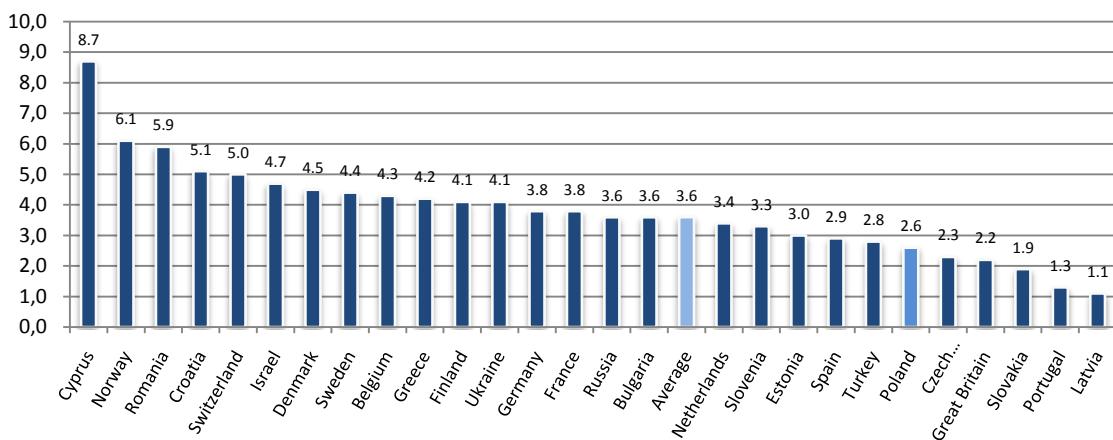
In the *European Social Survey* 2008, the Poles ranked below the European average in terms of their interest and involvement in politics (fig. 6.4.1 and 6.4.2). Our results concerning the participation in elections, be it parliamentary, local government or presidential, were even worse. Even in the case of the turnout in the elections to the European Parliament in 2009, we ranked at the third-to-last position (fig. 6.4.3.), despite being among the greatest EU enthusiasts and indicating the European Parliament as the institution we trust almost twice more often than the Sejm, as results from this year's edition of *Social Diagnosis* (see chapter 9.1). Even if we leave out the countries where participation in elections is an administrative obligation (such as Belgium and Luxembourg), the political activity of Polish people and – in general – their civil activity (as shown by the indices of social capital) is still very low. In this regard, we are more similar to those countries which also experienced real socialism than the countries from the north-west Europe, and Scandinavian countries in particular.

In the survey, the declared involvement in elections is naturally considerably higher. In the *European Social Survey*, just as in the subsequent editions of *Social Diagnosis*, the difference between the declared and the actual participation in elections, this most important civil event, amounts to 20 percent. In the last edition of *Social Diagnosis*, more than 66 per cent of respondents declared that they had taken part in the 2010 local government elections, while the data from the National Electoral Commission indicate the turnout at 47.3 per cent.



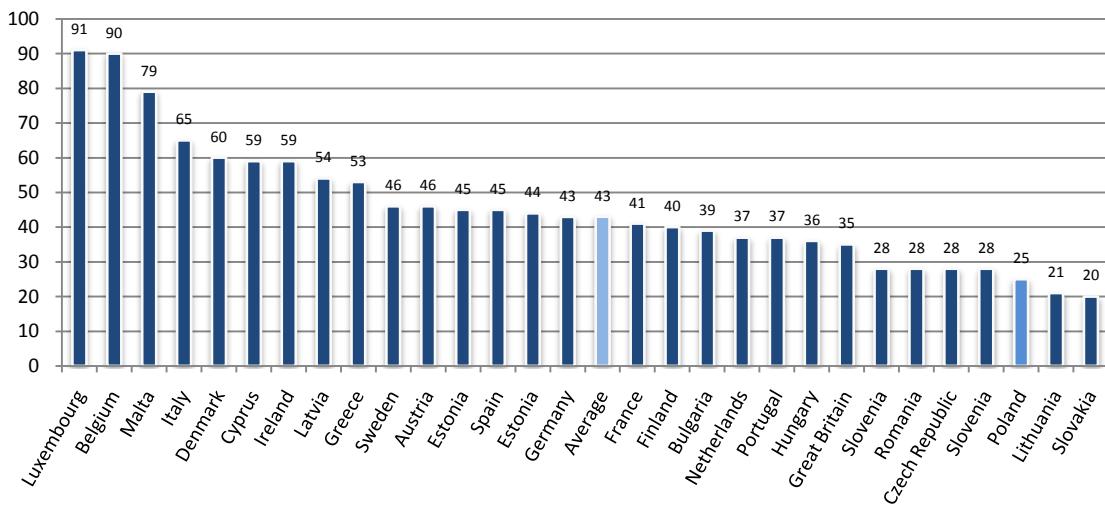
Source of data: European Social Survey 2008 (own elaboration)

Figure 6.4.1. Percentage of persons who declare high and considerable interest in politics broken down into 28 countries



Source of data: European Social Survey 2008 (own elaboration)

Figure 6.4.2. Percentage of persons who declare they are active in parties or action groups broken down into 28 countries



Source of data: <http://www.europarl.europa.eu/parliament/archive/staticDisplay.do?language=PL&id=211> [downloaded on 08 September 2011]

Figure 6.4.3. Turnout in the elections to the European Parliament in 2009

In this year's edition of *Social Diagnosis* we asked respondents to indicate the political party with which they identify the most (Annex 1, individual questionnaire, Question 106). The distribution of answers is shown in fig. 6.4.4. These declarations can be treated as an indicator of political identification. They show that more than half of Poles aged 16 and above cannot find (42 per cent), or have difficulties finding (14.1 per cent), a representative of their own beliefs or interests on the political scene. This means that more than a half of Poles have no political identity. Among these who in March and April indicated their representatives, 41.1 per cent identified with the Civic Platform (PO), 28.5 per cent with Law and Justice (PiS), 17 per cent with the Democratic Left Alliance (SLD), 7.5 with the Polish People's Party (PSL), 2 per cent with Poland Comes First (PJM) and 3.7 per cent with other parties.

Political identification, or the lack thereof, depends on socio-demographic traits and life situation. Among the most important differentiating factors are age and education as well as the amount of personal income which is connected with education (tables 6.4.1 to 6.4.3).

The dependency between the age and identification with PiS, PSL and SLD is visibly linear (the older the age group, the more often these parties are indicated), similarly as the dependency between the age and identification with "other parties" or the lack of such identification, which is reversely linear (the older the age group, the lower the percentage of such answers). However, there is no clear dependency between the

age and identification with PO, although there is a considerable difference between the two extreme groups (in the oldest age group, 20 per cent indicated this party and in the youngest less than 13 per cent). Only in the oldest age group there are slightly more PiS supporters than PO supporters.

In the case of educational level, the dependency pattern is similar, with some exceptions though. Identification with PiS and PSL decreases, while identification with PO, SLD and “other parties” increases together with educational achievement. The higher the education, the less difficult it is to indicate one’s political identification.

The smaller the place of residence, the smaller the percentage of PO supporters and the supporters of “other parties”, and the higher the percentage of PiS and PSL supporters, as well as of persons who do not identify with any party or cannot decide which one to choose. Only in rural areas does the percentage of PiS supporters exceed the percentage of PO supporters.

Table 6.4.1. Percentage distribution of political identification in 5 age groups

Identification	Age				
	16-24 years	25-34 years	35-44 years	45-59 years	60+ years
PiS	N Percentage in the column	303 7.6	383 7.3	389 9.4	961 13.9
PSL	N Percentage in the column	56 1.4	117 2.2	129 3.1	306 4.4
SLD	N Percentage in the column	205 5.1	335 6.4	290 7.0	579 8.4
PJN	N Percentage in the column	27 0.7	51 1.0	38 0.9	70 1.0
PO	N Percentage in the column	514 12.8	1023 19.6	818 19.8	1214 17.5
Other parties	N Percentage in the column	107 2.7	83 1.6	53 1.3	138 2.0
None of the parties	N Percentage in the column	2076 51.7	2530 48.4	1862 45.1	2683 38.8
It is hard to say	N Percentage in the column	725 18.1	707 13.5	546 13.2	968 14.0
					769 12.7

Table 6.4.2. Percentage distribution of political identification in 4 education groups

Identification	Educational level				
	Primary and lower	Basic vocational	Secondary	Higher and post-secondary	
PiS	N Percentage in the column	778 18.9	1053 12.7	922 11.3	526 9.1
PSL	N Percentage in the column	205 5.0	345 4.2	219 2.7	94 1.6
SLD	N Percentage in the column	215 5.2	539 6.5	675 8.3	534 9.2
PJN	N Percentage in the column	33 0.8	51 0.6	70 0.9	77 1.3
PO	N Percentage in the column	434 10.6	1113 13.4	1599 19.6	1630 28.2
Other parties	N Percentage in the column	28 0.7	114 1.4	145 1.8	137 2.4
None of the parties	N Percentage in the column	1701 41.4	3723 44.9	3481 42.8	2159 37.4
It is hard to say	N Percentage in the column	718 17.5	1350 16.3	1031 12.7	622 10.8

Table 6.4.3. Percentage distribution of political identification in 4 place of residence classes

Identification		Place of residence class			
		Cities with more than 500,000 inhabitants	Cities with 100,000- 500,000 inhabitants	Cities with less than 100,000 inhabitants	Rural areas
PiS	N	317	503	1063	1407
	Percentage in the column	9.8	11.1	12.3	14.2
PSL	N	15	35	152	662
	Percentage in the column	0.5	0.8	1.8	6.7
SLD	N	263	359	727	616
	Percentage in the column	8.1	7.9	8.4	6.2
PJN	N	25	46	79	81
	Percentage in the column	0.8	1.0	0.9	0.8
PO	N	996	1061	1605	1119
	Percentage in the column	30.8	23.3	18.6	11.3
Other parties	N	103	91	131	99
	Percentage in the column	3.2	2.0	1.5	1.0
None of the parties	N	1174	1877	3648	4385
	Percentage in the column	36.3	41.2	42.2	44.1
It is hard to say	N	343	579	1230	1573
	Percentage in the column	10.6	12.7	14.2	15.8

Table 6.4.4. Average value of the selected indices of the quality of life⁵⁷ in relation to political identification

Identification		Index of the quality of life				
		Material well-being	Civilisation level	Psychological well-being	Physical well-being	General quality of life
PiS	Average	-0.236	-0.378	-0.199	-0.261	-0.229
	Standard deviation	0.932	1.002	1.015	1.102	0.986
PSL	Average	-0.294	-0.577	-0.060	-0.090	-0.187
	Standard deviation	0.878	0.944	0.916	1.011	0.969
SLD	Average	0.118	0.075	-0.025	-0.107	0.053
	Standard deviation	0.977	0.979	1.003	1.039	0.985
PJN	Average	0.130	0.143	-0.026	-0.110	0.078
	Standard deviation	1.046	1.053	0.854	0.982	1.038
PO	Average	0.302	0.238	0.152	0.052	0.258
	Standard deviation	1.153	0.961	0.894	0.964	0.964
Other parties	Average	0.408	0.466	0.153	0.210	0.226
	Standard deviation	1.050	0.874	0.906	0.834	1.007
None of the parties	Average	-0.043	0.039	-0.011	0.055	-0.046
	Standard deviation	0.945	0.977	1.031	0.981	0.997
It is hard to say	Average	-0.096	-0.059	0.026	0.057	-0.013
	Standard deviation	0.919	0.994	1.020	0.959	1.001

The highest material standard of living is characteristic of the supporters of PO and “other parties”, and the lowest of the supporters of PSL and PiS. Similarly, in terms of civilisation level, the supporters of PO and of “other parties” stand out in a positive way, while the supporters of PSL and PiS stand out in a negative way. The highest psychological well-being is the feature of the supporters of PO and of “other parties”, and the lowest of the persons identifying with PiS. The supporters of “other parties” have the best health, which results from the fact that young persons prevail in this group, and the group of PiS supporters have the worst health (persons in their old age prevailing). In terms of the general index of the quality of life, the supporters of PO and “other parties” are characterised by the highest value and the supporters of PiS and PSL by the lowest.

If political identification reflects a subjective correspondence between the features ascribed to the party and own system of values and needs, we may expect that the supporters of specific parties will also differ from each other in terms of the features of their personality, beliefs and social attitudes, and indeed many such differences may be observed.

In a democratic country, political involvement is strongly connected with the attitudes towards democracy. Figure 6.4.4. shows that only the supporters of PO have unambiguously positive attitude towards democracy. The supporters of all other parties and the persons without political identification perceive the democratic system more sceptically or even in a negative way.

The distribution of answers to the question about the attitude to democracy and about political identification creates several clusters. One of them visibly assembles PO supporters, the other persons who

⁵⁷ For the description of the indices, see chapter 9 2.

have difficulties with political identification. The remaining clusters, which are close to each other, include the supporters of PiS, SLD, PSL and of “other parties”. The opinion that democracy is better than any other form of government is shared to a largest extent by PO supporters; the belief that sometimes non-democratic rule is better than democracy is shared to a largest extent by the supporters of SLD and PiS; PiS supporters also largely share an indifferent attitude towards democracy. The supporters of PSL and of “other parties” are most likely to state that democracy is a bad form of government. Those who have difficulties with political identification are unable to answer also the question about their attitude to democracy. PJN supporters and the persons who do not identify with any party have the most diversified opinions on democracy.

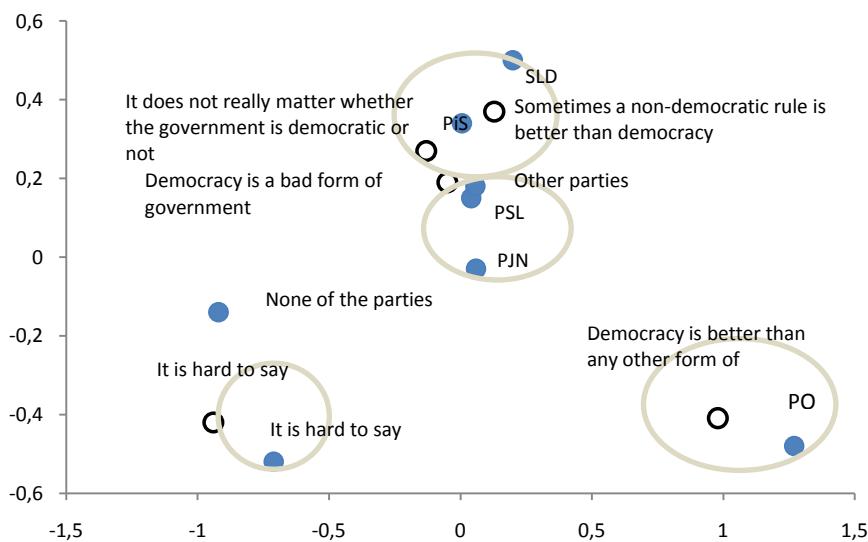


Figure 6.4.4. Results of the analysis of the correspondence between political identification (blue marks) and the attitude towards democracy (black-rimmed marks)

PiS supporters are least tolerant towards homosexuals and foreigners⁵⁸, and PO and SLD supporters are most tolerant towards those groups (table 6.4.5.). PiS supporters are also most active church goers while SLD and PO supporters are least active in this sphere (table 6.4.5.). The supporters of “other parties” are most entrepreneurial⁵⁹, with PJN and PO supporters at the second position, while the persons supporting PSL and PiS are least entrepreneurial (table 6.4.5.). The supporters of “other parties”, PJN and PO are most sensitive to the abuse of the common good⁶⁰, while PSL supporters are least sensitive to such practices (table 6.4.5.).

The characteristics of the supporters of four main political parties in terms of the socio-demographic variables (age, educational attainment, size of the place of residence, amount of personal income), selected indices of the system of values (frequency of religious practice and the belief that God is one of the three conditions of a happy life), social attitudes (the level of bias against homosexuals and foreigners), entrepreneurship, the attitude towards democracy and the attitude to control over own life (self-determinism v. fatalism) demonstrate in general two large groups which differ significantly and two smaller subgroups under those large groups (fig. 6.4.5.). Those two large groups are the supporters of PO and PiS. The supporters of SLD in many ways are similar to the supporters of PO and PiS supporters are characterised by many features shared by PiS supporters.

⁵⁸ For the description of the index, see chapter 6.1.1.

⁵⁹ For the description of the index of entrepreneurship, see chapter 8.4.

⁶⁰ For the description of the index, see chapter 6.1.1.

Table 6.4.5. Average value of the index of bias, entrepreneurship and sensitivity to the common good and the frequency of church going in relation to political identification

Identification	Place of residence class			
	Being biased	Participation in masses	Entrepreneurship	Sensitivity to the common good
PiS	Average	8.34	4.35	0.20
	Standard deviation	2.45	4.66	0.50
PSL	Average	7.56	3.00	0.20
	Standard deviation	2.31	2.44	0.50
SLD	Average	6.83	1.89	0.33
	Standard deviation	2.37	2.08	0.65
PJN	Average	7.35	2.99	0.47
	Standard deviation	2.52	2.72	0.80
PO	Average	6.41	2.23	0.42
	Standard deviation	2.37	2.71	0.74
other parties	Average	7.08	2.25	0.68
	Standard deviation	2.90	2.96	0.88
None of the parties	Average	7.34	2.31	0.31
	Standard deviation	2.43	2.71	0.64
It is hard to say	Average	7.47	2.76	0.26
	Standard deviation	2.21	2.70	0.57

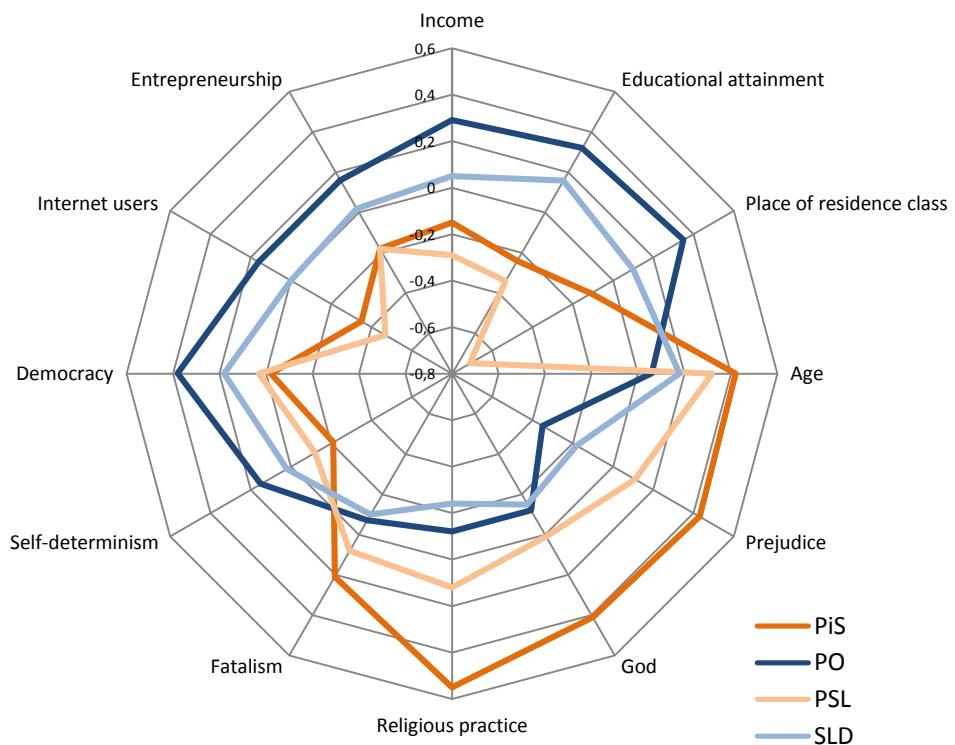


Figure 6.4.5. Age, educational achievement, personal income, place of residence class, entrepreneurship, percentage of Internet users, attitude to democracy, self-determination and fatalism⁶¹, frequency of religious practice, indicating God as the condition for a happy life and the level of prejudice towards homosexuals and foreigners among the supporters of four political parties (standardised values)

A specific test of the correspondence between a party's message and its supporters' beliefs is the distribution of the opinions on the causes of the Smoleńsk catastrophe in the groups with a different political identification. The belief that the catastrophe was a consequence of a conspiracy aimed at the President of the Republic of Poland can be treated as the most conclusive. The PiS leaders have more or

⁶¹ Self-determination is perceiving oneself as the author of the development of the events in the last year, and fatalism is a belief that the development of the events was dependent on fate (God).

less openly propagated such a theory. The leaders of other political parties supported less “conspiracy-like” causes. The distribution of the respondents’ answers to the question about the most probable cause of the Smoleńsk catastrophe broken down by political identifications has been demonstrated in table 6.4.6. Indeed, the highest percentage of persons supporting the conspiracy theory belongs to the group of PiS supporters. However, what may surprise is that even in this group there are “only” 39 per cent of supporters of a conspiracy theory, despite the fact that two possible causes could be indicated.

Table 6.4.6. Percentage of respondents supporting various probable causes of the Smoleńsk catastrophe in relation to their political identification

Political identification	The most probable cause of the Smoleńsk catastrophe					
	The error of the pilots / air traffic controllers	Attack/conspiracy against the president	The pilots being under pressure	General chaos	Other causes	It is hard to say
PiS	15.7	38.9	16.2	36.6	6.4	17.6
PSL	22.8	12.0	34.3	34.1	7.3	18.9
SLD	28.6	6.0	55.6	33.5	5.9	12.6
PJN	35.2	11.4	29.7	40.4	10.5	15.7
PO	34.9	3.7	58.4	28.7	6.2	13.7
Other parties	34.8	10.5	38.3	39.6	8.9	14.1
None of the parties	18.0	9.9	32.5	30.4	6.3	31.9
It is hard to say	15.8	9.2	24.7	25.5	5.2	46.4
Total	21.9	12.1	35.9	30.8	6.2	26.6

7. USE OF INFORMATION AND COMMUNICATION TECHNOLOGIES

Dominik Batorski

Information and communication technologies, though still sometimes referred to as "new technologies", have become common. For most Poles, a mobile phone is a tool used every day, more and more people are using computers and the Internet as well. Only a few years ago, these technologies were used by a small group of people only. In 2003, only 14 % of people aged 16 and above used cell phones, computers and the Internet. Currently, more than 85 % have mobile phones, 60 % use the Internet, and 55 % use all of these technologies. However, more important than the dissemination of ICT is the increase in the relevance of these technologies for different spheres of life, as well as for social and economic changes in Poland. This chapter of the *Social Diagnosis* is devoted to the development status of information society in Poland and the conditions, ways, and consequences of using new information and communication technologies.

7.1. New technologies in households

7.1.1. Computers and access to the Internet

In the first half of 2011, two-thirds of households had a computer, and 61.1 % had access to the Internet. We are seeing a continued growth in the number of computerized households, although the rise is slowing down (Figure 7.1.1). This slowdown indicates a gradual saturation of the market, as predicted in the report two years ago. On the other hand, the increase in the availability of the Internet is constantly fast, and during the last two years the number of households with access to the Internet grew by almost 10 percentage points. This is due to the shrinking group of households with a computer but without Internet access. Currently, only 8 % of computerized households have no access to the Internet, two years ago it was 15 %, and in 2003 only every second household with a computer had access to the Internet.

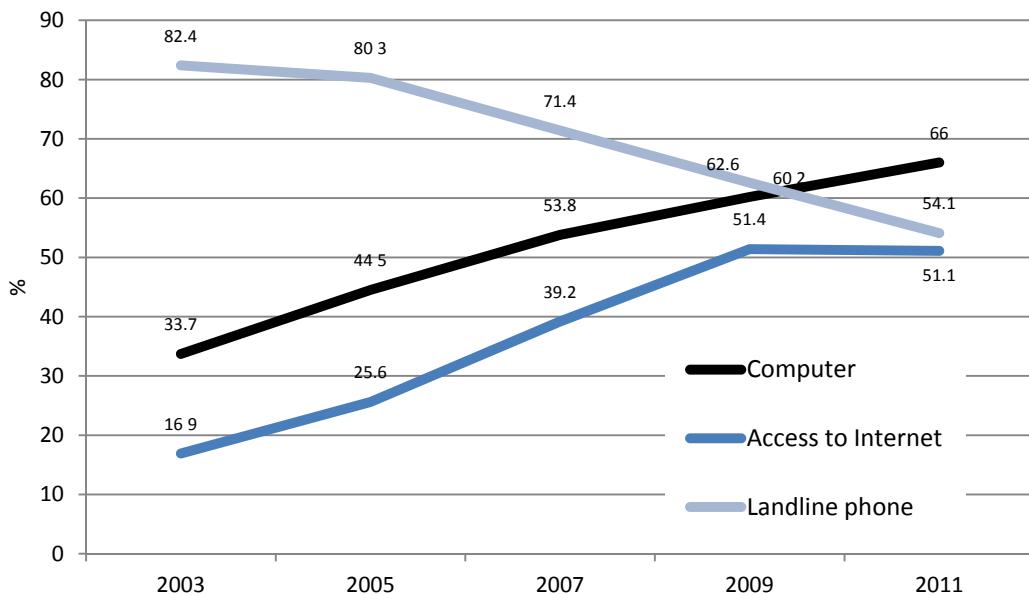


Figure 7.1.1. Households with computer, Internet access and landline phone in 2003-2011

Only some of the households that do not have computers and access to the Internet cite financial considerations for such absence. Currently, 10.3 % of all households do not have a computer for financial reasons, and 9.5 % have no access to the Internet because of that.

Slightly more than half (50.2 %) of the households have a desktop computer. A laptop, netbook or tablet may be found in 38.8% of households. Changes can be seen almost exclusively in the latter category. The number of households with a desktop computer was virtually identical as four years ago, while in 2009

it was even slightly higher (51.3 %). The share of households with laptops is increasing, as laptops are sold more often than desktop computers. Two years ago, 25 % of households had laptops, while in 2007 only 11 % did. However, the greater number of laptops does not mean a greater mobility of their use. They are used primarily at home, and users often prefer them because they take up less space and are more flexible to use.

The number of computers in individual households is increasing. Currently, 27.8 % of households have more than one computer, two years ago it was 17 %, and in 2007 only 10 %. In 5.2 % of households there are three or more computers. In 13 % of households there are at least as many computers as people living in the household. In computerised households, there are 2.7 people per one computer on average (in 2007 it was 3.5).

As in previous years, computers are more common in multi-person households, and the least common in single-person households. As many as 72 % of the latter do not have a computer at home, 49 % of two-person households do not have a computer. Meanwhile, computers are in 84 % of households where three people live and in up to 90 % of households where four or more people live. These differences mean that already 75.6 % of Poles aged 16 and above have a computer at home (an increase from less than 70 % two years ago and 62 % in 2007). The same is true for access to the Internet, so that now 70.5 % of Poles aged 16+ have a computer with access to the Internet (two years ago it was about 11 percentage points less). If we take into account children under 16 years of age, it turns out that 73 % of the population have Internet access at home.

However, not all households with ICT actually use them. As many as 23 % of people with a computer at home do not use it at all. Moreover, the number of such people is increasing - in 2007, 16 % of people who had a computer at home did not use it, and two years later it was 17 %. People who do not use home computers are primarily the elderly, those less educated, as well as retirees and pensioners. Fewer people use computers in small towns and in rural areas. As in the case of computers, also a significant number of people with computer and network access at home do not use the Internet. Currently it is 14.1 % of Poles aged 16+ and 19 % of those with access to the Internet.

For a very large and still growing group of people, the reason for not using computers and the Internet is not the lack of access to these technologies. They do not use them primarily due to the lack of motivation for unassisted use (they can often ask other household members for help or for checking something). What also matters is the lack of knowledge about the possible uses of the Internet, and the lack of skills.

A vast majority of households with access to the Internet use a broadband connection. This type of access is now present in more than half of all households (50.1 %). Modems that connect to the Internet through ordinary telephone landlines are a thing of the past - almost nobody uses them any longer. Already four years ago only 5 % of households with Internet access used them, while in 2003, there was broadband connection only in slightly more than 10 % of households connecting to the Internet.

In recent years we have also seen a spread of wireless access - already 15 % of households connecting to the Internet have access through a mobile operator, and a further 3 % use a mobile phone to connect to the Internet. The share of landline operators in providing access to the Internet is decreasing. This is related to the decreasing market share of the *neostrada* service of Telekomunikacja Polska, because connections offered by other providers can be found in a growing number of households. The share of connections offered by cable TV providers has practically not changed. Providers grow with the market and still reach 27 % of households with the Internet. However, networks in residential areas and services of local Internet providers are becoming less popular.

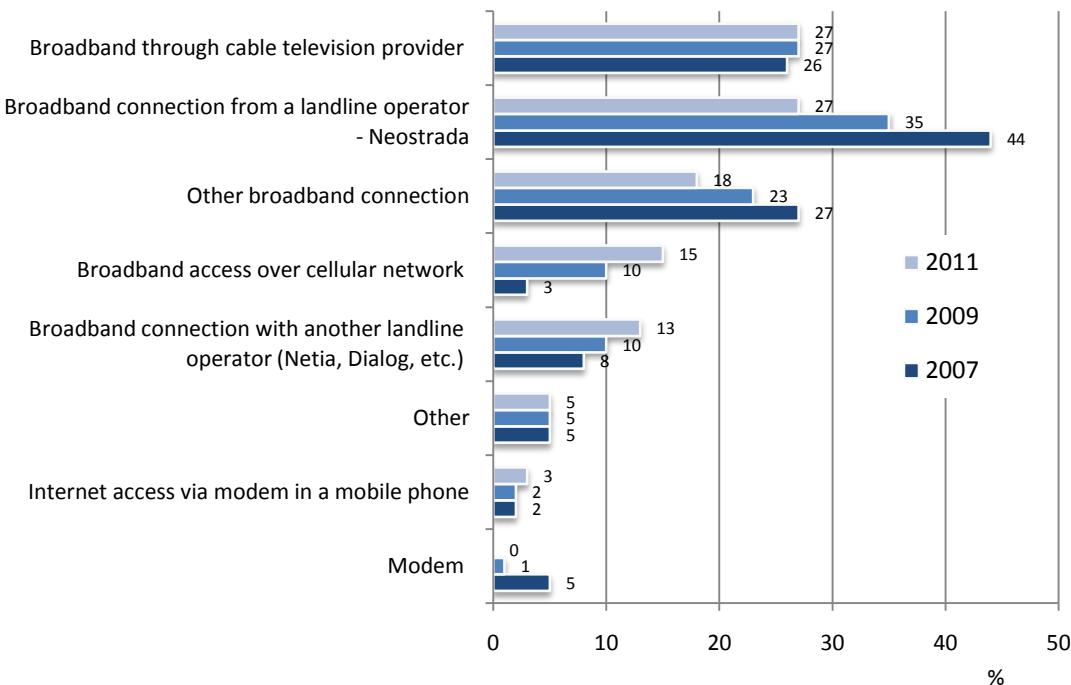


Figure 7.1.2. Ways of connecting to the Internet in households in 2007-2011

The most important change in the ways of connecting to the Internet is undoubtedly widespread wireless access. It is worth looking at closer. A growing percentage of households use cell phones to connect to the Internet, currently it is 9 % of all households, or 15 % of those with access to the Internet. The growth in the number of such households in recent years has been very large. For as many as 83 % of those using this type of access it is the only way to connect to the Internet. Its use is often stationary in nature and stems from the impossibility to get another broadband connection in the household, and not necessarily from the need for wireless access. Thus, the large number of households connecting to the Internet in this way is indirect evidence of the poor availability of the Internet in many areas. On the other hand, the spread of wireless access, along with an increase in the prevalence of laptops, may in time lead to a more mobile Internet usage.

Internet access via the mobile phone is used differently than broadband access provided by mobile network operators. It is more of a supplement and an additional means of access than the only way of accessing the Internet. As many as 80 % of those that use it have a different kind of access at home (the vast majority have a broadband connection), others generally also use the Internet in other places (e.g. at work).

Broadband connection bandwidth at homes and the dynamics of its changes in 2007-2011 is shown in Figure 7.1.3. The type of network access is important because it is relevant for the availability of the Internet. In this respect, Poland is still lagging behind the advanced countries of the EU. The most popular are connections with a bandwidth of 2Mb/s, but there are still many connections with the bandwidth of 1Mb/s. Connections with a much higher bandwidth are gradually becoming more popular. In general, the quality of connections has improved greatly in recent years. The share of the slowest connections is decreasing. There are connections of 6Mb/s or more in 28 % of households with access to the Internet, while only two years ago it was less than 7 % of households with broadband access.

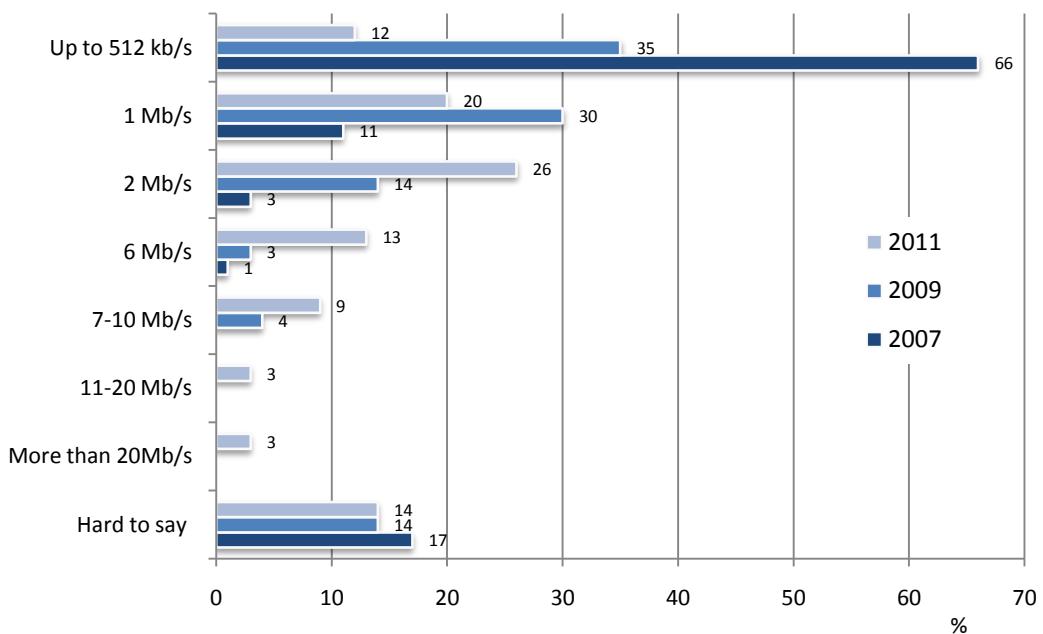


Figure 7.1.3. Bandwidth of Internet connections in households with broadband Internet connections in 2007-2011.

7.1.2. Other technologies in households

In the last two years, we have seen a large increase in the number of households with pay TV, satellite or cable (Figure 4.3.1 in section 4.3). In the last four years there has also been a very rapid increase in the number of LCD or plasma TV sets. The increase is significantly faster than the increase in the availability of computers and the Internet in recent years. In 2007, such TV sets were in every fifth household only, two years ago in every third, and now they are already in half of households. DVD players are also becoming more common, although the rate of growth is much slower. The percentage of households declaring ownership of a home theatre is also growing.

The number of households with a landline phone is still decreasing. At present, it is just over a half of the households. Of course, this results primarily from the spread of mobile phones – currently people from 87.9 % of households have mobile phones, and so the mobile phones are in a much larger number of households than landline phones. In as many as 57.7 % of households every household member has a mobile phone. Out of those aged 16 and above, 85.1 % have their own mobile phone. Among those who do not have a mobile phone, 10.1 % have a landline phone at home. Only 4.8 % of them are persons who have neither their own mobile nor landline phone.

7.1.3. Conditions for the presence of new technologies in households

As mentioned earlier, the presence of computers and the Internet in households varies greatly depending on several factors. Table 7.1.1 presents data on the availability of these technologies in households of various types for 2007- 2011.

Table 7.1.1. Availability of computers and the Internet in different types of households in 2007-2011

	Group of households	Computer			Internet		
		2007	2009	2011	2007	2009	2011
Size of place of residence	Towns with more than 500,000 inhabitants	67.4	70.8	77.1	57.6	65.4	73.3
	Towns with 200,000-500,000 inhabitants	60.8	69.2	71.9	50.2	63.0	68.7
	Towns with 100,000-200,000 inhabitants	55.9	61.8	67.1	44.3	55.8	64.6
	Towns with 20,000-100,000 inhabitants	55.7	60.4	66.5	44.2	52.9	62.0
	Towns with fewer than 20,000 inhabitants	53.3	57.8	65.0	40.4	50.2	61.4
	Rural areas	44.2	52.8	58.9	22.4	39.4	51.7
Region	Eastern voivodeships	48.2	55.2	63.0	30.7	43.9	56.8
	Other voivodeships	55.4	61.5	66.7	41.5	53.3	62.1
Type of family	Married couples with no children	28.1	42.5	50.6	22.4	35.9	47.8
	Married couples with 1 child	70.0	82.5	87.2	53.5	72.3	81.7
	Married couples with 2 children	80.5	89.7	93.5	61.5	78.2	87.4
	Married couples with 3 and more children	75.2	86.6	90.7	47.3	70.4	84.3
	Single-parent families	53.5	64.3	72.4	37.8	53.2	65.8
	Multi-family	65.5	78.0	87.1	38.3	63.3	78.5
	Non-family one-person	19.6	26.3	28.1	15.8	22.8	25.0
	Non-family multi-person	43.1	51.8	54.8	28.1	40.0	52.9
Income per unit of consumption in households	Up to the first quartile	39.0	44.8	48.1	19.1	32.8	41.1
	From the first to the second quartile	45.1	49.3	59.3	30.7	40.2	54.1
	From the second to the third quartile	55.0	61.8	66.2	41.7	53.4	62.3
	Above the third quartile	70.5	81.6	86.5	60.1	75.8	83.3

The availability of computers and the Internet in households very much depends on the type of family. About 90 % of married couples with children own a computer and slightly fewer of those also have access to the Internet. The situation is completely different in single-person households, where computers and Internet access are the least common - only one in four persons living on their own have access to the Internet. ICT are less common among married couples with no children, less than half of them have Internet access. For both these groups, the smaller presence of ICT is linked to the fact that these are primarily households of the elderly. It is also worth noting that the situation of single-parent families is significantly worse than that of married couples with children. The difference, like two years ago, is about 20 percentage points.

It should be emphasised that in recent years, the differences have widened rather than decreased. The situation of single-person households is definitely not improving well. In the last four years, the availability of the Internet has increased in this group by 10 percentage points only, while, for example, among married couples with three children – by 37 percentage points. The presence of children of school age is invariably of utmost importance for having new technologies in a household.

Also the class of place of residence and income are fairly important for the equipment of households with computers and Internet access. New technologies are present more often in larger towns and in households with higher income. There is greater variation in the availability of the Internet. In the largest cities, 73 % of households have access to the Internet, while in rural areas only 52 % do. The difference between one-quarter of households with the highest income and those with the lowest income is more than double. At the same time, by far the fastest growth in Internet availability over the recent years has taken place in rural areas (by nearly 30 percentage points) and small towns (by 21 percentage points). The differences between urban and rural areas are decreasing. However, there is little change in differences in income. In the last four years, the growth in the number of new users in these groups was similar.

Also significant are the differences in Internet access in households between different voivodeships, although they are declining as well (Figures 7.1.4 and 7.1.5). Currently, the best situation is in the Małopolskie Voivodeship, where almost two-thirds of households have access to the Internet. A similar situation is in the Wielkopolskie Voivodeship. Access to the Internet is the least common in the Świętokrzyskie, Lubelskie and Łódzkie voivodeships.

As shown in Table 7.1.1, there are appreciable differences between eastern voivodeships and the rest of the country. In the five voivodeships of eastern Poland, less than 57 % of households have Internet access, while in other regions it is 62 %. However, it should be emphasised that these differences are diminishing. Only two years ago, the difference was almost 10 percentage points, earlier - even more, and now it is only 5 percentage points. Thus, although the programme to build broadband networks in the eastern voivodeships still has not started for good, the differences are decreasing even without it. In the Pomorskie Voivodeship, where the number of connected households has been the highest so far, the last two years have not brought much change. However, in the Świętokrzyskie Voivodeship or the Warmińsko-Mazurskie Voivodeship, where the situation was much worse, there was a significant increase in the availability of the Internet.

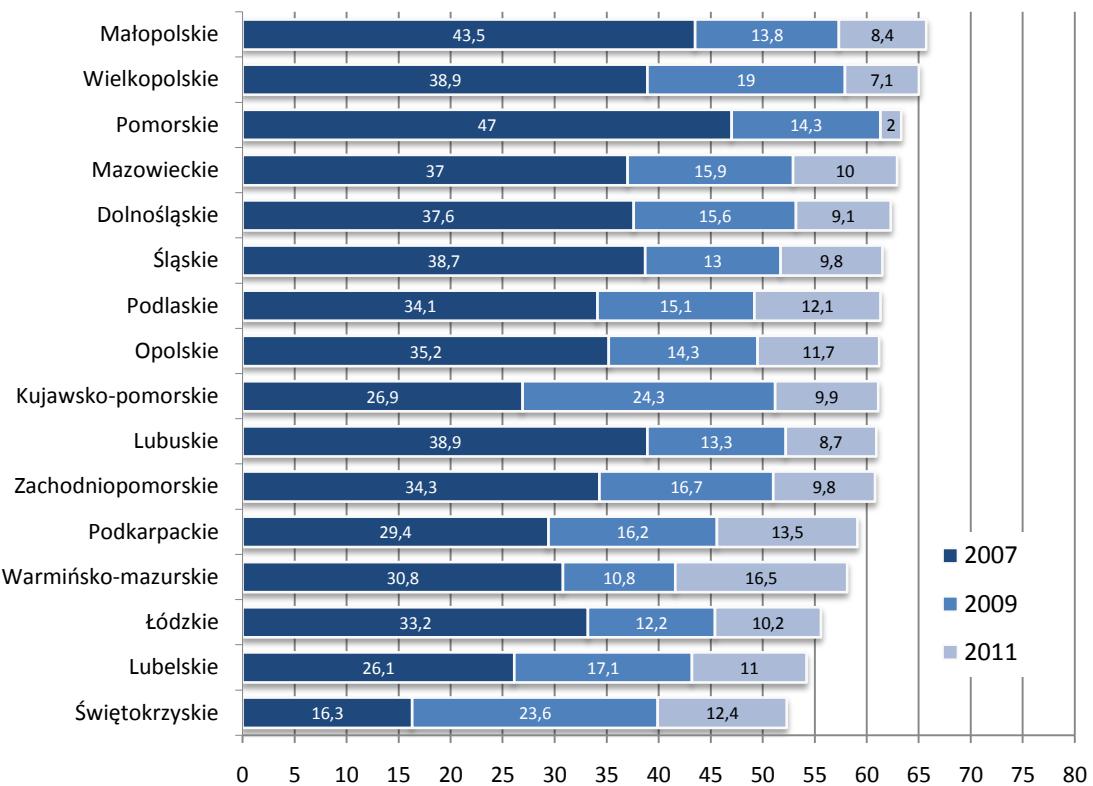


Figure 7.1.4. Percentage of households with Internet access by voivodeship in 2007 and an additional percentage of households with Internet access in 2009 and 2011

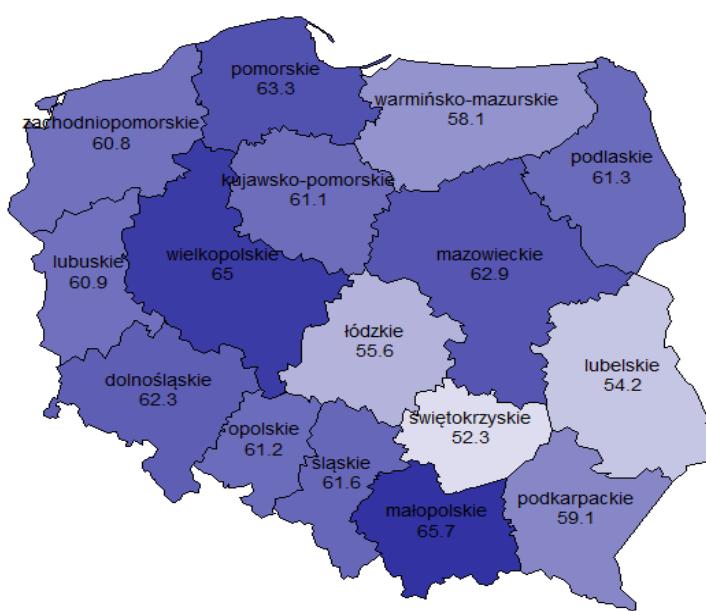


Figure 7.1.5. Percentage of households with Internet access in voivodeships

7.1.4. Reasons for the lack of ICT in households

The lack of widespread availability of ICT has been noticed by local governments, state administration, as well as by some companies, and is often seen as a problem, either as an important factor of digital exclusion or as a restriction on access to services, including public services provided electronically. A number of initiatives and campaigns are being undertaken to promote the use of computers and the Internet. However, in order to take measures adequate to the problem, it is necessary to diagnose it properly. Meanwhile, many efforts to disseminate ICT and combat digital exclusion poorly match the real problems⁶². Therefore, it is worth looking at the reasons for the lack of new technologies in households.

First, let us examine the importance of the declared lack of financial resources as a reason for not having a given technology. Figure 4.3.1 in section 4.3.1 illustrates the availability of various technologies in households. As can be seen, in recent years their availability has improved significantly. At the same time, the percentage of households that do not have the equipment and motivate its lack with financial considerations is decreasing (Figure 4.3.3 in section 4.3.1).

Currently, 13 % of households declare a desktop computer unaffordable, which is only slightly less than in 2009. In addition, 25 % declare the intention to have a laptop and the lack of funds for the purchase, while four years ago it was 35 %. Despite the decrease in the group of households that declare a desire to have a computer and the lack of funds to purchase it, it is still relatively frequent to explain the lack of a computer with financial considerations. However, such declarations are to be approached with caution, because they are often a convenient excuse, while the real reasons are more complex. The importance of material affluence for having a computer is significantly smaller than the importance of other factors. Nearly 46 % of households from the lowest income quartile have a computer, and 39 % have access to the Internet. This means that at least some of the poorer households are able to acquire ICT equipment.

Only 12 % of households declare that they would like to have access to the Internet but cannot afford it. This is only 30 % of those without access to the Internet. Moreover, as in the case of computers, there are clearly fewer such households than in previous years. Thus, 27 % of households have no access to the Internet, but the reasons for this are non-financial. The causes of the lack of Internet access are worth looking at in detail. The declared reasons for the lack of Internet are shown in Figure 7.1.6.

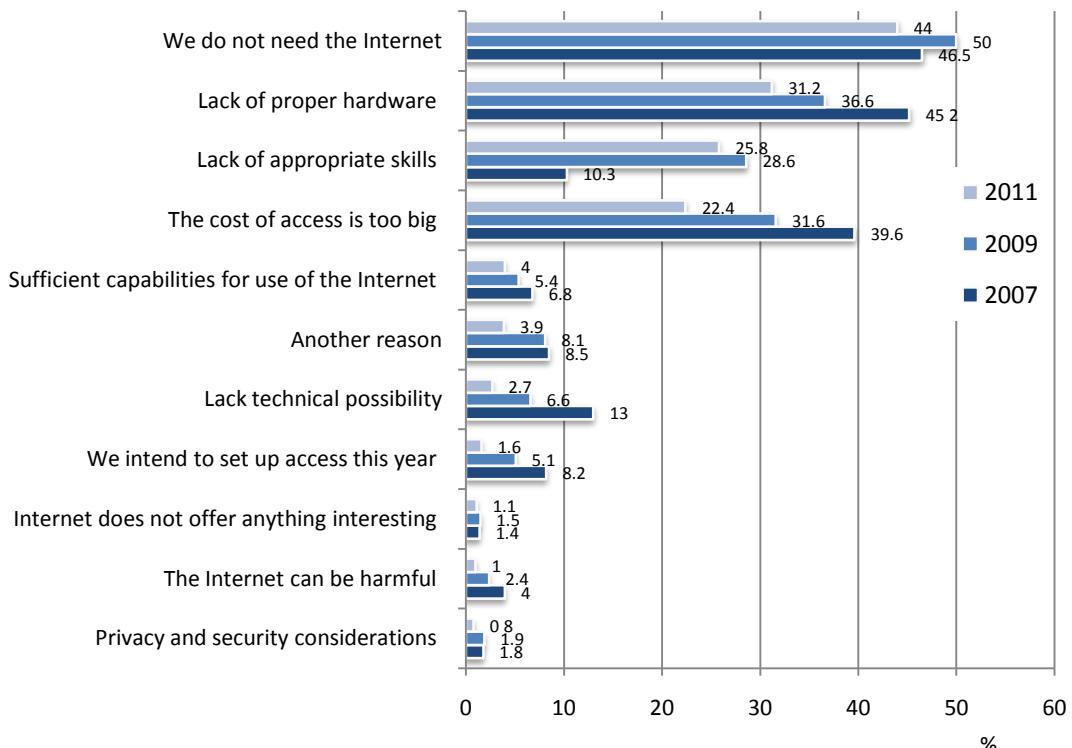


Figure 7.1.6. Reasons for the lack of Internet access in households in 2007-2011

⁶² Measure 8.3 of the Operational Programme Innovative Economy is an excellent example here.

The most frequently cited reason is the lack of need, indicated by 44 % of households without access to the Internet. Second is the lack of adequate equipment (31 %). It is worth noting that this reason is mentioned ever less frequently, even though the number of households having a computer without access to the Internet has decreased. Another factor, which is also much less frequently mentioned, is the high cost of access. Currently, it is mentioned by 22 % of households without access to the Internet, and only four years ago it was almost 40 %. These decreases may be due to two factors: the declining prices of hardware and of Internet access, and the fact that persons who have previously complained about the lack of equipment and high costs, after all, had a much higher motivation and a large proportion of them obtained access. Reasons for the lack of the Internet also include the lack of the technical capacity for using the broadband connection, which is related to the spread of access, as well as of wireless connections. Only about 1 % of households in Poland declare inability to have the Internet at home. This is very little. It also shows that the problem of the so-called blank spots is not very important. What matters, however, is the quality of access - its reliability and bandwidth.

The lack of skills is also among the important reasons for the lack of access to the Internet. It is mentioned by about every fourth household as one of the main reasons for the lack of Internet. Other reasons are far less frequent. So the trend observed for several years now is growing - hard barriers to Internet access (infrastructural or financial) are becoming less significant, and soft barriers to the spread of new technologies are growing – the lack of knowledge, needs and appropriate skills. It should be expected that this trend will be exacerbated in the coming years.

7.2. Internet users and non-users

7.2.1. The Poles and new technologies

The number of Internet users is steadily growing. In the first half of 2011, already 60 % of Poles aged 16 and above connected to the Internet. The growth rate of the number of new Internet users amounts to about 9 percentage points within two years.

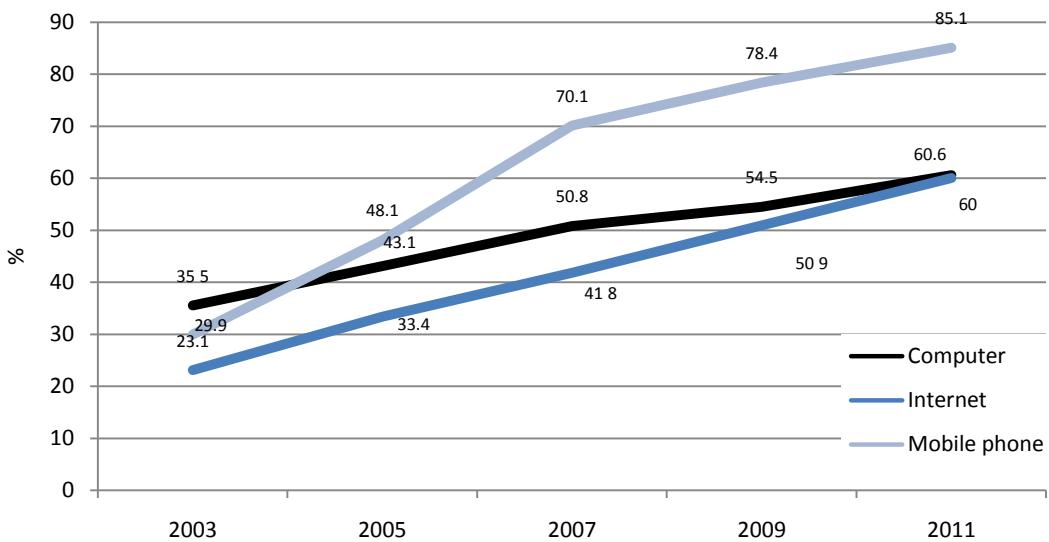


Figure 7.2.1. Use of information and communication technologies in 2003-2011

Among people aged 16 and above, 60.7 % use the computer, and only slightly fewer use the Internet. Using a computer is almost equivalent to using the Internet, although the difference was insignificant already two years ago. Interestingly, there is now a small group of people who, on the one hand, say they do not use computers but use the Internet on the other.

At the same time, the increase in the number of computer users in recent years has been very slow. Similarly, since 2007 the number of people using mobile phones has been increasing more slowly. More than 85 % of Poles use mobile phones now. The growth of the number of mobile phone users, as in the previous years, is faster than the increase in the number of people using computers.

As in the previous years, the cessation of using the Internet was a noticeable phenomenon. The actual increase in the number of new users is therefore greater than what is indicated by the changes presented in Figure 7.2.1. Within two years, since March 2009, 7 % of users stopped using the Internet. Also during the previous two years, 7.5 % of those who used the Internet in 2007 stopped doing so. The scale of cessation is now smaller than a few years ago: for example, 13 % of users stopped using the Internet between 2005 and 2007, while between 2003 and 2005 as many as over 15 % did so. The reasons for cessation are most often associated with the loss of access due to the change in life situation, for example, change or loss of a job, completion of education, relocation, or the children – computer users and owners – moving out of the household.

It is increasingly less common that people who use the Internet do not have access to it at home (Figure 7.2.2). In 2011, 94 % of people using the Internet had access to the Internet at home. Two years ago it was 91 %, and in 2007 80 %. On the other hand, there are a growing number of people who do not use the Internet, although they have a computer with Internet access at home. In 2009, this was 13 % of adult Poles, now it is more than 14 %. Thus, every fifth person with access to the Internet at home does not use it. The same is true for the use of computers – similar to 2009, slightly more than 17.3 % of Poles aged 16 and above have a computer at home yet do not use it at all.

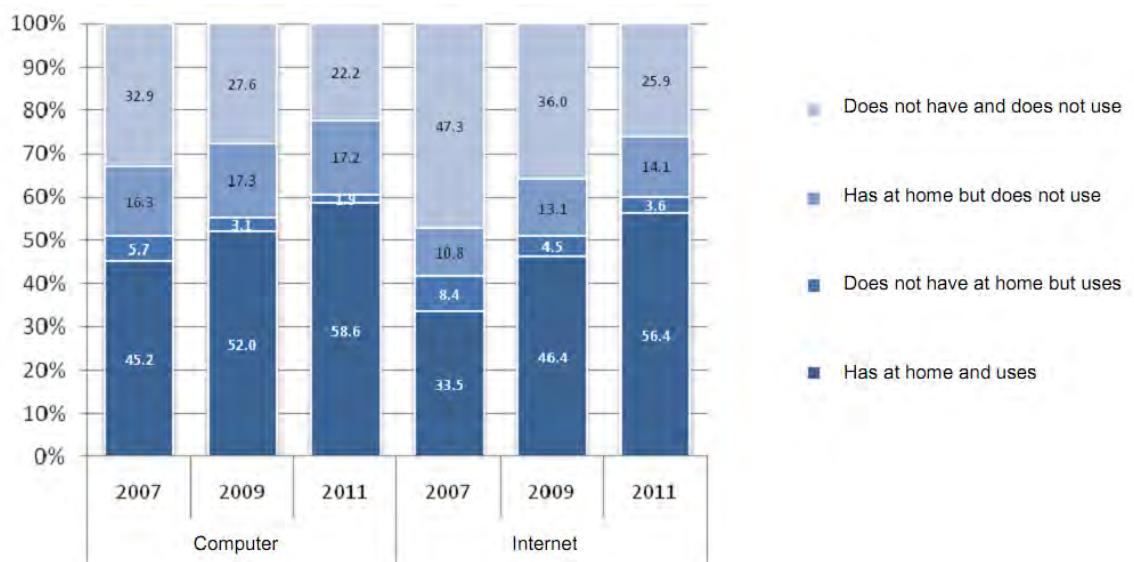


Figure 7.2.2. Possession and use of computers and the Internet in households in 2007-2011

Already more than 35 % of people who do not use the Internet are people who have a computer and Internet access at home. Among those who do not use the Internet, there is a fast-growing group of those who do have access to the Internet. Back in 2007, 18 % of people who did not use the Internet had access to it. These results show that one of the major barriers to the use of computers and the Internet is the lack of proper motivation and/or skills to use these technologies. The access itself does not guarantee that people will use it. Hardware and broadband network are not sufficient to ensure widespread use of ICT in Poland.

To answer the question why not everyone with access uses the Internet, one may want to examine who these people are. Figure 7.2.3 shows the availability and use of the Internet in different age groups. As can be seen, among those aged up to 50 the availability of the Internet in their homes exceeds 80 %. Only those aged 50 and above rarely have access to the Internet. Computer ownership decreases with age, but the usage of the Internet decreases even more quickly.

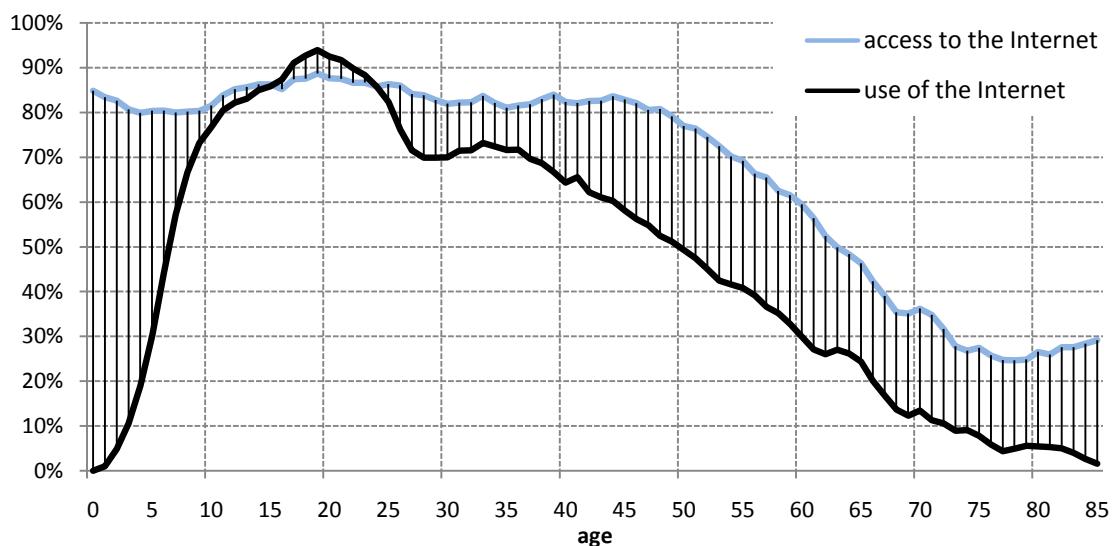


Figure 7.2.3. Access and use of the Internet among people of different age

7.2.2. Who uses the Internet?

Although the number of Internet users is growing, the use of the Internet is still very varied due to several socio-demographic factors. It is worth looking into what determines the use of new technologies; this might provide a clue for actions on e-inclusion and combating digital exclusion. In addition, it is worthwhile to compare the structure of Internet users and non-users in terms of the major socio-demographic variables.

Men still use the Internet more frequently than women. Among persons aged 16 and above, Internet users account for 62 % of men and 58 % of women. The difference is not large and close to that of two years ago. Moreover, because there are more women than men in the population, the number of women using the Internet is higher than the number of male users. Women constitute more than 53 % of all users.

The biggest differences between those who use the Internet and those who do not are of age and education. A majority of young people use the Internet (93 % of those aged 16-24 years), and very few older people do so (11 % of those aged 65 and above) (Figure 7.2.4). The use of computers and the Internet in different age groups is very different. As can be seen in the figure, almost all young people use the Internet. Also a majority of those aged 25-34 use the Internet. Among those who are of retirement age, the usage is very rare. Differences in Internet use according to age are very strong and there is no indication that they might decrease. In younger age groups, the growth in the number of new users is more rapid.

As one might guess, those who use the Internet are mostly young people, while non-users are mostly the elderly (Figure 7.2.5). Currently, 43 % of Internet users are aged 16-34. Among non-users, this age group makes up less than 7 %. On the other hand, those aged 45 and above, although they already make up 35 % of users, constitute 84 % of non-users. The share of the elderly in the group of those who do not yet use the Internet is growing, more than half of non-users are at least 60 years old. On the other hand, among users the average age is also getting higher. This also follows from the smaller size of younger year groups. Two years ago, people aged 16-24 accounted for 28 % of users, and now they only constitute 19 %.

Such large intergenerational differences in Internet use can cause many negative social phenomena. A rapid increase in the importance of the Internet in various areas of life causes difficulties for non-users to function in those areas. This applies to both the professional situation, as well as participation in social and cultural life (cf. Batorski, Zajac 2010). Increasingly often information about employment opportunities is only available online. Also information about cultural events is easy to find on the Internet and less accessible outside of it. The network becomes a gateway to activity in everyday life. Additional problems are associated with increasing barriers in communication between people of different generations. The worlds of the younger – Internet users - and the older – non-users – are increasingly different.

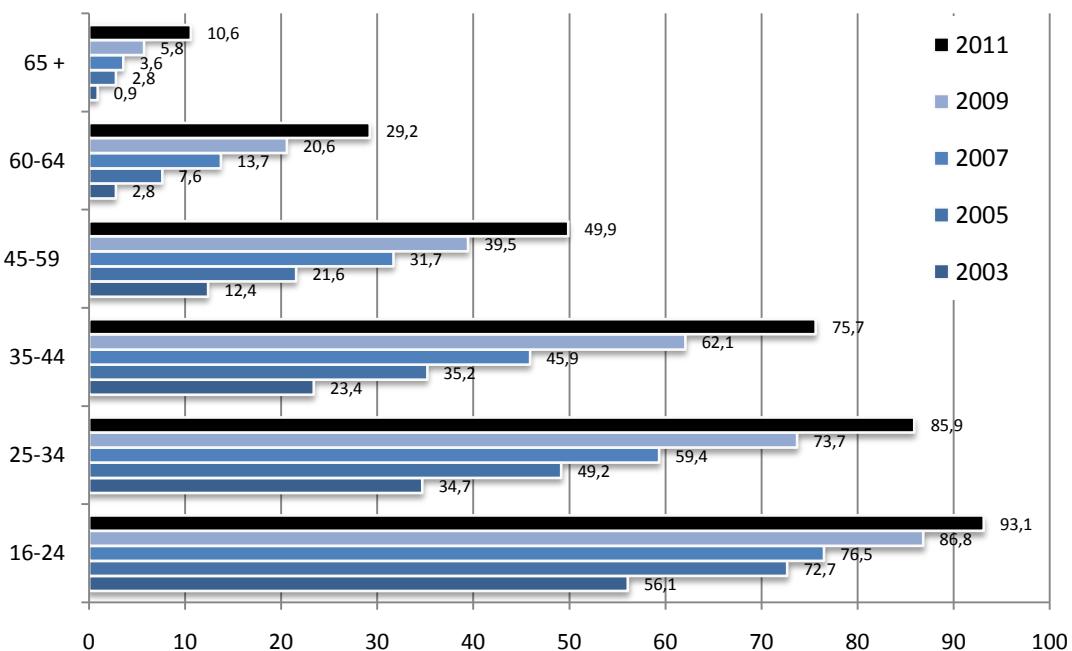


Figure 7.2.4. Percentage of Internet users in different age groups in 2003-2011

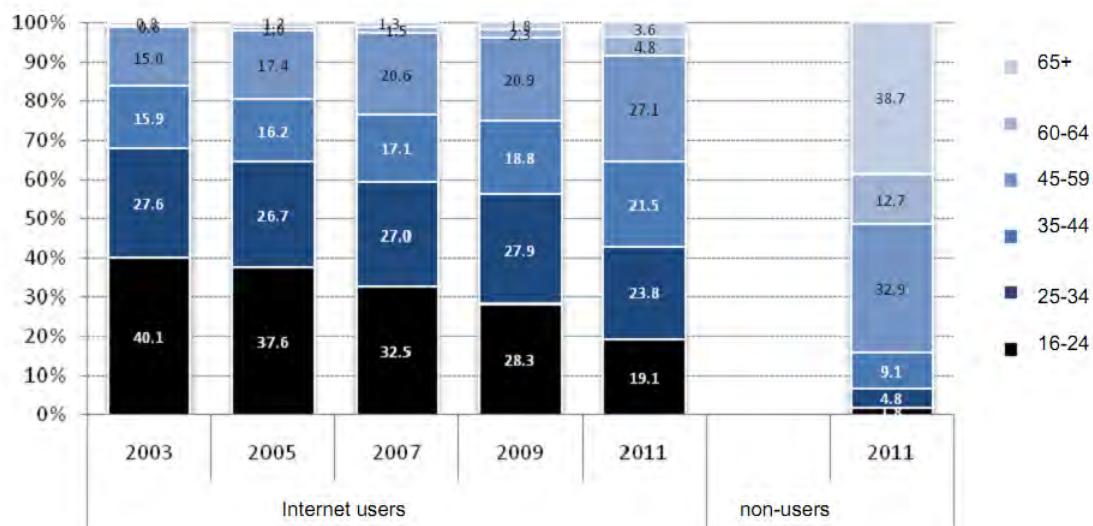


Figure 7.2.5. Change in the age structure of Internet users in 2003-2011, and non-users in 2011

Another factor that is very important for Internet use is educational attainment. Differences in Internet use according to educational attainment are enormous. Almost all learners (97 % of school and university students) and those better educated (89 % of people with higher education) are Internet users. On the other hand, among those with primary education it is exactly the opposite - only 10 % of them use the Internet. As many as 32 % of Internet users and only 6 % of non-users have higher education. Only 3 % of Internet users are people with primary education, among non-users they account for more than 34 %, and an even larger group of non-users are those with vocational education.

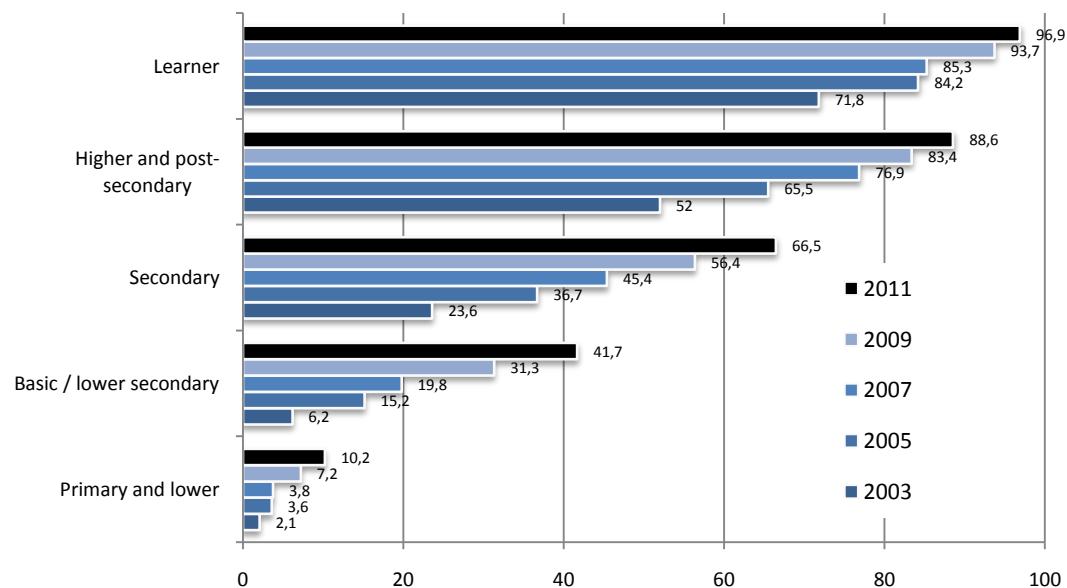


Figure 7.2.6. Percentage of Internet users in different groups by educational attainment in 2003-2011

The significance of educational attainment and age for the use of mobile phones is much smaller than for the use of computers and the Internet, although the differences between the groups of frequent and infrequent users are almost double. The smaller scale of the observed differences stems from the more rapid spread of mobile phones (see Figure 7.2.1).

The use of computers and the Internet is also significantly associated with wealth, but they are less strongly interrelated than is the case with age or educational attainment. Among the one-quarter of Poles who have the highest income, Internet users constitute 81 %, while in the group of those with the lowest income – only 42 %. Smaller differences are associated with owning a mobile phone - 76 % of people with low income and 94 % of people with the highest income have mobile phones.

Table 7.2.1. Use of new technologies in different groups

	Group	Computer	Internet	Mobile phone	Non-users	Users of all
Total		60.6	60.0	85.1	13.3	55.0
Gender	Men	62.3	62.0	87.1	11.1	56.6
	Women	59.1	58.1	83.2	15.2	53.5
Age	16-24	93.2	93.1	97.2	0.5	86.6
	25-34	86.4	85.9	97.8	1.4	81.1
	35-44	75.8	75.7	96.4	2.5	70.0
	45-59	50.8	49.9	86.2	11.1	43.9
	60-64	30.3	29.2	76.0	22.2	25.2
	65 and above	11.4	10.6	48.7	50.1	8.9
Social and professional status	Public sector employees	84.1	83.0	96.5	1.5	78.5
	Private sector employees	75.3	74.8	96.6	2.1	69.0
	Private entrepreneurs	83.1	85.2	97.3	1.5	79.1
	Farmers	37.6	33.0	79.8	17.6	28.9
	Pensioners	23.0	21.6	66.5	32.0	19.0
	Retirees	20.5	19.7	60.1	38.4	16.6
	School and university students	96.4	96.9	97.7	0.2	90.9
	The unemployed	62.3	63.2	90.5	8.6	57.3
	Other professionally inactive	55.9	55.3	83.4	13.4	48.5
Educational attainment, including learners	Primary and lower	11.0	10.2	51.3	47.2	7.8
	Basic/lower secondary	42.4	41.7	84.3	14.1	35.7
	Secondary	67.3	66.5	90.6	7.7	60.8
	Higher and post-secondary	88.8	88.6	95.8	2.4	84.6
	Learners	96.4	96.9	97.7	0.2	90.9
Size of place of residence	Towns with more than 500,000 inhabitants	77.2	76.7	93.6	5.6	73.2
	Towns with 200,000-500,000 inhabitants	71.7	72.2	89.2	8.6	66.0
	Towns with 100,000-200,000 inhabitants	66.5	66.1	86.3	11.1	60.6
	Towns with 20,000-100,000 inhabitants	63.9	64.2	88.6	10.0	58.8
	Towns with fewer than 20,000 inhabitants	60.0	59.5	86.4	12.3	54.8
	Rural areas	49.6	48.0	78.6	19.4	43.2
	The first quartile	43.0	41.6	76.2	21.6	36.4
Income per capita in the household	The second quartile	55.7	54.7	83.1	15.4	50.0
	The third quartile	60.9	60.1	85.8	12.5	55.2
	The fourth quartile	80.7	80.8	94.3	4.6	76.6

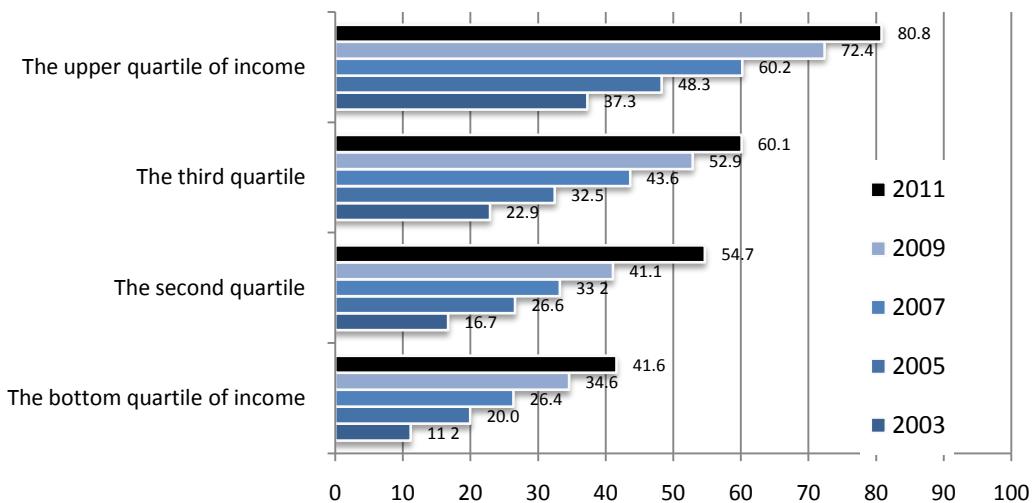


Figure 7.2.7. Income and the percentage of Internet users in 2003-2011

The social and professional status is also important for the use of computers and the Internet. As mentioned earlier, almost all school and university students (97 %) connect to the Internet, and most of the working people do so. In the latter group, those that work in the private sector connect to the Internet less often (75 %). Over the last two years, the percentage of users among the unemployed and economically inactive increased significantly. The fewest users are among retirees and pensioners. The number of farmers using the Internet is increasing (Figure 7.2.5). Currently, 55 % of Internet users aged 16 and above are workers (excluding agriculture); another 15 % are school and university students. Retirees make up only 9 % of users and as much as 44 % of non-users.

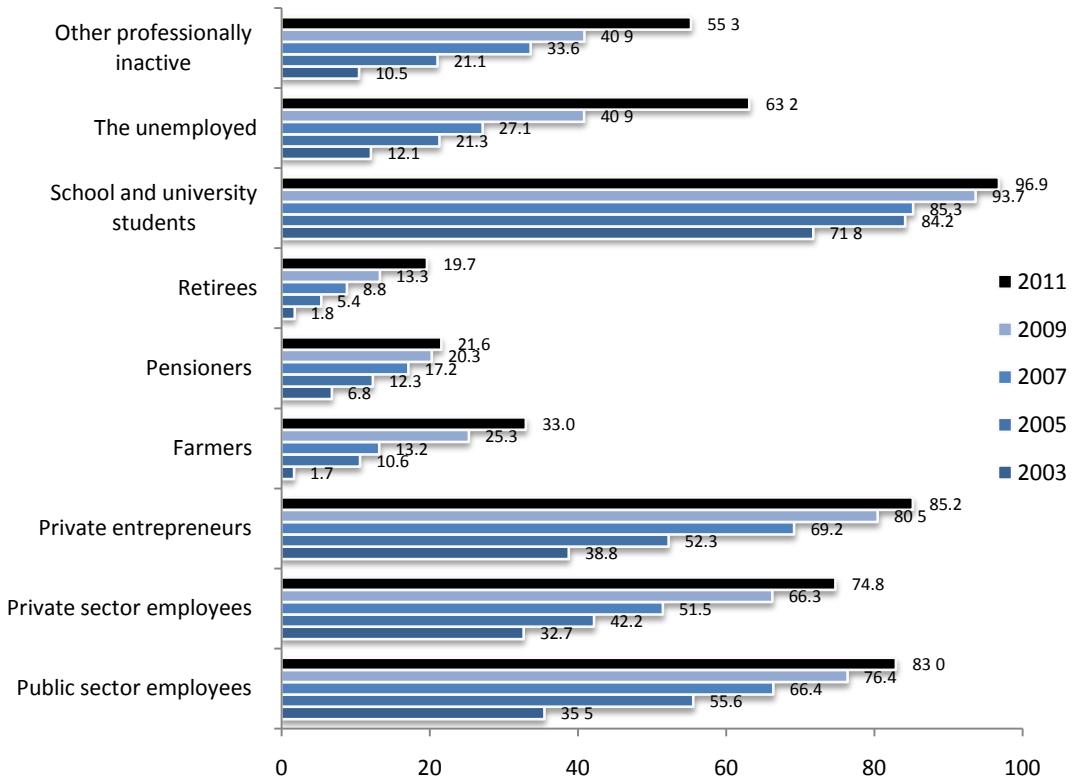


Figure 7.2.8. Percentage of Internet users in different groups by social and professional status in 2003-2011

Use of the Internet also differs depending on the size of the place of residence. In larger towns, significantly more people are users than in rural areas and small towns. In major cities over three-quarters of residents are users, while in rural areas nearly half of the residents. It is worth noting that the differences due to the size of the place of residence are now much smaller than in 2007. The increase in the number of users in rural areas since that time has amounted to more than 22 percentage points. Unfortunately, the share of the rural population among non-users is growing and already amounts to almost 50 %.

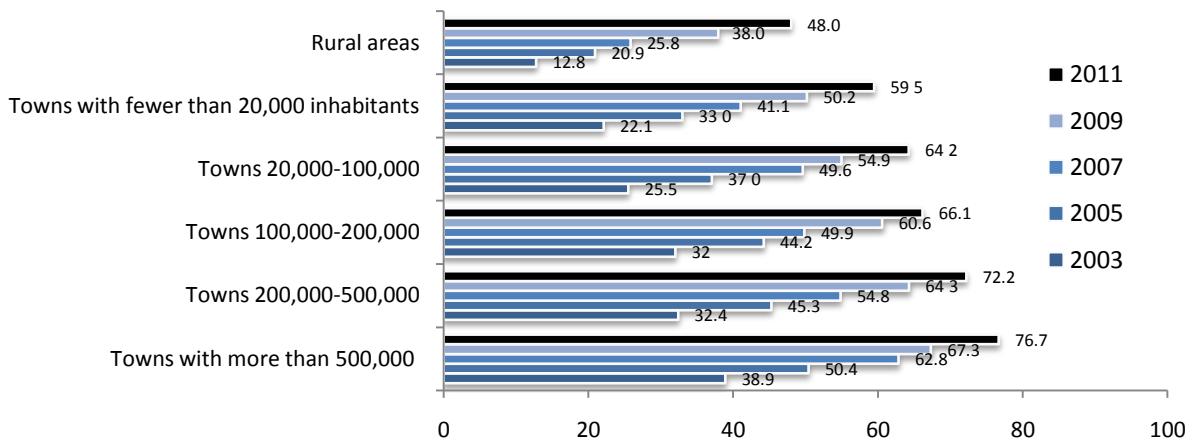


Figure 7.2.9. Internet use in different groups by the size of the place of residence in 2003-2011

The number of Internet users not only depends on the size of the place of residence, but also on the region. There are fewer users in eastern voivodeships. Figure 7.2.7 shows in detail the use of the Internet in individual voivodeships, and the changes that occurred between 2007 and 2011.

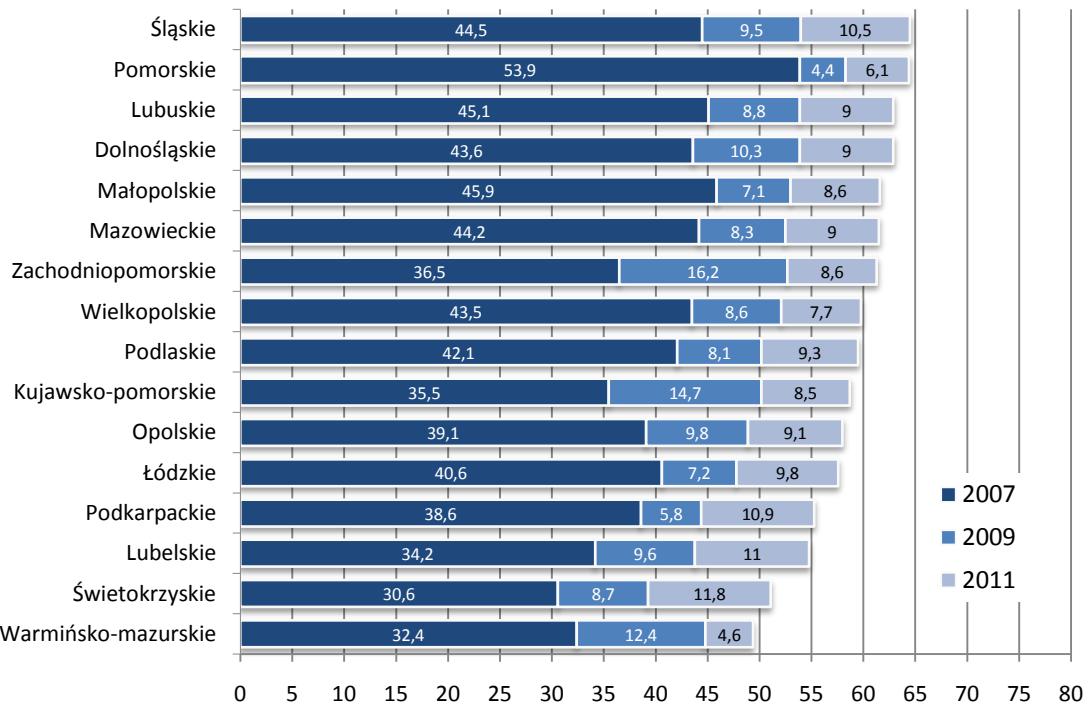


Figure 7.2.10. Percentage of Internet users aged 16+ in each voivodeship in 2007, and percentage of new users in 2009 and 2011

Although there is a very strong correlation between access to the Internet and its use, greater availability not always translates into a greater number of users. Especially in the Warmińsko-Mazurskie, Małopolskie and Wielkopolskie voivodeships there are few users, considering the number of households

with access to the Internet. As a result, the greatest numbers of users are currently in the Śląskie and Pomorskie voivodeships, with only slightly fewer of them in the Lubuskie and Dolnośląskie voivodeships. The number of users is the smallest in the Warmińsko-Mazurskie and Świętokrzyskie voivodeships.

7.2.3. Use of various technologies

Dissemination of information and communication technologies in Polish society follows a fairly specific pattern. An analysis of the combined use of different technologies in the following figure shows a significant increase in the number of people using computers, the Internet and mobile phones. Those who use both computers and the Internet, as well as mobile phones, constitute now 55 % of the population (Figure 2.7.11). On the other hand, those that do not use any of these technologies constitute slightly more than 13 %. In comparison to the previous years, we see a fast growth of the number of users and a decrease in the group of people who do not use any of these technologies.

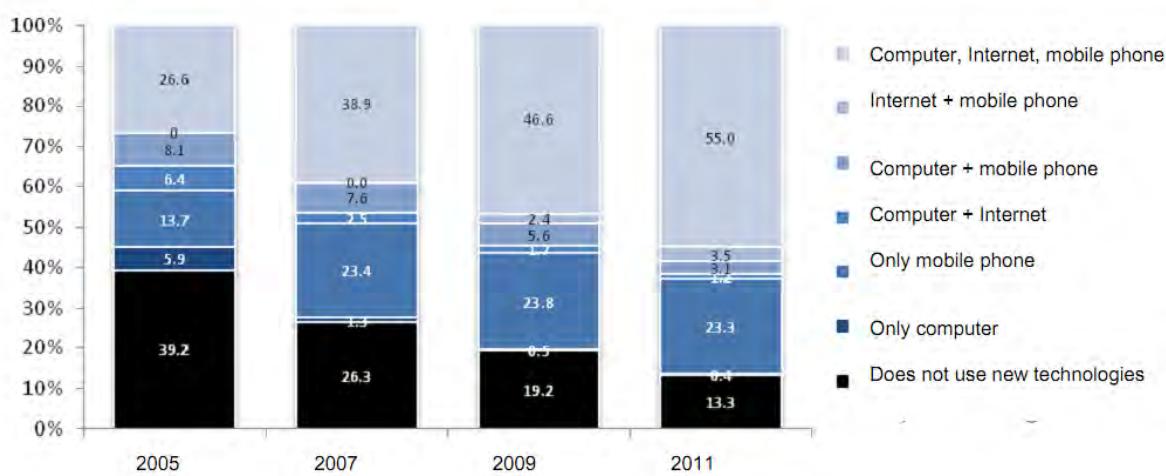


Figure 7.2.11. Percentage of users of various technologies in 2005-2011

The group of people who use all these technologies is growing mainly because users of mobile phones are starting to use computers and the Internet. Direct transitions from the group of people who do not use any of these technologies to the group who use all three are extremely rare. At the same time, the share of people who only use mobile phones practically has not changed since 2007. This group comprises about 23 % of Poles aged 16 and above, but its composition is changing significantly with every year. Some people are starting to use other technologies, and those who have not used any of them begin to use mobile phones.

Using the computer almost always also means the use of mobile phones and the Internet. People who only use computers constitute less than half % of the population. Users of computers and the Internet who do not use mobile phones account for 1.2 % only. The group of people who, while using other technologies, do not use the Internet (or use it to a very limited extent) is also small. In 2005, they accounted for 8 %, and now it is barely 3 %.

The diversity of socio-demographic groups in terms of the use of ICT can best be seen by comparing those who use all of them with those who do not use either mobile phones or computers and the Internet (Table 7.2.1). Among people less than 34 years of age, more than 80 % use all three technologies, among the oldest group under examination there are only less than 9 % of such people, while half of them do not use any of these technologies. Despite such significant differences, the situation is improving - two years ago, as many as two-thirds of people aged 65 and above did not use ICT. There are also very large differences in terms of educational attainment - all of these tools are used by 91 % of learners and 85 % of people with higher education, and just under 8 % of people with primary education, and almost 47 % from the last group do not use any of these technologies.

The most interesting differences, however, are associated with the social and professional status. Among the working people there are virtually no people who do not use ICT, and almost 80 % of entrepreneurs and public sector employees and almost 70 % of private sector employees use all three technologies. Those who do not use ICT are almost exclusively retirees and pensioners, with a dozen or so

% of farmers and professionally inactive people. In other groups there are practically no people who would not use mobile phones or computers. Also income and the size of place of residence are significant. Among those from households with higher income and from larger towns, there are more people using ICT and fewer of those that do not use any ICT.

7.2.4. Changes in the prevalence of Internet use

In the previous sections we have shown the use of the Internet and other ICT in various socio-demographic groups, and also how the use of ICT is becoming more common in these different groups. One should realize that the rapid increase in the number of users, which has taken place in recent years, also changes the structure of the population of Internet users. These changes have far-reaching consequences. The content and services available online are an excellent example. Along with changes in the user population, such as a rise in the average age, also the methods and products offered on the Internet change. The change in the structure of Internet users between 2003 and 2011 is presented in Table 7.2.2.

The biggest changes in the population of Internet users are associated with age. In 2003, more than 40 % of users were 16-24 years old. Currently, people from this age group make up less than 20 % of Internet users. Above all, the share of persons aged 45-59 is increasing. The average user age has increased significantly in recent years.

We are seeing other changes as well. There are fewer and fewer students among Internet users. Within a few years their proportion has declined from 30 % to less than 15. This change is primarily due to the increasing share of retirees and those economically inactive, as well as to the demographic decline in the group of school and university students. The percentage of Internet users who work has changed little. The same applies to higher education, which in the last decade pertained to just over 30 % of users. The share of people with secondary education increased only slightly, and the fastest growth can be seen in the group of people with vocational education.

The population of Internet users is also changing in terms of the size of the place of residence. People living in major cities make up a diminishing proportion of Internet users. The share of rural population is increasing. In the last eight years it rose from 21 to 31 %. The share of people living in towns with up to 100,000 inhabitants has not changed much.

For comparison, the last column of Table 7.2.2 provides data on the current structure of the population of those who do not use the Internet.

Table 7.2.2. Change in the structure of the population of Internet users in 2003-2011

	Composition of the population of Internet users in a given year					Non-users in 2011
	2003	2005	2007	2009	2011	
Men	49.9	50.4	46.3	49.4	46.8	43.6
Women	50.1	49.6	53.7	50.6	53.2	56.4
	2003	2005	2007	2009	2011	non-users
16-24 years old	40.1	37.6	32.5	28.3	19.1	1.8
25-34 years old	27.6	26.7	27.0	27.9	23.8	4.8
35-44 years old	15.9	16.2	17.1	18.8	21.5	9.1
45-59 years old	15.0	17.4	20.6	20.9	27.1	32.9
60-64 years old	0.6	1.0	1.5	2.3	4.8	12.7
65 and above	0.8	1.2	1.3	1.8	3.6	38.7
	2003	2005	2007	2009	2011	non-users
Public sector employees	24.2	24.0	23.2	20.2	19.4	5.1
Private sector employees	24.3	23.6	28.5	30.2	29.7	14.2
Private entrepreneurs	7.2	6.6	7.2	6.6	6.0	1.3
Farmers	0.4	1.7	1.6	2.1	2.8	6.8
Pensioners	3.2	3.3	3.2	3.1	3.0	14.1
Retirees	1.5	2.9	4.3	5.4	9.1	43.7
School and university students	30.0	26.0	21.9	19.7	14.7	0.5
The unemployed	6.2	6.2	4.5	4.8	6.8	5.2
Other professionally inactive	2.9	5.8	5.5	7.9	8.4	9.0
	2003	2005	2007	2009	2011	non-users
Primary and lower	2.0	2.0	1.5	2.3	2.9	34.3
Basic/lower secondary	7.5	12.0	12.1	16.4	19.2	37.0
Secondary	27.7	29.1	30.0	30.1	31.8	21.9
Higher and post-secondary	32.9	31.7	34.4	31.4	31.5	6.2
Students	29.9	25.3	21.9	19.7	14.5	0.5
	2003	2005	2007	2009	2011	non-users
Towns with more than 500,000 inhabitants	19.6	15.3	16.1	16.2	15.6	7.5
Towns with 200,000-500,000 inhabitants	14.3	13.6	14.5	14.1	11.6	7.0
Towns with 100,000-200,000 inhabitants	10.9	11.1	10.5	8.4	8.5	6.0
Towns with 20,000-100,000 inhabitants	21.3	22.4	23.5	20.7	21.1	17.1
Towns with fewer than 20,000 inhabitants	12.8	14.4	12.6	12.8	11.9	12.9
Rural areas	21.1	23.3	22.8	27.9	31.4	49.5

7.3. Skills and forms of computer and Internet use

7.3.1. Computer skills

Users' computer skills are vary a great deal (Figure 7.3.1). The greatest proportion of users has skills associated with the basic use of the Internet. Almost 96 % use e-mail, although more complex uses, even such as sending an e-mail with an attachment, are difficult for some. A vast majority of users know how to use a web browser, and 92 % declare the ability to use search engines.

Computer skills are much less common. Less than 70 % of users can perform basic operations related to the organization of file systems, such as copying or moving a file or folder. Only 37 % know how to install a printer, modem, scanner or other devices.

The knowledge of office programs is small. Only 63 % of users have simple skills associated with using a word processor (copying and pasting text fragments). Barely 36 % can use a spreadsheet, and 23 % can prepare an electronic presentation. These percentages are lower than they were two years ago. This is due to the increase in the number of users and to the low competence of those who begin their adventure with the computer and the Internet. Generally, the level of computer literacy among current users is similar to that observed in previous years. Although the skills related to operating a computer and use of office suites are somewhat less frequent, slightly greater skills are associated with the use of the Internet.

The percentage of users who have considerable computer skills is changing very slightly. About 40 % of users mention at least two-thirds of the skills we studied. All or nearly all of the skills are mentioned by 12 %. The increase in computer skills in Polish society is mainly due to the increase in the number of users.

Computers skills in Poland are low. Currently, just 9.2 % of Poles aged 16+ have skills to use basic office applications and the Internet. This result is still an improvement on 2009, when the ratio was 7.5.

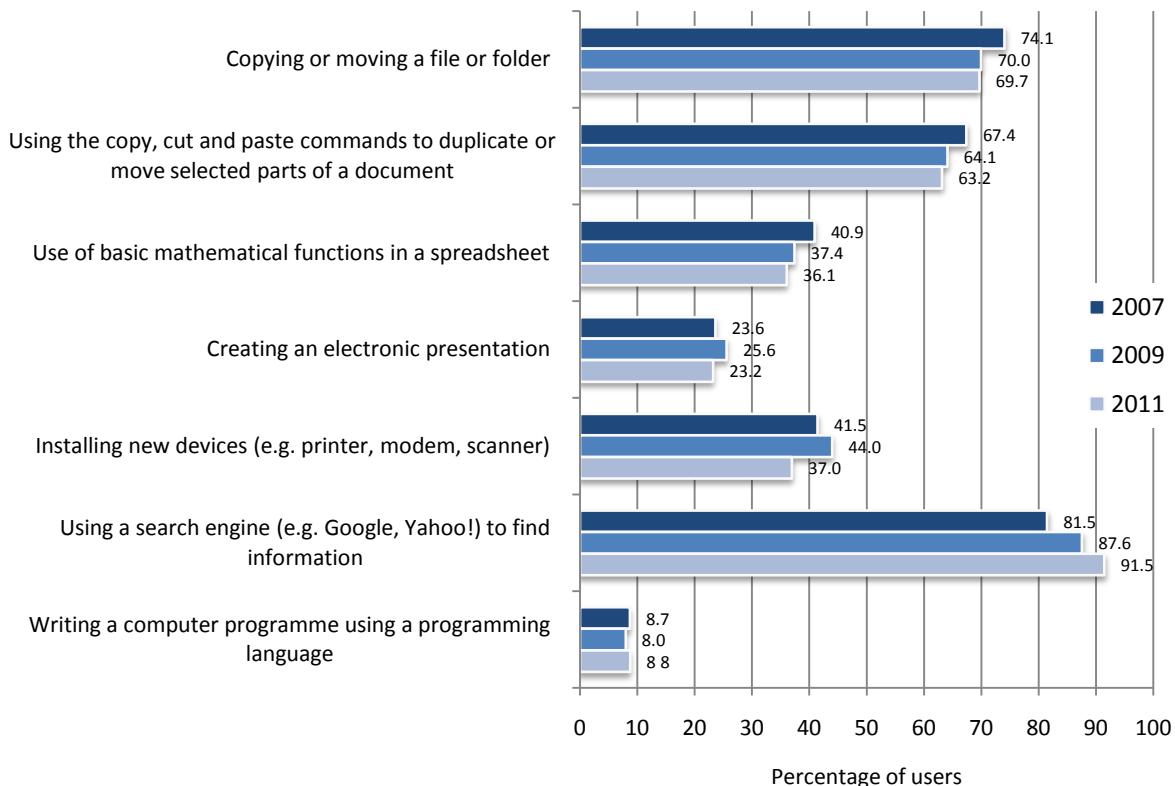


Figure 7.3.1. Computer skills in 2007-2011

7.3.2. Time spent using computers

The average amount of time spent at a computer per week is just over 15 hours. Interestingly, now with the increase in the number of people using computers and the Internet, the average amount of time is decreasing. In 2009, users spent an average of 16 hours per week, and in 2007 even slightly more. This is due to the less intensive use of computers by those who have recently started to use them. Those who did not use computers in the previous wave of the study, now spend an average of 7 hours and 15 minutes at a computer. Those who use computers more often spend as much as 17 hours and a half per week.

An average user spends 10 hours a week at the computer. Those who spend little time at computers - up to two hours a week – constitute 19 % of users. 42 % of users spend up to 7 hours per week. 22 % of users spend at least 21 hours per week at the computer (25 % in 2009). People who spend 40 hours and more at computers constitute about 12 % of users (two years ago it was 14 %). These percentages are almost the same as in 2007.

The amount of time spent at the computer has changed in recent years in an interesting way. More or less until 2007 we observed an increasing number of hours spent at computers. In part, this could result from the spread of broadband Internet connections in that period, which allowed a less restricted way of using the web. In subsequent years and between 2007 and 2009, the changes were minimal. Now however, the average time spent in front of the monitor is slightly shorter, though this is due to the less intensive use on the part of new users, because people with more experience do so more and more intensively.

In the first decade of the twenty-first century, the time spent using the Internet was increasing. The use of the Internet itself was also becoming an increasingly important way of using the computer. We observed an increase in the proportion of time spent on the web to the total time spent on the computer. It resulted, *inter alia*, from the fact that more people had access to the Internet at home and more of them had a broadband connection. The increased availability of the Internet also fostered more intensive use on the part of new users, and along with the experience in using the Internet also the flexibility of using it increased, and consequently so did the time spent on it. Today, when almost every computer has access to the Internet, it is difficult now to separate the time spent using the Internet from the time spent at the computer. Therefore, in the current edition we cancelled the question about the time spent on the Web.

7.4. Social dimensions of Internet use

As shown in the earlier sections, in recent years there has not only been a significant increase in the number of Internet users, but also in the structure of users. The average age is rising, there are an increasing proportion of users with lower education, and there are also proportionately more people from smaller towns. At the same time, the services available on the Internet are developing and changing, and the spectrum of its uses is widening. All this also translates into changes in the way the Internet is used, although, as we will show, these changes are smaller than one might think.

In this section we will explore the different ways to use the Internet and the relation between the use of the Internet and the life situation of users and their activity outside the Web.

7.4.1. Communication via the Internet and social networking sites

Communication is one of the primary purposes of using the Internet. A vast majority of communication on the Web involves contact with people known from everyday life. Electronic communication tools are now used very much in the same way as in the last few years. The most important changes are associated with the less regular use of instant messaging, since although almost 80 % of users use it from time to time, only half of them use it regularly. The use of e-mail is somewhat less regular. As with IM, this may be related to the increased popularity of social networking sites and the fact that part of communication takes place on those sites.

Few changes can be seen in the use of other forms of Internet communication. VOIP services are becoming more popular and are used by more than two-thirds of Internet users (63 % in 2009, 32 % in 2005). Still, relatively few people use it regularly. As in the previous years, even now only 24 % make calls via the network during the week.

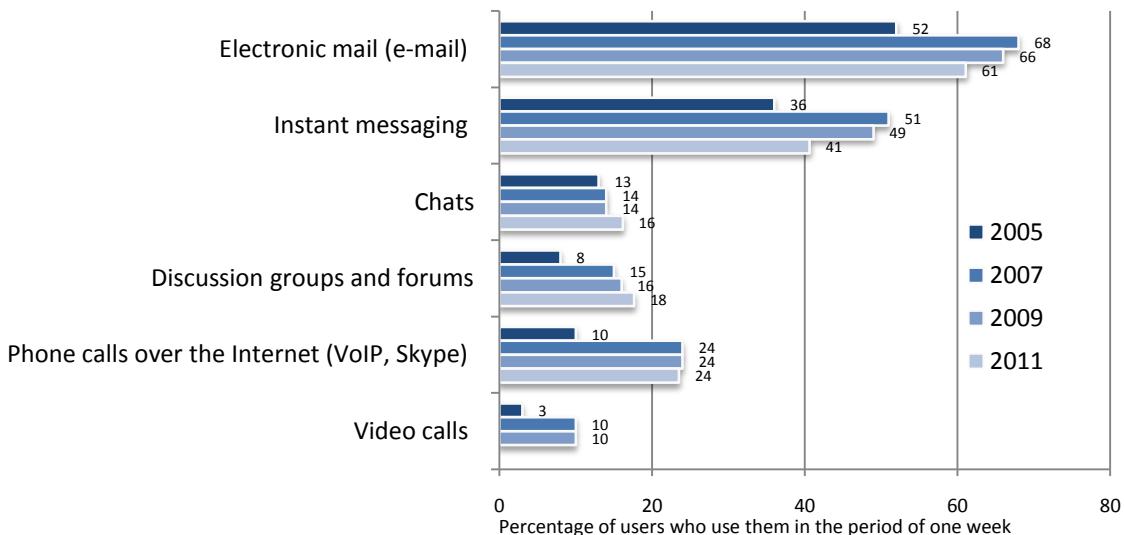


Figure 7.4.1. Internet communication tools used by users in the period of one week in 2005-2011

Already two years ago, more than half of the users declared they regularly used social networking sites, and more than 80 % had had contact with them. Now already 68 % of Internet users, i.e. more than 40 % of Poles, have an account at one of the social networking sites. Almost 35 % of Poles have an account with NK.pl (formerly nasza-klasa.pl), 20 % on Facebook, and 13 % at another site. We should also note that users of different services are often the same people. Currently, as much as 80 % of Facebook users also have an account at NK.pl and use it.

Despite a much larger publicity of Facebook and its greater visibility outside the Internet and in other media, still many more Poles use the native service. In April 2011, 57.5 % of Internet users had an account at NK.pl, while only 34 % had an account on Facebook, and 22 % had an account at another social networking site. This translates to slightly more than 11 million people on NK.pl and 6.5 million on Facebook. These results are exactly consistent with the number of Polish users given by Facebook, and the

data for NK.pl do not deviate from what we know from other statistics. However, as shown by Megapanel PBI/Gemius data, also people without an account on Facebook use it very often. As a result, despite the large difference in the number of registered users, both sites are visited by a similar number of people. This is partly the result of a greater presence of Facebook on other sites and in other media, so that more people have a chance to accidentally visit a fan page promoted elsewhere or take interest in it.

Social networking sites are primarily used by younger Internet users. Other socio-demographic factors are relatively less important, yet they differentiate the services that people use. This problem is discussed in more detail in section 7.4.3.

7.4.2. Using the Internet and social relationships

Starting with the mid-1990s, there has been an ongoing debate about the impact of Internet use on interpersonal relationships, social isolation and social capital. It is worth tracking this issue in the results of *Social Diagnosis*.

First, it should be noted that Internet users are generally people with many more social relationships than non-users. This is largely due to other differences between these groups, particularly age, but also occupational activity. Younger people are more likely to have more friends, and they use the Internet more often. Therefore, by observing the connection between the number of relations and the use of the Internet or social networking sites, first of all we see the effect of coexistence rather than a cause-and-effect type of dependence (Figure 7.4.2). We will reflect on the actual effects of the use when analysing changes over time, which is made possible by the panel nature of the study.

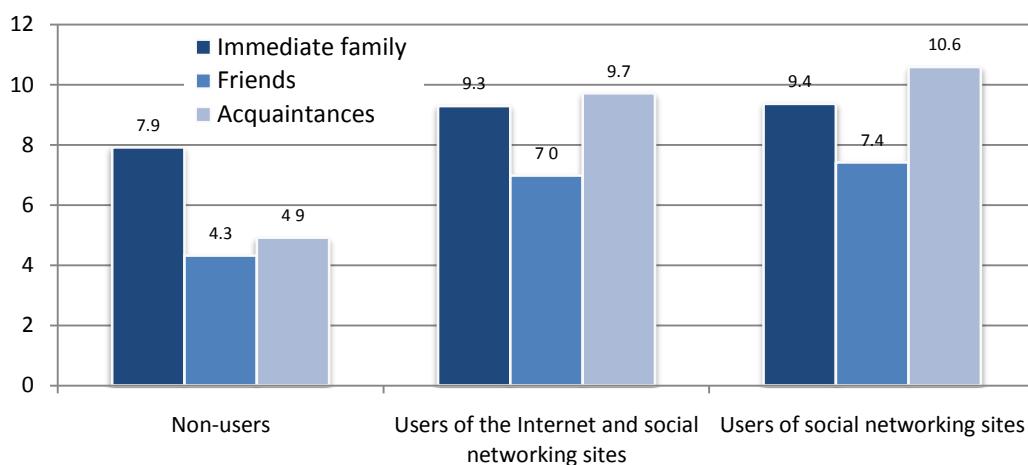


Figure 7.4.2. Number of people from different circles with whom regular contact is maintained, depending on the use of the Internet and social networking sites

More detailed statistical analyses show that even if we exclude differences related to age, Internet users still have far more relationships. On average, they have one person more from the family circle. They also declare regular contact with more friends; they also have more friends who also use social networking sites, especially Facebook. The biggest differences are related to the number of friends. Facebook users regularly interact with the widest range of people - the difference compared to Internet non-users of the same gender and age is four friends (for users of other social sites the difference is two people).

A slightly different picture emerges from the data when we examine the changes that occur over time. Between 2005 and 2011, Internet use had no effect on changing the number of friends with whom respondents maintained regular contact. But it was important for contacts with others. Internet users had more relationships with family members and friends, but both these effects apply only to those who do not use social networking sites (they apply to a greater extent to those who have started to use the Internet in recent years).

To summarize the results presented here, we should note that although Internet users, especially those who use social networking sites, have a greater number of social relationships and maintain regular contact outside the Internet with more people, the number of these relations is not increasing significantly. If any changes are visible, they are quite unexpected in nature. Using the Internet, but not social networking sites, encourages regular contact with more family members and friends than six years ago. By contrast, the use of Facebook and/or NK.pl is related to the lack of such positive effects and has no influence on the change in the number of contacts.

7.4.3. Class divisions on the Internet

What is interesting in the analysis of the use of social networking sites is the question of the migration of users between different sites. The issue was described in an interesting way by Danah Boyd, who studies young people and social networking sites. By analyzing changes in the popularity of MySpace and Facebook, she showed the emergence of social and class differences in the use of these two sites⁶³. White, educated, better-off inhabitants of larger towns quickly abandoned MySpace for Facebook. By contrast, Latinos, people with lower education, from smaller towns and with a lower financial status, as well as the youth from homes with worse-educated parents, used MySpace much more often. It is worth analysing what determines the use of the two most popular services, NK.pl and Facebook in Poland.

The first study of the use of social networking sites depending on educational attainment (Figure 7.4.3) already shows that factors associated with social status also matter in Poland. It is not surprising that users of social networking sites are mostly learners or students. Interestingly, among other users education is not significant for whether they use Facebook or NK.pl, yet it does matter when it comes to which site they use. In each group of educational attainment, more than half of Internet users use NK.pl, while Facebook is more often used by those better educated. Among those with higher education, there is also a larger group of users of social networking sites who do not have an account on NK.pl.

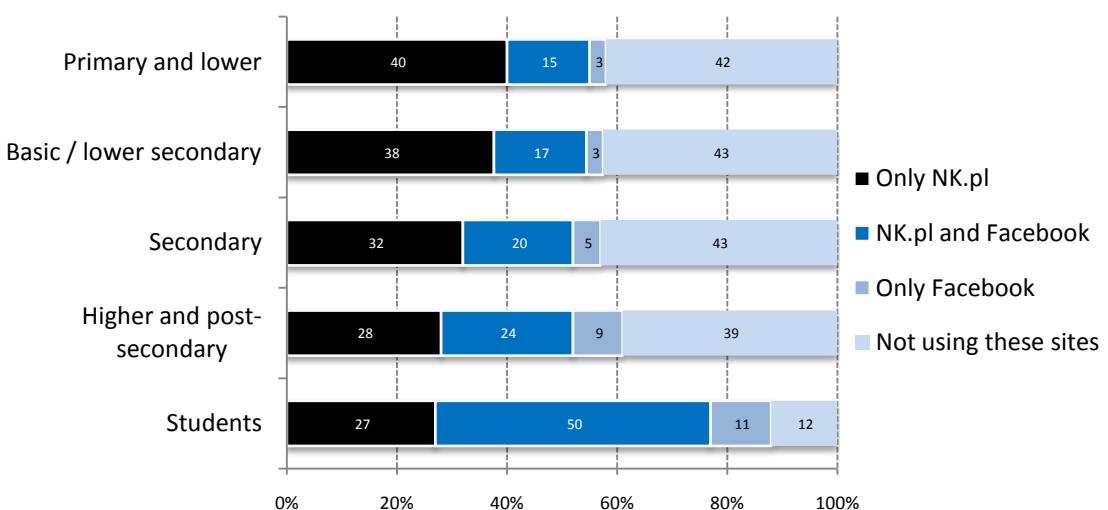


Figure 7.4.3. Use of NK.pl and Facebook among Internet users by educational attainment groups

Among Internet users from the largest cities, 16 % use Facebook and do not have an account on NK.pl, among those living in rural areas such users only account for 3 % of Internet users. On the other hand, 20 % of Internet users from the largest cities and 38 % from rural areas use NK.pl and not Facebook. It should also be noted that Internet users living in rural areas and in smaller towns more often use social networking sites. This may result from the fact that in those towns the share of the elderly among Internet users is relatively low as compared to larger towns.

⁶³ Boyd, Danah. 2007. "Viewing American class divisions through Facebook and MySpace." Apophenia Blog Essay. June 24. <http://www.danah.org/papers/essays/ClassDivisions.html>

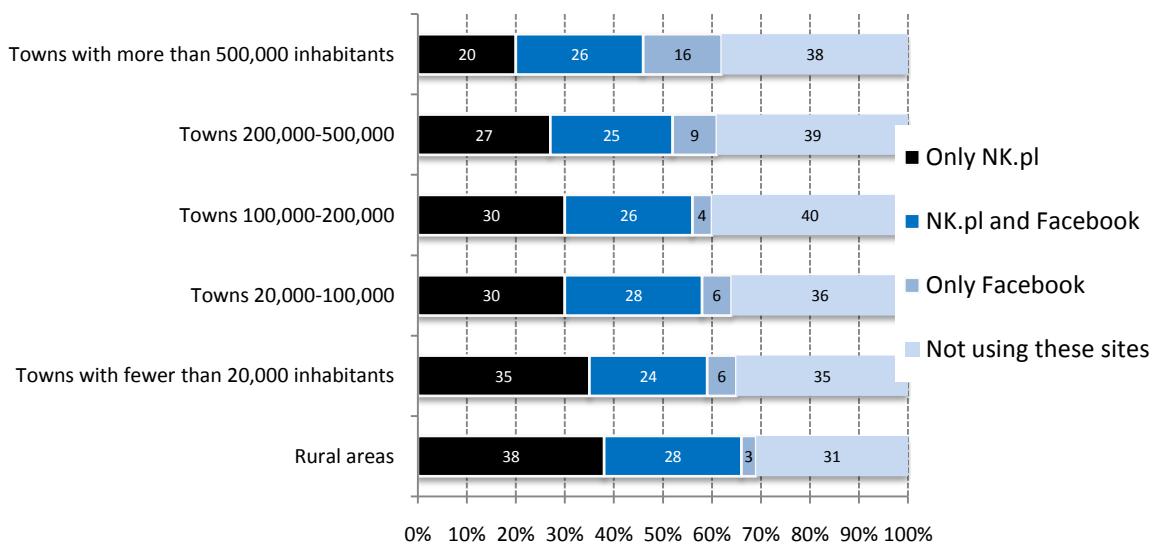


Figure 7.4.4. Use of NK.pl and Facebook among Internet users in groups by size of the place of residence

The wide variation in the use of social networking sites by Internet users depending on the social and professional status is shown in Figure 7.4.5. Interestingly, in addition to school and university students the sites are most often used by the unemployed and economically inactive. In all groups, NK.pl has the most users. Facebook has the most users among learners, as well as private sector employees and entrepreneurs. Also many unemployed use it, but most of them also have accounts on NK.pl.

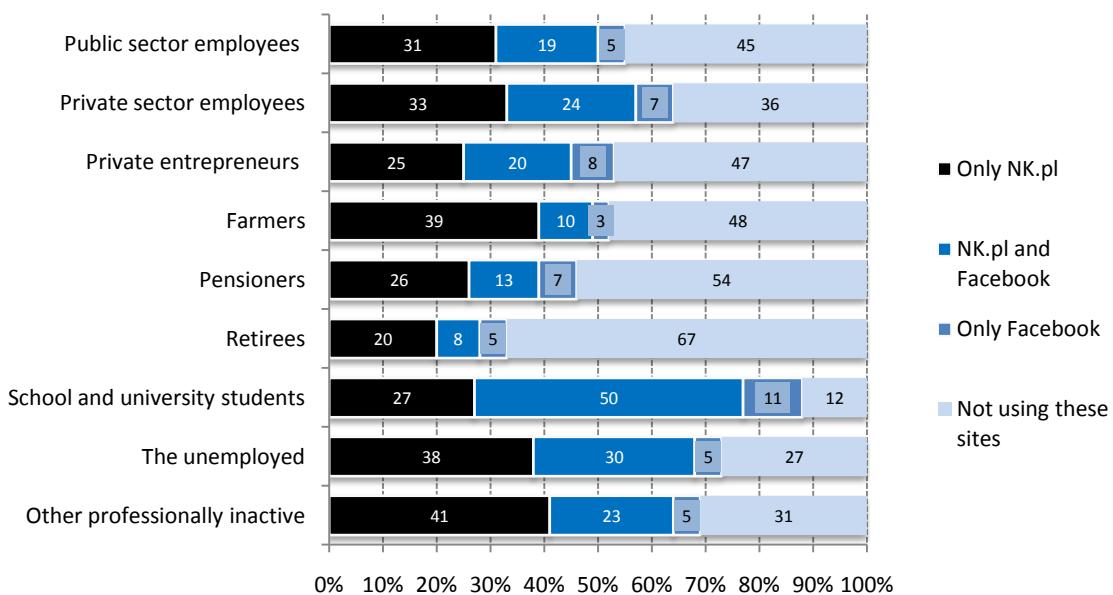


Figure 7.4.5. Use of NK.pl and Facebook among Internet users in groups by social and professional status

The relationship with income is also interesting. Internet users from households with lower incomes use social networking sites more often. It is also in such households that NK.pl has the greatest advantage over Facebook. On the other hand, users of Facebook without an account on NK.pl are most often found among those with higher incomes.

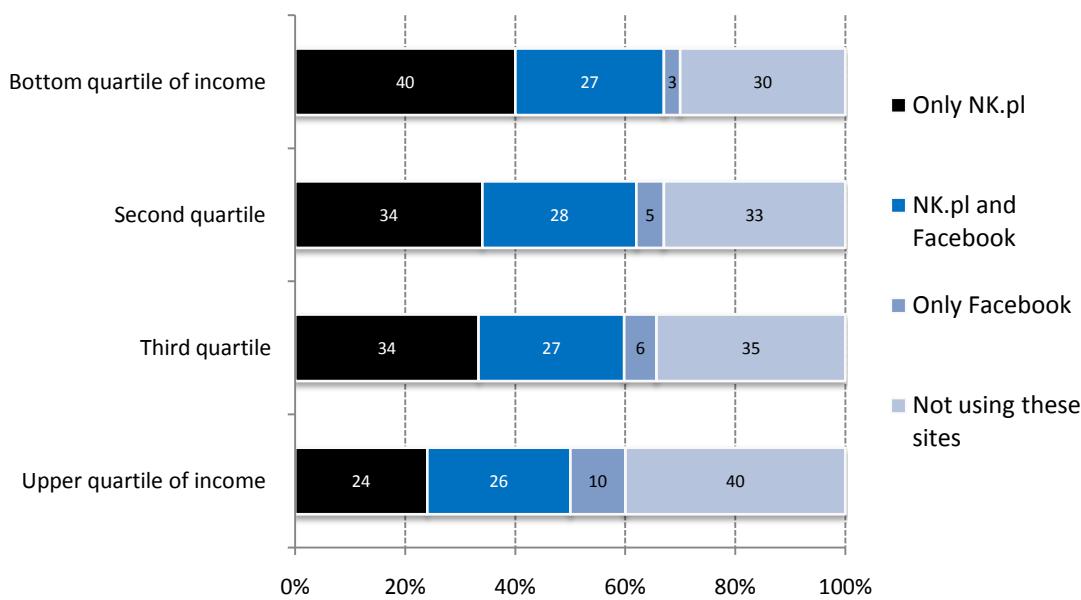


Figure 7.4.6. Use of NK.pl and Facebook among Internet users in groups by household income per capita.

In Poland, like in the U.S., there are clear class differences in the use of social networking sites. To some extent, however, this stems from the very nature of the process of dissemination of particular sites. At the beginning, such sites are used by younger, better educated individuals from larger towns. In the case of Facebook in Poland, an additional factor is that it is a foreign service, which in the initial period of its operation was known only to those who have contact with people from other countries, work in the Internet industry, to more active users. Only gradually, with the spread of the use of the site, is it joined by people from other social groups. In the longer perspective, such dynamics and a sort of fashion for Facebook bode ill for NK.pl.

7.4.4. Relationships, social commitment and the Internet

Internet users show a much higher social activity (Figure 7.4.7). They engage for the benefit of the local community nearly twice as often. They also take part in various public meetings more often. Among Internet users there are more people who are members of organizations and associations, 17.5 % of users and less than 11 % of non-users belong to them. In addition, Internet users belong to twice as many of those organisations.

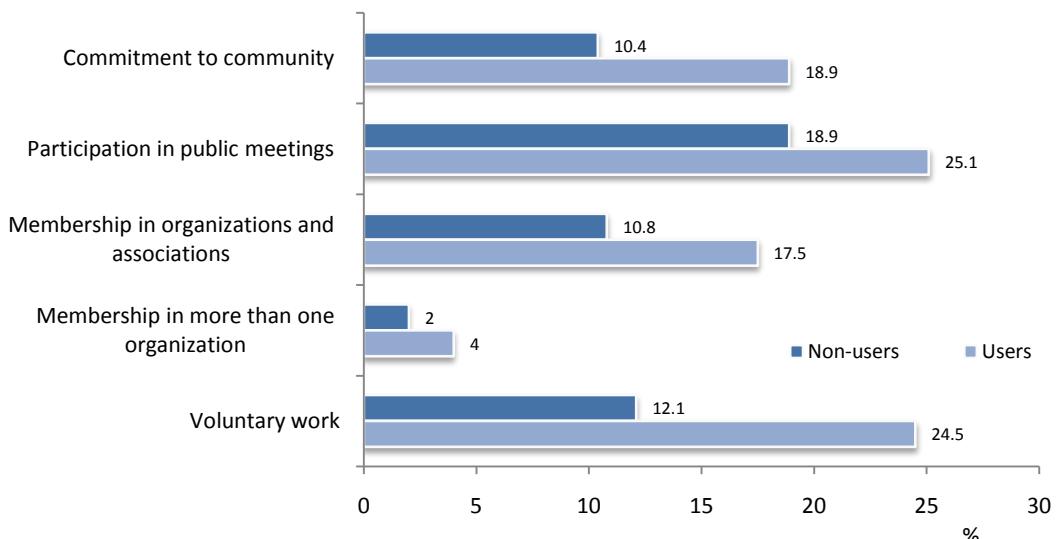


Figure 7.4.7. Differences between Internet users and non-users in terms of social activity

What relevance does using the Internet have to social activity? To answer this question, we examine how Poles' social activity changes depending on whether they use computers and the Internet or not. Commitment to local community has changed very little, and among those who did not use the Internet in 2009-2011, it did not change at all. Among current Internet users, slightly fewer get involved than two years ago. However, the biggest decline was among those who ceased to use the Internet after 2009. Participation in public meetings is changing differently. The number of Internet users who participated in such meetings increased by almost 4 percentage points, and among those who became users in the last two years the increase amounted to over 6 percentage points. Activity among non-users increased much less, and among those who stopped using the Internet it even declined by 4 percentage points. There have also been changes in membership in organizations and associations. The number of people who become members of an organisation is similar to the number of those who were members of at least one organisation in 2009 and now are not. Slight increases in membership in organisations can be seen among those who use the Internet. In particular, the activity of new Internet users increased, among them the number of people who engage in some type of activity increased by 2 percentage points.

7.4.5. Economic activity of Internet users and non-users

Internet users more often have a job than non-users. As can be seen in Figure 7.4.8, among people aged 25-40, the percentage of workers among Internet users is by about 20 percentage points higher than among non-users. Among the latter, unemployed and economically inactive persons are much more numerous. The differences are somewhat smaller for the age group of 40-50 and higher for people of pre-retirement age.

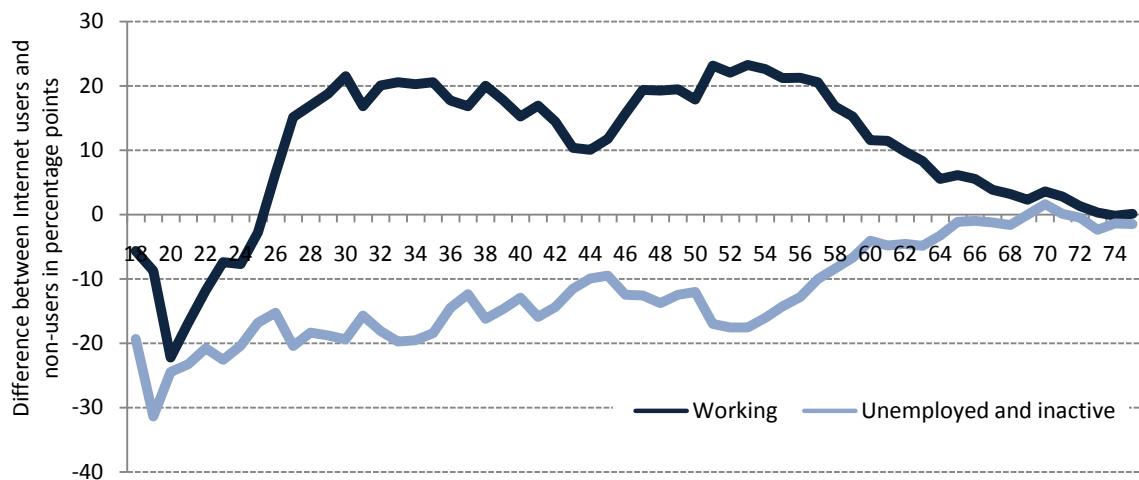


Figure 7.4.8. Differences in the frequency of being employed and unemployed or inactive between Internet users and non-users depending on age (in percentage points)

Internet use is associated with lower risks of unemployment and greater chances of finding a job. Of those who were unemployed or professionally inactive in 2009, currently 35 % of Internet users and 27 % of non-users have work. During those two years, 7 % of users and 11 % of non-users lost their jobs.

If we only look at those who work, we see further differences between users and non-users. The former visibly more often change their job for a better-paid one or undertake additional work. In the last year, as many as 17 % of working Internet users found such a job, among non-users it was 11 %. Internet users improved their competence and skills with a view to earning better wages five times more often. In the last year, new skills were acquired by every fourth user and only by every twentieth non-user.

Internet users also get promoted more often – in the past year over four times as many working users as non-users were promoted. On the other hand, Internet users also more often say they were not promoted (5.7 % of employed users and 3.8 % of non-users). Additionally, 2 % of them were transferred to a lower position; non-users were transferred to a lower position less frequently.

Internet users more often start their own business (within the last year, three times as often as non-users).

7.4.6. Public services via the Internet

One of the frequently cited aspects of information society development is e-administration, i.e. the ability to provide better communication in relations between citizens and public institutions, and between different

offices. Poland is gradually developing public services offered via the Internet and an increasing number of matters can be settled online. Also more and more public information is available on the web.

Analyses of Internet use show that more and more Internet users use information posted on websites of public institutions. In 2005, half of Internet users declared they obtained information from such sites, and now it is 62 % of users. It should also be borne in mind that during these six years, the number of Internet users almost doubled. The percentage of people who declare "downloading or filling in official forms via the Internet" is also significantly higher. Currently, 56 % of users declare they use the Internet like this, while six years ago it was 35 %.

In addition to such general contact with public administration on the web, it is worth looking into particular electronic public services. In discussions about the development of e-government in Poland, there are many concerns about the pace and direction of these changes. One of the main concerns is the allegation of concentrating on the development of public services available electronically to citizens, in spite of the relatively rare situations in which citizens use a given type of service (how often can one change the documents?). Instead, it is primarily postulated that the processes within administration be improved, and that administrative processes and procedures be rationalised based on the use of ICT. In this part of the report, we will look at the declared demand of Poles for public services available electronically, and how it changed over the past four years.

As in previous years, also in this wave of the study we asked about preferences regarding the ways of dealing with various administrative matters. This question takes into account the varying degrees of Internet use. For each of the several matters, the head of the household had the possibility to declare whether he/she envisaged dealing with such a matter, and if so, whether he/she would like to use the Internet for doing so. In addition, two levels of using the Internet were distinguished - first, only to get information (and settling the matter in a traditional way), and second, settling the whole matter over the Internet.

Figure 7.4.9 shows the percentages of households interested in settling the matter over the Internet from beginning to end. As can be seen, interest in the availability of public services on the Internet is not large. It should be noted that users who have access to the Internet at home would like to have the ability to settle some matters online more often.

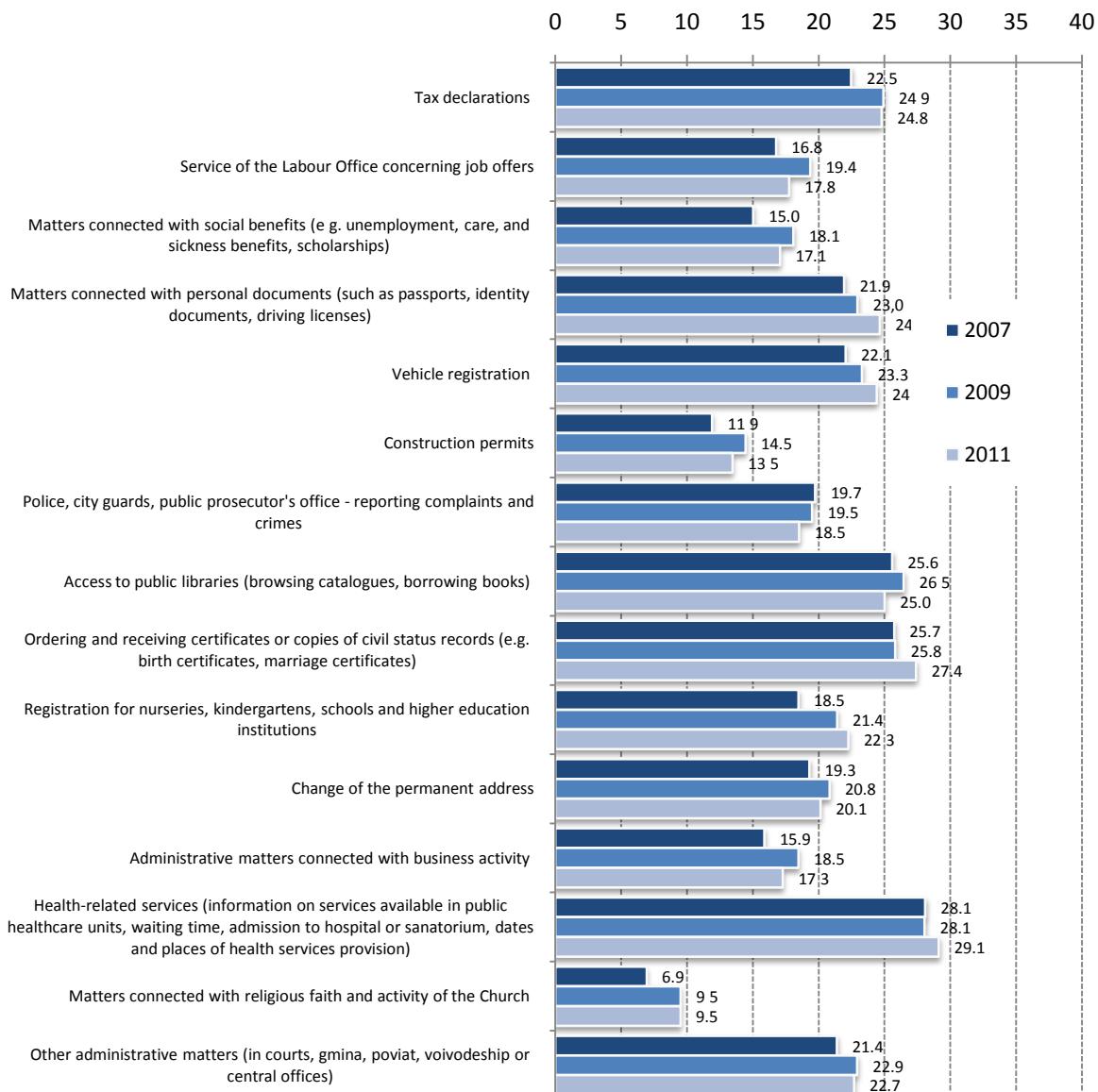


Figure 7.4.9. Interest in public services available online - percentage of people who would like to settle a given matter entirely over the Internet

The most popular are health-related services, although these happen to be the least accessible. Quite a large proportion of respondents would like to be able to request and receive certificates or copies of certificates related to marital status, etc., as well as to handle matters related to personal documents, tax returns (though in this case one-third declare they prefer to handle matters related to taxes in the traditional way) or registration of a vehicle, and to have electronic access to public libraries. Definitely the least interest is in handling the matters related to religious beliefs and activities of the Church.

Until recently, the availability of public services online was often regarded as one of the most important elements of information society development. However, the number of public services available online in Poland is still very small. Moreover, despite a significant increase in the number of users, the declared desire to benefit from particular services practically does not change. It is also hard to expect that providing the possibility to settle matters online will contribute to a significant increase in the motivation to use the Internet, and will thus further increase the number of its users. The availability of public services over the Internet is of course necessary, but it will no longer be a significant stimulus for development. It appears to be of key importance now to computerise the country, which is to be understood not only as offering public services online, but also as using ICT to improve the functioning of administration, both internally and in its dealings with companies and ordinary citizens.

7.4.7. The problem of digital exclusion

In earlier parts of this chapter we have shown differences in the use of computers and the Internet among different socio-demographic groups, as well as the relationship of Internet use with the situation on the labour market, cultural participation and social activity. The Internet is much more frequently used by young people, learners and those better educated. At the same time, those people are much more active in both professional and social life. Differences in the availability and use of the Internet may have significant social consequences. Information and communication technologies are not just toys, they increasingly condition access to full participation in society. The more common use of these technologies and their increasing capacities, and often their indispensability in everyday life – at school, at work, in access to information and knowledge – means that people who do not use them begin to be socially excluded. This phenomenon is called digital exclusion.

The problem of digital exclusion is not limited to the phenomenon of the digital divide, i.e., systematic differences in access to and use of computers and the Internet among people of different socio-economic status (education, income, profession), between people at the different stages of life, men and women and between different regions. The key differences are those differences related to access, skills to use ICT, and the fact of using them, that lead to social and economic exclusion.

In Poland, it is mainly the elderly and less educated that are at risk of digital exclusion. There is no doubt that people living in smaller towns and with lower household income face greater difficulties. Moreover, these differences do not only concern the use, but also skills, versatility of use, especially when it comes to more instrumental ways to use computers and the Internet. In addition, the significance of the most important of those differences remains very high and is not likely to change quickly.

As illustrated earlier in this chapter, the most important barrier to promoting the use of computers and the Internet is primarily the lack of motivation to use them, due in part to the lack of knowledge and skills. Financial constraints, lack of hardware, and the lack of technical possibility of having a broadband connection are important, but to a considerably smaller proportion of non-users. Unfortunately, most actions taken in Poland to promote the use of the Internet and prevent digital exclusion are too heavily focused on infrastructural issues. This confirms the fears of the previous years concerning the ineffectiveness of measures taken by state administration and local governments. Despite the huge amounts of money allocated under Operational Programmes for combating digital exclusion and the construction of broadband networks or providing last mile access, the scale of digital exclusion in Poland is not decreasing. Internet use still strongly differentiates Polish society. The consequence of this civilization divide may be the progressive stratification of society and the social exclusion of those unable to use ICT. The continued widening of the gap between Internet users and non-users can be a source of significant social problems in the future.

8. SOCIAL EXCLUSION

8.1. Poverty and income inequalities

Tomasz Panek

8.1.1. Poverty measure and analysis method

The first and at the same time the crucial step to measure poverty is to define its category. Selection of a specific poverty category is vital for the results of such a measurement (Hagenaars, 1986). Depending on the definition, various groups in the society may be considered as groups at the highest risk of poverty. At the same time the manner of defining poverty and the methods of measuring it affect the methodology for developing social policy programmes aimed at reducing poverty.

Actual divergences in poverty assessment and thus divergences in the concept of combating poverty result from the lack of precise and generally accepted definition of poverty. Moreover, this category is variable over time and regionally diversified (Sen, 1983).

All definitions used in thematic publications associate poverty with the failure to satisfy certain basic needs at a demanded degree (Drewnowski, 1977, Panek 2007). Such definitions are general enough not to be disputable and they are indeed commonly accepted. Such acceptance results from the fact that the main controversial issues, such as which needs are to be considered basic and what degree of their satisfaction should be considered sufficient remain open.

In the present analysis we have adopted the so-called economic definition of poverty (Panek, 2011). Poverty would imply a situation where a household does not have sufficient financial resources (both cash in the form of current income and income from previous periods and accumulated fixed assets) to satisfy its basic needs. In this case poverty is analysed as one of the aspects of social exclusion; i.e. its financial aspect. However, poverty is not a situation where basic needs cannot be satisfied by a household for reasons other than financial, such as due to disability of household members or low level of their attainment.

Aggregate poverty indices were used to assess poverty. They are statistical formulae that aggregate individual poverty measures (relating to individual households) enabling experts to assess poverty at the national level, across regions or in respective types of households. Due to the fact that there is no single universal formula in this respect, various aggregate index formulae are applied in different studies, providing information about various aspects of poverty. Poverty indices focus on four main aspects of poverty; i.e. its incidence, depth, intensity and severity.

In the case of poverty assessments it is vital to analyse changes in poverty over time. In the present study we analysed the mobility of households in terms of poverty, with mobility assessed on the basis of tables of flows. Moreover, tables of flows were also used to estimate mobility indices.

Detailed information about the methodology of measuring poverty adopted in this study is presented in Annex 5.

8.1.2. Results of analysis of poverty and inequality

8.1.2.1. The range and depth of poverty

The poverty indices used in the analyses contain basic information that is the objective of every research on poverty. However, due to the abstract nature of the term *poverty line*, the significance of the information provided by these indices should not be overestimated. Much more significant for the objectives of this study are changes in their values over time and breakdowns according to selected typological groups of households.

The value of minimum income estimated by the Institute of Labour and Social Studies which serves as the poverty line for one-person households of employees in 2011 was PLN 480. Due to the method of defining the minimum income category (cf. Annex 4), it should be considered the poverty line. In the case of the subjective approach, we shall use the term *deficiency line* since when households consider the lowest level of income necessary to make ends meet, which is one of the parameters that are decisive for specifying the value of that threshold (cf. Annex 4), they take into account the higher level of income than the one that secures only the minimum income. The subjective deficiency line for one-person households was estimated to be PLN 1515. This is more than 3 times higher than objective level. This means that the aspirations of households with regard to their income situation allowing for satisfaction of their needs at an

acceptable minimum level are much higher than the minimum standards established by experts in this regard. Households simply compare their economic situation with that of other households in a better financial condition.

In March/April 2011, 4.0% of households in Poland lived below the objective poverty line and 36.8% below the subjective deficiency line (Tables 8.1.1 and 8.1.5). However, these values should be considered overestimated as households tend to underestimate their income in the statements they make. On the other hand, poverty depth indices reached almost 25.3% with the objective approach and 28.7% with the subjective approach (Tables 8.1.1 and 8.1.5). This means that in March/April 2011, the average equivalent income of Polish households below the poverty line was lower by 25.3% than the minimum income, and the average equivalent income of Polish households below the deficiency line was beneath the deficiency line (subjective poverty line) by 28.7%.

The poverty intensity index, derived from the combined incidence and depth of poverty, was 1.0% in March/April 2011, while the deficiency intensity index was 10.6% respectively. This means that in March/April 2011, on average each household below the poverty line should receive PLN 4.9 (PLN 0.0102-480) in order to eliminate poverty. In order to eliminate deficiency, the average transfer to each household below the poverty line should amount to PLN 160 (PLN 0.1057-1515). The poverty severity index, derived from the incidence and depth of poverty and income inequalities among the poor, was 0.41% in March/April 2011, while the deficiency severity index was 4.65% respectively.

With the two approaches combined, the highest percentage of households living in poverty concerned the groups of households living on passive sources of income and pensioners (35.3 and 9.6% respectively under the objective approach and 81.2 and 70.5% respectively under the subjective approach, Tables 8.1.1 and 8.1.5). The lowest poverty level was reported in the groups of households of retirees, employees and the self-employed (the headcount ratio in those groups of households was below 1.8%). However, with the subjective approach the notably lowest levels were reported in the groups of households of the self-employed and employees (15.7 and 24.4% respectively). The deepest poverty with the objective approach was reported in households living on passive sources of income as well as among the self-employed. They amounted to 32.5 and 25.7% respectively. In the group of self-employed households, deep poverty is related to the present economic crisis as a result of which many family businesses went bankrupt or their income significantly decreased.

The deepest deficiency level with the subjective approach in March/April 2011 was reported in households living on passive sources of income as well as among pensioners. Deficiency depth indices in those groups of households amounted to 50.4 and 34.9% respectively.

Poverty and deficiency were most intensive and severe also in the group of households living on passive sources of income. In this group, the poverty intensity index was 11.5% with the objective approach and 40.9% with the subjective. Poverty severity index in this group of households amounted to 5.4% with the objective approach and 25.4% in the subjective.

With the objective approach not less than 13.9% and with the subjective 54.9% of households with unemployed members lived in poverty or deficiency respectively in March/April 2011, whereas in the group of households without unemployed members these indices amounted merely to 2.6% with the objective approach and 34.2% with the subjective (Tables 8.1.1 and 8.1.5). Also the poverty depth with the two approaches was higher in the former group of households than in the latter. The poverty gap index in these groups amounted to 29.2 and 22.3% respectively. Deficiency depth indices in those groups of households amounted to 36.4 and 27.0% respectively.

Similar levels of indices among the discussed groups of households can be reported in the case of intensity and severity of poverty (Tables 8.1.1 and 8.1.5).

Among the types of households, in March/April 2011 the highest incidence of poverty was reported with the objective approach among the groups of married couples with many children and single-parent families (the percentage of households in those groups living in poverty amounted to 8.6 and 7.2% respectively) and with the subjective approach among non-family households and single-parent families (the percentage of households in those groups living in poverty amounted to 62.7 and 45.6% respectively; Tables 8.1.2 and 8.1.6). Poverty depth is much less diversified according to household types than its incidence. The highest poverty depth indices were reported in non-family households. With the objective approach, 29.4% of non-family one-person households lived below the poverty line and 33.9% of non-family multi-person households lived below the deficiency line with the subjective.

Poverty intensity and severity were also the highest in those groups of households where the highest levels of poverty incidence and depth were reported. With the objective approach, the visibly highest levels of poverty intensity and severity indices were reported in the group of households of married couples with many children (2.2 and 0.8% respectively), whereas with the subjective approach, the highest levels of deficiency intensity and severity indices were reported in the groups of non-family one-person households and non-family multi-person households, as well as in single-parent families. Deficiency intensity indices in

those groups of households were 9.0, 14.8 and 14.6% respectively and deficiency severity indices were 8.8, 7.1 and 6.5% respectively.

The obtained results indicate the impact of the size of place of residence on the incidence of poverty (Tables 8.1.3 and 8.1.7). In March/April 2011, the percentage of households living in poverty was significantly higher the smaller their place of residence. Among households living in rural areas, 6.4% lived below the poverty line with the objective approach and 47.9% lived below the deficiency line with the subjective. The headcount ratios for poverty and deficiency in the largest cities accounted for merely 1.8 and 20.5% respectively.

Diversification of the poverty depth among the respective classes of place of residence was not too high. The deepest deficiency with the subjective approach was reported in rural areas, where the deficiency depth index reached 31.7%. In turn the deepest poverty with the objective approach concerned households in medium-sized cities with 100-200k inhabitants (the poverty depth index in this group of households amounted to 30.0%).

The highest intensity of both poverty and deficiency was reported in rural areas (where poverty intensity indices accounted for 1.6 and 15.2% respectively). Poverty severity with both approaches was also the highest in the group of households in rural areas (poverty severity indices in this group of households accounted for 0.7 and 6.8% respectively).

The highest poverty with the objective approach was reported in kujawsko-pomorskie and pomorskie voivodeships (with 8.0 and 5.2% of households respectively in poverty in those voivodeships, Table 8.1.4) in March/April 2011. With the subjective approach, the highest deficiency was reported also in lubelskie and świętokrzyskie voivodeships (with 51.3 and 47.2% of households respectively in deficiency in those voivodeships, Table 8.1.8).

The deepest poverty in the analysed period with the objective approach was reported in warmińsko-mazurskie and pomorskie voivodeships where the poverty gap indices were 35.8 and 34.2% respectively. The relatively deepest deficiency with the subjective approach was reported in lubelskie, łódzkie and dolnośląskie voivodeships. In those voivodeships the deficiency gap indices were 32.8, 30.3 and 30.1% respectively. This means that in those voivodeships with households in poverty (with the objective approach) or deficiency (with the subjective approach) were on average the least wealthy.

Table 8.1.1. Aggregate poverty indices by socio-economic groups and types of economic activity in March/April 2011 objective approach

Socio-economic group and type of economic activity	Aggregate poverty indices - 100			
	Poverty incidence	Poverty depth	Poverty intensity	Poverty severity
Employees	1.74	21.76	0.38	0.15
Farmers	8.98	25.41	2.28	0.85
Retirees	1.62	15.26	0.25	0.07
Pensioners	9.64	20.75	2.00	0.63
Self-employed	1.79	25.73	0.46	0.15
Living on passive sources of income	35.27	32.47	11.45	5.38
Excluding the unemployed	2.58	22.31	0.58	0.21
Including the unemployed	13.90	29.22	4.06	1.78
Total	4.01	25.34	1.02	0.41

Table 8.1.2. Aggregate poverty indices by household type in March/April 2011 objective approach

Household type	Aggregate poverty indices - 100			
	Poverty incidence	Poverty depth	Poverty intensity	Poverty severity
Single-family:				
married couples without children	1.82	23.16	0.42	0.15
married couples with 1 child	2.34	23.46	0.55	0.20
married couples with 2 children	3.03	27.12	0.82	0.33
married couples with 3 and more children	8.55	25.45	2.18	0.83
single-parent families	7.15	20.34	1.45	0.52
Multi-family	4.04	22.00	0.89	0.30
Non-family: one-person	4.65	29.41	1.37	0.64
multi-person	4.42	26.26	1.16	0.44

The highest intensity of poverty in March 2011 was in lubuskie, lubelskie and zachodniopomorskie voivodeships. The poverty intensity index in those voivodeships accounted for approximately 1.7%. The deficiency intensity index was the highest also in lubelskie voivodeship (16.9%). Poverty severity with the objective approach was the highest in kujawsko-pomorskie and zachodniopomorskie voivodeships (deficiency severity index of 0.9 and 0.8% respectively) in March 2011. Deficiency severity with the subjective approach was the highest in lubelskie and świętokrzyskie voivodeships (7.7 and 5.9% respectively).

Table 8.1.3. Aggregate poverty indices by class of the place of residence in March/April 2011 objective approach

Class of the place of residence	Aggregate poverty indices - 100			
	Poverty incidence	Poverty depth	Poverty intensity	Poverty severity
Towns with more than 500,000 inhabitants	1.79	26.59	0.48	0.18
Towns with 200,000-500,000 inhabitants	2.15	24.88	0.53	0.19
Towns with 100,000-200,000 inhabitants	2.99	29.96	0.90	0.42
Towns with 20,000-100,000 inhabitants	3.19	25.92	0.83	0.34
Towns with fewer than 20,000 inhabitants	3.75	22.57	0.85	0.29
Rural areas	6.44	25.15	1.62	0.67

Table 8.1.4. Aggregate poverty indices by voivodeships in March/April 2011 objective approach

Voivodeship	Aggregate poverty indices - 100			
	Poverty incidence	Poverty depth	Poverty intensity	Poverty severity
Dolnośląskie	3.18	25.61	0.81	0.36
Kujawsko-Pomorskie	4.82	35.82	1.73	0.86
Lubelskie	8.04	21.58	1.74	0.61
Lubuskie	3.91	22.09	0.86	0.26
Łódzkie	4.23	21.97	0.93	0.36
Małopolskie	2.83	22.85	0.65	0.21
Mazowieckie	3.52	21.65	0.76	0.23
Opolskie	4.42	28.66	1.27	0.50
Podkarpackie	4.67	21.37	1.00	0.39
Podlaskie	3.58	19.68	0.70	0.29
Pomorskie	3.16	34.16	1.08	0.68
Śląskie	3.05	27.69	0.84	0.37
Świętokrzyskie	4.99	22.15	1.11	0.40
Warmińsko-Mazurskie	3.75	32.70	1.23	0.51
Wielkopolskie	4.20	22.55	0.95	0.31
Zachodniopomorskie	5.24	32.61	1.71	0.82

Table 8.1.5. Aggregate deficiency indices by socio-economic groups and types of economic activity in March/April 2011 subjective approach

Socio-economic group and type of economic activity	Aggregate poverty indices - 100			
	Poverty incidence	Poverty depth	Poverty intensity	Poverty severity
Employees	24.36	23.40	5.70	2.16
Farmers	48.50	32.55	15.79	7.24
Retirees	45.56	25.46	11.60	4.34
Pensioners	70.50	34.93	24.62	11.66
Self-employed	15.73	22.69	3.57	1.60
Living on passive sources of income	81.1	0.41	0.91	5.43
Excluding the unemployed	34.17	26.96	9.21	3.83
Including the unemployed	54.86	36.43	19.99	10.30

Table 8.1.6. Aggregate deficiency indices by household type in March/April 2011 subjective approach

Household type	Aggregate poverty indices - 100			
	Poverty incidence	Poverty depth	Poverty intensity	Poverty severity
Single-family: married couples without children	21.24	25.90	5.50	2.12
married couples with 1 child	20.22	27.47	5.56	2.23
married couples with 2 children	27.21	22.72	6.18	2.67
married couples with 3 and more children	40.37	30.80	12.43	5.45
single-parent families	45.55	31.99	14.57	6.50
Multi-family	24.16	25.41	6.14	2.40
Non-family: one-person	62.71	30.33	19.02	8.76
multi-person	43.75	33.90	14.83	7.05
Total	36.78	28.74	10.57	4.65

Table 8.1.7. Aggregate deficiency indices by the class of place of residence in March/April 2011 subjective approach

Place of residence	Aggregate poverty indices - 100			
	Poverty incidence	Poverty depth	Poverty intensity	Poverty severity
Towns with more than 500,000 inhabitants	20.53	25.70	5.28	2.33
Towns with 200,000-500,000 inhabitants	27.76	24.70	6.86	2.78
Towns with 100,000-200,000 inhabitants	33.94	27.56	9.35	4.25
Towns with 20,000-100,000 inhabitants	35.21	26.11	9.19	3.91
Towns with fewer than 20,000 inhabitants	38.16	27.99	10.68	4.57
Rural areas	47.88	31.70	15.18	6.84
Total	36.78	28.74	10.57	4.65

Table 8.1.8. Aggregate deficiency indices by voivodeships in March/April 2011 subjective approach

Voivodeship	Aggregate poverty indices - 100			
	Poverty incidence	Poverty depth	Poverty intensity	Poverty severity
Dolnośląskie	33.62	30.10	10.12	4.38
Kujawsko-Pomorskie	41.31	29.12	12.03	5.51
Lubelskie	51.32	32.83	16.85	7.65
Lubuskie	36.50	28.53	10.41	4.47
Łódzkie	40.16	30.25	12.15	5.47
Małopolskie	33.22	24.89	8.27	3.36
Mazowieckie	32.43	29.56	9.59	4.21
Opolskie	40.55	28.37	11.50	5.18
Podkarpackie	43.53	28.26	12.30	5.10
Podlaskie	42.07	29.38	12.36	5.20
Pomorskie	32.74	26.16	8.57	3.71
Śląskie	32.06	27.16	8.71	3.83
Świętokrzyskie	47.15	29.23	13.78	5.85
Warmińsko-Mazurskie	39.71	29.08	11.55	5.38
Wielkopolskie	34.11	26.78	9.13	3.91
Zachodniopomorskie	34.74	29.66	10.30	4.98
Total	36.78	28.74	10.57	4.65

8.1.2.2. The permanent nature of poverty

For most households participating in the last two research waves, poverty was not of a permanent nature with the objective approach. However, out of the 3.7% of households in poverty in March/April 2009, not less than 36% remained in poverty also in March 2011 (Table 8.1.9). Households in permanent deficiency with the subjective approach constituted as much as 66% of households in poverty in March/April 2011 (Table 8.1.10), which means that deficiency was of a rather permanent nature for most households studied in the analysed period.

Table 8.1.9. Movements of households in Poland in terms of their belonging to the poverty sphere from March/April 2009 to March/April 2011 objective approach

Specification	Non-poor households in March 2011 (%)	Poor households in March 2011 (%)	Total
Non-poor households in March 2009 (%)	94.23	2.37	96.60
Poor households in March 2009 (%)	2.07	1.33	3.40
Total	96.30	3.70	100.00

Table 8.1.10. Movements of households in Poland in terms of their belonging to the deficiency sphere from March/April 2009 to March/April 2011 subjective approach

Specification	Non-poor households in March 2011 (%)	Poor households in March 2011 (%)	Total
Non-poor households in March 2009 (%)	45.98	5.29	51.27
Poor households in March 2009 (%)	16.31	32.42	48.73
Total	62.29	37.71	100.00

Approximately 4.4% of households between March/April 2009 and March/April 2011 shifted between poverty and non-poverty (Table 8.1.11). The number of households which have entered the poverty sphere

in the last two years was slightly higher (2.37% of households) than the number of those which left this sphere (2.07% of households).

Table 8.1.11. Mobility of households in terms of their belonging to the poverty sphere from March/April 2009 to March/April 2011

Mobility indices	Mobility indices - 100	
	Poverty	Deficiency
S	4.44	21.60
SU ⁺	2.07	16.31
SU ⁻	2.37	5.29
CM	-0.30-	11.02

A different mobility trend can be noted in the case of households belonging to the deficiency sphere (Table 8.1.12). In the analysed period, almost 22% of households shifted between the deficiency sphere and beyond that sphere. In March/April 2011 the income of over 16% of households had improved with regard to March/April 2009 to the extent that they left the deficiency sphere. In the same period, only slightly over 5% of households entered the deficiency sphere due to significantly lower income.

8.1.2.3. Determinants of poverty

Tables 8.1.12 and 8.1.13 present the results of the probit analyses of poverty risk with the objective and subjective approaches (poverty/deficiency). They include estimates of probit model parameters, standard errors of parameter estimates, values of t-statistic and empirical significance levels $P>|t|$, where the hypothetical insignificance of the probability parameter stating that the absolute value of the random variable in the Student's t-distribution assumes the value no lower than the obtained value of the t-statistic.

The comparison of the value of χ^2 statistic, amounting to 1,085 for the objective approach and 3,332 for the subjective approach (at the level of 22 degrees of freedom) with the corresponding critical levels of significance 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 (variants of the attributes) selected for the model equals 0.05. This means that a given variable (variant of the attribute) is significant when the corresponding critical level of significance is lower than 0.05.

Socio-economic group (source of income of the household head)

The point of reference assumed for the assessment of impact of the main source of income of a household (the socio-economic group the household belonged) on poverty risk was the group of self-employed households. This means that the degree of poverty risk for a group of households broken down by the main source of income will be analysed in relation to the degree established for the self-employed households. With the objective approach, only the employee households do not differ statistically in terms of poverty risk from the self-employed households (Table 8.1.12). However, with the subjective approach, the deficiency risk for all socio-economic groups of households is significantly higher than in the case of the self-employed households (Table 8.1.13).

With the objective approach the groups of households with the highest poverty risk are households living on passive sources of income other than pension or retirement pay, and the households of pensioners. 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 relatively the lowest income.

With the subjective approach, all socio-economic groups of households are at a noticeably higher deficiency risk than the self-employed households. Similarly to the objective approach, the highest deficiency risk is associated with households living on passive sources of income and the households of pensioners.

The impact of variables determining to which socio-economic group a household belongs is much higher with the subjective approach than the objective.

Table 8.1.12. Results of poverty risk probit model estimates with the objective approach in March/April 2011

Predictors	Parameter estimates	Standard errors of estimates	t-statistic	P> t
(Constant)	-2.104	0.178	-11.838	0.000
Socio-economic group:				
Employees	-0.002	0.048	-0.050	0.960
Farmers	0.482	0.093	5.163	0.000
Self-employed	Ref.			
Retirees	0.217	0.093	2.344	0.019
Pensioners	0.715	0.094	7.576	0.000
Living on passive sources of income	1.501	0.091	16.546	0.000
Number of household members				
1	Ref.			
2	-0.118	0.073	-1.615	0.106
3	-0.123	0.081	-1.517	0.129
4	-0.073	0.0875	-0.830	0.406
5	-0.072	0.098	-0.730	0.465
6 and more	0.235	0.093	2.520	0.012
Class of the place of residence:				
Towns with more than 500,000 inhabitants	Ref.			
Towns with 200,000-500,000 inhabitants	-0.037	0.183	-0.205	0.838
Towns with 100,000-200,000 inhabitants	-0.131	0.190	-0.691	0.490
Towns with 20,000-100,000 inhabitants	0.018	0.196	0.090	0.928
Towns with fewer than 20,000 inhabitants	-0.032	0.178	-0.180	0.857
Rural areas	0.149	0.168	0.887	0.375
Level of attainment of the household head:				
Primary and lower	1.003	0.119	8.464	0.000
Basic vocational	0.665	0.115	5.796	0.000
Secondary	0.341	0.120	2.857	0.004
Higher	Ref.			
Age of the household head: under 35	-0.029	0.093	-0.309	0.757
35-59	Ref.			
60+	-0.295	0.070	-4.171	0.000
Household status on the labour market:				
At least one unemployed person	Ref.			
No unemployed persons	-0.520	0.056	-9.257	0.000
Household disability status: At least one disabled person	Ref.			
No disabled persons	-0.017	0.052	-0.330	0.742

Table 8.1.13. Results of deficiency risk probit model estimates with the subjective approach in March/April 2011

Predictors	Parameter estimates	Standard errors of estimates	t-statistic	P> t
(Constant)	-0.288	0.106	-2.719	-0.007
Socio-economic group:				
Employees	0.274	0.071	3.856	0.000
Farmers	0.635	0.087	7.315	0.000
Self-employed	Ref.			
Retirees	0.596	0.081	7.347	0.000
Pensioners	0.960	0.089	10.762	0.000
Living on passive sources of income	1.416	0.104	13.653	0.000
Number of household members	Ref.			
1				
2	-1.061	0.041	-26.140	0.000
3	-1.306	0.0481	-27.122	0.000
4	-1.060	0.051	-20.987	0.000
5	-1.177	0.060	-19.599	0.000
6 and more	-1.446	0.064	-22.448	0.000
Class of the place of residence:	Ref.			
Towns with more than 500,000 inhabitants				
Towns with 200,000-500,000 inhabitants	0.243	0.068	3.567	0.000
Towns with 100,000-200,000 inhabitants	0.198	0.072	2.737	0.006
Towns with 20,000-100,000 inhabitants	0.339	0.060	5.693	0.000
Towns with fewer than 20,000 inhabitants	0.360	0.063	5.695	0.000
Rural areas	0.601	0.058	10.440	0.000
Level of attainment of the household head:	Ref.			
Primary and lower	1.219	0.051	23.753	0.000
Basic vocational	0.836	0.046	18.142	0.000
Secondary	0.549	0.046	11.975	0.000
Higher	Ref.			
Age of the household head: under 35	0.151	0.049	3.087	0.002
35-59	-0.323	0.045	-7.203	0.000
60+	Ref.			
Household status on the labour market: At least one unemployed person	Ref.			
No unemployed persons	-0.636	0.040	-16.115	0.000
Household disability status: At least one disabled person	Ref.			
No disabled persons	-0.089	0.030	-2.934	0.003

Number of household members

The point of reference for estimating the impact of the number of household members on the poverty risk was the group of one-person households. With the objective approach, only in households consisting of 6 or more members does the number of household members significantly affect the poverty risk (Table 8.1.12). The risk is significantly higher than in the group of one-person households. Most probably, this is caused by the most of the multi-person households being families with many children where most of household members do not work.

The impact of the number of household members on deficiency risk with the subjective approach is much stronger than with the objective. All the variable parameters defining the number of household members with the subjective approach are significant and negative. Therefore, with the subjective approach, the highest deficiency risk is reported for one-person households (Table 8.1.13). This means that the determinants of poverty and deficiency differ significantly in terms of the number of household members.

Class of place of residence

The point of reference assumed for estimating the impact of class of the place of residence on poverty risk was the group of households in the largest towns. All estimates of model parameters with the objective approach, behind the variables representing the class of place of residence are not significant (Table 8.1.12). However, parameter estimates for all groups of households according to the class of place of residence are significantly positive with the subjective approach, which means that households living in other classes of place of residence are at a higher deficiency risk than households in the largest towns (Table 8.1.13). Definitely the highest deficiency risk can be attributed to the group of households in rural areas. Among urban households, the highest deficiency risk can be attributed to the group of households in the smallest towns.

Educational level of attainment of household head

The educational level of attainment of a household head clearly determines poverty risk both with the objective and subjective approach (Tables 8.1.12 and 8.1.13). The point of reference assumed for estimating the impact of educational level of attainment of the household head on poverty risk was the group of households where the household head had a university degree.

All parameter values are statistically significant and positive. This means that households where the household head has a university degree are at the lowest poverty and deficiency risk. The lower the educational level of attainment of the household head, the higher both the poverty and the deficiency risk for the household.

Age of the household head

Household head age groups were distinguished according to adults' stages of life. The point of reference assumed here was the group of households where household heads were between 35 and 59 years old. The differences in the level of poverty risk between the reference group of households and all other groups of households turned out to be significant only under the objective approach for the group of households where the household heads were 60 years old and over (Table 8.1.12 and 8.1.13). For that group of households, the deficiency risk was significantly lower than for the reference group of households. In the case of the subjective approach, all estimates of parameters behind the variables representing the age categories were significant. The highest deficiency risk occurred in households where the household heads were under the age of 35 and the lowest deficiency risk concerned households where the household heads belonged to the highest age category.

Household status on the labour market

Households analysed in terms of their status on the labour market were divided into the households without unemployed members and those where at least one household member was unemployed. The former was assumed as the point of reference for poverty risk assessment. The obtained parameter estimates showed that both with the objective and the subjective approach the poverty risk was considerably higher for households with unemployed members (Tables 8.1.12 and 8.1.13).

Disability status

The point of reference assumed here was the group of households with at least one disabled person. Only with the subjective approach is the poverty risk insignificantly increased for households with disabled people. However, this impact is relatively lower than in the case of unemployment (Table 8.1.12 and 8.1.13).

8.2. Unemployment

Janusz Czapinski

The registered unemployment rate in the sample of individual respondents in the working age group was 10.9% (slightly less than estimated by the Central Statistical Office in the month of the study; i.e. 13.1% in March and 12.6% in April). All persons registered at the labour offices can be divided into two large groups: the real and the fake unemployed. 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 1,034 per month. Similarly to the previous waves of the study, the share of the fake unemployed in all registered unemployed was significant (about 1/3 in 2003 and 2005 and from 2007 onwards already between 40 and 50%)⁶⁴ (Table 8.2.1).

For the majority of the registered unemployed women the main reason for not seeking a job is childcare (50.8%, an increase by 1/3 compared to 2009) and general household duties (the total of 16.6% including housework and care of disabled or elderly household members). Men do not seek a job mostly due to the loss of hope in finding work (24.2%) and in the second place due to their health condition (22.9%, an increase by 68% compared to 2009). It is symptomatic that often mainly for men (though twice less often than two years ago) the reason for not seeking a job is the desire to keep the right to receive social benefits (9.4% in comparison with 1.9% in the group of the unemployed women). Also men, more often than women, explicitly admit that they do not feel like getting a job (2.1 and 1.1%, respectively; Table 8.2.2).

*Table 8.2.1. Share of the unemployed in the total working age group (18-60 for women, 18-65 for men) excluding the retirees, pensioners and students according to various unemployment criteria**

Unemployment criterion	Unemployment rate in the working age group				
	2003	2005	2007	2009	2011
Registration in a labour office	19.6	17.6	12.5	9.9	10.9
Registration + readiness to start working	16.6	14.7	8.9	7.2	9.0
Registration + readiness to start working + seeking a job	14.8	13.4	7.6	6.6	7.6
Registration + readiness to start working + seeking a job + not working full time + monthly personal net income lower than PLN 1,034 (PLN 800 in 2003, PLN 850 in 2005, PLN 900 in 2007, PLN 950 in 2009)	13.5	11.9	6.5	5.1	6.5

* The study took into account only respondents 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 household members had been omitted.

Table 8.2.2. Share of women and men among the registered unemployed not interested in working, who provide various reasons for not seeking jobs in 2009 and in 2011

Reason for not seeking a job	Women		Men		Total	
	2011	2009	2011	2009	2011	2009
Studying, raising qualifications	3.4	5.2	11.5	7.0	5.5	5.8
Taking care of household duties	14.3	12.3	2.1	1.4	11.0	8.8
Taking care of the children	50.8	37.7	2.1	1.9	37.8	26.3
Taking care of the disabled or elderly household members	2.3	2.9	2.1	1.6	2.2	2.5
Due to bad health condition	7.1	11.2	22.9	13.6	11.3	12.0
Due to inappropriate age	2.3	1.7	7.3	9.9	3.6	4.3
Due to lack of proper qualifications	1.9	2.8	5.2	1.0	2.8	2.2
Due to their belief they will not find a job	10.9	5.4	24.0	24.3	14.4	11.6
Does not want to lose the right to receive social benefits	1.9	8.1	9.4	18.9	3.9	11.6
Does not want to work	1.1	0.6	2.1	5.2	1.4	2.1
Other reasons	3.4	10.2	11.5	11.9	5.5	10.7

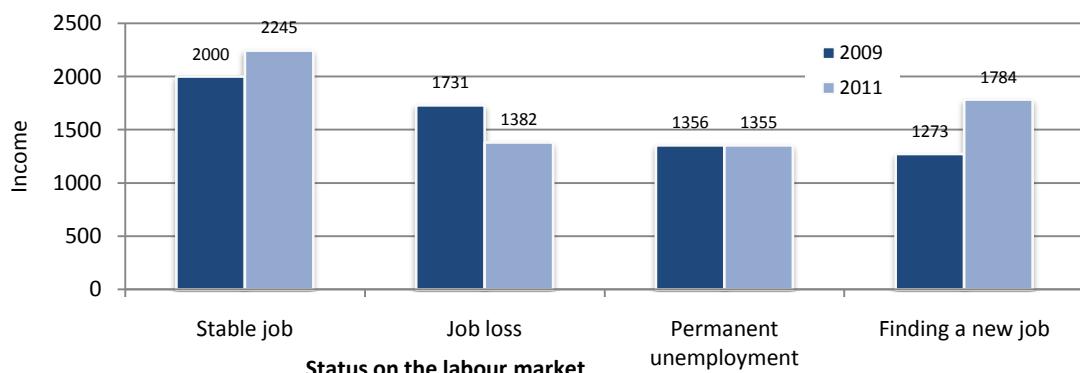
Losing or gaining a job has many life consequences affecting income, social relations, psychological well-being and life strategies. However, the probability of losing a job depends on several personal features, including those relating to income, social relations, life strategies or mental condition. Figures 8.2.1-8.2.4 show this mutual dependence. People who have already lost a job in the past have lower income, worse social relations⁶⁵, worse psychological well-being⁶⁶ and less often apply a task-oriented strategy to deal with

⁶⁴ An increase in the share of the fake unemployed in total registered unemployed results mainly from a decrease in the rate of registered unemployment while the size of this group remained relatively unchanged.

⁶⁵ Measured according to social well-being; for the operational definition of this indicator, see Chapter 9.2.

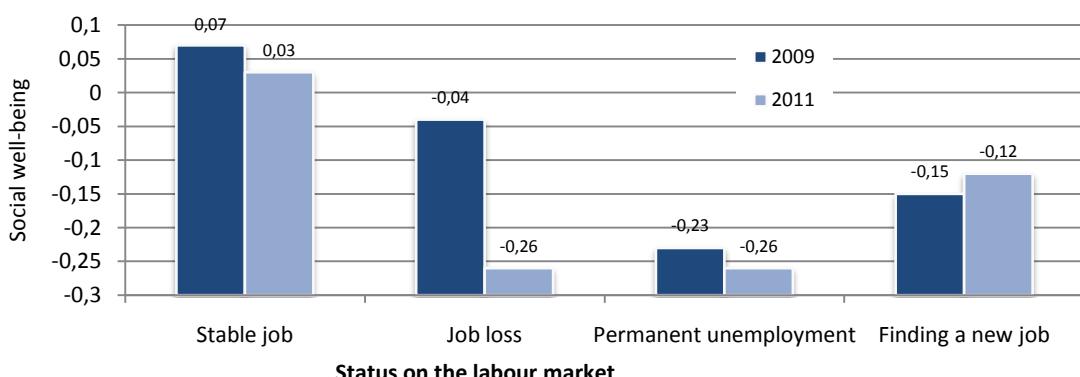
⁶⁶ For the operational definition of this indicator, see Chapter 9.2.

their problems.⁶⁷ Job loss alone deteriorates those deficits. On the other hand, finding a new job improves all those factors, although for people who find a new job those indicators have been usually better already before finding the new job than it is the case for the permanently unemployed.⁶⁸



NOTES: main effect of the date of measurement $F<1$, n_i ; main effect of the status on the labour market $F(3, 4,361)=24\ 986$, $p<0.000$, $\eta^2=0.017$; effect of interaction of the date of measurement and the status on the labour market $F(3, 4361)=12.886$, $p<0.000$, $\eta^2=0.009$.

Figure 8.2.1. Amount of monthly personal net income in 2009 and in 2011 in the groups of persons who worked in those years, lost their jobs after 2009, were unemployed in those years and in the group of persons who found a new job after 2009

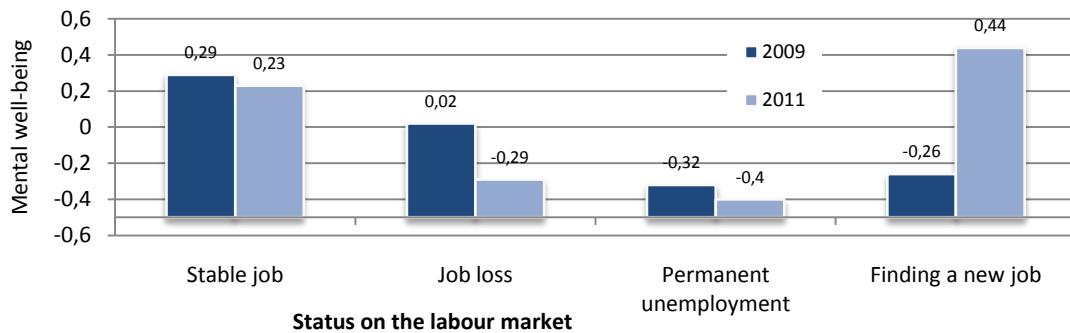


NOTES: main effect of the date of measurement $F(1, 5290)=5.167$, $p<0.05$, $\eta^2=0.001$; main effect of the status on the labour market $F(3, 5,290)=18\ 201$, $p<0.000$, $\eta^2=0.010$; effect of interaction of the date of measurement and the status on the labour market $F(3, 5,290)=2.706$, $p<0.05$, $\eta^2=0.002$.

Figure 8.2.2. Social well-being in 2009 and in 2011 in the groups of persons who worked in those years, lost their jobs after 2009, were unemployed in those years and in the group of persons who found a new job after 2009

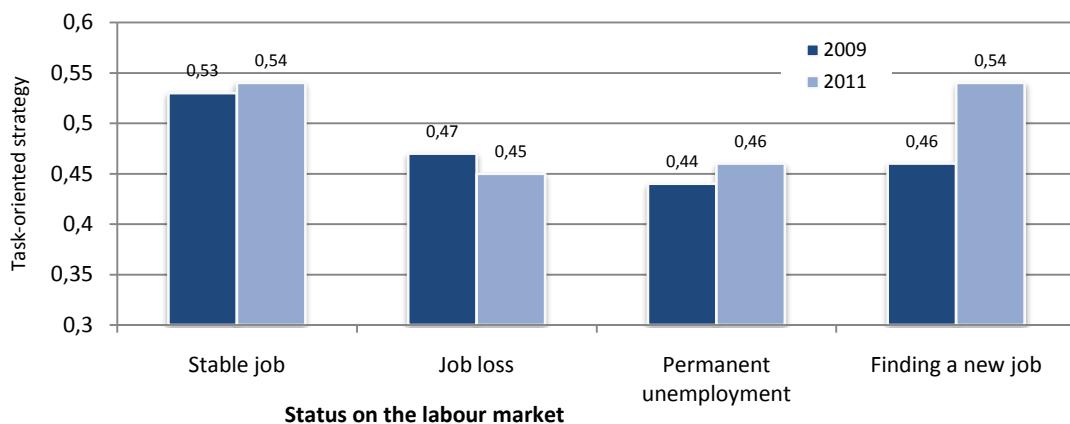
⁶⁷ For the dealing strategy, see Chapter 5.8.

⁶⁸ A more detailed description of mutual connections between individual features and the change of status on the labour market can be found in previous editions of *Social Diagnosis* (www.diagnoza.com)



NOTES: main effect of the date of measurement $F(3, 5,439)$, $p=0.051$; $\eta^2= 0.001$; main effect of the status on the labour market $F(3, 5,439)=102.407$, $p<0.000$, $\eta^2= 0.053$; effect of interaction of the date of measurement and the status on the labour market $F(3, 5,439)=25.618$, $p<0.000$, $\eta^2= 0.014$.

Figure 8.2.3. Psychological well-being in 2009 and in 2011 in the groups of persons who worked in those years, lost their jobs after 2009, were unemployed in those years and in the group of persons who found a new job after 2009



NOTES: main effect of the date of measurement $F<3$, ni; main effect of the status on the labour market $F(3, 5,115)= 8.911$, $p<0.000$, $\eta^2= 0.006$.

Figure 8.2.4. Task-oriented strategy indicator in 2009 and in 2011 in the groups of persons who worked in those years, lost their jobs after 2009, were unemployed in those years and in the group of persons who found a new job after 2009 after verification for age, gender and level of attainment

8.3. Social discrimination

Janusz Czapinski

One of the important risks for social integration is the discrimination occurring when a certain category of citizens is denied equal rights and access to various aspects of life due to their particular features, and when neither the discrimination nor its consequences are formally penalised.

In order to define the type and the level of risk for social order which discrimination can entail, it is first necessary to assess its incidence and the extent of intolerance in our society. We did not ask our respondents about nationality, ethnicity or race and households of foreigners were excluded from the study. Therefore, we are unable to estimate the level of discrimination regarding these attributes. It should be pointed out however that the Third Republic is a very homogeneous country in terms of race, ethnicity and religion. Contrary to many 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.

In general, the sense of discrimination in Poland is still low, although it is three times higher than in mid-1990s (Table 8.3.1).

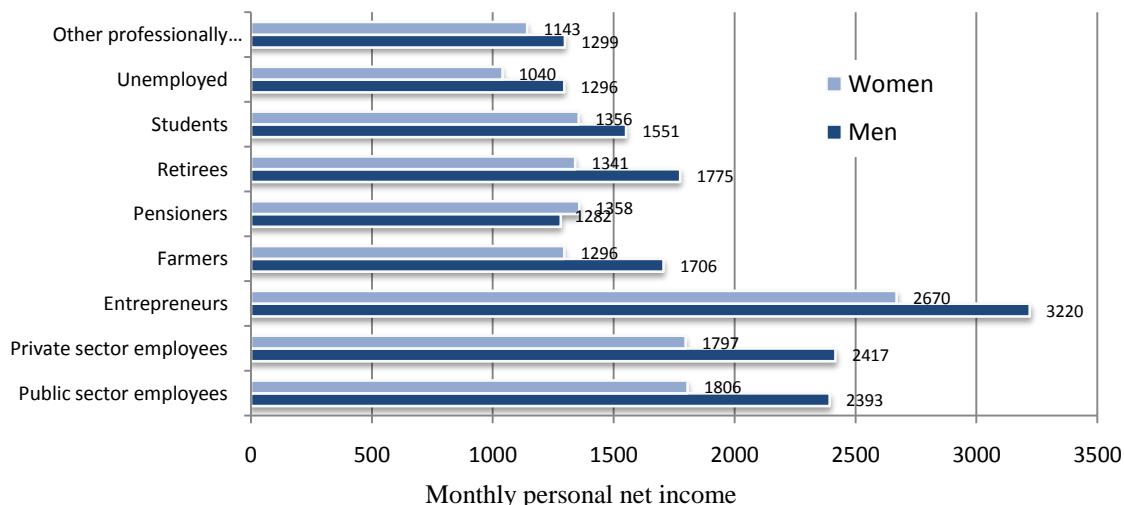
Table 8.3.1. Share of adults who felt discriminated against between 1992 and 2011

1992 N=3,396	1993 N=2,307	1994 N=2,298	1995 N=3,024	1996 N=2,329	1997 N=2,100	2000 N=5,431	2003 N=9,620	2005 N=8,609	2007 N=12,638	2009 N=26,122	2011 N=26,300
0.8	1.0	0.7	0.9	0.5	0.6	1.2	1.6	1.8	1.9	1.8	1.7

Source of data: for years 1992-1997: Czapinski, 1998; for years 2000-2011: *Social Diagnosis*.

We asked about the sense of discrimination on any grounds. Some objective grounds for the sense of discrimination in Poland, such as disability (e.g. accessibility barriers or a negative attitude of employers) or gender-based income inequality can be easily indicated.

Firstly, let us discuss gender-based discrimination. We have already mentioned income disproportions between men and women (Chapter 5.5.1). The average personal income declared by women is $\frac{1}{4}$ lower than the income declared by men (similarly to 2009). This discrepancy does not result from different social and professional status. In all social and professional groups, except for pensioners, students and other professionally inactive persons, the difference is either equal or similar to the general difference revealed after verification of the level of attainment and age (Figure 8.3.1).

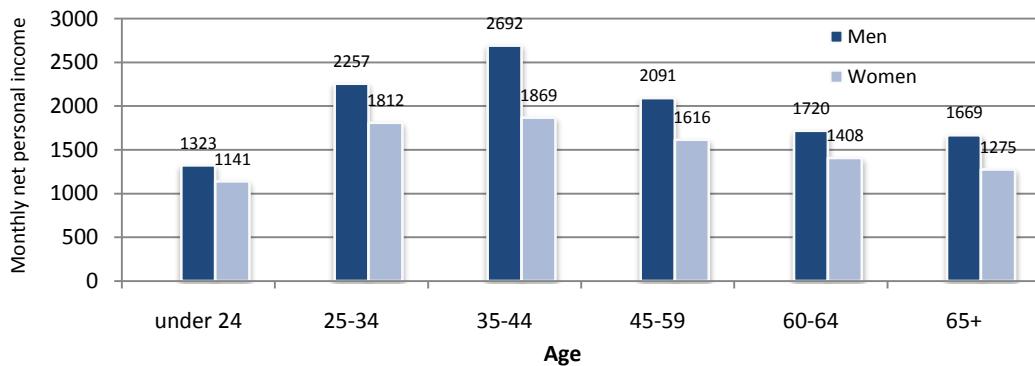


NOTES: main effect of gender $F(1, 18,657)=157.522$, $p<0.000$, $\eta^2=0.008$; main effect of status $F(8, 18,657)=169.626$, $p<0.000$, $\eta^2=0.068$; effect of interaction of gender and status $F(8, 18,657)=13.412$, $p<0.000$, $\eta^2=0.006$.

Figure 8.3.1. Average monthly personal net income (disposable income) of men and women by social and professional status after verification for age and educational level of attainment

The difference remains at the same level also in all age groups. This difference is the greatest in the working age group (25-59) and the smallest in the youngest group (under 24) where students with low

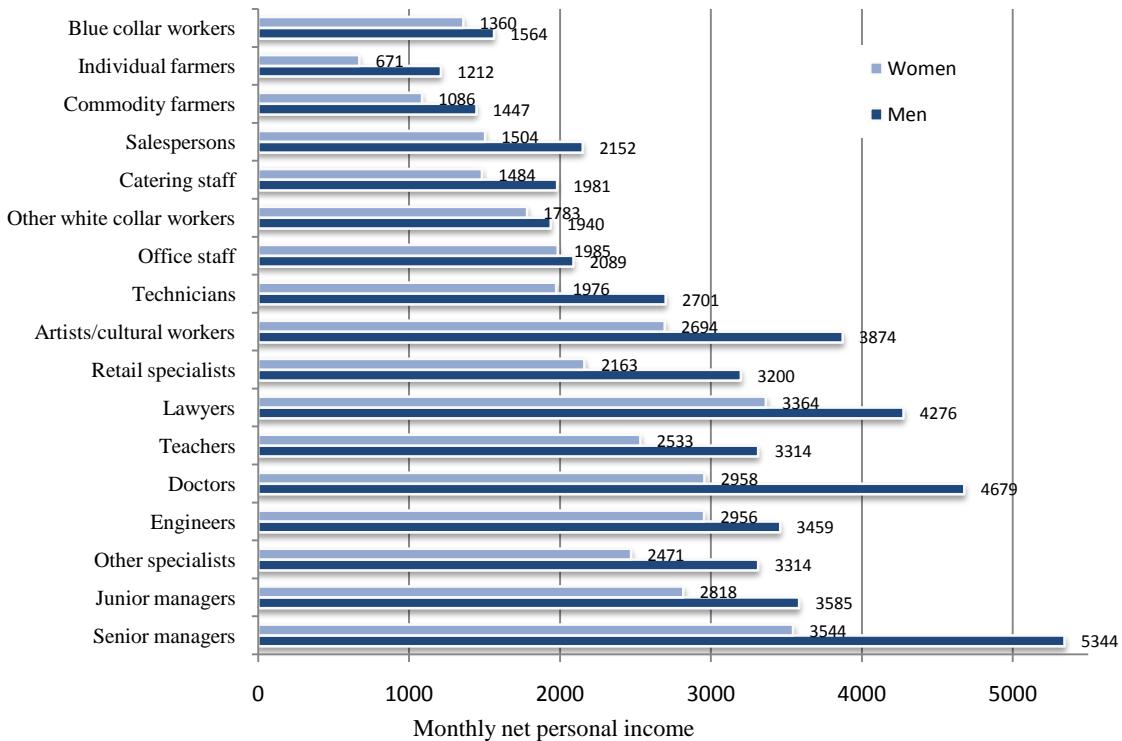
income prevail, the income being generated for example from scholarships, which are „insensitive” to the gender of beneficiaries as is the case with pensions and social security benefits, (Figure 8.3.2).



NOTES: main effect of gender $F(1, 18,787) = 439.604, p < 0.000, \eta^2 = 0.023$; main effect of age $F(5, 18,787) = 87.650, p < 0.000, \eta^2 = 0.023$; effect of interaction of gender and age $F(5, 18,787) = 22.624, p < 0.000, \eta^2 = 0.006$.

Figure 8.3.2. Average monthly net personal income (disposable income) of men and women by age groups after verification of the number of years of education

One can question these results by saying that income inequalities depend on the type of profession and position rather than gender. However, the male-female income disparity does not disappear even within respective professional groups representing relatively equal competences, duties and positions although it drops to 18.5% (Figure 8.3.3). Therefore the actual gender-based discrimination in terms of income can be estimated at 18-19%.



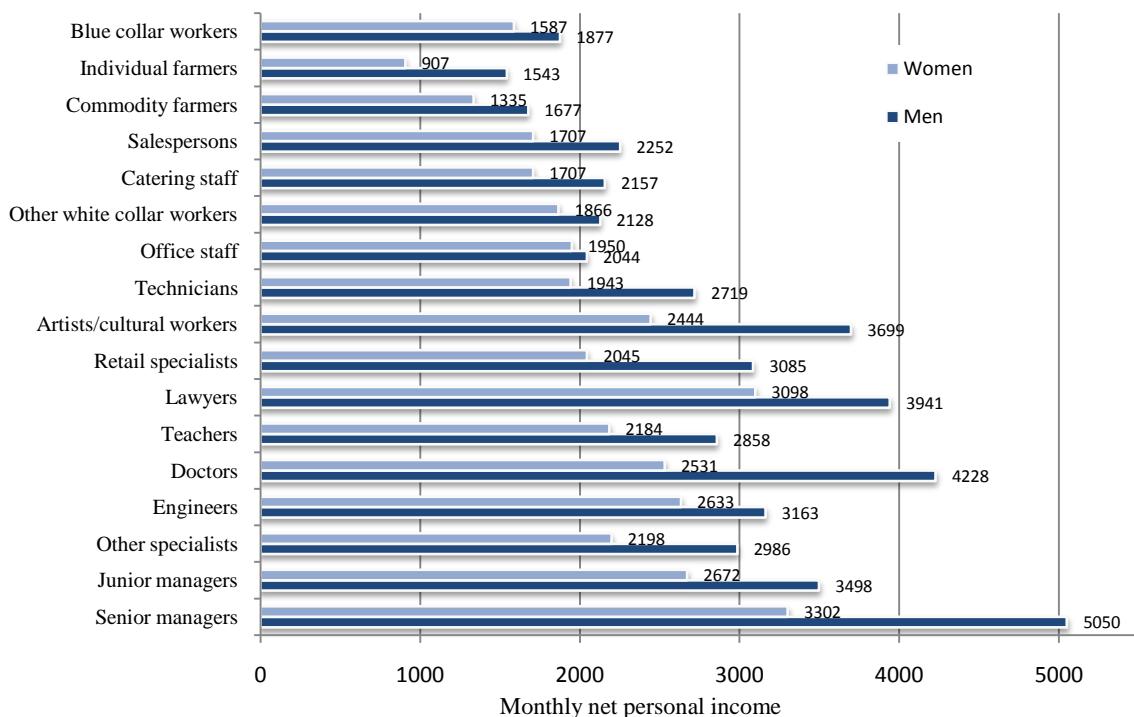
NOTES: main effect of gender $F(1, 6,765) = 202.459, p < 0.000, \eta^2 = 0.029$; main effect of the group $F(16, 6,765) = 103.157, p < 0.000, \eta^2 = 0.196$; effect of interaction of gender and group $F(16, 6,765) = 5.542, p < 0.000, \eta^2 = 0.013$.

Figure 8.3.3. Average monthly net personal income (disposable income) of men and women by professional groups

Verification of the level of educational attainment and age (as tenure indicator) increases the difference between men and women in terms of personal income from 22% to 24.9% (Figure 8.3.4). Women have on average a half year shorter tenure but a half year longer education. This means that it is education and not

tenure that is critical for narrowing the gender-based income gap. If we compare the income generated by men and women working in the same selected professions with the assumption that both have the same level of attainment measured by years of study, the difference grows by 3.2 percentage point, whereas with the assumption that both have the same tenure, it drops by merely 0.2 percentage point.

Let us consider if such a visible income discrimination translates into a greater feeling of being discriminated against. It appears that women do not feel discriminated against more often than men (Figure 8.3.5), and in 2007 and in 2011 the share of men who subjectively felt discriminated against was higher than the share of women (in the remaining years the differences were statistically insignificant). Even if we consider only people who are working and if we compare men and women with the same tenure and level of attainment, we do not state any greater sense of being discriminated against among women (1.6 and 1.7% respectively).



NOTES: main effect of gender ($F(1, 6,750)=206.900$, $p<0.000$, $\eta^2=0.030$); main effect of the group $F(16, 6,750)=41.492$, $p<0.000$, $\eta^2=0.090$; effect of interaction of gender and group $F(16, 6,750)=5.134$, $p<0.000$, $\eta^2=0.012$; effect of the number of years of education $F(1, 6,750)=126.015$, $p<0.000$, $\eta^2=0.018$; effect of age $F(1, 6,750)=56.913$, $p<0.000$, $\eta^2=0.008$.

Figure 8.3.4. Average monthly net personal income (disposable income) of men and women by professional groups after verification for age and the number of years of education

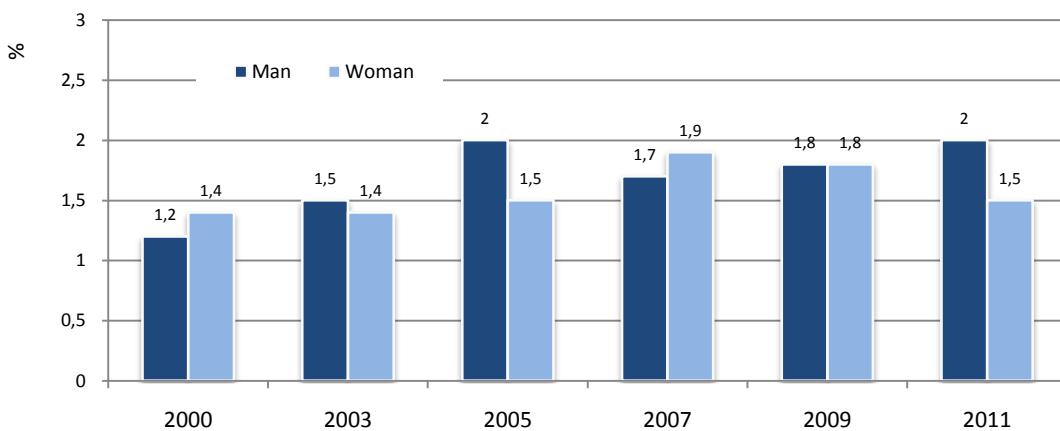
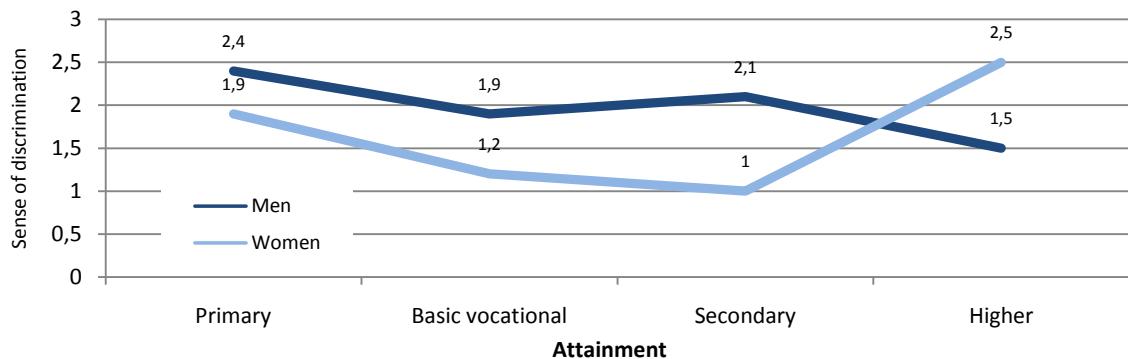


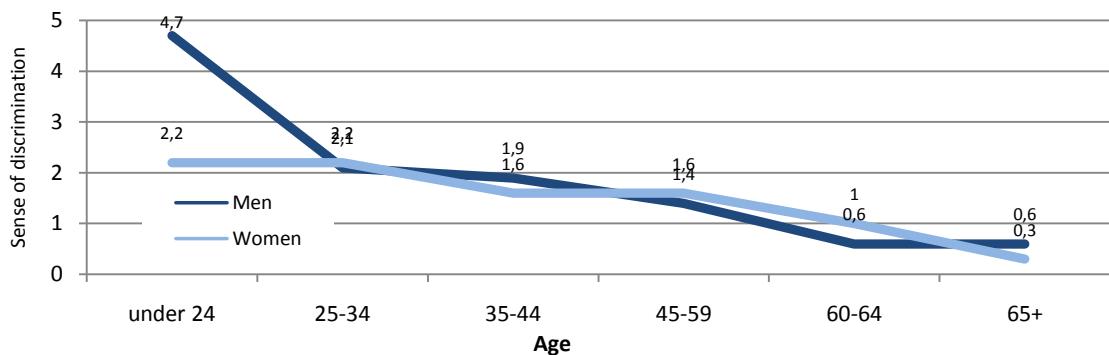
Figure 8.3.5. Share of men and women who felt discriminated against between 2000 and 2011

The level of attainment (Figure 8.3.6) and age (Figure 8.3.7) has impact on the differences in the sense of discrimination between men and women. Among men, those who most often felt discriminated against were those whose level of attainment was the lowest, while among women this concerned those with the highest level of attainment. The proportions between men and women who felt discriminated against differed only in the group of the youngest respondents (aged 16-24), where the share of men subjectively discriminated was over twice as high as the share of women. In the remaining groups the proportions are similar and they drop with age.



NOTES: main effect of gender $F(1, 25,604)=3.139$, $p=0.076$, $\eta^2= 0.000$; main effect of attainment $F(3, 25,604)=3.161$, $p=0.024$, $\eta^2= 0.000$; effect of interaction of gender and attainment $F(3, 25,604)=8.583$, $p<0.000$, $\eta^2= 0.001$.

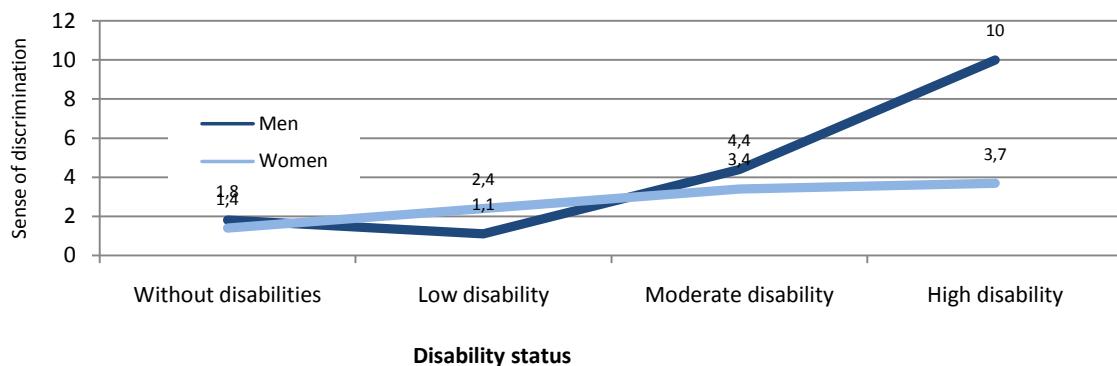
Figure 8.3.6. Share of men and women who felt discriminated against due to their level of education after verification for age



NOTES: main effect of gender $F(1, 25,512)=5.075$, $p=0.024$, $\eta^2= 0.000$; main effect of age $F(5, 25,512)=6.720$, $p=0.000$, $\eta^2= 0.000$; effect of interaction of gender and age $F(5, 25,512)=6.720$, $p<0.000$, $\eta^2= 0.001$.

Figure 8.3.7. Share of men and women who felt discriminated against due to their age after verification for the years of education

Another group other than women that is objectively discriminated and denied equal access to goods, institutions and rights are the disabled. However, apparently their objective social inequality only moderately translates into their sense of being discriminated against. Here the degree of disability is crucial (Figure 8.3.8). In the group of persons with a high degree of disability, the subjective discrimination rate is four times higher than in the group of persons with a low degree, which in turn does not differ from the group of people with no disabilities. The interaction of disability and gender is also important. The degree of disability diversifies the subjective discrimination rate for men much more than it does for women. The share of men who felt discriminated against and who had high degree of disability was nine times higher than the share of men with a low degree of disability. In the case of women this difference is only 2.5. This might result from the difference between the failed professional aspirations between the disabled men and women.

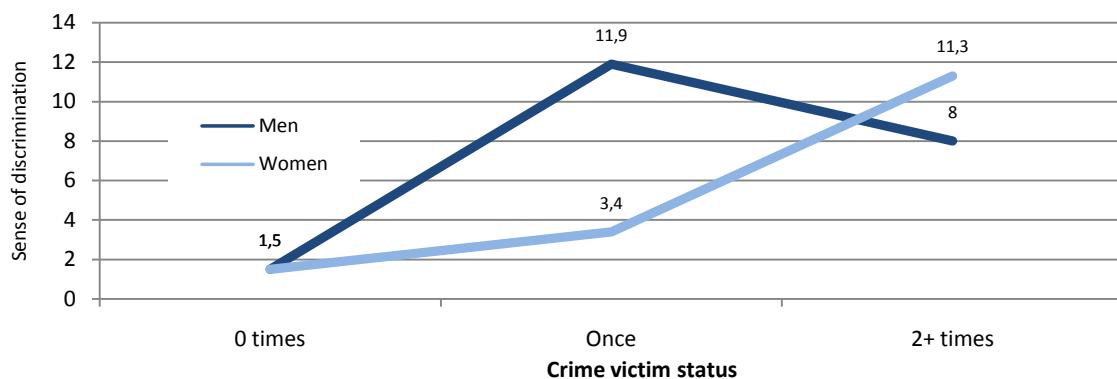


NOTES: main effect of gender $F(1, 25,068)=8.389$, $p<0.005$, $\eta^2= 0.000$; main effect of disability $F(3, 25,068)=21.844$, $p<0.000$, $\eta^2= 0.003$; effect of interaction of gender and disability $F(3, 25,068)=5.499$, $p<0.001$, $\eta^2= 0.001$.

Figure 8.3.8. Share of men and women who felt discriminated against due to their degree of disability, after verification of age and level of attainment

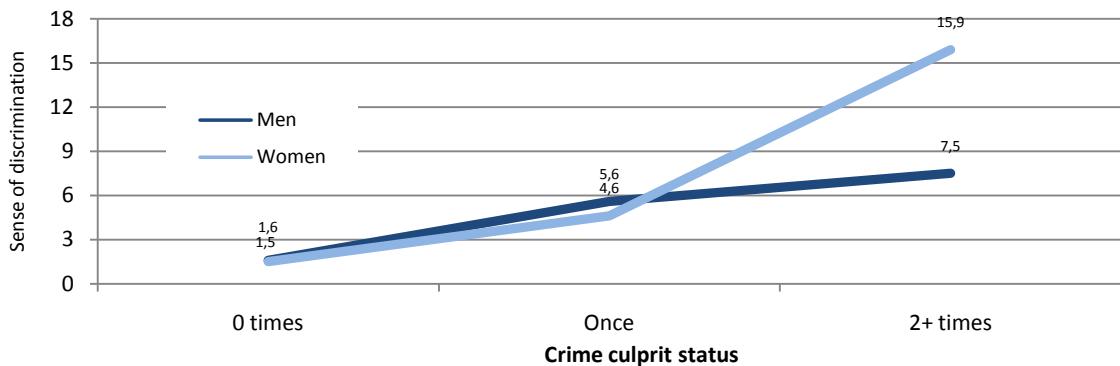
However, it is not the disabled persons, even those with high degree of disability, who feel discriminated against most often, but persons who are the victims of crime and criminals (Figures 8.3.9 and 8.3.10), smoke cigarettes, abuse alcohol or take drugs (Figure 8.3.11) or undergo psychiatric or psychological treatment (Figure 8.3.12). The sense of discrimination of victims is diversified in terms of gender. A much greater share of male rather than female crime victims are at the same time criminals (16 against 2), which also increases the probability of subjective discrimination (Figure 8.3.10).

A single addiction (in most cases to nicotine) does not increase the subjective discrimination rate; only when it is accompanied by alcohol and/or drug addiction does this rate grow in particular among women (Figure 8.2.11).



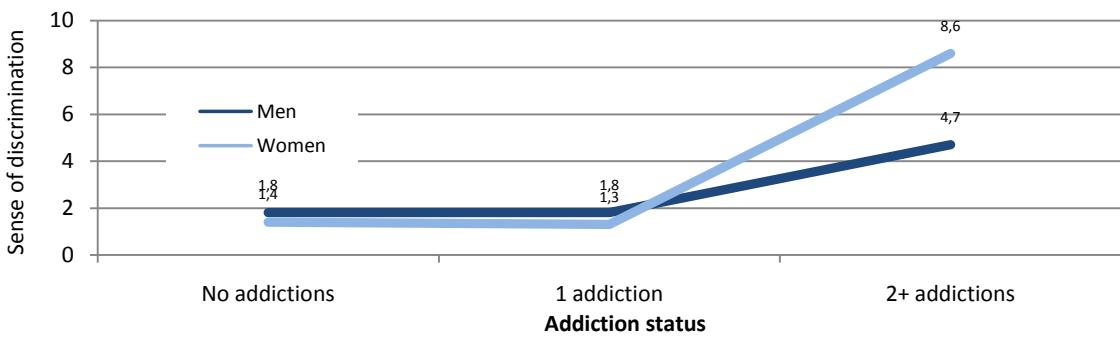
NOTES: main effect of gender $F(1, 25,609)=6.702$, $p<0.01$, $\eta^2= 0.000$; main effect of victim $F(2, 25,609)=129.844$, $p<0.000$, $\eta^2= 0.010$; effect of interaction of gender and victim $F(2, 25,609)=45.499$, $p<0.000$, $\eta^2= 0.004$.

Figure 8.3.9. Share of men and women who felt discriminated against due to their crime victim status after verification for age



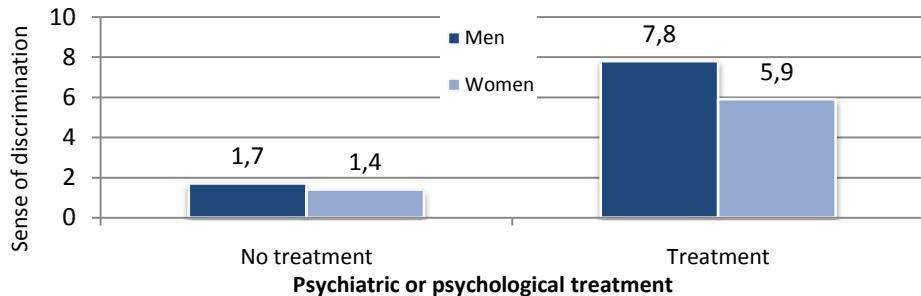
NOTES: main effect of gender $F(1, 25,537)=8.502$, $p<0.01$, $\eta^2= 0.000$; main effect of culprit $F(2, 25,537)=68.844$, $p<0.000$, $\eta^2= 0.005$; effect of interaction of gender and culprit $F(2, 25,537)=7.217$, $p<0.01$, $\eta^2= 0.001$.

Figure 8.3.10. Share of men and women who felt discriminated against due to their crime culprit status after verification for age



NOTES: main effect of gender $F(1, 25,644)=8.102$, $p<0.01$, $\eta^2= 0.000$; main effect of addiction $F(2, 25,644)=42.844$, $p<0.000$, $\eta^2= 0.003$; effect of interaction of gender and addiction $F(2, 25,609)=7.899$, $p<0.000$, $\eta^2= 0.001$.

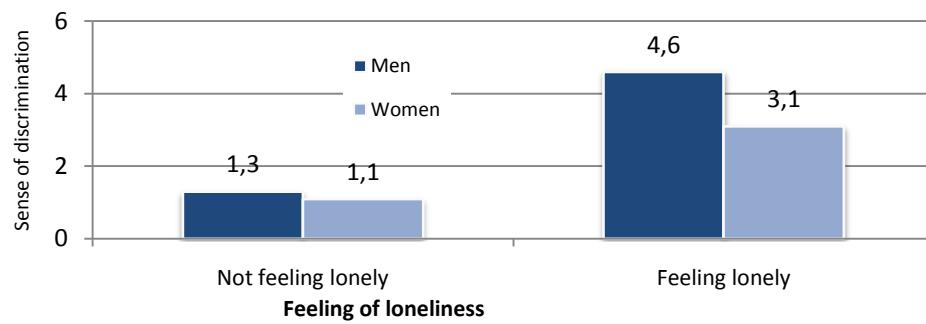
Figure 8.3.11. Share of men and women who felt discriminated against due to their addiction status after verification for age



NOTES: main effect of gender $F(1, 25,626)=7.438$, $p<0.01$, $\eta^2= 0.000$; main effect of treatment $F(1, 25,626)=172.344$, $p<0.000$, $\eta^2= 0.007$; effect of interaction of gender and treatment $F(1, 25,626)=3.299$, $p<0.070$, $\eta^2= 0.000$.

Figure 8.3.12. Share of men and women who felt discriminated against due to their psychiatric or psychological treatment after verification for age

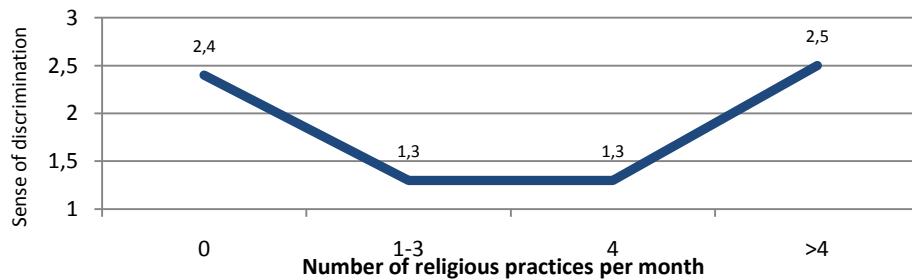
Also single persons more often feel discriminated against in particular men (Figure 8.3.13). The latter feature might be however considered yet another symptom of social ostracism. The feeling of being discriminated against is also the case for the socially excluded who, for reasons other than prejudice, have a similarly limited (or even more so) access to resources institutions and social services than discriminated people (see Chapter 8.4).



NOTES: main effect of gender $F(1, 25,402)=17.738$, $p<0.000$, $\eta^2= 0.001$; main effect of being single $F(1, 25,402)=163.744$, $p<0.000$, $\eta^2= 0.006$; effect of interaction of gender and being single $F(1, 25,402)=10.799$, $p<0.01$, $\eta^2= 0.000$.

Figure 8.3.13. Share of men and women who felt discriminated against due to their feeling of loneliness after verification of age

A separate category of persons who might be discriminated against in a country where most people are practising Roman Catholics are atheists and according to our categories, persons not participating in any religious practices. This is indeed the case. However, also the religiously devoted who go to church more often than four times a month are at a higher risk of discrimination (Figure 8.3.14).



NOTES: main effect of gender $F(1, 25,436)=5.089$, $p<0.05$, $\eta^2= 0.000$; main effect of practices $F(3, 25,436)=14.544$, $p<0.000$, $\eta^2= 0.002$; effect of interaction of gender and practices $F<1$, ni.

Figure 8.3.14. Share of persons who felt discriminated against due to the frequency of their religious practices per month after verification for age

The data from *Diagnosis* prove that in Poland the main grounds for social discrimination are deviations from the majority standards in terms of alcohol and drug addiction, psychological disorders, criminal offences and religious practices. On the other hand, disabled and women do not feel significantly discriminated against. This does not imply however that the latter groups are not objectively discriminated against in any way.

8.4. Types of social exclusion

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The correlations between respective exclusion criteria such as those 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, one's own and one's father's low level of educational attainment, alcohol or drug addiction, 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 that coherently formed three orthogonal factors together explaining over 40% of the variances. In the last two editions a certain change in factorial structure was observed. Apart from the three factors identified earlier: i.e. physical, structural and normative exclusion, 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 (Table 8.4.1). Indeed the largest share of households at risk of such exclusion (over 50% in comparison with the population average of 10%) and the excluded for this reason (47% vs. the population average of 8.5%) is the group of households living on passive sources of income.

From the beginning of social exclusion studies, poverty and unemployment have been considered the main barriers preventing full participation in social life. Most attention has been paid to these problems, as it has been assumed that combating unemployment and poverty should constitute the principal aim of social reintegration policy. The fact that material exclusion is at present one of four distinct types of exclusion in Poland suggests the need to diversify reintegration policy so that it could include other grounds for exclusion which are independent of labour market situation and material living standards and which require separate instruments addressed to the less educated, rural area inhabitants, the disabled, alcohol and drug addicts as well as those who break the law. Therefore, full employment and elimination of poverty does not imply that the problem of social exclusion is solved.

Let us see the extent of exclusion and the risk of exclusion for reasons other than unemployment and poverty in the entire society and across different social groups.

Table 8.4.1. Results of factor analysis (factor loadings) of selected exclusion criteria with varimax rotation in years 2009-2011

Criteria	Factors							
	physical exclusion		structural exclusion		normative exclusion		material exclusion	
	2011	2009	2011	2009	2011	2009	2011	2009
Age: 50+	0.73	0.75						
Disability	0.64	0.68						
Loneliness	0.47	0.47			0.30	0.31	0.33	
Father's level of attainment: primary or lower	0.50	0.53	0.59	0.55				
Living in rural area			0.73	0.76				
Below-average level of attainment			0.71	0.70				
Addiction (alcohol, drugs)					0.70	0.72		
Infringement of the law					0.71	0.77		
Sense of discrimination					0.42	0.46		
Poverty							0.70	0.66
Unemployment							0.73	0.73
Share of the explained variance (%)	16.68	15.57	12.95	12.85	11.28	10.34	9.59	9.67

NOTES only factor loadings higher than 0.3 are presented.

9. SUMMARY

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9.1. A plus for the Pole, a minus for the Poles

We still live in a culture of envy and distrust, and we have not yet embarked on the journey towards civil society. But we have been developing, and changes have been taking place at a fairly good pace even in these times of worldwide economic crisis, though over recent years the process has been much faster at the individual rather than collective level. This is clearly visible when we compare the financial situation of Polish families with the condition of the central budget; between 2008 and 2010, similarly as in previous years, the Poles have been getting richer at a pace similar to the growth of GDP⁶⁹, while the State; i.e. the central budget, has been getting poorer at a dramatic pace in recent years (Figure 9.1.1). Starting with the middle of the previous decade, budget income grew faster than the GDP and household income, mainly thanks to EU grants and loans. The latter inflated public debt, bringing it dangerously close to the first prudential threshold specified in the Constitution. A fierce public debate over that issue unfolded and still is unfolding. In the light of the uncertain economic situation in the world and in our closest European surroundings, the tone of the debate has become increasingly forboding, if not to say catastrophic. This however, has not impressed our fellow citizens to a great extent. They have not lost their optimism even though the growth rate of affluence has dropped dramatically and a majority of well-being indicators continue to grow as in the best times of the economic boom.

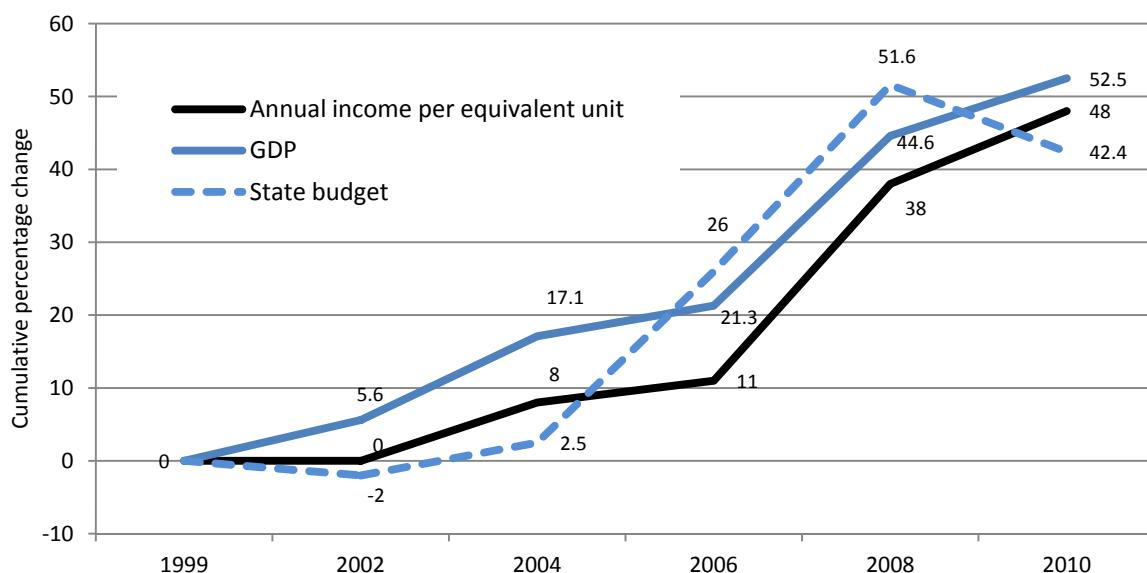


Figure 9.1.1. Cumulative percentage change in real values of annual household per capita income, the GDP and the State budget between 1999 and 2010

The Poles have become fairly good at playing with the State and see less and less connection between what the authorities do and what their lives look like.

The resourcefulness of the Poles helps them improve their own existence without concern for anyone else or the condition of the wider community. The deepening rupture between citizens and their State is best illustrated by the contrast between the evaluation of the domestic situation and the percentage of respondents who live in households with income insufficient for satisfying ongoing needs (Table 9.1.1).

⁶⁹ The data concern monthly income per equivalent unit from the year before the survey; i.e. 2010 in the case of the 2011 survey. A comparison of income from the month prior to the survey (March-April in 2011) does not reveal any such growth between 2009 and 2011 (cf. section 4.1).

Even though existence at the individual level has been improving systematically (the number of poor households has dropped nearly three times since 1992), we remain dissatisfied with the situation in the country (the level of satisfaction nearly the same as in 1997. Consistently since the beginning of the transition this has been the lowest indicator of satisfaction in a set of approx. twenty various aspects of life – cf. section 5.2).

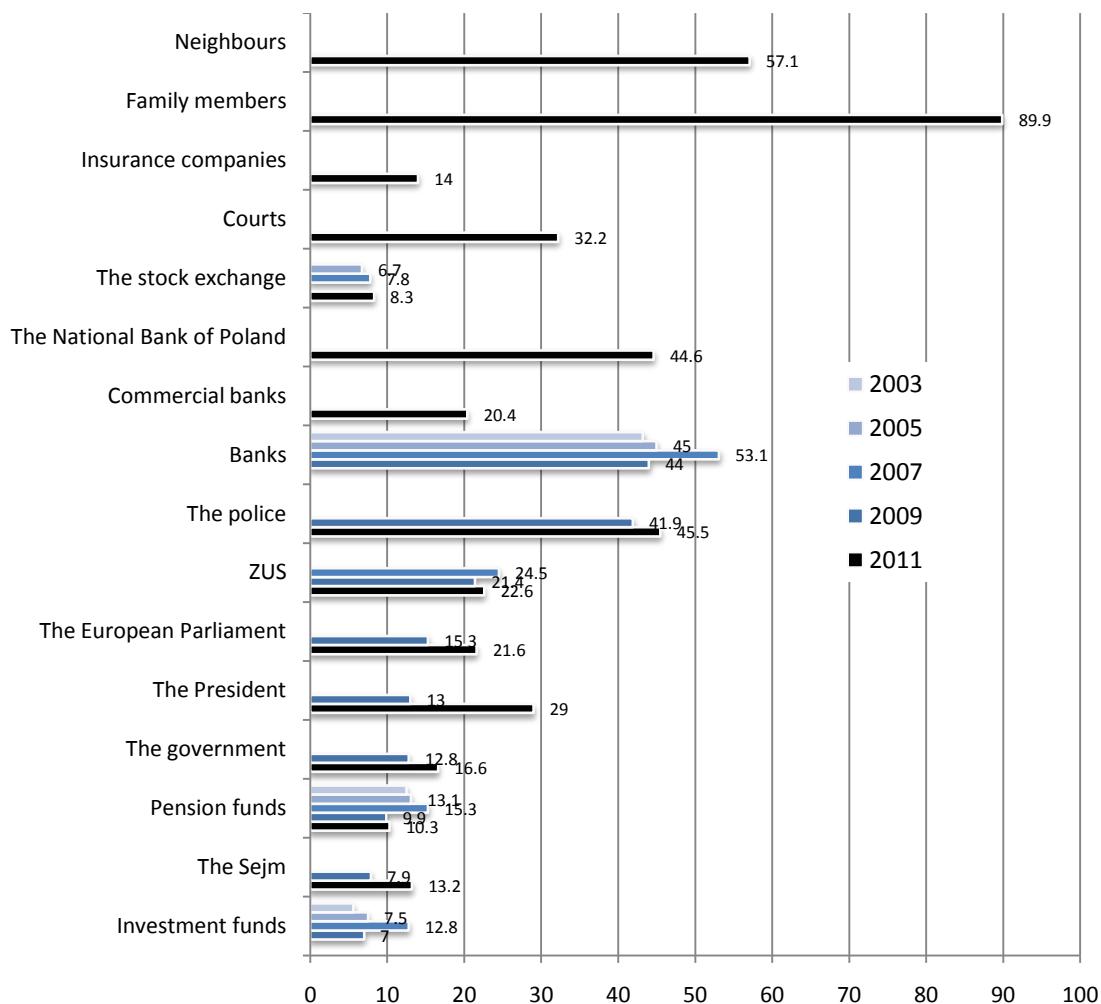
This perfectly illustrates the progress the Poles have made in enhancing their quality of life and progress made by Poland in the eyes of its citizens. We are still developing in a molecular manner rather than collectively (Czapiński, 2008). Presumably, the fundamental reason for that is the lack of social capital (Czapiński, 2011b).

Table 9.1.1. Percentage of households that declare their regular income as insufficient to meet their ongoing needs and the percentage of adult Poles satisfied with the situation in the country between 1992 and 2011

Indicator	1992	1993	1994	1995	1996	1997	2000	2003	2005	2007	2009	2011
Percentage of households with regular income insufficient to meet their needs	70.6	74.2	68.8	64.5	64.8	66.2	46.7	42.3	37.0	30.2	28.0	25.7
Percentage of those 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	26.0

Source of data: Czapiński, 1998 for the years 1992-1997; *Social Diagnosis* for the years 2000-2011.

Growing individual resourcefulness is not matched by an increase in the ability to cooperate (cf. section 6.3). We are not learning to cooperate because we generally do not trust each other; we only make an exception for family members and less often for neighbours. We also do not trust institutions in general (with the exception of the NBP) (Figure 9.1.2).



NOTE The results of the European Social Survey of 2006/8 regarding the European Parliament and the Polish Sejm are fairly similar when looking at respondents who selected answers 7 to 10 at a 10-point scale, with 10 defined as "absolute confidence". 5% trust the national parliament and 16.4% trust the European Parliament.

Figure 9.1.2. Percentage of respondents who declare confidence in various persons and institutions

Poland, after Bulgaria, is an EU Member State where the difference between confidence in the European Parliament and in the national legislative body is the greatest in favour of the former.⁷⁰ It is also alarming that in social groups which have or will have a decisive influence on the development of the country; i.e. among residents of large agglomerations, young people and the well-educated, the hiatus between confidence in national and European authorities is the greatest (Figure 9.1.3). If we want to - and in our opinion we should - develop collectively, we urgently need to introduce a special subject, provisionally called civil skills in schools and perhaps even already in kindergartens. Young Poles have a fairly good knowledge of society and in this respect they win international rankings, but at the same time they are last in the same rankings in terms of applying civil knowledge in practice. They do not know how to get organised, to cooperate, they do not get involved in volunteer activities and they are as "molecular" as their parents (see www.szkolabezprzemocy.pl). Thus, they do not need classes in the standard lecture-and-textbook form, but rather such forms of education (or actually upbringing) that will show them the real benefits that come with "taking the risk" of cooperation. Without serious investments in social capital we may forget the dreams of thousands of kilometres of motorways.

Apart from schools, there are also two other milieus where one could successfully persuade fellow citizens to trust more and to cooperate; i.e. public administration offices and enterprises. Regarding offices, legal regulations and the culture of officials are the key issues. The regulations followed by officers are

⁷⁰ In all new EU Member States citizens place more confidence in the European Parliament rather than in the national assembly, as opposed to "old" EU countries.

designed to counter potential fraud, making it impossible to stop the vicious circle of distrust. Obviously, many enterprises appreciate the value of social capital, yet most do not know how to build it. This calls for training advisors and trainers in this particular respect, HR on its own will not suffice.

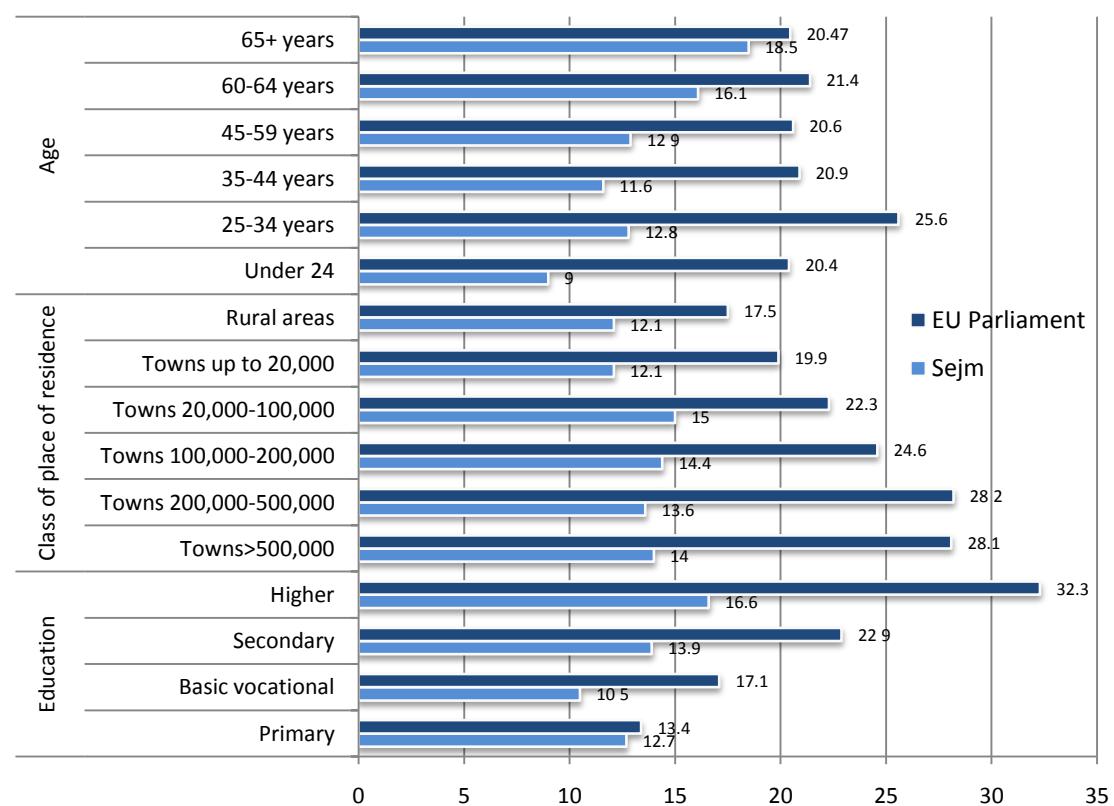


Figure 9.1.3. Confidence in the Sejm of the Republic of Poland and in the European Parliament in various social and demographic groups

9.2. The quality of life of various socio-demographic groups

It is worth concluding with one general question: how varied are Poles' living conditions and their quality of life today and how has this variation changed in the past two years? Is society becoming more deeply or less stratified? For who is life easier and for who is it more difficult? Are the weak becoming even weaker and the strong even stronger?

Let us see how the multi-dimensional quality of life, which covers the most important indicators discussed separately in the chapters above, stratifies Polish society today. Can we speak of straightforward winners and losers, how big are the differences between them, and are these differences getting bigger or smaller in different dimensions of the quality of life?

When designing synthetic indicators of the quality of life, we endeavoured to strike a balance between objective and subjective indicators, as well as to take possibly the widest spectrum of various aspects into account. We distinguished eight dimensions assumed to cover independent content areas, which served to build up a general synthetic indicator of the quality of life:

- **social capital** – activity for the benefit of the local community, participation in self-government elections in 2010 (participation in parliamentary elections in 2007 was considered in the 2009 survey, participation in self-government elections was included in the 2007 one, and participation in the EU referendum was studied in 2005), participation in non-obligatory meetings, positive attitude to democracy, membership in organisations and serving functions in them, the belief that most people can be trusted;
- **psychological well-being** – sense of happiness, assessment of life-as-a-whole, incidence of mental depression symptoms, assessment of the past year;
- **physical well-being** – incidence of somatic symptoms, serious disease in the past year, degree of disability, intensity of health-related stress;
- **social well-being** – lack of the feeling of loneliness, a sense of being loved and respected, number of friends;
- **civilisation level** – educational level, ownership of modern communication devices and familiarity with them (satellite or cable TV, laptop, desktop computer, mobile phone, Internet connection, computer skills, Internet use), active command of foreign languages, driving license;
- **material well-being** – household income per equivalent unit, number of goods and appliances owned, ranging from automatic washing-machine to a motorboat or summer house (excluding appliances included in the civilisation level indicator);
- **stress in life** – a sum of six categories of stress measured by experiences related to finance, work, liaison with public administration offices, bringing up children, the marriage relationship, environmental protection (home, surroundings);
- **pathology** – alcohol abuse and drug use, smoking, consulting a psychiatrist or psychologist, being a criminal or victim of crime (burglaries, assaults, thefts).

Each partial indicator was a sum of standardised component variables, each of the latter measured on a different scale. Partial indicators were then standardized themselves and the sum of their standardized values formed the general indicator of the quality of life, which in turn was also standardized at the end. In such a form, these indicators are relative in nature and only show the position of particular groups and individuals in relation to the average of the sample.

Before we go on to discuss social differences in the general indicator of the quality of life, let us see to what extent partial indicators correlate with one another, whether they form one coherent syndrome or whether similarly to exclusion indicators they constitute several relatively independent factors which make it possible for individuals and social groups to compensate for shortages in one area with a better position in other areas.

Factor analysis with varimax rotation reveals two independent explanatory factors in four waves, which together explain a total of approx. 50% of variance in partial indicators (Table 9.2.1). The first factor, which explains the greatest proportion of variance (approx. 30%), may be described as civilisation-related living conditions (shortened to living conditions); these are mainly defined by the civilisation level and material well-being, but they also include social capital, physical well-being and psychological well-being. The other factor, which explains 18% to 19% of variation, is lifestyle mainly defined by stress in life, social well-being and pathology. It shares two aspects with the category of living conditions, namely psychological well-being and physical well-being. Thus, (mental and physical) health is determined both by living conditions and by lifestyle.

This pattern of results confirms the statement that there is no single dimension of the quality of life in Poland at present. Thus, the less well-off are not very modern and show little social activity, but may nevertheless enjoy other favours of fate: absence of pathology, little stress and considerable social support.

Table 9.2.1. Results of factor analysis with varimax rotation for aspects of the quality of life

Aspects of the quality of life	Factor loadings							
	Civilisation level				Lifestyle			
	2011	2009	2007	2005	2011	2009	2007	2005
Civilisation level	0.848	0.851	0.845	0.832				
Material well-being	0.747	0.742	0.720	0.722				
Social capital	0.461	0.497	0.481	0.528				
Physical well-being	0.492	0.508	0.514	0.448	0.449	0.441	0.422	0.481
Psychological well-being	0.604	0.619	0.609	0.560	0.607	0.592	0.599	0.653
Social well-being					0.577	0.595	0.628	0.612
Life stress					0.690	0.659	0.673	0.643
Pathologies					0.546	0.547	0.524	0.559
Percentage of variance explained	31.2	31.8	30.4	29.8	18.7	18.2	18.4	19.4

NOTE: the table shows factor loadings with values in excess of 0.4

Table 9.2.2. General indicator of the quality of life in entire samples between 2005 and 2011 in cross-section by socio-demographic group

Rank	Socio-demographic group			Quality of life				
	2011	2009	2007	2005	2011	2009	2007	2005
1	1	1	2		0.60	0.65	0.65	0.62
2	2	2	1		0.56	0.53	0.56	0.63
3	3	3	4		0.48	0.50	0.49	0.45
4	5	5	3		0.43	0.41	0.40	0.48
5	4	4	5		0.41	0.46	0.44	0.44
6	6	6	7		0.35	0.38	0.33	0.30
7	7	9	13	Towns with 500,000 and more inhabitants	0.31	0.28	0.20	0.11
8	8	8	9	Married couples with 2 children	0.27	0.25	0.24	0.21
9	10	7	6	Unmarried men/women	0.22	0.22	0.26	0.32
10	9	12	8	Private sector employees	0.18	0.25	0.11	0.21
11	11	11	12	Married couples with 1 child	0.17	0.22	0.15	0.13
12	13	19	21	Those aged 35-44 years	0.16	0.15	0.03	-0.03
13	12	10	10	Secondary education	0.12	0.18	0.17	0.20
14	14	17	17	Married couples with 3 and more children	0.08	0.10	0.03	0.03
15	15	18	20	Married men/women	0.08	0.09	0.03	-0.01
16	16	14	15	Towns with 200,000-500,000 inhabitants	0.06	0.08	0.07	0.09
17	17	15	14	Men	0.06	0.07	0.06	0.09
18	21	21	19	Multi-family households	0.02	-0.02	0.01	0.00
19	22	16	16	Towns with fewer than 20,000 inhabitants	0.00	-0.03	0.03	0.09
20	20	22	18	Married couples with no children	-0.01	0.01	-0.05	0.02
21	19	20	22	Towns with 20,000-100,000 inhabitants	-0.02	0.04	0.02	-0.06
22	18	13	11	Towns with 100,000-200,000 inhabitants	-0.04	0.04	0.10	0.18
23	23	23	23	Women	-0.05	-0.06	-0.05	-0.07
24	25	24	26	Farmers	-0.05	-0.11	-0.06	-0.13
25	24	33	36	Non-family multi-person households	-0.09	-0.09	-0.40	-0.63
26	26	25	24	Rural areas	-0.10	-0.12	-0.12	-0.09
27	29	28	28	Other professionally inactive	-0.15	-0.19	-0.18	-0.21
28	27	27	27	Those aged 45-59 years	-0.15	-0.15	-0.16	-0.16
29	28	26	25	Basic vocational education	-0.16	-0.17	-0.14	-0.11
30	30	29	29	Those aged 60-64 years	-0.24	-0.27	-0.21	-0.28
31	32	30	30	Single-parent families	-0.27	-0.36	-0.30	-0.30
32	31	32	32	Unemployed persons	-0.33	-0.35	-0.40	-0.35
33	33	31	31	Retirees	-0.39	-0.39	-0.33	-0.31
34	35	34	34	Divorced men/women	-0.52	-0.56	-0.44	-0.52
35	34	36	35	Non-family one-person households	-0.57	-0.53	-0.58	-0.56
36	36	35	33	Those aged 65+ years	-0.61	-0.62	-0.53	-0.50
37	37	37	38	Widower/widow	-0.72	-0.73	-0.71	-0.69
38	39	38	37	Primary education	-0.86	-0.85	-0.76	-0.68
39	38	39	39	Pensioners	-0.88	-0.82	-0.77	-0.80

However, the above-mentioned independence of two factors of the quality of life at the level of the individual; i.e. in respect of individuals, may disappear or radically diminish in cross-section by socio-demographic group. It is not impossible that some segments of society suffer, like the biblical Job, all possible calamities while others enjoy the good life in all its aspects. In order to see whether this indeed is the case, we specified the position on the scale of one general and eight specific aspects of the quality of life of 174 groups determined by a range of not fully separable demographic and social criteria such as age,

gender, educational level, class of place of residence, voivodeship, subregion, town, family type, social and professional status, occupation as currently pursued and marital status. The results are presented in Tables 9.2.2 to 9.2.9 (general indicator of the quality of life in 2011, 2009, 2007 and 2005) and in Tables 1-8 in Annex 6 (partial indicators of the quality of life in 2011).

Despite the fact that particular groups have different positions in respect of individual partial aspects, the general indicator of the quality of life clearly shows for whom life is good at present in Poland and for whom it is difficult, who has recently experienced an improvement and for whom there has been a deterioration. Undoubted beneficiaries include those with higher education, young people, entrepreneurs, residents of the largest cities (e.g. of Warsaw, Poznań, Kraków, Szczecin, Trójmiasto), the Mazowieckie, Małopolskie, Pomorskie and Wielkopolskie Voivodeships, the Tyski, Warszawski Zachodni, Poznański, Bydgosko-Toruński and Łódzki subregions, university teachers, doctors, IT specialists, managers, senior officials and lawyers. The poorest quality of life is definitely experienced by pensioners those with primary education, widowed persons, the elderly (aged 65 years and above), those who live on their own, divorcees, retirees and unemployed persons, residents of the Świętokrzyskie, Lubuskie and Lubelskie Voivodeships, of Radom, Kielce, Bielsko Biała, the Sieradzki, Sandomiersko-Jędrzejowski and Radomski subregions, farmers who produce for their own needs only, housekeepers and cleaners and unskilled workers.

Table 9.2.3. General indicator of the quality of life in the 2009-2011 panel sample in cross-section by socio-demographic group

Rank	2011	2009	Socio-demographic group	2011			2009		
				Average	Standard deviation	N	Average	Standard deviation	N
1	2	School and university students	0.67	0.74	1001	0.59	0.79	884	
2	1	Higher education	0.63	0.86	2726	0.66	0.86	2520	
3	4	Those aged 18-24 years	0.53	0.79	1380	0.47	0.80	1390	
4	3	Private entrepreneurs	0.52	0.91	483	0.56	0.85	464	
5	5	Public sector employees	0.44	0.86	1644	0.45	0.89	1827	
6	6	Those aged 25-34 years	0.38	0.85	1982	0.41	0.86	2062	
7	8	Married couples with 2 children	0.30	0.89	2593	0.26	0.92	2510	
8	10	Unmarried men/women	0.25	1.01	2932	0.23	1.00	2702	
9	7	Towns with 500,000 and more inhabitants	0.23	1.03	1513	0.27	1.04	1462	
10	9	Private sector employees	0.20	0.90	2898	0.25	0.90	2774	
11	11	Married couples with 1 child	0.20	0.98	2233	0.21	0.91	2420	
12	13	Those aged 35-44 years	0.17	0.92	2017	0.15	0.91	2060	
13	16	Married couples with 3 and more children	0.17	0.91	1319	0.08	0.95	1266	
14	12	Secondary education	0.16	0.89	3982	0.18	0.89	3863	
15	14	Towns with 200,000-500,000 inhabitants	0.09	1.01	1238	0.09	1.01	1182	
16	17	Married men/women	0.09	0.92	7469	0.08	0.94	7727	
17	15	Men	0.07	1.01	5729	0.08	1.01	5668	
18	18	Towns with 20,000-100,000 inhabitants	0.01	0.99	2441	0.04	0.97	2449	
19	19	Towns with 100,000-200,000 inhabitants	0.00	0.97	922	0.03	0.96	908	
20	20	Multi-family	0.00	0.88	1592	0.03	0.86	1425	
21	26	Farmers	-0.02	0.79	559	-0.12	0.92	602	
22	21	Towns with fewer than 20,000 inhabitants	-0.03	1.02	1569	-0.02	1.02	1565	
23	22	Married couples with no children	-0.04	0.96	1982	-0.04	1.01	2122	
24	23	Women	-0.06	0.99	6917	-0.07	0.99	6819	
25	24	Those aged 45-59 years	-0.07	1.02	3707	-0.10	1.05	3862	
26	25	Rural areas	-0.09	0.98	4962	-0.12	0.98	4922	
27	27	Other professionally inactive	-0.11	1.02	1012	-0.13	1.00	1197	
28	28	Basic vocational education	-0.15	0.90	3781	-0.14	0.89	3907	
29	29	Those aged 60-64 years	-0.18	0.99	1072	-0.21	0.99	917	
30	33	Single-parent families	-0.26	0.98	1146	-0.35	1.03	1128	
31	30	Non-family multi-person	-0.27	1.11	75	-0.22	1.09	76	
32	32	Unemployed persons	-0.31	1.07	774	-0.35	0.97	721	
33	31	Retirees	-0.32	0.94	3139	-0.33	0.92	2962	
34	34	Divorced men/women	-0.47	1.14	655	-0.47	1.15	620	
35	36	Those aged 65+ years	-0.56	0.93	2487	-0.55	0.90	2196	
36	35	Non-family one-person	-0.61	1.09	1705	-0.53	1.10	1541	
37	37	Widower/widow	-0.67	0.94	1554	-0.67	0.93	1438	
38	38	Pensioners	-0.83	0.90	1003	-0.80	0.96	1026	
39	39	Primary education	-0.83	0.88	2142	-0.82	0.89	2195	

However, the question arises as to how durable these differences are. Do they remain the same, or are they growing or perhaps diminishing? A comparison of data from the four and last two measurements proves that the ranking of quality of life is essentially stable. Few groups have changed their position to an

extent that could be deemed statistically significant. Over the past 6 years the quality of life improved for residents of the largest cities and those aged 25-34 and deteriorated for the eldest and those with the lowest level of education. In cross-section by town and voivodeship the changes were relatively small, only the quality of life of the residents of Toruń increased as compared to 2007, while that of the inhabitants of Gdynia decreased (although the latter are still the most satisfied with their city)⁷¹.

Table 9.2.4. General indicator of the quality of life in entire samples between 2005 and 2011 in cross-section by larger towns (absence of data means that in respect of the particular variable the town was represented by fewer than 60 respondents)

Rank	2011	2009	2007	2005	Town	Quality of life			
						2011	2009	2007	2005
1	1	1	3	2	Warszawa	0.46	0.42	0.27	0.21
2	2	2	8		Toruń	0.40	0.42	0.14	
3	4	4	7	5	Poznań	0.36	0.32	0.18	0.16
4	5	5	6	4	Kraków	0.36	0.29	0.18	0.19
5	3	3	1		Gdynia	0.25	0.34	0.50	
6	9	9	10	8	Szczecin	0.23	0.22	0.02	0.05
7	7	7	5	3	Wrocław	0.14	0.25	0.18	0.20
8	11	11	14		Bydgoszcz	0.14	0.09	-0.09	
9	6	6	2	1	Gdańsk	0.11	0.25	0.27	0.27
10	14	14	12	10	Łódź	0.09	-0.03	0.00	-0.08
11	10	10	15	6	Lublin	-0.01	0.17	-0.15	0.10
12	12	12	9		Częstochowa	-0.02	0.08	0.03	
13	15	15	11	7	Katowice	-0.03	-0.06	0.00	0.09
14	17				Sosnowiec	-0.03	-0.08		
15	19				Zabrze	-0.06	-0.10		
16	20		4		Białystok	-0.06	-0.11	0.20	
17	13				Gliwice	-0.14	0.07		
18	16		13		Wałbrzych	-0.16	-0.08	-0.07	
19	18		16	9	Kielce	-0.22	-0.09	-0.17	-0.01
20	21				Radom	-0.24	-0.24	-0.17	

Table 9.2.5. General indicator of the quality of life in the 2009-2011 panel sample in cross-section by larger towns represented for particular variables by at least 60 respondents in each wave

Rank	2011	2009	Town	2011			2009		
				Average	Standard deviation	N	Average	Standard deviation	N
1	2	2	Poznań	0.47	1.00	130	0.53	0.76	117
2	1	1	Toruń	0.42	0.92	72	0.63	0.80	64
3	3	3	Warszawa	0.37	1.10	500	0.46	1.05	502
4	5	5	Szczecin	0.36	1.07	165	0.33	1.01	149
5	7	7	Gdynia	0.34	0.98	69	0.23	0.96	70
6	6	6	Kraków	0.28	0.90	295	0.24	1.03	281
7	8	8	Gdańsk	0.24	1.09	128	0.18	1.13	171
8	4	4	Wrocław	0.11	0.99	224	0.34	0.96	206
9	11	11	Jaworzno	0.11	1.10	61	0.02	1.08	61
10	10	10	Bydgoszcz	0.09	1.02	97	0.04	0.91	89
11	13	13	Sosnowiec	0.07	0.89	71	-0.01	0.97	85
12	9	9	Częstochowa	0.03	0.75	101	0.12	0.89	79
13	14	14	Wałbrzych	0.03	1.00	100	-0.01	1.02	84
14	16	16	Białystok	0.03	0.93	138	-0.02	0.96	103
15	18	18	Łódź	-0.02	1.03	364	-0.10	1.05	351
16	15	15	Katowice	-0.05	1.02	113	-0.01	1.02	92
17	17	17	Lublin	-0.06	0.95	95	-0.03	1.00	76
18	12	12	Bielsko-Biała	-0.11	0.90	88	0.01	1.20	99
19	20	20	Radom	-0.23	1.00	99	-0.23	0.93	107
20	19	19	Kielce	-0.28	1.14	91	-0.14	1.06	92

⁷¹ Changes between 2009 and 2011 in the panel sample in cross-section by town and voivodeship are definitely smaller and sometimes follow a different direction than the changes in entire samples.

Table 9.2.6. General indicator of the quality of life between 2005 and 2011 in entire samples in cross-section by voivodeship

Rank	2011	2009	2007	2005	Voivodeship	Quality of life			
						2011	2009	2007	2005
1	6	6	6	6	Mazowieckie	0.10	0.04	0.05	0.04
2	3	2	2	2	Wielkopolskie	0.07	0.10	0.14	0.16
3	5	5	5	5	Małopolskie	0.07	0.04	0.05	0.05
4	1	1	1	1	Pomorskie	0.06	0.12	0.20	0.22
5	8	4	8	8	Śląskie	0.03	0.03	0.07	0.03
6	2	3	3	3	Opolskie	0.02	0.12	0.08	0.13
7	4	7	4	4	Dolnośląskie	0.01	0.06	-0.01	0.11
8	11	9	9	9	Podkarpackie	-0.02	-0.08	-0.06	-0.02
9	7	13	7	7	Zachodniopomorskie	-0.06	0.04	-0.11	0.04
10	9	10	10	10	Warmińsko-Mazurskie	-0.07	-0.03	-0.07	-0.08
11	12	11	13	13	Łódzkie	-0.07	-0.11	-0.07	-0.15
12	10	14	15	15	Kujawsko-Pomorskie	-0.08	-0.03	-0.15	-0.16
13	14	16	16	16	Lubelskie	-0.08	-0.17	-0.27	-0.28
14	13	8	11	11	Podlaskie	-0.09	-0.15	-0.02	-0.12
15	16	12	12	12	Lubuskie	-0.13	-0.20	-0.09	-0.13
16	15	15	14	14	Świętokrzyskie	-0.27	-0.18	-0.22	-0.15

Table 9.2.7. General indicator of the quality of life in the panel sample between 2009 and 2011 in cross-section by voivodeship

Rank	2011	2009	Voivodeship	2011			2009	
				Average	Standard deviation	N	Average	Standard deviation
1	3	Wielkopolskie	0.15	0.96	956	0.10	0.94	1047
2	5	Pomorskie	0.13	1.06	703	0.07	1.04	808
3	6	Małopolskie	0.08	0.94	1122	0.06	1.02	1015
4	8	Mazowieckie	0.05	1.05	1707	0.03	1.07	1755
5	1	Dolnośląskie	0.03	0.96	928	0.10	0.96	891
6	4	Śląskie	0.03	0.93	1459	0.08	0.96	1389
7	7	Zachodniopomorskie	0.03	1.01	601	0.04	0.98	568
8	2	Opolskie	-0.03	0.96	368	0.10	0.97	334
9	12	Podkarpackie	-0.04	0.94	738	-0.09	0.94	776
10	10	Warmińsko-Mazurskie	-0.06	1.00	478	-0.05	0.99	507
11	13	Łódzkie	-0.07	0.95	970	-0.10	0.98	965
12	9	Kujawsko-Pomorskie	-0.09	0.98	625	-0.04	0.92	567
13	11	Podlaskie	-0.10	1.05	519	-0.08	0.99	446
14	15	Lubelskie	-0.14	1.04	701	-0.22	0.99	644
15	16	Lubuskie	-0.18	1.14	319	-0.23	1.10	305
16	14	Świętokrzyskie	-0.25	1.12	451	-0.14	1.07	471

Table 9.2.8. Quality of life in entire samples of 2009 and 2011 in cross-section by subregion (NUTS3)

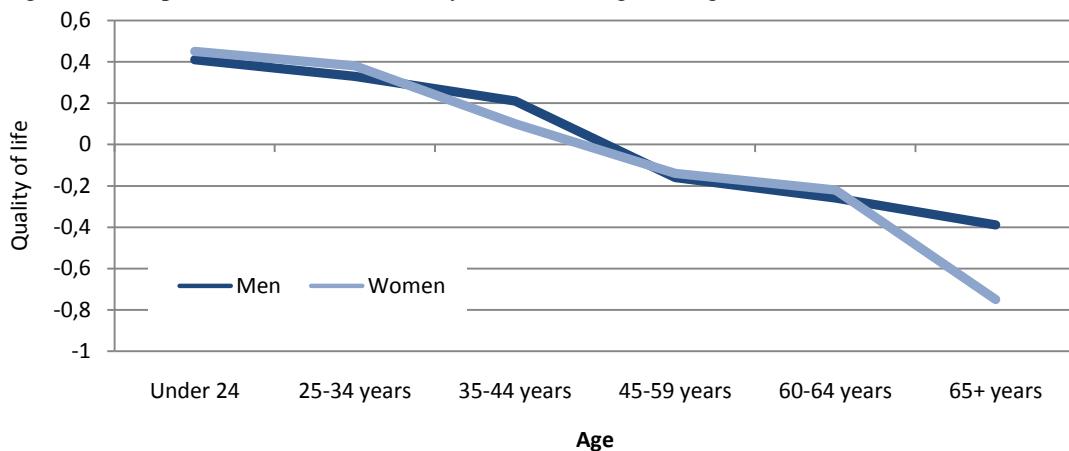
Rank		Subregion	2011			2009	
2011	2009		Average	Standard deviation	N	Average	Standard deviation
1	1	M. Warszawa	0.46	1.02	913	0.42	1.09
2	2	M. Poznań	0.36	0.99	207	0.32	0.88
3	4	M. Kraków	0.36	0.93	486	0.29	0.97
4	8	Tyski	0.25	0.98	200	0.20	1.02
5	7	M Szczecin	0.23	1.04	261	0.22	1.01
6	3	Poznański	0.19	1.01	238	0.32	0.92
7	14	Warszawski Zachodni	0.19	0.95	315	0.13	1.09
8	5	Trójmiejski	0.16	1.05	386	0.26	1.06
9	12	Rybnicki	0.16	0.90	214	0.18	0.90
10	13	Bydgosko-Toruński	0.15	0.96	415	0.16	0.95
11	16	Bytomski	0.15	0.87	191	0.10	0.94
12	23	Łódzki	0.15	0.88	159	0.04	1.11
13	6	M. Wrocław	0.13	0.99	356	0.25	0.95
14	9	Legnicko-Głogowski	0.11	0.85	232	0.20	0.93
15	24	Jeleniogórski	0.10	0.95	368	0.04	0.94
16	10	Opolski	0.09	0.94	353	0.20	0.95
17	25	Śląski	0.09	1.04	232	0.04	1.08
18	39	M. Łódź	0.09	0.98	538	-0.03	1.04
19	35	Rzeszowski	0.08	1.04	301	-0.01	1.04
20	19	Warszawski Wschodni	0.07	0.92	293	0.07	0.95
21	26	Elbląski	0.07	0.99	298	0.03	1.08
22	62	Tarnowski	0.07	0.92	299	-0.28	1.13
23	18	Częstochowski	0.04	0.91	401	0.08	0.90
24	15	Kaliski	0.03	0.89	341	0.11	0.90
25	27	Bielski	0.03	0.88	352	0.03	1.02
26	17	Pielski	0.02	1.01	187	0.09	0.93
27	21	Wrocławski	0.02	0.95	221	0.06	0.99
28	49	Leszczyński	0.02	0.96	292	-0.12	0.95
29	31	Nowosądecki	0.01	0.85	416	0.00	0.97
30	32	Krośnieński	0.00	0.94	342	0.00	0.87
31	55	Przemyski	0.00	0.92	239	-0.19	0.92
32	28	Starogardzki	-0.01	1.01	269	0.03	0.91
33	29	Lubelski	-0.01	1.02	349	0.01	0.97
34	41	Białostocki	-0.01	0.95	318	-0.05	0.91
35	22	Sosnowiecki	-0.02	0.94	402	0.06	0.91
36	20	Gdański	-0.04	1.00	284	0.07	0.97
37	44	Skieriewicki	-0.04	0.91	186	-0.08	0.91
38	51	Puławski	-0.04	0.96	255	-0.17	0.97
39	33	Krakowski	-0.05	1.03	346	0.00	1.01
40	56	Gorzowski	-0.06	0.99	237	-0.19	1.08
41	34	Nyski	-0.07	0.96	254	0.00	0.94
42	37	Giłnicki	-0.07	0.93	231	-0.02	1.00
43	45	Katowicki	-0.08	1.03	410	-0.09	0.99
44	38	Elęcki	-0.09	1.03	114	-0.02	1.05
45	47	Ostrołęcko-Siedlecki	-0.09	0.96	420	-0.10	0.95
46	11	Szczeciński	-0.10	1.00	130	0.20	0.94
47	58	Łomżyński	-0.11	1.20	242	-0.21	1.10
48	36	Koniński	-0.12	0.98	281	-0.01	0.96
49	42	Stargardzki	-0.13	0.97	227	-0.07	0.88
50	30	Oświęcimski	-0.16	0.95	315	0.01	0.98
51	60	Chelmsko-Zamojski	-0.16	1.00	309	-0.26	0.96
52	52	Tarnobrzeski	-0.17	0.94	255	-0.18	0.99
53	65	Ciechanowsko-Płocki	-0.17	1.04	314	-0.34	0.96
54	64	Bialski	-0.18	0.98	171	-0.33	1.01
55	43	Koszaliński	-0.20	0.97	385	-0.07	0.97
56	53	Włocławski	-0.20	0.95	417	-0.18	0.90
57	57	Zielonogórski	-0.20	1.25	265	-0.20	1.05
58	48	Kielecki	-0.21	1.21	366	-0.11	1.08
59	61	Suwalski	-0.21	0.93	178	-0.27	0.98
60	46	Olsztyński	-0.24	1.02	217	-0.09	0.90
61	40	Grudziądzki	-0.27	0.99	227	-0.03	0.89
62	50	Walbrzyski	-0.27	1.03	399	-0.14	1.03
63	59	Piotrkowski	-0.28	0.97	336	-0.24	0.97
64	66	Radomski	-0.33	1.03	420	-0.39	1.07
65	54	Sieradzki	-0.35	1.03	198	-0.18	0.88
66	63	Sandomiersko-Jędrzejowski	-0.37	1.05	222	-0.29	1.02

Table 9.2.9. Quality of life in the 2009-2011 panel sample in the cross-section by subregion (NUTS3)

Rank		Subregion	2011			2009		
2011	2009		Average	Standard deviation	N	Average	Standard deviation	
1	1	M. Poznań	0.47	1.00	130	0.53	0.76	117
2	2	M. Warszawa	0.37	1.10	500	0.45	1.05	505
3	5	M Szczecin	0.36	1.07	165	0.33	1.01	149
4	10	Tyski	0.34	0.92	129	0.23	0.91	102
5	3	Poznański	0.31	1.00	114	0.45	1.02	108
6	13	Trójmiejski	0.29	1.06	213	0.19	1.09	254
7	9	M. Kraków	0.28	0.90	295	0.24	1.03	281
8	15	Warszawski Zachodni	0.28	0.93	221	0.14	1.10	215
9	24	Łódzki	0.27	0.84	115	0.05	1.15	121
10	6	Legnicko-Głogowski	0.22	0.83	126	0.27	0.87	119
11	11	Rybnicki	0.17	0.99	131	0.22	0.86	115
12	37	Sląski	0.17	1.14	157	-0.04	1.13	191
13	25	Szczeciński	0.15	0.93	83	0.05	0.95	68
14	7	Warszawski Wschodni	0.14	0.88	196	0.26	0.93	182
15	36	Leszczyński	0.13	0.89	159	-0.03	0.94	182
16	14	Bydgosko-Toruński	0.12	1.02	205	0.17	0.99	191
17	4	M. Wrocław	0.11	0.99	224	0.34	0.96	206
18	26	Krakowski	0.11	1.00	253	0.03	1.06	237
19	29	Rzeszowski	0.09	1.06	211	0.01	1.04	205
20	40	Tarnowski	0.09	0.99	142	-0.06	1.06	139
21	17	Bielski	0.08	0.88	278	0.09	1.05	285
22	21	Białostocki	0.08	0.93	246	0.07	0.88	207
23	27	Piński	0.07	0.92	122	0.03	0.84	135
24	30	Starogardzki	0.07	0.82	149	0.01	0.84	174
25	31	Kaliski	0.07	0.94	243	0.00	0.91	278
26	35	Wrocławski	0.07	0.98	106	-0.02	0.95	114
27	22	Elbląski	0.06	1.00	212	0.07	1.04	208
28	23	Jeleniogórski	0.05	0.92	240	0.06	0.94	225
29	8	Bytomski	0.03	0.91	79	0.25	0.86	75
30	12	Opolski	0.03	0.99	193	0.20	0.97	179
31	16	Częstochowski	0.02	0.86	203	0.10	0.90	165
32	20	Sosnowiecki	0.02	0.93	237	0.08	0.96	293
33	28	Krośnieński	-0.01	0.88	215	0.01	0.85	239
34	34	Koniński	-0.01	0.98	188	-0.01	0.96	226
35	42	M. Łódź	-0.02	1.03	364	-0.09	1.05	352
36	59	Puławski	-0.02	1.06	190	-0.24	1.03	161
37	19	Gdański	-0.03	1.15	184	0.08	1.02	189
38	46	Nowosądecki	-0.04	0.89	221	-0.11	0.95	173
39	38	Skierniewicki	-0.06	0.85	143	-0.05	0.87	128
40	43	Ełcki	-0.06	1.02	75	-0.09	1.05	75
41	33	Gliwicki	-0.07	0.85	148	-0.01	0.91	155
42	51	Ostrołęcko-Siedlecki	-0.08	0.99	313	-0.14	0.98	333
43	60	Gorzowski	-0.09	1.09	141	-0.24	1.10	145
44	32	Nyski	-0.10	0.93	175	-0.01	0.97	155
45	39	Stargardzki	-0.10	0.93	137	-0.05	0.86	120
46	18	Oświęcimski	-0.12	0.91	211	0.08	0.96	184
47	55	Przemyski	-0.12	0.81	123	-0.20	0.86	136
48	49	Katowicki	-0.14	1.04	254	-0.12	0.97	201
49	48	Lubelski	-0.15	1.05	193	-0.12	1.02	155
50	61	Tarnobrzeski	-0.15	0.92	189	-0.25	0.97	196
51	65	Ciechanowsko-Płocki	-0.15	0.91	193	-0.31	0.87	221
52	41	Grudziądzki	-0.16	0.91	144	-0.07	0.89	118
53	64	Bialski	-0.17	0.97	115	-0.27	0.96	101
54	45	Walbrzyski	-0.19	1.01	233	-0.11	0.97	228
55	47	Koszaliński	-0.19	0.97	216	-0.11	0.99	230
56	44	Kielecki	-0.20	1.19	276	-0.10	1.08	298
57	53	Olsztyński	-0.20	0.97	191	-0.15	0.91	224
58	50	Sieradzki	-0.21	0.80	129	-0.14	0.77	130
59	62	Chełmsko-Zamojski	-0.21	1.05	203	-0.26	0.96	227
60	54	Włocławski	-0.22	0.97	275	-0.18	0.86	258
61	63	Łomżyński	-0.24	1.19	167	-0.26	1.09	139
62	58	Zielonogórski	-0.25	1.17	179	-0.22	1.10	160
63	52	Suwalski	-0.26	1.03	105	-0.15	1.02	99
64	56	Piotrkowski	-0.27	0.97	220	-0.21	0.93	233
65	57	Sandomiersko-Jędrzejowski	-0.32	0.98	176	-0.21	1.04	173
66	66	Radomski	-0.46	1.03	285	-0.46	1.08	296

The categories of respondents as defined by some of the criteria may differ only apparently in the sense that they are determined by some other criterion of division into groups correlated with a given group. Gender may serve as an example here. In all waves men score higher in terms of the value of the indicator of the quality of life. This, however, may result from the fact that women live longer and the quality of life deteriorates with age. Indeed, in the 2011 sample women's average life expectancy was more than 3 years longer than that of men while in the eldest group (65 years and above), where the quality of life is the worst, the proportion of women is nearly twice as large as that of men (63% to 37%). Results of the analysis of variance prove that indeed, the difference between men and women in respect of the quality of life is primarily determined by age (Figure 9.2.1). Only in the group of the eldest people is men's quality of life considerably better than that of women⁷²; in other age groups, with the exception of the 34-44 group, gender does not differentiate the quality of life.

The differentiating role of the age variable in respect of the quality of life may also be inflated due to the fact that in Poland there is a strong correlation between age and the level of education⁷³, with the latter certainly important for the quality of life. The question therefore is whether the low quality of life of the elderly is only attributable to their age, or maybe also to the fact that on average they are much worse educated than younger people. It turns out that the indicator for determinative role of age in the regression analysis decreases nearly three times (from 13.1% to 4.6% of independently explained variance in the quality of life) when the equation is expanded to also include the level of education as well. The analysis of variance reveals a significant effect of interaction of age and educational level in respect of the quality of life (Figure 9.2.2). Higher education clearly mitigates the negative impact of age on the quality of life; the difference between those with better and poorer education in the eldest group is nearly four times as big as in the youngest group, which is mainly due to the fact that the quality of life changes considerably with age among those with poor education and virtually does not change among those with better education.

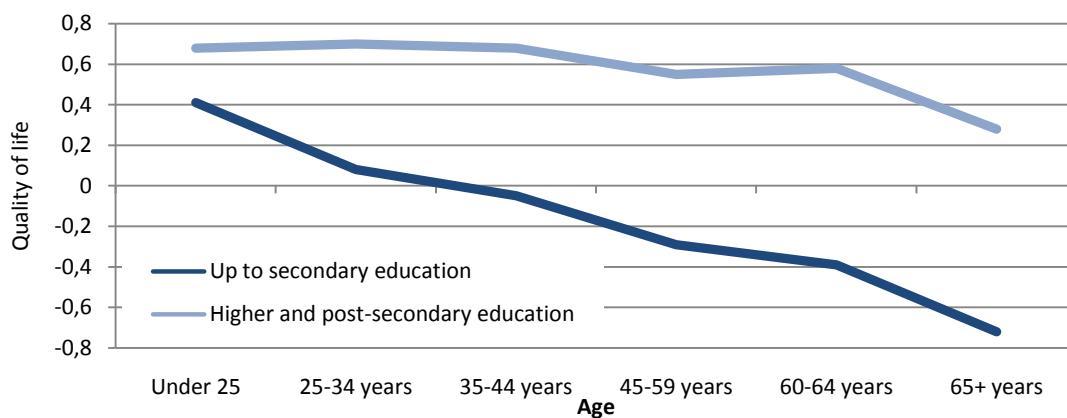


NOTE: main effect of age $F(5, 19487)=510.132, p<0.000, \eta^2= 0.116$; main effect of gender $F (1, 19487)=2.132, p<0.01, \eta^2= 0.001$; effect of interaction of age and gender $F(5, 19487)=22.670, p<0.000, \eta^2= 0.006$.

Figure 9.2.1. General indicator of the quality of life depending on age and gender

⁷² Average age of women in this group is more than one year more than that of men.

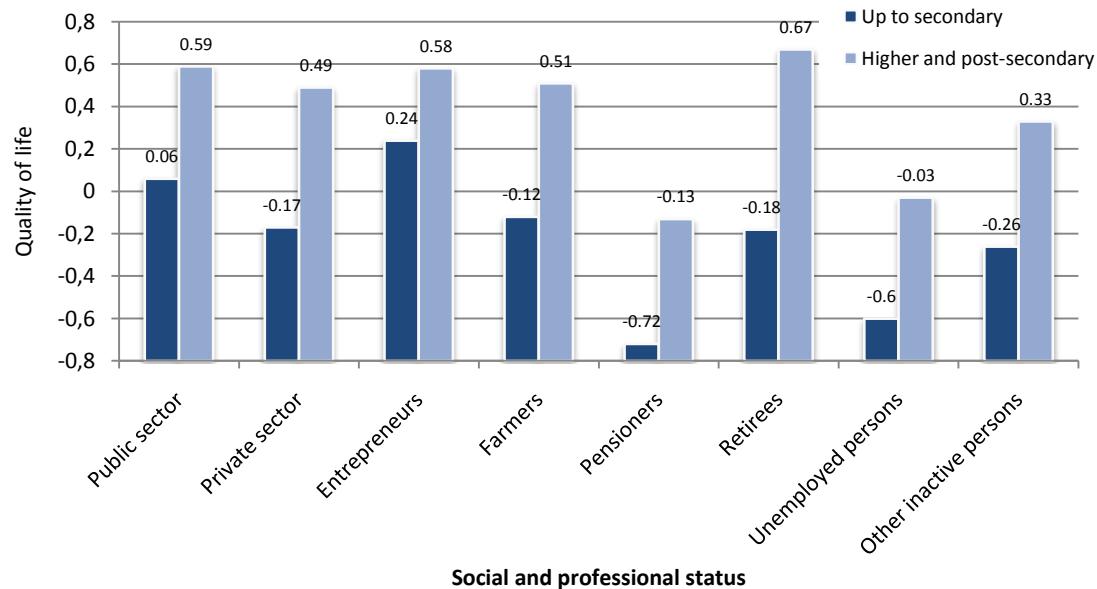
⁷³ The correlation coefficient of age and educational level as measured by the number of years of schooling (together with those who have not completed education yet) amounts to -0.303 in the entire sample and to -0.441 in the sample of those who have already completed education .



NOTE: main effect of age $F(5, 19455)=135.907, p<0.000, \eta^2= 0.034$; main effect of education $F(1, 19455)=1382.491, p<0.000, \eta^2= 0.066$; effect of interaction of age and education $F(5, 19455)=24.336, p<0.000, \eta^2= 0.006$.

Figure 9.2.2. General indicator of the quality of life depending on age and educational level, with gender control

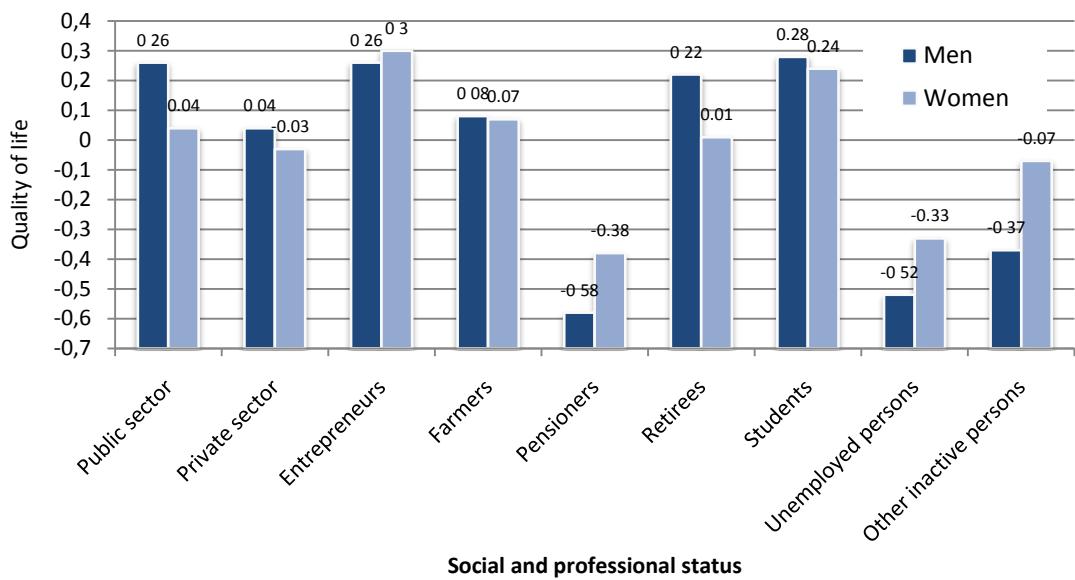
Education also influences the differences in the quality of life of groups determined by social and professional status (Figure 9.2.3). Even though those with higher education live a better life in all groups, their predominance over those with lower education is not always the same. It is relatively small among entrepreneurs but enormous among employees, retirees, pensioners and unemployed persons.



NOTE: main effect of status $F(7, 17324)=77.187, p<0.000, \eta^2= 0.030$; main effect of education $F(1, 17324)=445.988, p<0.000, \eta^2= 0.025$; effect of interaction of status and education $F(7, 17324)=9.322, p<0.000, \eta^2= 0.004$.

Figure 9.2.3. General indicator of the quality of life depending on social and professional status and educational level, with age and gender control

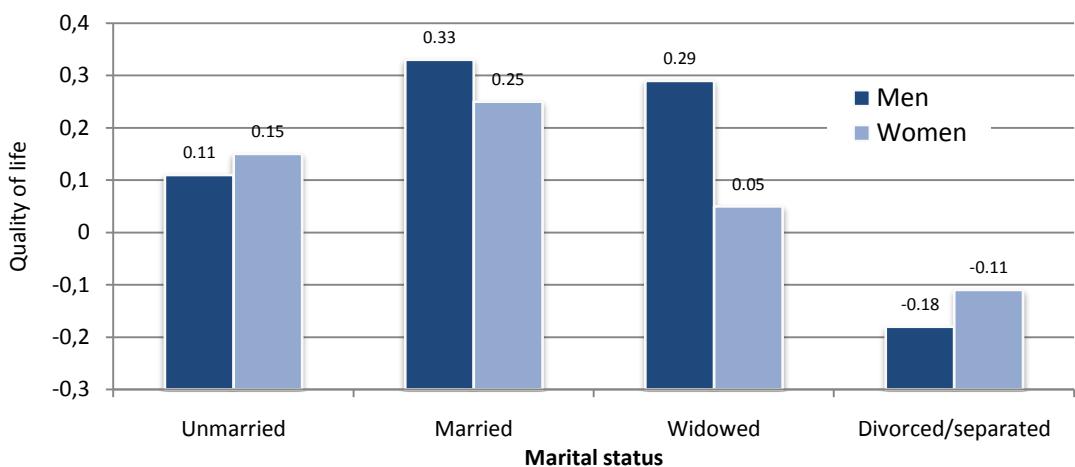
Similarly to education, gender also modifies the differences in the quality of life of groups defined by social and professional status (Figure 9.2.4). In principle, there are no differences between men and women among private sector employees and school and university students. In the groups of public sector employees and retirees men enjoy a slightly better quality of life, but among pensioners, the unemployed and other professionally inactive women's quality of life is definitely better than that of men. Only in the group of public sector employees and pensioners do men prevail over women in terms of the quality of life.



NOTE: main effect of status $F(8, 19328)=157.947, p<0.000, \eta^2= 0.061$; main effect of gender $F<1$, ns; effect of interaction of status and gender $F(8, 19722)=22.313, p<0.000, \eta^2=0.009$.

Figure 9.2.4. General indicator of the quality of life depending on social and professional status and gender, with age and educational level control

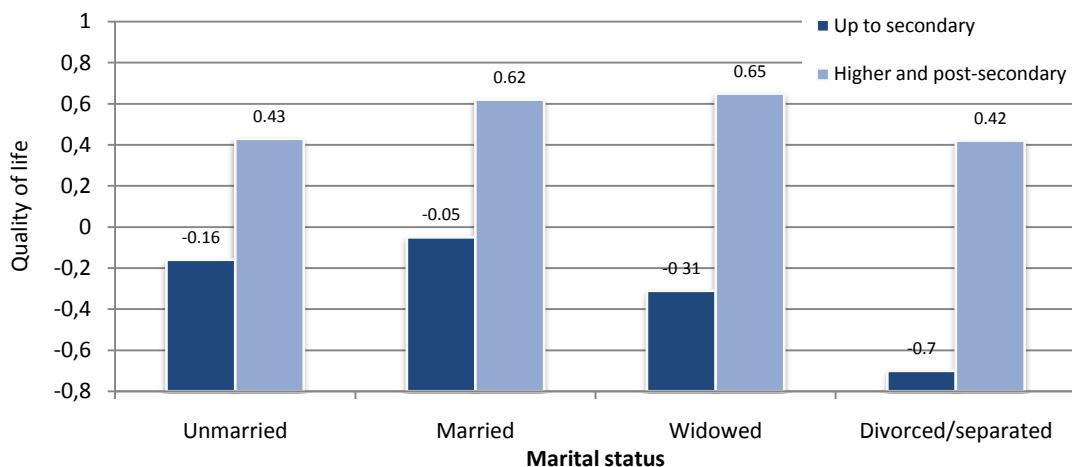
Gender and educational level, with age control, also play a significant role in explaining the difference in the quality of life of groups defined by marital status (Figures 9.2.5 and 9.2.6). Widowers feel definitely better and husbands slightly better than widows and wives respectively though divorce, albeit unfavourable for either gender, is more detrimental to men.



NOTE: main effect of marital status $F(3, 19823)=62.071, p<0.000, \eta^2= 0.009$; main effect of gender $F<4$, ns; the effect of interaction of marital status and gender $F(3, 19823)=25.597, p<0.000, \eta^2=0.001$.

Figure 9.2.5. General indicator of the quality of life depending on marital status and gender, with age and educational level control

On the other hand, education nearly eliminates the differences in the quality of life that arise due to marital status (Figure 9.2.6). Although being widowed and divorced especially entails a significant decrease in the quality of life among persons with poorer education, a university diploma ensures that a high quality of life is retained also by those widowed and divorced.

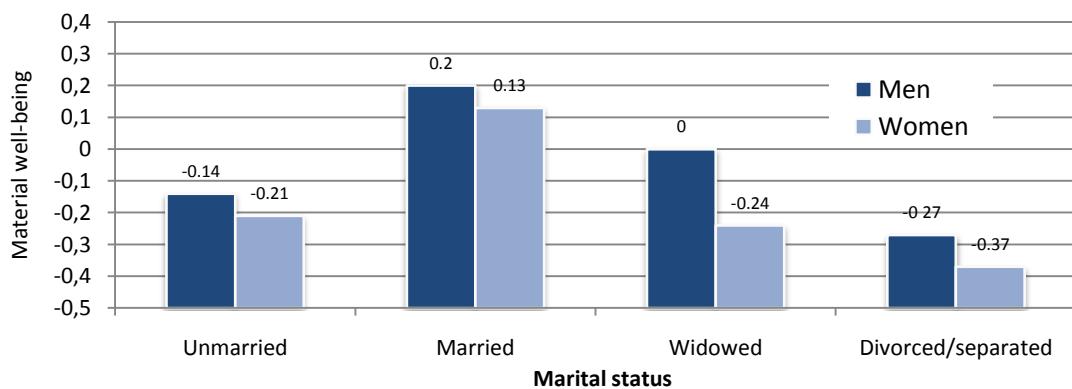


NOTE: main effect of marital status $F(3, 19823)=62.071, p<0.000, \eta^2= 0.009$; main effect of education $F(1, 19823)=846.361, p<0.000, \eta^2= 0.041$; the effect of interaction of marital status and education $F(3, 19823)=20.207, p<0.000, \eta^2=0.003$.

Figure 9.2.6. General indicator of the quality of life depending on marital status and educational level, with age and gender control

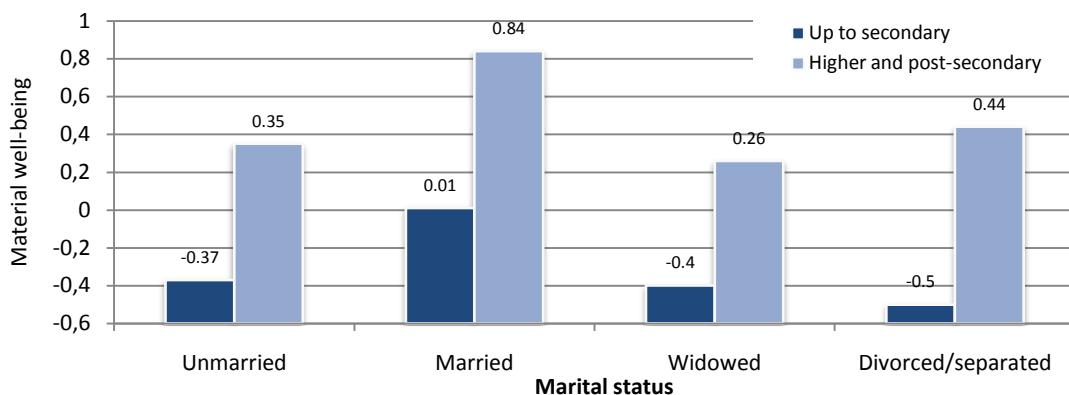
Being male, and more importantly education, prevent a decrease in the quality of life after the partner's decease, primarily because these factors make it possible to maintain the material standard of living. This is corroborated by the effects of interaction of marital status with gender and educational level in terms of material well-being. After marriage breakdown, men fare better materially than when they were married, while the opposite is true for women: their material standard of living drops after divorce and even more so after the husband's decease (Figure 9.2.7). Also education protects material well-being after marriage breakdown (Figure 9.2.8). However, material well-being does not explain everything, as divorced men maintain their material standard of living to a greater extent than women but definitely lose on the general quality of life to a much greater extent than women, which is due to the worse level of other factors such as for example the level of pathology (mainly alcoholism).

The second-order effect of interaction of marital status, educational level and gender also proves to be significant (Figure 9.2.9). Higher education protects the material standard of living after marriage breakdown much more effectively among men than among women.



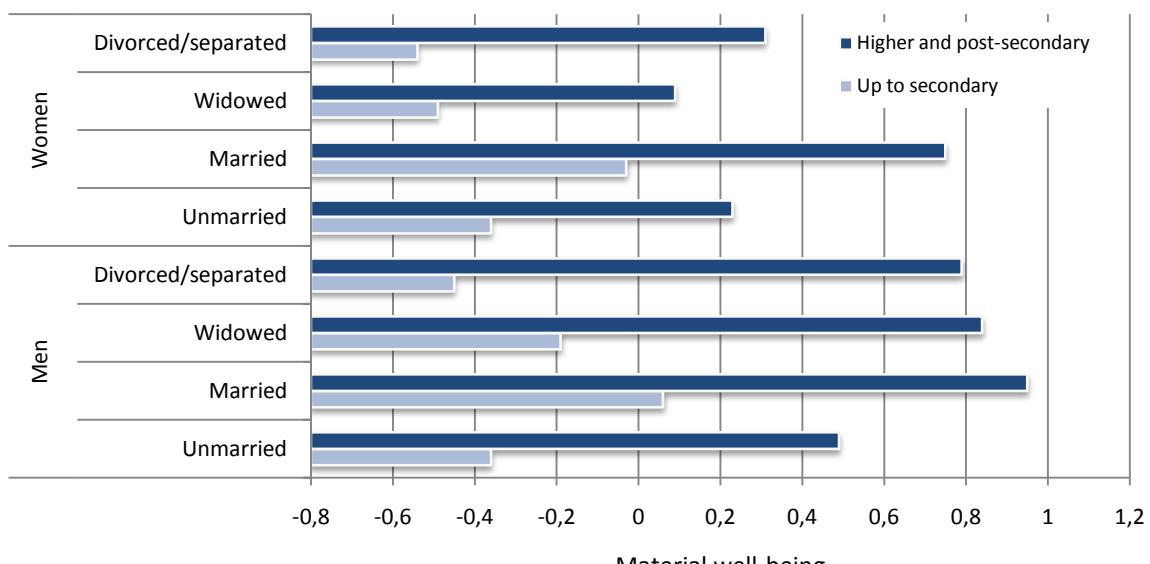
NOTE: main effect of marital status $F(3, 24121)=265.220, p<0.000, \eta^2= 0.032$; main effect of gender $F(1, 24121)=38.766, p<0.000, \eta^2= 0.002$; effect of interaction of marital status and gender $F(3, 24121)=4.360, p<0.01, \eta^2=0.001$.

Figure 9.2.7. Material well-being depending on marital status and gender, with control for age and educational level



NOTE: main effect of marital status $F(3, 24163)=248.220, p<0.000, \eta^2= 0.030$; main effect of education $F(1, 24163)=979.966, p<0.000, \eta^2= 0.039$; effect of interaction of marital status and gender $F(3, 24163)=8.512, p<0.000, \eta^2=0.001$.

Figure 9.2.8. Material well-being depending on marital status and educational level, with control for age and gender



NOTE: main effect of marital status $F(3, 24163)=248.220, p<0.000, \eta^2= 0.030$; main effect of gender $F(1, 24163)=96.066, p<0.000, \eta^2= 0.004$; main effect of education $F(1, 24163)=979.966, p<0.000, \eta^2= 0.039$; effect of interaction of marital status, educational level and gender $F(3, 24163)=3.834, p<0.01, \eta^2=0.000$.

Figure 9.2.9. Material well-being depending on marital status, educational level and gender, with control for age

When all previous factors and additionally the class of place of residence and bringing up children are taken into account in one multiple regression equation, we will be able to control the mutual relationships between those factors and thus better estimate the role of each of them as predictor (and perhaps even as determinant) of the quality of life and its individual dimensions. We carried out such analyses both for the general indicator of the quality of life and for eight component indicators. The results are presented in Tables 9.2.10 to 9.2.18.

The level of education is the best predictor of the general quality of life, which is independent of other factors⁷⁴, with age the second-best. Then there is unemployment, living on social security, marriage (a positive effect) and bringing up children (a negative effect). What also matters is divorce (negative effect), being an entrepreneur (positive effect), employment in the public sector (positive effect), employment in the private sector (negative effect), being widowed (negative effect), being a pensioner (negative effect) and gender (the quality of life is somewhat worse for women).

⁷⁴ It must be borne in mind however that the level of education was one of the variables taken into account in the civilisation level, a component of the quality of life.

Table 9.2.10. Multiple regression analysis for general quality of life

Predictor	Non-standardized indicators		Standardized indicator Beta	t	Significance
	B	Standard error			
(Constant)	-0.507	0.047		-	0.000
Education	0.106	0.002	0.348	48.937	0.000
Age	-0.017	0.001	-0.313	-	0.000
Gender (1 M, 2 F)	-0.033	0.012	-0.017	-2.663	0.008
Class of place of residence (1 largest cities, 6 rural areas)	0.001	0.004	0.001	0.191	0.848
Pensioners	-0.454	0.031	-0.116	-	0.000
Farmers	0.009	0.035	0.002	0.270	0.787
Private sector employees	-0.041	0.019	-0.018	-2.126	0.034
Public sector employees	0.109	0.024	0.037	4.565	0.000
Retirees	0.087	0.029	0.035	3.058	0.002
Entrepreneurs	0.238	0.033	0.049	7.279	0.000
Bringing up children	-0.236	0.017	-0.116	-	0.000
Unemployed persons	-0.438	0.026	-0.112	-	0.000
Marriage	0.300	0.021	0.149	14.403	0.000
Widowed men/women	0.130	0.030	0.040	4.270	0.000
Divorce	-0.258	0.032	-0.056	-8.004	0.000
<i>R</i> ² = 0.316					

Bringing up children is the most significant predictor of stress in life (negative effect), followed by employment in the private sector (negative effect) and employment in the public sector (negative effect). More stress is also experienced by entrepreneurs, unemployed persons, married as well as divorced people, the elderly, those better educated and by men. Less stress is experienced by pensioners and widowed persons.

Table 9.2.11. Multiple regression analysis for stress in life

Predictor	Non-standardized indicators		Standardized indicator Beta	t	Significance
	B	Standard error			
(Constant)	0.493	0.043		11.523	0.000
Education	-0.006	0.002	-0.021	-3.187	0.001
Age	-0.004	0.001	-0.078	-7.233	0.000
Gender (1 M, 2 F)	0.058	0.011	0.029	5.081	0.000
Class of place of residence (1 largest cities, 6 rural areas)	0.042	0.003	0.075	12.798	0.000
Pensioners	0.038	0.028	0.010	1.325	0.185
Farmers	-0.361	0.032	-0.069	-	0.000
Private sector employees	-0.376	0.018	-0.163	-	0.000
Public sector employees	-0.283	0.022	-0.095	-	0.000
Retirees	0.242	0.026	0.097	9.194	0.000
Entrepreneurs	-0.363	0.030	-0.075	-	0.000
Bringing up children	-0.596	0.015	-0.292	-	0.000
Unemployed persons	-0.307	0.025	-0.077	-	0.000
Marriage	-0.222	0.020	-0.110	-	0.000
Widowed men/women	0.093	0.028	0.028	3.264	0.001
Divorce	-0.184	0.030	-0.039	-6.053	0.000
<i>R</i> ² = 0.264					

Age is the best predictor of psychological well-being (negative effect), followed by education (positive effect), marriage (positive effect), unemployment (negative effect) and divorce (negative effect). Also living on social security (negative effect), being an entrepreneur (positive effect), a pensioner or a public sector employee (positive effect) is significant. Bringing up children and being a woman is a moderately negative predictor of psychological well-being. These predictors explain nearly one-fourth of all variation in psychological well-being in the sample.

Table 9.2.12. Multiple regression analysis for psychological well-being

Predictor	Non-standardized indicators		Standardized indicator	t	Significance
	B	Standard error			
(Constant)	0.340	0.043		7.916	0.000
Education	0.047	0.002	0.155	23.486	0.000
Age	-0.021	0.001	-0.391	-	0.000
				35.507	
Gender (1 M, 2 F)	-0.033	0.012	-0.016	-2.799	0.005
Class of place of residence (1 largest cities, 6 rural areas)	-0.006	0.003	-0.011	-1.805	0.071
Pensioners	-0.243	0.029	-0.062	-8.363	0.000
Farmers	-0.001	0.032	0.000	-0.017	0.987
Private sector employees	0.027	0.018	0.012	1.481	0.139
Public sector employees	0.077	0.022	0.026	3.440	0.001
Retirees	0.127	0.027	0.051	4.733	0.000
Entrepreneurs	0.207	0.031	0.043	6.736	0.000
Bringing up children	-0.089	0.016	-0.044	-5.681	0.000
Unemployed persons	-0.370	0.025	-0.093	-	0.000
				14.915	
Marriage	0.323	0.020	0.160	16.273	0.000
Widowed men/women	0.007	0.029	0.002	0.227	0.821
Divorce	-0.384	0.031	-0.082	-	0.000
				12.424	

R² = 0.233

Independently of all other factors, physical well-being is worse among the elderly, pensioners, women, retirees, divorcees and those with poorer education. Being a farmer, living in a rural area or small town, being an employee (irrespective of the sector), an entrepreneur and a widow(er) are positive predictors. Also, employees (especially in the private sector) and entrepreneurs are healthier than the general population. More than one-third of variation in physical well-being is related to that set of predictors.

Table 9.2.13. Multiple regression analysis for physical well-being

Predictor	Non-standardized indicators		Standardized indicator	t	Significance
	B	Standard error			
(Constant)	0.683	0.040		17.073	0.000
Education	0.022	0.002	0.073	11.817	0.000
Age	-0.019	0.001	-0.339	-	0.000
				32.861	
Gender (1 M, 2 F)	-0.085	0.011	-0.042	-7.800	0.000
Class of place of residence (1 largest cities, 6 rural areas)	0.017	0.003	0.030	5.283	0.000
Pensioners	-1.136	0.027	-0.289	-	0.000
				41.943	
Farmers	0.143	0.030	0.028	4.741	0.000
Private sector employees	0.141	0.017	0.061	8.312	0.000
Public sector employees	0.115	0.021	0.038	5.489	0.000
Retirees	-0.206	0.025	-0.082	-8.203	0.000
Entrepreneurs	0.215	0.029	0.044	7.472	0.000
Bringing up children	0.000	0.015	0.000	-0.007	0.994
Unemployed persons	0.011	0.023	0.003	0.480	0.631
Marriage	-0.010	0.019	-0.005	-0.539	0.590
Widowed men/women	0.089	0.027	0.027	3.280	0.001
Divorce	-0.097	0.029	-0.021	-3.363	0.001

R² = 0.338

The level of social capital is determined first and foremost by the level of education. The paradox however is that despite the fast growth in the number of people with higher education, social capital is not growing just as fast (see section 6.3). Slightly less significant but still fairly important are such factors as age (positive effect), gender (men score higher), class of place of residence (the smaller the town, the higher the level of social capital), being a farmer (positive effect), employment in the private sector (negative effect), employment in the public sector (positive effect), being an entrepreneur (weak positive effect), bringing up children (positive effect) and divorce (weak negative effect). Summed up, all these predictors explain only 11% of variation in the value of the standardized indicator of social capital.

Table 9.2.14. Multiple regression analysis for social capital

Predictor	Non-standardized indicators		Standardized indicator Beta	t	Significance
	B	Standard error			
(Constant)	-1.334	0.047		-	0.000
Education	0.091	0.002	0.301	41.598	0.000
Age	0.006	0.001	0.108	8.880	0.000
Gender (1 M, 2 F)	-0.116	0.013	-0.058	-9.031	0.000
Class of place of residence (1 largest cities, 6 rural areas)	0.027	0.004	0.048	7.243	0.000
Pensioners	-0.087	0.032	-0.022	-2.703	0.007
Farmers	0.273	0.036	0.052	7.590	0.000
Private sector employees	-0.153	0.020	-0.066	-7.650	0.000
Public sector employees	0.153	0.025	0.051	6.196	0.000
Retirees	0.031	0.030	0.012	1.034	0.301
Entrepreneurs	0.071	0.034	0.015	2.101	0.036
Bringing up children	0.100	0.017	0.049	5.767	0.000
Unemployed persons	-0.191	0.027	-0.048	-7.002	0.000
Marriage	0.007	0.022	0.004	0.325	0.745
Widowed men/women	-0.032	0.032	-0.010	-1.011	0.312
Divorce	-0.088	0.034	-0.019	-2.592	0.010

$R^2 = 0.109$

The incidence of pathology diminishes with age and education, but gender is its strongest predictor: the pathology indicator is much higher among men than among women. The larger the place of residence, the more pathologies there are. Unemployment, divorce and bringing up children increase pathology while marriage, employment in the public sector and being a farmer diminish it. Only 5% of variation in that indicator of the quality of life is explained by all the predictors.

Table 9.2.15. Multiple regression analysis for pathology (reversed scale)

Predictor	Non-standardized indicators		Standardized indicator Beta	t	Significance
	B	Standard error			
(Constant)	-0.989	0.047		-	0.000
Education	0.010	0.002	0.034	4.664	0.000
Age	0.004	0.001	0.065	5.313	0.000
Gender (1 M, 2 F)	0.299	0.013	0.149	23.254	0.000
Class of place of residence (1 largest cities, 6 rural areas)	0.043	0.004	0.077	11.598	0.000
Pensioners	-0.006	0.032	-0.002	-.199	0.842
Farmers	0.113	0.036	0.022	3.165	0.002
Private sector employees	0.025	0.020	0.011	1.236	0.216
Public sector employees	0.104	0.025	0.035	4.229	0.000
Retirees	0.103	0.030	0.041	3.484	0.000
Entrepreneurs	-0.044	0.034	-0.009	-1.302	0.193
Bringing up children	-0.070	0.017	-0.034	-4.039	0.000
Unemployed persons	-0.157	0.027	-0.040	-5.736	0.000
Marriage	0.120	0.022	0.060	5.487	0.000
Widowed men/women	0.035	0.032	0.011	1.086	0.278
Divorce	-0.200	0.034	-0.042	-5.803	0.000

$R^2 = 0.049$

The greatest proportion of variation in material well-being is explained by educational level. Education remains the most reliable guarantor of affluence (cf. section 5.5.3). People in rural areas continue to be worse-off than residents of towns, while inhabitants of small towns are worse-off than those who live in the large towns. Also marriage, as a community which accumulates material goods, is a strong predictor. It is not surprising that entrepreneurs are significantly better-off than others though also employees, both in the public and in the private sector, turn out to be better-off especially when compared to unemployed persons. Bringing up children is costly and thus diminishes the family's material well-being. Also divorce negatively affects well-being and so does being pensioner. On the other hand, widowers and widows are better-off; also men fare better, as already discussed in the chapter on discrimination (8.3). Even though living in a rural area entails a lower average material standard, this generally does not concern farmers; these do not depart from the national average in terms of material well-being. This does not mean that they do not obtain lower incomes, yet they may own more goods, which to some extent compensates for lower income. The predictors included in the regression equation explain a total of nearly 29% of variation in material well-being.

Table 9.2.16. Multiple regression analysis for material well-being

Predictor	Non-standardized indicators		Standardized indicator Beta	t	Significance
	B	Standard error			
(Constant)	-0.584	0.042		-	0.000
Education	0.095	0.002	0.314	48.575	0.000
Age	-0.009	0.001	-0.156	-	0.000
Gender (1 M, 2 F)	-0.038	0.011	-0.019	-3.309	0.001
Class of place of residence (1 largest cities, 6 rural areas)	-0.082	0.003	-0.146	-	0.000
Pensioners	-0.148	0.028	-0.038	-5.253	0.000
Farmers	-0.008	0.032	-0.002	-0.255	0.799
Private sector employees	0.132	0.018	0.057	7.397	0.000
Public sector employees	0.190	0.022	0.063	8.593	0.000
Retirees	0.009	0.026	0.004	0.332	0.740
Entrepreneurs	0.575	0.031	0.116	18.801	0.000
Bringing up children	-0.216	0.015	-0.106	-	0.000
Unemployed persons	-0.392	0.024	-0.099	-	0.000
Marriage	0.465	0.019	0.231	23.905	0.000
Widowed men/women	0.118	0.028	0.036	4.187	0.000
Divorce	-0.091	0.030	-0.019	-3.002	0.003
<i>R</i> ² = 0.285					

Marriage and young age ensure the greatest social support. Divorce negatively affects social well-being and so does bringing up children and unemployment. Pensioners, men and entrepreneurs enjoy greater social support than others. Also educational level is favourable for social well-being although to a limited extent. In general however only 4% of variation in the value of that indicator of the quality of life is explained, which is the lowest of all proportions.

Table 9.2.17. Multiple regression analysis for social well-being

Predictor	Non-standardized indicators		Standardized indicator Beta	t	Significance
	B	Standard error			
(Constant)	0.197	0.048		4.117	0.000
Education	0.010	0.002	0.032	4.376	0.000
Age	-0.009	0.001	-0.166	-	0.000
Gender (1 M, 2 F)	-0.046	0.013	-0.023	-3.527	0.000
Class of place of residence (1 largest cities, 6 rural areas)	0.006	0.004	0.010	1.509	0.131
Pensioners	-0.020	0.032	-0.005	-0.630	0.529
Farmers	0.052	0.036	0.010	1.422	0.155
Private sector employees	-0.009	0.020	-0.004	-0.468	0.640
Public sector employees	0.043	0.025	0.014	1.708	0.088
Retirees	0.211	0.030	0.085	7.061	0.000
Entrepreneurs	0.113	0.034	0.023	3.273	0.001
Bringing up children	-0.129	0.018	-0.063	-7.354	0.000
Unemployed persons	-0.196	0.028	-0.049	-7.059	0.000
Marriage	0.303	0.022	0.150	13.630	0.000
Widowed men/women	-0.037	0.032	-0.011	-1.144	0.253
Divorce	-0.284	0.035	-0.060	-8.194	0.000
<i>R</i> ² = 0.044					

In the regression analysis of civilisation level, education was removed from the list of predictors as it was already one of the components of that indicator. This gives the role of the strongest predictor to age, a strong negative correlate of the level of education. Employment, especially in the public sector, is also very important. Positive influence is exerted by being an entrepreneur or pensioner (obviously, after excluding the age effect), being married and bringing up children; a negative effect is characteristic of unemployment, living on social security, being a widow(er) and a farmer. Civilisation level is very strongly differentiated by the size of place of residence: the smaller it is, the lower the civilisation level. Overall, the predictors included in the regression equation explain nearly half of the variance of the civilisation level indicator.

Table 9.2.18. Multiple regression analysis for the civilisation level

Predictor	Non-standardized indicators		Standardized indicator	t	Significance
	B	Standard error			
(Constant)	1 990	0.026		77.810	0.000
Age	-0.032	0.000	-0.571	-65.303	0.000
Gender (1 M, 2 F)	-0.068	0.009	-0.034	-7.182	0.000
Class of place of residence (1 largest cities, 6 rural areas)	-0.134	0.003	-0.239	-51.218	0.000
Pensioners	-0.149	0.023	-0.038	-6.343	0.000
Farmers	-0.069	0.026	-0.014	-2.636	0.008
Private sector employees	0 216	0.015	0.094	14.724	0.000
Public sector employees	0 561	0.017	0.189	32.096	0.000
Retirees	0 100	0.022	0.040	4.596	0.000
Entrepreneurs	0 556	0.025	0.116	22.505	0.000
Bringing up children	0.062	0.013	0.030	4.852	0.000
Unemployed persons	-0.140	0.020	-0.035	-6.881	0.000
Marriage	0 189	0.016	0.094	11.777	0.000
Widowed men/women	-0.078	0.023	-0.024	-3.331	0.001
Divorce	0.024	0.025	0.005	0.966	0.334

*R*² = 0.492

The criteria of the quality of life adopted here are not fully objective but also a good life is also simply a happy life not just what meets some objective standards (of affluence, health, respect, etc.) and it remains an open question what could measure the truth in respect this respect. Researchers from diverse fields of science have debated on that topic for years (cf. Czapinski, 2002b, 2004b; Lewicka, 2005), which in the last decade gave rise to the development of a new branch of study called positive psychology.

9.3. Is Polish society becoming more and more stratified?

In the opinion of many economists, economic growth of a relatively poor country should entail its greater socio-economic stratification. Indeed, throughout the period when *Social Diagnosis* has been carried out, the proportion of income of the richest 20% of households to that of the poorest 20% increased until 2009. It is worth noting that the growing stratification resulted first and foremost from the higher growth rate of the highest incomes (Figure 9.3.1). The value of the 9th decile of household income per equivalent unit in terms of constant prices of 2000 increased by 45.6% between 2000 and 2009, which is much more than the average for entire samples (38.9%), while the value of the 1st decile increased by 27.6% over that period. However, over the last two years the increase in 1st decile real income was greater than the growth of the 9th decile for the first time since the beginning of the survey (8% and 4% respectively) and thus the proportion of the 9th to the 1st decile diminished (Table 9.3.1).

Thus, Poles have not been getting richer at the same pace. This, however, does not mean that the poor have had fewer opportunities for economic advancement than the rich. Quite on the contrary, while the income scale increased, poor households were catching up on the richer ones. The income of the poorest 10% of households grew at a much faster pace over the past four years and slightly faster over the last two years than the income of the richest 10% of households (Figure 9.3.2)⁷⁵.

Table 9.3.1. Variation in household net income in entire samples between 2000 and 2011

Study year	Ratio of the 4th to the 1st quintile of household income		Ratio of the 9th to the 1st decile of household income	
	Total	Per equivalent unit	Total	Per equivalent unit
2000	3.64	2.15	4.48	3.59
2003	2.82	2.33	4.62	3.94
2005	2.80	2.36	4.67	3.98
2007	3.00	2.41	5.12	4.15
2009	3.15	2.48	5.56	4.10
2011	3.00	2.46	5.28	3.96
Difference between:				
2011 and 2000	0.36	0.31	0.80	0.37
2011 and 2009	-0.15	-0.02	-0.28	-0.14

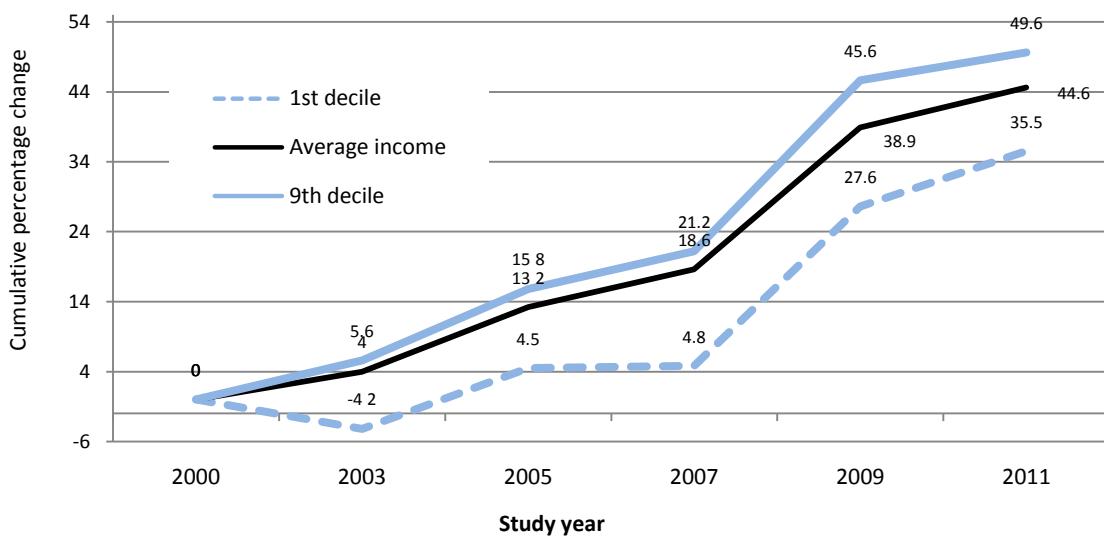


Figure 9.3.1. Cumulative percentage change in the middle, 1st and 9th decile of household income per equivalent unit in the previous month in terms of constant prices of the year 2000 between 2000 and 2011

⁷⁵ The objection that this is an instance of the base effect (an increase in nominal income by X yields a greater percentage growth when the initial level is low than when it is high) may be countered by stating that irrespective of the base effect this means that income differences between the rich and the poor have been diminishing rather than growing. Moreover, the base effect does not explain why the smallest percentage increases in income were found in the groups of households with middle income (the 3rd and 7th decile).

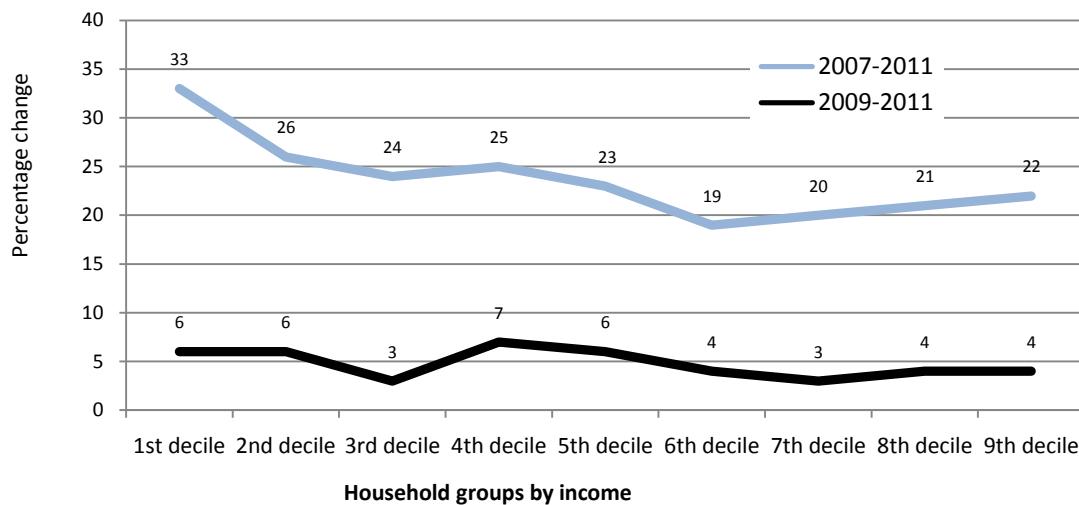
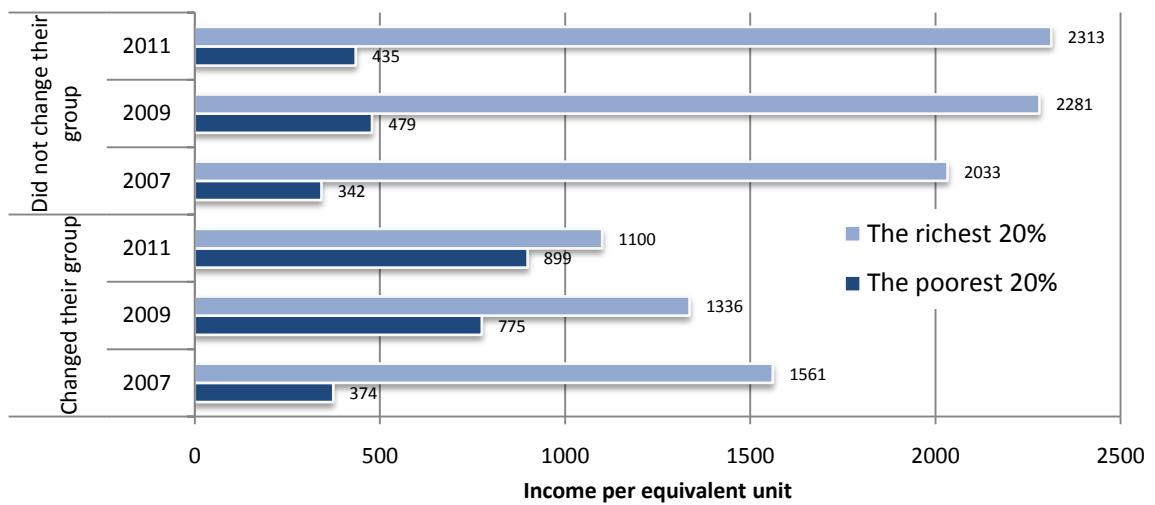


Figure 9.3.2. Percentage change in household income per equivalent unit in terms of constant prices of 2000 in the years 2007-2011 and 2009-2011 in groups of households by income deciles in panel samples

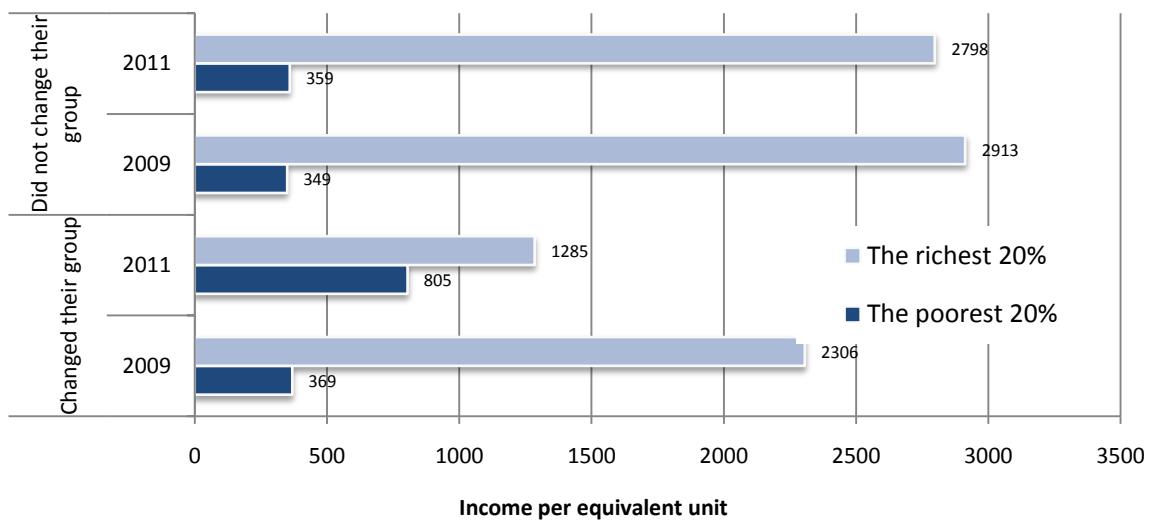
The statement that Polish society is increasingly stratified in economic terms is proved false by the symmetric, two-directional mobility of households on the income axis. Only 59% of households from the group of the 20% who were the poorest in 2007 remained in that group after four years and exactly the same proportion from the group of the richest 20% remained in that group in 2011. Thus, 41% of the poorest moved to higher income groups (a majority of 23% only moved one level up) and 41% of the richest moved to lower income groups (a majority of 23% moved one quintile down). With the shorter time span of two years between 2009 and 2011, 80% remained in the lowest group of households and 90% remained in the top group. Thus we have a nearly full (and after four years a perfectly full) symmetry of the changes in the position of the richest 20% and the poorest 20% of households in terms of income.

The economic distance between the poorest and the richest households that remained in their income groups basically did not change over four and two years (Figures 9.3.3 and 9.3.4), while in the case of households that did change position in terms of income, the distance diminished 12 times over four years and 4 times over the past two years.



NOTE effect of changing the group $F(1, 871)=49.463, p<0.000, \eta^2= 0.054$; effect of the date of measurement $F(2, 870)=21.063, p<0.000, \eta^2= 0.046$; effect of interaction of changing the group, initial group and date of measurement $F(2, 870)=80.078, p<0.000, \eta^2= 0.155$; effect of interaction of the initial group and the date of measurement $F(2, 870)=37.363, p<0.000, \eta^2= 0.079$; effect of interaction of changing the group and the date of measurement $F(2, 870)=5.703, p<0.000, \eta^2= 0.013$.

Figure 9.3.3. Household income per equivalent unit in 2007, 2009 and 2011 in terms of constant prices of the year 2000 in the group of the poorest 20% and the richest 20% of households by equivalent per capita income quintiles in 2007 which in 2011 remained or did not remain in the same quintile groups in the panel sample



NOTE effect of changing the group $F(1, 1681)=154.363, p<0.000, \eta^2= 0.084$; effect of the date of measurement $F(1, 1681)=79.405, p<0.000, \eta^2= 0.045$; effect of interaction of changing the group, the initial group and the date of measurement $F(1, 1681)=296.441, p<0.000, \eta^2= 0.150$; effect of interaction of the initial group and date of measurement $F(1, 1681)=418.063, p<0.000, \eta^2= 0.199$; effect of interaction of changing the group and of the date of measurement $F(1, 1681)=38.547, p<0.000, \eta^2= 0.022$.

Figure 9.3.4. Household income per equivalent unit in 2009 and 2011 in terms of constant prices of the year 2000 in the group of the poorest 20% and the richest 20% of households by equivalent per capita income quintiles in 2009 which in 2011 remained or did not remain in the same quintile groups in the panel sample

One may add that the difference between the groups on the extremes in terms of the standardized indicator of the quality of life was nearly the same in 2009 as two years before (2.1 and 2.07 of standard deviation) and between 2005 and 2009 the difference diminished by 0.3 of standard deviation (Table 9.1.2). This suggests that the distance between the social groups with the highest and the lowest quality of life is not increasing. The Poles are improving their quality of life together rather than at each other's expense.

BIBLIOGRAPHY

- Abramowska A. (2005). *Projekcja liczby osób starszych wymagających opieki w Polsce*. Raport z badań, ISiD KAE, SGH.
- Abramowska A. (2006). Sytuacja rodzinna osób starszych w Polsce w świetle wyników NSP 2002. *Zeszyt nr 14 Sekcji Analiz Demograficznych, KND PAN*.
- Abramowska-Kmon A. (2008). Indywidualne demograficzno – społeczne determinanty stanu zdrowia osób starszych - próba kwantyfikacji ich wpływu. W: J. T. Kowaleksi, P. Szukalski (red.), *Pomyślne starzenie się w świetle nauk o zdrowiu*. Uniwersytet Łódzki: Zakład Demografii i Gerontologii Społecznej.
- Andrews F. M., Withey S. B. (1976). *Social indicators of well-being: Americans' perception of life quality*. New York: Plenum Press.
- Argyle M. (2004). Przyczyny i korelaty szczęścia. W: J. Czaplański (red.), *Psychologia pozytywna* (ss 165-203). Warszawa: Wydawnictwo Naukowe PWN.
- Aspiwall L. G., Staudinger U. M. (red.) (2003). *A psychology of human strengths. Fundamental questions and future directions for positive psychology*. Washington, DC: American Psychological Association.
- Baltes P. B., Glück J., Kunzmann U. (2004). Mądrość. Jej struktura i funkcja w kierowaniu pomyślnym rozwojem w okresie całego życia. W: J. Czaplański (red.), *Psychologia pozytywna* (ss. 117-146). Warszawa: Wydawnictwo Naukowe PWN.
- Baranowska A. (2010). *The effects of fixed-term contracts on the transition into adulthood in Poland*. Praca doktorska, Kolegium Analiz Ekonomicznych, Szkoła Główna Handlowa, Warszawa
- Baranowska A., Lewandowski P., 2008, Adaptacyjność do zmian gospodarczych, w: Bukowski M. (red.) Zatrudnienie w Polsce 2007. Bezpieczeństwo na elastycznym rynku pracy, Instytut Badań Strukturalnych, Departament Analiz Ekonomicznych i Prognoz, Ministerstwo Pracy i Polityki Społecznej, Warszawa.
- Beck A. T, Ward, C. H., Mendelson M., Mock J., Erbaugh J. (1961). An inventory for measuring depression. *Archives of General Psychiatry*, 4, 561-571.
- Beckett M., (2000), Converging health inequalities in later life – an artifact of mortality selection? *Journal of Health and Social Behavior*, 41, No. 1.
- Beckman N. M., Houser B. B. (1982). The consequences of childlessness on the social-psychological well-being of older women. *Journal of Gerontology*, 37, 243-250.
- Betti G., Cheli B., Lemmi A. and Verma V. (2005). *On the Construction of Fuzzy Measures for the Analysis of Poverty and Social Exclusion*, International Conference to Honour Two Eminent Scientists C. Gini and M. O. Lorenz, University of Siena, Siena, May 23-26.
- Białowolski, P., Bieszki, M., Borusowski, K. (2009). *Przygotowanie sektora finansowego w Polsce do działań w obliczu kryzysu*, Raport na zlecenie Konferencji Przedsiębiorstw Finansowych w Polsce, Gdańsk, lipiec 2009
- Bourdieu P. (1986). The forms of capital. W: J. G. Richardson (ed.), *Handbook of theory and research for the sociology of education* (241-258). Westport, CT: Greenwood Press.
- Bourdieu P. (1993). *The field of cultural production*. Columbia University Press.
- Brown, C., 2008, *Inequality, Consumer Credit and the Saving Puzzle*, Edward Elgar Publishing
- Browne M.W., Cudeck R. (1993). *Alternative Ways of Assessing Model Fit*. In: K.A. Bollen, J.S.Long. (eds.), *Testing Structural Equations Models*, Newbury Park.
- Campbell A., Converse P. E., Rodgers W. L. (1976). *The quality of American life*. New York: Russell Sage.
- Cichoński, S., Strzelecki, P., Tyrowicz, J., & Wyszyński, R. (2011). *Kwartalny raport o rynku pracy - I kw. 2011r.* Warszawa: Narodowy Bank Polski. Pobrano z http://www.nbp.pl/publikacje/rynek_pracy/rynek_pracy_03_2011.pdf
- Coleman J.(1990). *Foundations of social theory*. Cambridge, MA: Harvard University Press.
- Czaplański J. (1992). *Psychologia szczęścia: przegląd badań i zarys teorii cebulowej*. Poznań: Akademos.
- Czaplański J. (1996). Uziemienie polskiej duszy. W: M. Marody, E. Gucwa-Leśny (red.), *Podstawy życia społecznego w Polsce*. Warszawa: Instytut Studiów Społecznych UW.
- Czaplański J. (1998). *Jakość życia Polaków w czasie zmiany społecznej*. Warszawa: Instytut Studiów Społecznych Uniwersytetu Warszawskiego.
- Czaplański J. (2000). Niewdzięczne społeczeństwo. *Charaktery*, nr 1, 28-29.
- Czaplański J. (2001a). Szczęście – złudzenie czy konieczność? Cebulowa teoria szczęścia w świetle nowych danych empirycznych. W: M. Kofta, T. Szustrowa (red.), *Złudzenia, które pozwalają żyć* (wyd. 2, s. 266-306). Warszawa: Wydawnictwo Naukowe PWN.
- Czaplański J. (2001b). Makropsychologia, czyli psychologia zmiany społecznej. W: M. Lewicka i J. Grzelak (red.), *Jednostka i społeczeństwo* (s. 23-48). Gdańsk: Gdańskie Wydawnictwo Psychologiczne.
- Czaplański J. (2002a). Dlaczego reformatorzy tracą poparcie społeczne. W: K. Skarżyńska (red.), *Podstawy psychologii politycznej* (s. 324-343). Poznań: Zysk i S-ka, 2002.

- Czapiński J. (2002b). Quo vadis homo? W: M. Marody (red.), *Wymiary życia społecznego. Polska na przełomie XX i XXI wieku* (s. 356-380). Warszawa: Wydawnictwo Naukowe Scholar.
- Czapiński J. (2004a). Spotkanie dwóch tradycji: hedonizmu i eudajmonizmu. W: J. Czapiński (red.), *Psychologia pozytywna. Nauka o szczęściu, zdrowiu, sile i cnotach człowieka* (s. 13-17). Warszawa: Wydawnictwo Naukowe PWN.
- Czapiński J. (2004b). Psychologiczne teorie szczęścia. W: J. Czapiński (red.), *Psychologia pozytywna* (s. 51-103). Warszawa: Wydawnictwo Naukowe PWN.
- Czapiński J. (2004c). Ekonomiczne przesłanki i efekty dobrostanu psychicznego. W: T. Tyszka (red.), *Psychologia ekonomiczna* (s. 192-242). Gdańsk: Gdańskie Wydawnictwo Psychologiczne.
- Czapiński J. (2006). Polska — państwo bez społeczeństwa., *Nauka*, 4.
- Czapiński J. (2008). Kapitał ludzki i kapitał społeczny a dobrobyt materialny. Polski paradoks. *Zarządzanie Publiczne*, 2, 5-27.
- Czapiński J. (2011a). Dynamika dobrostanu psychicznego: rola "atraktora szczęścia" i wydarzeń życiowych. W: D. Doliński, W. Błaszcak (red.), *Dynamika emocji. Teoria i praktyka* (s. 283-302). Warszawa: Wydawnictwo Naukowe PWN.
- Czapiński J. (2011b). Miękkie kapitały a dobrobyt materialny: wyzwania dla Polski. W: J. Czarnota-Bojarska, I. Zinserling (red.), *W kręgu psychologii społecznej* (s. 253-285). Warszawa: Wydawnictwa Uniwersytetu Warszawskiego.
- Czapiński J., Panek T. (red.) (2004). *Diagnoza społeczna 2003*. Warszawa: Wyższa Szkoła Finansów i Zarządzania.
- Czapiński J., Panek T. (red.) (2006). *Diagnoza społeczna 2005*. Warszawa: VizjaPress&IT.
- Czapiński J., Panek T. (red.) (2007). *Diagnoza społeczna 2007*. Warszawa: VizjaPress&IT.
- Czapiński J., Panek T. (red.) (2009). *Diagnoza społeczna 2009*. Warszawa: VizjaPress&IT.
- Czapiński J., Wojciszke B. (1997). Pogoń za lisem. Społeczne zróżnicowanie i struktura postaw wobec prywatyzacji. W: J. Gardawski, L. Gilejko (red.), *Miedzy nadzieję i lękiem. Społeczne efekty prywatyzacji* (s. 37-76). Warszawa: Szkoła Główna Handlowa.
- Dalton H. (1920). The Measurement of Inequality of Income. *Economic Journal*, 30, 361-384.
- Davidov E. (2009). *Testing the cross-country and cross-time equivalence of the human values measurements with the 3rd Round of the European Social Survey (ESS)*. 11.06.09, QMSS2 – ESF Seminar.
- Davidov E. (2009). *Testing the cross-country and cross-time equivalence of the human values measurements with the 3rd Round of the European Social Survey (ESS)*, 11.06.09, QMSS2 – ESF Seminar.
- Deniszcuk L., Sajkiewicz B. (1996). Kategoria minimum socjalnego. W: S. Golinowsk (red.), *Polska bieda: kryteria, ocena, przeciwdziałanie* (s. 18-40). Warszawa: Instytut Pracy i Spraw Socjalnych.
- Diener E. (1984). Subjective well-being. *Psychological Bulletin*, 95, 542-575.
- Diener E., Biswas-Diener R. (2008). *Happiness. Unlocking the mysteries of psychological wealth*. Malden, MA: Blackwell Publishing.
- Diener E., Lucas R. E., Oishi S. (2004). Dobrostan psychiczny. Nauka o szczęściu i zadowoleniu z życia. W: J. Czapiński (red.), *Psychologia pozytywna* (ss. 35-50). Warszawa: Wydawnictwo Naukowe PWN.
- Diener E., Seligman M.E.P. (2004). Beyond money. Toward an economy of well-being. *Psychological Science in the Public Interest*, 5, 1-31.
- Diener E., Suh E.M., Lucas R.E., Smith H.L. (1999). Subjective well-being: Three decades of progress. *Psychological Bulletin*, 125, 276-301.
- Drewnowski J. (1997). Poverty: Its Meaning and Measurement, *Development and Change*, 8, 183-208.
- Drinkwater S., Eade J., Garapich M. (2006). *Poles apart? EU Enlargement and the Labour Market Outcomes of Immigrants in the UK*, IZA Discussion Paper No. 2410.
- Drucker, P.F. (1999). *Spoleczeństwo pokapitalistyczne*, Warszawa: PWN.
- Easterlin R. A.(2005). Building a better theory of well-being. W: L.Bruni, P. L. Porta (ed.), *Economics and happiness: framing the analysis* (ss 29-65). Oxford: Oxford University Press.
- Eid M., Larsen R. J. (red.) (2008). *The science of subjective well-being*. New York: The Guilford Press.
- Ellison C. G. (1991). Religious involvement and subjective well-being. *Journal of Health and Social Behavior*, 32, 80-99.
- Ernst L. (1989): Weighting Issues for Longitudinal Household and Family Estimates. W: D. Kasprzyk et al. (ed.), *Panel Survey* (ss. 139-159). New York: Wiley.
- Eurostat (1995). *Longitudinal Weighting*, ECHP PAN doc. 55/95, Luxembourg.
- Fukuyama F. (1997). *Zaufanie. Kapitał społeczny a droga do dobrobytu*. Warszawa: Wydawnictwo Naukowe PWN.
- Fukuyama F. (2000). Kapitał społeczny. W: L. E. Harrison, S. P. Huntington (red.) *Kultura ma znaczenie* (s. 169-187). Poznań: Zysk i S-ka.

- Gauthier A. (2005). Trends in policies for family-friendly societies. W: Macura M., MacDonald A.L., Haug W. (ed.), *The new demographic regime. Population challenges and policy responses* (ss. 95-110). New York and Geneva: United Nations.
- Gleaser E. L., Laibson D., Sacerdote B. (2002). An economic approach to social capital. *The Economic Journal*, 112, 437- 458.
- Goethart T., Halberstadt V., Kapteyn A., Van Praag B. M. S. (1997). The Poverty Line, Concept and Measurement, *The Journal of Human Resources*, 12, 503-520.
- Górniak J. (2001). *My i nasze pieniądze*. Kraków: Aureus.
- Grabowska M., Szawiel T. (2001). *Budowanie demokracji. Podziały społeczne, partie polityczne i społeczeństwo obywatelskie w postkomunistycznej Polsce*. Warszawa: Wydawnictwo Naukowe PWN.
- Grabowska-Lusińska I., Okolski M. (2008). *Migracja z Polski po 1 maja 2004 r.: jej intensywność i kierunki geograficzne oraz alokacja migrantów na rynkach pracy krajów Unii Europejskiej*. Center of Migration Research Working Papers No. 33/91.
- Greene W. H. (1997): *Econometric Analysis*. New York: Prentice Hall.
- Gruszczyński M. (2002). *Modele i prognozy zmiennych jakościowych w finansach i bankowości*. Warszawa: Oficyna Wydawnicza Szkoły Głównej Handlowej.
- GUS (2007). *Przejście z pracy na emeryturę*. Informacje i Opracowania Statystyczne. Warszawa: Zakład Wydawnictw Statystycznych
- GUS (2009). Kształcenie dorosłych. *Informacje i Opracowania Statystyczne*. Warszawa: Zakład Wydawnictw Statystycznych.
- GUS. (2011). *Popyt na prace w I kw. 2011 roku (monitoring rynku pracy)*. Warszawa: Zakład Wydawnictw Statystycznych.
- Hagenaars A. J. M. (1986). *The perception of poverty*. Amsterdam – New York – Oxford: North-Holland.
- Halpern D. (ed.) (2005). *Social capital*. Cambridge: Polity.
- Hardin R. (2009). *Zaufanie*. Warszawa: Wydawnictwo Sic!
- Helliwig Z. (1968). Zastosowanie metody taksonomicznej do typologicznego podziału krajów ze względu na poziom ich rozwoju i strukturę wykwalifikowanych kadr. *Przegląd Statystyczny*, nr 4.
- Hox J. (2002). *Multilevel Analysis. Techniques and Applications*. London: Lawrence Erlbaum Associates, Publishers.
- Hox J., Maas C. J. M. (2005). *Multilevel Analysis, Encyclopedia of Social Measurement*, Volume 2, Elsvier.
- Iversen L., Sabroe S. (1988). Psychological well-being among unemployed and employed people after a company closedown: A longitudinal study. *Journal of Social Issues*, 44, 141-152.
- Jones, S. R. G., & Riddell, W. C. (1999). The Measurement of Unemployment: An Empirical Approach. *Econometrica*, 67(1), pp. 147-161.
- Kahneman D. (1999). Objective happiness. W: D. Kahneman, E. Diener, N. Schwarz (ed.), *Well-being. The foundations of hedonic psychology* (ss 3-25).New York: Russell Sage Foundation
- Kahneman, D., Diener D., Schwarz N. (red.) (1999). *Well-being. The foundations of hedonic psychology*. New York: Russell Sage Foundation
- Kalton G., Brick J. M. (1995). Weighting schemes for household panel survey. *Survey Methodology*, 21, 3-44.
- Kasser T. (2002). *The high price of materialism*. Cambridge: The MIT Press.
- Kasser T., Ryan R.M. (1996). Further examining the American dream: Differential correlates of intrinsic and extrinsic goals. *Personality and Social Psychology Bulletin*, 22, 280-287.
- Knack S., Keefer P. (1997). Does social capital have an economic payoff? A cross-country investigation. *Quarterly Journal of Economics*, 112, 1251-1288.
- Komorita, S. S., Parks, C. D. (1994). Social dilemmas. Madison: WCB Brown , Benchmark.
- Kotowska I.E. (2005). *Older workers in the labour market and social policies*. Referat na Europejską Konferencję Ludnościową „Demographic Challenges for Social Cohesion”, Strasburg, 7–8 kwietnia.
- Kotowska I.E., Matysiak A., Muszyńska M., Abramowska A. (ed.) (2005). *Work and Parenthood – Comparative Data Analysis and Policy Implications. Workpackage 6. DIALOG project*. Warsaw: Institute of Statistics and Demography, Warsaw School of Economics.
- Kotowska I.E., Sztanderska U. Wójcicka I., (2007), Podsumowanie i rekomendacje, w: I. E. Kotowska, U. Sztanderska, I. Wójcicka (red.), *Aktywność zawodowa i edukacyjna a obowiązki rodzinne w Polsce w świetle badań empirycznych* (s. 430–478). Warszawa: Wydawnictwo Scholar.
- Kotowska I.E. (1994). Prognozowanie gospodarstw domowych. Problemy i metody. *Monografie i Opracowania* 396. Warszawa: Szkoła Główna Handlowa.
- Kotowska I.E., Abramowska A., Balcerzak-Paradowska B., Kowalska I., Muszyńska M., Wróblewska W. (2003). *Polityka ludnościowa – cele, rozwiązania, opinie*. Warszawa: Instytut Statystyki i Demografii, Szkoła Główna Handlowa.

- Kukliński A. (2004). Gospodarka oparta na Wiedzy - wyzwanie dla Polski XXI wieku, *Polska w Europie* 2 (46).
- Lane R. (2000). *The loss of happiness in market democracies*. New Haven: Yale University Press.
- LaPorta R., Lopez-de-Silanes F., Shleifer A., Vishny R. W. (1997). Trust in large organizations. *American Economic Review*, 87, 333-338.
- Lazarus R. S., Folkman S. (1984). Stress, appraisal, and coping. New York: Springer.
- Lewicka M. (2005). „Polacy są wielkim i dumnym narodem“, czyli nasz portret (wielce) zróżnicowany. W: M. Drogosz (red.) *Jak Polscy przegrywają, jak Polacy wygrywają* (s. 5-34). Gdańsk: Gdańskie Wydawnictwo Psychologiczne
- Linley A., Joseph S. (red.) (2007). *Psychologia pozytywna w praktyce*. Warszawa: Wydawnictwo Naukowe PWN.
- Lopez S. J. (red.) (2009). *The encyclopedia of positive psychology*. Malden, MA: Blackwell Publishing.
- Machon D., Norton M.I., Ariely D. (2008). Getting off the hedonic treadmill, one step at a time: The impact of regular religious practice and exercise on well-being. *Journal of Economic Psychology*, 29, 632-642
- Mander, J. (1978). *Four arguments for the elimination of television*. New York: Harper.
- Maslow A. (1986). *W stronę psychologii istnienia*. Warszawa: Pax.
- Maslow A. (1990). *Motywacja i osobowość*. Warszawa: Pax.
- Matysiak A., 2005. The sharing of professional and household duties between Polish couples – preferences and actual choices, *Studia Demograficzne*, 147, 122-153.
- Muthén B. (1997). Latent variable modeling with longitudinal and multilevel data. W: A. Raftery (ed.), *Sociological Methodology* (s. 453-480). Boston: Blackwell Publishers.
- Myers D. G. (1993). The pursuit of happiness. New York: Avon Books.
- Myers D. G. (2004). Bliskie związki a jakość życia. W: J. Czapinski (red.), *Psychologia pozytywna* (ss 204-234). Warszawa: Wydawnictwo Naukowe PWN.
- Nesse, R. M., Williams, G. C. (1994). *Why we get sick*. New York: New York Times Books.
- OECD (1998). *Impact of the emerging information society on the policy process and democratic quality*.
- OECD (2001). *The Well-being of Nations. The role of human and social capital*, http://www.oecd.org/findDocument/0,2350,en_2649_34543_1_1_1_1_1,00.html, as of 20.01.2007.
- Panek T. (2001). Wymiary ubóstwa w Polsce w latach 1996-1999. *Wiadomości Statystyczne*, 11, 37-55.
- Panek T. (2005). Metody pomiaru ubóstwa. *Wiadomości Statystyczne*, 7, 1-12.
- Panek T. (2007). Ubóstwo i nierówności. W: T. Panek (red.), *Statystyka społeczna* (s. 258-298). Warszawa: Wydawnictwo Ekonomiczne.
- Panek T. (2009). *Statystyczne metody wielowymiarowej analizy porównawczej*. Warszawa: Oficyna Wydawnicza Szkoły Głównej Handlowej.
- Panek T. (2011). *Ubóstwo, wykluczenie społeczne i nierówności. Teoria i praktyka pomiaru*, Oficyna Wydawnicza Szkoły Głównej Handlowej, Warszawa.
- Penedo, F. J., & Dahn, J. R. (2005). Exercise and well-being: A review of mental and physical health benefits. *Current Opinion in Psychiatry*, 18, 189-193.
- PGSS (1999). *Polski Generalny Sondaż Społeczny*. Warszawa: Instytut Studiów Społecznych Uniwersytetu Warszawskiego.
- Pissarides, C. A., & Wadsworth, J. (1994). On-the-job search: Some empirical evidence from Britain. *European Economic Review*, 38(2), 385 - 401. doi:DOI: 10.1016/0014-2921(94)90064-7
- Platt J. (1973). Social traps. *American Psychologist*, 28, 641-651.
- Podgórski J. (1994). Wyznaczanie subiektywnych linii ubóstwa. *Wiadomości Statystyczne*, 12, 12-19.
- Postman, N. (1985). *Amusing ourselves to death*. New York: Penguin.
- Pratto F., Sidanius J., Stallworth L. M., Malle B. F. (1994). Social dominance orientation: A personality variable predicting social and political attitudes. *Journal of Personality and Social Psychology*, 67, 741-763.
- Psacharopoulos G., Patrinos H. A. (2004). Human capital and rates of return. W: G. Johnes, J. Johnes (red.), *International handbook on the economics of education* (ss. 1-57). Cheltenham, UK: Edward Elgar Publishing Ltd.
- Putnam R.D. (2003). *Better together. Restoring the American community*. New York: Simon & Schuster.
- Putnam R.D. (2008). *Samotna gra w kregle: Upadek i odrodzenie lokalnych w Stanach Zjednoczonych*. Warszawa: Wydawnictwo Akademickie i Profesjonalne.
- Putnam, R.D. with Leonardi, R. & Nanetti, R.Y. (1993), *Making Democracy Work: Civic traditions in modern Italy*. Princeton: Princeton University Press 1993.
- Raiser M., Haerpfer C., Nowotny T., Wallace C. (2001). *Social capital in transition: a first look at the evidence*. EBRD, Working Paper No. 61.

- Richins M., Dawson S. (1992). A consumer values orientation for materialism and its measurement: scale development and validation. *Journal of Consumer Research*, 19, 303-316.
- Rifkin J. (2000). *The Age of Access. How the Shift from Ownership to Access is Transforming Modern Life*, London: Penguin Books.
- Robinson J.P., Martin S. (2008). What do happy people do? *Social Indicators Research*, 89, 565-571.
- Rogers C.R. (1961). *On becoming a person*. Boston: Houghton Mifflin.
- Ross, C. E., Hayes, D. (1988). Exercise and psychologic well-being in the community. *American Journal of Epidemiology*, 127, 762-771.
- Ryan R.M., Frederick Ch. (1997). On energy, personality, and health: Subjective vitality as a dynamic reflection of well-being. *Journal of Personality*, 65, 529-565.
- Ryff C.D. (1989). Happiness is everything , or is it? Explorations on the meaning of psychological well-being, *Journal of Personality and Social Psychology*, 57, 1069-1081.
- Ryff C.D., Singer B. (2004). Paradoksy kondycji ludzkiej: dobrostan i zdrowie na drodze ku śmierci. W: J. Czapinski (red.), *Psychologia pozytywna* (ss. 147-162). Warszawa: Wydawnictwo Naukowe PWN.
- Sabatini F. (2007). The empirics of social capital and economic development: a critical perspective. W: M Osborne, K. Sankey, B. Wilson (Eds.), *Social capital, lifelong learning and the management of place* (pp. 76-94). London and New York: Routledge.
- Seligman M. (2004). Psychologia pozytywna. W: J. Czapinski (red.), *Psychologia pozytywna* (ss. 18-33). Warszawa: Wydawnictwo Naukowe PWN.
- Seligman M. (2005). *Prawdziwe szczęście*. Poznań: Media Rodzina.
- Sen A. (1983). Poor, Relatively Speaking, *Oxford Economic Papers*, 35, 153-169.
- Shorrocks A. F. (1978). The Measurement of Mobility. *Econometrica*, 46, 1013-1024.
- Sidanius J., Pratto F. (1993). The inevitability of oppression and the dynamics of social dominance. W: P. Sniderman, P. Tetlock (ed.), *Predjudice, politics, and the American dilemma* (s. 173-211). Stanford CA: Stanford University Press.
- Sidanius J., Pratto F. (1999). *Social dominance: An intergroup theory of social hierarchy and oppression*. New York: Cambridge University.
- Snijders, T. A. B., Bosker R. J. (1999). *Multilevel Analysis*. Thousand Oaks – London – New Delhi: Sage.
- Snyder C. R., Lopez S. J. (2007). *Positive psychology*. Thousand Oaks, CA: Sage Publications.
- Snyder C. R., Lopez S. J. (red.) (2002). *Handbook of positive psychology*. Oxford: Oxford University Press.
- Steenkamp J.-B. E. M., Baumgartner H., 1998, Assessing Measurement Invariance in Cross-National Consumer Research, *The Journal of Consumer Research*, 25, 78-90.
- Strzelecki, P., & Wyszynski, R. (2011). Potential implications of labour market opening in Germany and Austria on emigration from Poland (MPRA Paper No. 32586). University Library of Munich, Germany. Pobrano z <http://ideas.repec.org/p/pra/mprapa/32586.html>
- NBP (2010). *Sytuacja na rynku kredytowym - wyniki ankiety do przewodniczących komitetów kredytowych, II kwartał 2010*.
- Szafraniec, K. (2011). *Młodzi 2011*. Warszawa: Kancelaria Prezesa Rady Ministrów. Pobrano z http://kprm.gov.pl/Młodzi_2011_alfa.pdf
- Sztanderska U., Grotkowska G. (2007). Zatrudnienie i bezrobocie kobiet i mężczyzn. W: I. E. Kotowska, U. Sztanderska, I. Wójcicka (red.), *Aktywność zawodowa i edukacyjna a obowiązki rodzinne w Polsce w świetle badań empirycznych* (ss. 170-218). Warszawa: Wydawnictwo Naukowe SCHOLAR.
- Sztompka P. (2007). *Zaufanie. Fundament społeczeństwa*. Kraków: Wydawnictwo Znak.
- Szukalski P., Warzywoda-Kruszyńska W. (2005). Polityka w sferze oświaty i wychowania – bariera i symulanta pracy zawodowej rodziców. W: I. Wójcicka (red.), *Szanse na wzrost dzieciństwa – jaka polityka rodzinna, Polskie Forum Strategii Lizbońskiej – Niebieskie Księgi 2005* (ss. 109–118), Warszawa-Gdańsk: Instytut Badań nad Gospodarką Rynkową, .,
- Szulc A. (1996). Skale ekwiwalencji w pomiarach ubóstwa. W: S. Golinowska (red.), *Polska bieda: kryteria, ocena, przeciwdziałanie* (s. 204-219). Warszawa: Instytut Pracy i Spraw Socjalnych.
- Tajfel H., Turner J. (1979). An integrative theory of inter-group conflict. W: W. G. Austin, S. Worchel (ed.), *The social psychology of intergroup relations*. Monerey, CA: Brooks/Cole.
- Thayer R. (1987). Energy, tiredness, and tension effects of sugar snack versus moderate exercise. *Journal of Personality and Social Psychology*, 52, 119-125.
- Thayer R. (2001). *Calm energy: How people regulate mood with food and exercise*. London: Oxford University Press.
- Tourangeau R., Rips L. J., Rasinski K. (2000). *The Psychology of Survey Response*. Cambridge, U.K.: Cambridge University Press.
- UNDP (2000). *Human Development Report*.
- UNDP (2010). *Human Development Report*.

- Van der Vald W.M. (2009). *Methodological Aspects of the Cross-National Evaluation of a Theory on the Causes of Generalized Social Trust*, QMSS2 seminar at Bolzano-Bozen, Italy, June 11-12, 2009.
- Veenhoven R. (1984). *Conditions of happiness*. Dordrecht: Kluwer Academic.
- Veenhoven R. (1994). *World Database of Happiness*. Rotterdam: RISBO.
- Veenhoven R. (2007). Szczęście jako cel polityki społecznej: zasada największego szczęścia. W: P. A. Linley, S. Joseph (red.), *Psychologia pozytywna w praktyce* (s. 413-441). Warszawa: Wydawnictwo Naukowe PWN.
- Verba S. (1966). The citizen as respondent: sample surveys and American democracy, *American Political Science Review*, 90, 1-7.
- Verba S., Schlozman K. L., Brady H. E. (1995). *Voice and Equity. Civic Voluntarism in American Politics*. Cambridge, Mass.: Harvard University Press
- Verkley H., Stolk J. (1990). Does happiness lead into idleness? W: R.Veenhoven (ed.), *How harmful is happiness?* (s. 79-93). Rotterdam: Universitaire Pers Rotterdam.
- Verma V., Betti G., Ghellini G. (2007). Cross-sectional and longitudinal weighting in a rotational household panel: applications to EU-SILC, *Statistics in Transition*, 8(1).
- Węziak D. (2007). *Wielopoziomowe modelowanie regresyjne w analizie danych*, *Wiadomości Statystyczne*, Nr 9 (556), s. 1-12.
- Woolcock M. (1998) Social capital and economic development: Toward a theoretical synthesis and policy framework. *Theory and Society* -27, 151-208
- Zacher L.W. (red.) (1999). *Społeczeństwo informacyjne – w perspektywie człowieka, techniki, gospodarki*. Warszawa: Fundacja Edukacyjna TRANSFORMACJE.

ANNEXES

Annex 1. Questionnaires and instructions for interviewers

1.1. Household questionnaire

Subsequent number of the questionnaire in the voivodeship

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SOCIAL DIAGNOSIS 2011

An independent survey of the conditions and quality of life in Poland

PART I

A. HOUSEHOLD CHARACTERISTICS

0. Household status in the survey

voivodeship

poviat gmina

1. Territorial symbol

2. Address (street, house no., flat no., postcode and town/city)
.....

area code landline

mobile (if there is no landline phone)

2b. telephone no. and – if available – e-mail address.....

3. Symbol of the place of residence category

4. Household identification number

5. Number of families in the household

6. Symbol of the source of income for the household

7. Number of all persons in the household

8. Number of all persons in the household aged at least 15 as of 1 March 2011

B. INFORMATION ON THE CONDUCTED INTERVIEW

1. Course of the visits to the household's dwelling

Visit number	Date of the visit day/month	Time of the visit	Duration of the visit in minutes	Notes
1				
2				
3				

2. The interview in the household was:

1. conducted
2. not conducted.

If the interview was not conducted (answer no. 2), provide the reasons (point 3). If the interview was conducted, fill in the collective information on the individual interviews.

3. The reasons for the interview being not conducted

Choose one of the options given below and write its number in the boxes.

Although the household was contacted, the interview was not conducted because

1. the household is unable to take part in the survey (old age, illness, alcohol intoxication)
2. the household members are foreigners (beyond the scope of the survey)
3. the household initially refused to take part in the survey (it is possible it will be willing to take part in the survey in the coming years)
4. the household definitely refused to take part in the survey now or in the future

It was not possible to contact the household (although it was localised) because:

5. all household members were temporarily absent due to their stay abroad
6. all household members were temporarily absent due to a holiday trip

7. all household members were temporarily absent due to other or unknown reasons

8. no one was present at home.

The household could not be localised because:

9. the address provided on the list could not be localised (e.g. the address was incorrect, the dwelling was unoccupied, the dwelling had been liquidated)

10. the household changed the place of residence and the new address could not be established

11. the interview was not conducted due to other reasons (e.g. all persons from the household moved to a multi-occupancy accommodation facility).

4. Collective information on the individual interviews (all household members aged at least 16 as of 1 March 2011 are to complete an individual interview)

4.1. Number of persons in the household to complete an individual interview

4.2. Number of conducted individual interviews

4.3. Number of individual questionnaires recognised as not filled in accordance with the instructions

5. Does the household consent to take part in the survey in the subsequent years?

(Choose one of the options given below and mark the appropriate box)

1 YES 2 NO 3 HAS NOT DECIDED

YET

I confirm that the information presented in the questionnaire was collected in accordance with the procedure under the survey.

date month year					Name of the interviewer
			1	1	
Signature of the interviewer					Name of the person checking the form:

C. HOUSEHOLD COMPOSITION

1. THE PERSON'S REFERENCE NUMBER ⁷⁶		2. FIXED NUMBER ⁷⁷		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	The person's reference number		1	2	3	4	5	6	7	8		
4	Relationship to the household head											
5	Family number											
6	Relationship to the family head											
7	Date of birth	day										
8		month										
9		year (two last digits)										
10	Gender 1 – man, 2 – woman											
11	Marital status if unmarried → line 16											
12	Date of marriage	month										
13		year (two last digits)										
14	Date of the breakdown of marriage (divorce, death of the spouse)	month										
15		year (two last digits)										
16	Educational attainment (if 99 → line 19)											
17	Years of education completed											
18	Specialisation of the completed education											
19	Educational status (5,8 → line 22)											
20	Type of education service											
21												
22	Driving licence 1 YES, 2 NO; 8 – not applicable											

⁷⁶ Dla gospodarstw badanych w 2009 r. ten sam co w roku 2009; dla osób, których nie ma na liście, numery kolejne.

⁷⁷ Tylko dla gospodarstw badanych w 2009 r.; liczba z 6 kolumny listy osób badanych; dla osób, których nie ma na liście, puste miejsce

23	Command of foreign languages 1. active 2. passive 3. none	English									
24		German									
25		French									
26		Russian									
27		Spanish									
28		other									
29		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 – both devices, 4 NO, none of these)									
30	Does he/she use any bank services? 1. YES, 2. NO, 3. I do not know <i>(if several persons have a joint account, answer 1. YES should be checked for all such persons)</i>	bank account									
31		payment card									
32		savings account									
33		credit card									
34		personal overdraft									
35	Disability 1, 2, 3 → 36; others → 37										
36	Disability certificate?										
37	Source of income	main									
38		additional									
39	Reasons for temporary absence <i>concerning the persons who are temporarily absent from the household</i>										
40	Being a household member or not										
41	Movement of persons in the household <i>(only for the households interviewed in 2009)</i>	date of arrival	month								
42			year <i>(two last digits)</i>								
43		date of leaving	month								
44			year <i>(two last digits)</i>								
45		reason for arrival									
46		reason for leaving									
47	Result of the individual interview										

48. Reference number of the persons answering the questions on behalf of the household

D. ECONOMIC ACTIVITY OF THE HOUSEHOLD MEMBERS AGED 15 AND ABOVE

(economic activity as defined in the Labour Force Survey (BAEL); **the person's reference number is the same as in part C**)

1	Reference number of the person (the same as in part C)					
2	During the last 7 days, has this person performed any paid work or helped without pay in the family business? <i>1 YES → 4, 2 NO → 3</i>					
3	During the last 7 days, has this person been an employee, a self-employed person or helped without pay in the family business but has temporarily not performed his/her work? <i>1 YES → 5; 2 NO → 8</i>					
4	How many hours has this person worked during the last 7 days?					
5	What is the type of work this person performs at his/her main job?					
6	Is this a full-time job? <i>1 YES → 8; 2 NO → 7</i>					
7	Why does this person work part-time?					
8	Is this person registered as an unemployed person in the Labour Office? <i>1 YES → 9, 2 NO → 10</i>					
9	Does this person receive the unemployment benefits? <i>1 YES, 2 NO</i>					
10	During the last 4 weeks, has this person been seeking a job or a different job? <i>1 YES (currently unemployed) → 12; 2 YES (currently employed) or 5 NO (currently employed) → 15; 3 NO (already found a job) → 13; 4 NO (currently unemployed) → 11</i>					
11	Why is this person not seeking a job?					
12	Is this person ready to start a job this or next week? <i>1 YES, 2 NO</i>					
13	For how long has this person been unemployed? <i>(applicable also to retirees and pensioners; in the case of persons who have never worked, enter 97 in the line "years")</i>	years				
14		months				
15	Ownership structure of the institution being the main workplace of the person <i>(in the case of currently employed persons)</i>					
16	Ownership structure of the institution being the additional workplace of the person <i>(in the case of currently employed persons)</i>					
17	Is the main workplace located in the city/town of residence? <i>(in the case of currently employed persons) 1 YES, 2 NO</i>					
18	Current profession					
19	Profession at the last job <i>(in the case of currently unemployed persons who worked in the past)</i>					
20	During the last 2 years, how many times has this person been registered in the Labour Office as an unemployed person?					
21	During the last 2 years, how long in total has this person been unemployed? <i>(in months)</i>					

1	Reference number of the person (the same as in part C)					
23	During the last 2 years, has this person participated in any activity related with gaining new professional qualifications or other skills? <i>1 YES, 2 NO – go to line 27</i>					
24						
25	Specify the type (<i>up to three types</i>) of educational activity					
26						
27	Did this person work abroad in the period 2007-2011? <i>1 YES, 2 NO</i>					
28	Did this person study abroad in the period 2007-2011? <i>1 YES, 2 NO (if the answer “NO” is given to questions 27 and 28 – go to part E)</i>					
29	How many times did this person go abroad to work or study there in the period 2007-2011?					
30	In which countries did this person work or study? (<i>if in more than two, write those two in which the person spent most time</i>)					
31						
32	Provide the total time of working or studying abroad in the period 2007-2011 (<i>in months</i>).	Working				
33		Studying				
34	If in the last year this person has returned after a stay abroad longer than 6 months in the period 2007-2011, then why? (<i>if this condition is not fulfilled, do not enter anything</i>)					

E. NUTRITION

I would like to ask you about meeting the nutritional needs in your household.

1. Can your household afford to buy a sufficient amount of the following food items?

Provide the answers for each of the following items separately, by crossing the appropriate box.

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 products

1 YES 2 NO

1.5. fish and fish products

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. confectionary (sweets, chocolate, etc.)

1 YES 2 NO

1.11. stimulants (coffee, tea, alcohol, tobacco)

1 YES 2 NO

2. What kind of water is usually used in your household for drinking (for tea or coffee)?

1. tap water or water from an ordinary well
2. tap water or water from an ordinary well but filtered through a home water filter
3. bottled mineral or spring water
4. water from a deep well (so-called „Oligocene water“)

3. In comparison with the situation two years ago, has the ability to meet the nutritional needs in your household:

Choose one of the options given below by crossing the appropriate box.

1. declined
2. improved
3. remained unchanged

F. HOUSEHOLD AFFLUENCE

Now, I would like to ask you whether you possess certain goods and/or savings and whether you have taken out any credits or loans.

1. Does your household have any savings? 1. YES 2. NO

If the household has savings, go to question 2, if not – go to question 5.

2. What is the approximate total amount of your household savings?

Show CARD 1, ask to choose one of the options and cross the appropriate box.

- 1 up to the equivalent of the household's monthly income
- 2 above the equivalent of the household's monthly income – up to the equivalent of the household's 3-months' income
- 3 above the equivalent of the household's 3-months' income – up to the equivalent of the household's 6-months' income
- 4 above the equivalent of the household's 6-months' income – up to the equivalent of the household's yearly income
- 5 above the equivalent of the household's yearly income
- 6 it is hard to say [NOT TO BE READ]

3. What is the form of your household savings?

*Provide the answers for each of the following forms separately, by crossing the appropriate box.*3.1. bank deposits in PLN
1 YES 2 NO3.2. bank deposits in foreign currencies
1 YES 2 NO3.3. bonds
1 YES 2 NO3.4. investment funds
1 YES 2 NO3.5. Individual Pension Fund
1 YES 2 NO3.6. securities quoted on the stock exchange
1 YES 2 NO3.7. shares and stocks in private joint-stock companies
1 YES 2 NO3.8. investments in real property
1 YES 2 NO3.9. investments in material goods other than real property
1 YES 2 NO3.10. cash
1 YES 2 NO3.11. insurance policy
1 YES 2 NO3.12. other forms
1 YES 2 NO

4. What is the purpose of your household savings?

*Provide the answers for each of the following purposes separately, by crossing the appropriate box.*4.1. reserves for everyday consumer needs (e.g. food, clothes)
1 YES 2 NO4.2. regular fees (e.g. home payments)
1 YES 2 NO4.3. purchase of consumer durables
1 YES 2 NO4.4. purchase of a house or an apartment, payments to the housing cooperative
1 YES 2 NO4.5. renovation of the house or apartment
1 YES 2 NO4.6. medical treatment
1 YES 2 NO4.7. medical rehabilitation
1 YES 2 NO4.8. leisure
1 YES 2 NO4.9. reserves for unexpected events
1 YES 2 NO4.10. securing the children's future
1 YES 2 NO4.11. security for the old age
1 YES 2 NO4.12. other purposes
1 YES 2 NO4.13. no special purpose
1 YES 2 NO

5. Does your household have any loans or credits to repay?

1 YES 2 NO*If the household has loans or credits to repay, go to question 6, if not – go to question 9.*

6. Where did your household take out the loans or credits?

Provide the answers for each of the following sources of loans or credits separately, by crossing the appropriate box.

6.1. banks	<input type="checkbox"/> YES	<input type="checkbox"/> NO
6.2. other institutions	<input type="checkbox"/> YES	<input type="checkbox"/> NO
6.3. private persons	<input type="checkbox"/> YES	<input type="checkbox"/> NO

7. What is the total amount of your household's debt?

Show CARD 1, ask to choose one of the options and cross the appropriate box.

<input type="checkbox"/> up to the amount of the household's monthly income
<input type="checkbox"/> above the equivalent of the household's monthly income – up to the equivalent of the household's 3-months' income
<input type="checkbox"/> above the equivalent of the household's 3-months' income – up to the equivalent of the household's 6-months' income
<input type="checkbox"/> above the equivalent of the household's 6-months' income – up to the equivalent of the household's yearly income
<input type="checkbox"/> above the equivalent of the household's yearly income
<input type="checkbox"/> it is hard to say

8. What was the purpose of the loans or credits taken out by your household?

Provide the answers for each of the following purposes separately, by crossing the appropriate box.

8.1. everyday consumer needs (e.g. food, clothes, footwear)	
<input type="checkbox"/> YES	<input type="checkbox"/> NO
8.2. regular payments (e.g. home payments)	
<input type="checkbox"/> YES	<input type="checkbox"/> NO
8.3. purchase of consumer durables	
<input type="checkbox"/> YES	<input type="checkbox"/> NO
8.4. purchase of a house or an apartment, payments to the housing cooperative	
<input type="checkbox"/> YES	<input type="checkbox"/> NO
8.5. renovation of the house or apartment	
<input type="checkbox"/> YES	<input type="checkbox"/> NO
8.6. medical treatment	
<input type="checkbox"/> YES	<input type="checkbox"/> NO
8.7. purchase or lease of the tools necessary for work (machines, lease of a facility, etc.)	
<input type="checkbox"/> YES	<input type="checkbox"/> NO
8.8. leisure	
<input type="checkbox"/> YES	<input type="checkbox"/> NO
8.9. purchase of securities	
<input type="checkbox"/> YES	<input type="checkbox"/> NO
8.10. repayment of earlier debts	
<input type="checkbox"/> YES	<input type="checkbox"/> NO
8.11. developing own business	
<input type="checkbox"/> YES	<input type="checkbox"/> NO
8.12. education	
<input type="checkbox"/> YES	<input type="checkbox"/> NO
8.13. other purposes	
<input type="checkbox"/> YES	<input type="checkbox"/> NO

9. Does your household or any of its members possess the following goods? It does not matter whether such goods are owned, leased or made available in any other manner (provide the answers in the column "Does the household possess?"). If the household does not possess a specific item, please specify (provide the answer in the column "If not, is it due to financial reasons?") whether this is due to financial reasons (answer "YES") or any other reasons, for example such item is redundant (answer "NO"). In the case of three lines (desktop computer, portable computer, car), enter the number in the column "How many items?".

Provide the answers for each of the following items.

	Does the household possess...?	If not, is it due to financial reasons?	How many items?
9.1. automatic washing machine	1 <input type="checkbox"/> YES 2 <input type="checkbox"/> NO	1 <input type="checkbox"/> YES 2 <input type="checkbox"/> NO	
9.2. dishwasher	1 <input type="checkbox"/> YES 2 <input type="checkbox"/> NO	1 <input type="checkbox"/> YES 2 <input type="checkbox"/> NO	
9.3. microwave oven	1 <input type="checkbox"/> YES 2 <input type="checkbox"/> NO	1 <input type="checkbox"/> YES 2 <input type="checkbox"/> NO	
9.4. LCD or plasma TV set	1 <input type="checkbox"/> YES 2 <input type="checkbox"/> NO	1 <input type="checkbox"/> YES 2 <input type="checkbox"/> NO	
9.5. paid satellite or cable TV	1 <input type="checkbox"/> YES 2 <input type="checkbox"/> NO	1 <input type="checkbox"/> YES 2 <input type="checkbox"/> NO	
9.6. DVD player	1 <input type="checkbox"/> YES 2 <input type="checkbox"/> NO	1 <input type="checkbox"/> YES 2 <input type="checkbox"/> NO	
9.7. home cinema set	1 <input type="checkbox"/> YES 2 <input type="checkbox"/> NO	1 <input type="checkbox"/> YES 2 <input type="checkbox"/> NO	
9.8. summer house	1 <input type="checkbox"/> YES 2 <input type="checkbox"/> NO	1 <input type="checkbox"/> YES 2 <input type="checkbox"/> NO	
9.9. desktop computer	1 <input type="checkbox"/> YES 2 <input type="checkbox"/> NO	1 <input type="checkbox"/> YES 2 <input type="checkbox"/> NO	
9.10. portable computer (laptop, notebook, iPad, tablet)	1 <input type="checkbox"/> YES 2 <input type="checkbox"/> NO	1 <input type="checkbox"/> YES 2 <input type="checkbox"/> NO	
9.11. e-book reader	1 <input type="checkbox"/> YES 2 <input type="checkbox"/> NO	1 <input type="checkbox"/> YES 2 <input type="checkbox"/> NO	
9.12. passenger car (also semi-truck)	1 <input type="checkbox"/> YES 2 <input type="checkbox"/> NO	1 <input type="checkbox"/> YES 2 <input type="checkbox"/> NO	
9.13. Internet access from the home desktop computer, laptop or mobile phone	1 <input type="checkbox"/> YES 2 <input type="checkbox"/> NO	1 <input type="checkbox"/> YES 2 <input type="checkbox"/> NO	
9.14. landline phone	1 <input type="checkbox"/> YES 2 <input type="checkbox"/> NO	1 <input type="checkbox"/> YES 2 <input type="checkbox"/> NO	
9.15. motorboat, sailboat	1 <input type="checkbox"/> YES 2 <input type="checkbox"/> NO	1 <input type="checkbox"/> YES 2 <input type="checkbox"/> NO	
9.16. garden plot	1 <input type="checkbox"/> YES 2 <input type="checkbox"/> NO	1 <input type="checkbox"/> YES 2 <input type="checkbox"/> NO	

10. In comparison with the situation two years ago, has the material situation of your household:

- 1 worsened
- 2 improved
- 3 remained unchanged.

11. Please state to what extent you agree or disagree with the following statements.

	I completely disagree	I rather disagree	I neither agree or disagree	I rather agree	I completely agree
11.1. When shopping, the product's quality is most important to us, while its price is a secondary matter.	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>
11.2. At our home we regularly meet with many friends and relatives.	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>
11.3. We like to spend a lot of money on technical devices.	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>
11.4. We follow all the latest technical developments.	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>

12. Would you change your landline or mobile phone operator for an operator offering combined mobile, landline and Internet services? (this question is asked if there is a landline phone in the household or if the household head has a mobile phone)

- 1 no
- 2 rather not
- 3 neither yes or no
- 4 rather yes
- 5 yes

13. Since when has there been a computer (desktop computer, laptop, notebook, iPad, tablet) in your household, if any?
(enter the two last digits of the year)

G. HOUSING CONDITIONS

Now I would like to ask you about your housing conditions.

1. Does your household share your dwelling with any other household? 1 YES 2 NO
2. What is the total useable floor space of the dwelling your household lives in, in full square metres?

3. I would also like to ask you about the equipment at your dwelling. Is your dwelling equipped with:

Provide the answers for each of the following installations and devices separately, by crossing the appropriate box.

- | | |
|--|--|
| 3.1. water supply system | 1 <input type="checkbox"/> YES 2 <input type="checkbox"/> NO |
| 3.2. toilet flushed with running water | 1 <input type="checkbox"/> YES 2 <input type="checkbox"/> NO |
| 3.3. bathroom with a bathtub or a shower | 1 <input type="checkbox"/> YES 2 <input type="checkbox"/> NO |
| 3.4. hot running water | 1 <input type="checkbox"/> YES 2 <input type="checkbox"/> NO |
| 3.5. gas supply system | 1 <input type="checkbox"/> YES 2 <input type="checkbox"/> NO |
| 3.6. gas from a cylinder | 1 <input type="checkbox"/> YES 2 <input type="checkbox"/> NO |

If the household has a water supply system

4. Is the tap water potable without boiling? 1. YES 2. NO

5. How is your dwelling heated?

Choose one of the options given below by crossing the appropriate box.

- 1 collective central heating
- 2 individual central heating (using gas, coal, coke, electricity, other fuel)
- 3 fuel-fired furnaces (using coal, wood, sawdust, etc.)
- 4 other

6. Does your household have currently any overdue:

Provide the answers for each of the following payments/bills, by crossing the appropriate box.

Options: 1 – yes, for 1 month; 2 – yes, for 2 months; 3 – yes, for 3 months; 4 – yes, for 4-6 months; 5 – yes, for 7-12 months; 6 – yes, for more than 12 months; 7 – no; 8 – not applicable.

- | | |
|---------------------------------------|---|
| 6.1. payments for the dwelling (rent) | 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/> 7 <input type="checkbox"/> 8 <input type="checkbox"/> |
| 6.2. gas or electricity bills | 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/> 7 <input type="checkbox"/> 8 <input type="checkbox"/> |
| 6.3. repayment of the home loan | 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/> 7 <input type="checkbox"/> 8 <input type="checkbox"/> |

7. In comparison with the situation two years ago, have the housing conditions of your household:

Choose one of the options given below by crossing the appropriate box.

- 1 improved
- 2 deteriorated
- 3 remained unchanged.

H. EDUCATION**Now I would like to ask you about the education of your children.****NOTE: QUESTIONS 1-5 CONCERN ONLY THE HOUSEHOLDS WITH CHILDREN AGED UP TO 26**

1., 2., 3. What level of education would you like your children to attain and what are the chances this will happen?
(For each child choose one of the levels of education given below, by entering the appropriate number in the box in the column "level of education". Then, assess the child's chances of attaining the selected level of education, by entering the appropriate number in the box in the column "assessment of the chances" (show Card 2)).

level of education:

- 1 basic vocational school
- 2 profiled secondary school
- 3 technical or vocational secondary school
- 4 higher education (Bachelor's degree)
- 5 higher education (Master's degree)

assessment of the chances:

- 1 already attained
- 2 a good chance
- 3 a moderate chance
- 4 a small chance
- 5 no chance

*(Enter the answers in lines 2 and 3 in the table below.)***4., 5. Does your child use the computer and Internet at home? (show CARD 3)**

- 1 Yes, but only under supervision of other household members
- 2 Yes, he/she uses them on his/her own
- 3 No, he/she cannot use them due to an illness
- 4 No, he/she does not know how to use the computer/Internet
- 5 No, although he/she knows how to do it, there is no computer/Internet access at home
- 6 No, he/she is too young for it

(Enter the answers in lines 4 and 5 in the table below.)

1. Child's number*	1.1 <input type="checkbox"/>	2.1 <input type="checkbox"/>	3.1 <input type="checkbox"/>	4.1 <input type="checkbox"/>	5.1 <input type="checkbox"/>
2. Level of education	1.2 <input type="checkbox"/>	2.2 <input type="checkbox"/>	3.2 <input type="checkbox"/>	4.2 <input type="checkbox"/>	5.2 <input type="checkbox"/>
3. Assessment of the chances	1.3 <input type="checkbox"/>	2.3 <input type="checkbox"/>	3.3 <input type="checkbox"/>	4.3 <input type="checkbox"/>	5.3 <input type="checkbox"/>
4. Use of computer	1.4 <input type="checkbox"/>	2.4 <input type="checkbox"/>	3.4 <input type="checkbox"/>	4.4 <input type="checkbox"/>	5.4 <input type="checkbox"/>
5. Use of the Internet	1.5 <input type="checkbox"/>	2.5 <input type="checkbox"/>	3.5 <input type="checkbox"/>	4.5 <input type="checkbox"/>	5.5 <input type="checkbox"/>

** The child's number is the same as the reference number assigned to this person in part C, line 1.***NOTE: QUESTIONS 6 and 7 CONCERN ONLY THE HOUSEHOLDS WITH CHILDREN AT SCHOOL AGE
(above the reception class)**

6. During the current school year, have you – due to financial reasons – had to:

Provide the answers for each of the following decisions separately, by crossing the appropriate box.

- | | | |
|---|------------------------------|-----------------------------|
| 6.1. decide not to enrol the child on extra-curricular classes? | <input type="checkbox"/> YES | <input type="checkbox"/> NO |
| 6.2. limit or suspend the payment of school fees? | <input type="checkbox"/> YES | <input type="checkbox"/> NO |
| 6.3. stop paying for the child's meals at school? | <input type="checkbox"/> YES | <input type="checkbox"/> NO |
| 6.4. withdraw the child from any private lessons? | <input type="checkbox"/> YES | <input type="checkbox"/> NO |
| 6.5. change the school for one with lower or no fees? | <input type="checkbox"/> YES | <input type="checkbox"/> NO |
| 6.6. introduce other restrictions? | <input type="checkbox"/> YES | <input type="checkbox"/> NO |

7. In comparison with the situation two years ago, has your household's ability to meet the needs connected with the education of your children:

Choose one of the options given below by crossing the appropriate box.

- 1 declined
- 2 improved
- 3 remained unchanged.

I. SOCIAL ASSISTANCE**Now I would like to ask you about any assistance your household receives.**1. Does your household receive any external assistance? YES NO*If the household receives assistance, go to question 2, if not – go to Section J "Culture and Leisure".*

2. What is the form of assistance your household receives?

Provide the answers for each of the following forms of assistance separately, by crossing the appropriate box.

- | | | |
|------------------------------|------------------------------|-----------------------------|
| 2.1. financial | <input type="checkbox"/> YES | <input type="checkbox"/> NO |
| 2.2. in the form of goods | <input type="checkbox"/> YES | <input type="checkbox"/> NO |
| 2.3. in the form of services | <input type="checkbox"/> YES | <input type="checkbox"/> NO |

J. CULTURE AND LEISURE

Now I would like to ask you about the matters connected with culture and leisure.

1. In the last year, has any of the members of your household been unable to afford: (*The answer "NOT APPLICABLE" specifies the lack of the given need.*)

1.1. cinema

1. YES 2. NO 3. NOT APPLICABLE

1.2. theatre, opera, operetta, philharmonic concert, other concert

1. YES 2. NO 3. NOT APPLICABLE

1.3. museum or exhibition

1. YES 2. NO 3. NOT APPLICABLE

1.4. purchase of a book

1. YES 2. NO 3. NOT APPLICABLE

1.5. purchase of press (daily newspapers, weeklies, monthlies)

1. YES 2. NO 3. NOT APPLICABLE

2. How many books (approximately) are there at your home (excluding school books and manuals)?

- 1 none
- 2 up to 25 volumes
- 3 26-50 volumes
- 4 51-100 volumes
- 5 101-500 volumes
- 6 more than 500 volumes

3. Is there any musical instrument (piano, guitar, other) in your household?

1. YES 2. NO

4. – if YES, does any of the household members play it?

1. YES 2. NO

5. In comparison with the situation two years ago, has your household's ability to meet the needs connected with culture:

Choose one of the options given below by crossing the appropriate box.

- 1 declined
- 2 improved
- 3 remained unchanged

6. In the last year, have you (any adult or child) been unable to afford: (*The answer "NOT APPLICABLE" specifies the lack of the given need.*)

6.1. summer camp or other group trips for (minor) children

1. YES 2. NO, the children have participated 3. NOT APPLICABLE

6.2. holiday leave, trips for adults

1. YES 2. NO, the adults have participated 3. NOT APPLICABLE

6.3. family trips (adults and minor children)

1. YES 2. NO, the family has participated 3. NOT APPLICABLE

7. In comparison with the situation two years ago, has your household's ability to meet the needs connected with leisure:

Choose one of the options given below by crossing the appropriate box.

- 1 declined
- 2 improved
- 3 remained unchanged.

K. HEALTHCARE

Now I would like to ask you about the matters connected with health.

1. In the last year, has any member of your household used the services of:

1.1. healthcare units providing services financed by the National Health Fund

1. YES 2. NO

1.2. healthcare units providing services paid for by the patient

1. YES 2. NO

1.3. healthcare units providing services paid for by the employer (under a medical services plan or health insurance)

1. YES 2. NO

2. In the last year, has any member of your household been hospitalised:

(for reasons other than pregnancy)?

1. YES

reference number of the person(s) from part C

2. NO

If the answers to both question 1 and 2 are NO, go to question 4.

3. During the last 3 months, how much in total (in PLN) has the household spent on:

3.1. medical treatment or various medical tests in the clinics where the services were officially paid for (including also non-standard services provided by dentists and orthodontists, orthopaedic equipment, also when at least partially financed by the National Health Fund, etc.) PLN

3.2. informal payments, the so-called "gifts of gratitude", meant to secure a better or quicker care PLN

3.3. gifts being tokens of real gratitude for the received care PLN

3.4. fees in a public hospital (e.g. gifts, fees for the night care, anaesthesia, purchase of medicines in the pharmacy for an in-patient, etc.) PLN

4. Please state the total amount of expenditures incurred in the last 3 months on medicines and other pharmaceutical items connected with any illness in your household: PLN

5. In the last year, has your household experienced any of the following situations?

Provide the answers for each of the following situations separately, by crossing the appropriate box.

5.1. there has not been enough money to buy a prescribed or recommended medicine

1 YES 2 NO 3 NO SUCH NEED HAS OCCURRED

5.2. you have not been able to afford to treat your teeth

1 YES 2 NO 3 NO SUCH NEED HAS OCCURRED

5.3. you have not been able to afford dental prostheses

1 YES 2 NO 3 NO SUCH NEED HAS OCCURRED

5.4. you have not been able to afford to visit a doctor

1 YES 2 NO 3 NO SUCH NEED HAS OCCURRED

5.5. you have not been able to afford medical tests (such as laboratory tests, X-ray examination, electrocardiography)

1 YES 2 NO 3 NO SUCH NEED HAS OCCURRED

5.6. you have not been able to afford to undergo a rehabilitation treatment

1 YES 2 NO 3 NO SUCH NEED HAS OCCURRED

5.7. you have not been able to afford a stay at a sanatorium

1 YES 2 NO 3 NO SUCH NEED HAS OCCURRED

5.8. you have not been able to afford hospital treatment

1 YES 2 NO 3 NO SUCH NEED HAS OCCURRED

6. Do the Polish sanitary and epidemiological services protect us sufficiently against the health risks connected with:

scale of answers:

1. definitely yes
2. rather yes
3. rather not
4. definitely no
5. it is hard to say [NOT TO BE READ]

6.1. chemical contamination of food with pesticides or other substances (e.g. conserving substances or environmental contaminants, such as mercury)

6.2. bacteria in food (e.g. salmonella, botulinum toxin)

6.3. new technologies used in food production (e.g. genetic modification of plants, cloning of animals, nanotechnology)

6.4. animal diseases transmissible to human beings, such as swine influenza, avian influenza or BSE (mad cows disease)

6.5. other virus diseases against which vaccines exist

6.6. contamination at bathing sites

6.7. improper sanitary and hygienic conditions at the leisure and catering sites

7. If an additional health insurance policy guaranteed an improved access to medical services and their higher quality, would your household be willing to buy such an insurance policy?

1 NO

2 YES, up to PLN 100 monthly

3 YES, also above PLN 100 monthly

8. In comparison with the situation two years ago, has the ability of your household to meet the health needs:

Choose one of the options given below by crossing the appropriate box.

1 declined

2 improved

3 remained unchanged

L. INCOME SITUATION AND INCOME MANAGEMENT

Now I would like to ask you about your household's financial situation and income. Please take into account the income earned by all persons from your household (from any source), which to any extent is added to the common budget.

1. What was the net income (in PLN) of your household last month?

in the case of refusal to answer – please specify the range (show Card 4)

2. What was the average monthly net income (in PLN) of your household in 2010? in the case of refusal to answer – please specify the range (show Card 4)

3. Is your household able to make ends meet with the current net income?

Choose one of the options given below by crossing the appropriate box.

1 with great difficulty

2 with difficulty

3 with some difficulty

4 rather easily

5 easily

4. What is the lowest monthly net income (in PLN) needed to make ends meet for your household?

PLN

5. Which of the following statements characterises best the income management in your household? *Show CARD 5, ask to choose one of the options and cross the appropriate box.*

- 1 we can afford everything and make savings for the future
- 2 we can afford everything without any particular problems but we do not make savings for the future
- 3 we live thrifitly and thus can afford everything
- 4 we live very thrifitly in order to save money for important purchases
- 5 we can afford only the cheapest food, clothes and rent, and (if the household is in debt) – for the loan repayment
- 6 we can afford the cheapest food, clothes and rent but we have no money to repay the loan
- 7 we can afford the cheapest food and clothes but we have no money to pay the rent
- 8 we can afford the cheapest food but we have no money to buy clothes
- 9 we cannot afford even the cheapest food

6. Does the regular income of your household allow you to meet the everyday needs?

1. YES 2. NO

If the regular income of the household allows to meet the everyday needs, go to question 7, if not – go to question 8.

7. What does your household do to meet the everyday needs?

Provide the answers for each of the following solutions, by crossing the appropriate box.

7.1. uses the savings	1. <input type="checkbox"/> YES 2. <input type="checkbox"/> NO
7.2. sells or pawns its property (material goods)	1. <input type="checkbox"/> YES 2. <input type="checkbox"/> NO
7.3. limits the everyday needs	1. <input type="checkbox"/> YES 2. <input type="checkbox"/> NO
7.4 takes out loans and credits	1. <input type="checkbox"/> YES 2. <input type="checkbox"/> NO
7.5. uses the assistance of relatives	1. <input type="checkbox"/> YES 2. <input type="checkbox"/> NO
7.6. uses the assistance of the Church/Caritas	1. <input type="checkbox"/> YES 2. <input type="checkbox"/> NO
7.7. applies for social assistance	1. <input type="checkbox"/> YES 2. <input type="checkbox"/> NO
7.8. a household member takes up an additional job	1. <input type="checkbox"/> YES 2. <input type="checkbox"/> NO
7.9. other actions	1. <input type="checkbox"/> YES 2. <input type="checkbox"/> NO
7.10. does not take any actions	1. <input type="checkbox"/> YES 2. <input type="checkbox"/> NO

8. How does your household pay regular telephone, television or electricity bills (or all other bills with a fixed amount)?

Mark all methods used.

- 8.1. via direct debit through the bank account
- 8.2. via an online bank account
- 8.3. via a bank account at a bank unit
- 8.4. at the post office
- 8.5. at a cash register where bills can be paid (e.g. at the supermarket)
- 8.6. directly at the provider's customer service point
- 8.7. by other method
- 8.8. no such bills are paid

If the household does not use direct debit, answer 8.1 should not be marked.

9. Why does the household not use the direct debit service to pay its bills?

If the household has a bank account, show CARD 6, ask to choose one of the options and cross the appropriate box.

- 9.1. we have no bank account
- 9.2. the method we use now is more convenient
- 9.3. we pay the bills when we have money, an automatic payment would constitute a problem
- 9.4. we pay few bills, we see no point in setting up such a service
- 9.5. we did not know there is such a service
- 9.6. we do not know how to set up this service
- 9.7. activation of the service is too complicated
- 9.8. it costs too much
- 9.9. we do not trust that the payment will be made on time
- 9.10. we fear we will lose control over our payments
- 9.11. we fear the invoice may be issued for a wrong amount
- 9.12. the providers do not offer the possibility to pay by debit service

If from questions 30-34 in part C it results that any of the household members uses bank services

10. In the last year, has any of the household members stopped using the services at any bank
(bank and not a branch)?

1. YES 2. NO

11. -- If YES, what was the reason? Show CARD 7, ask to choose one of the options and cross the appropriate box.

- 11.1. we do not trust this bank any longer
- 11.2. we were not satisfied with the customer service (at the branch, over the phone, online)
- 11.3. the location of the branch/cash machine was no longer convenient for us (we moved, changed the place of work, etc.)
- 11.4. another bank presented a better offer
- 11.5. we received a negative credit decision
- 11.6. personal reasons (opening a joint account with a spouse, going abroad, etc.)
- 11.7. other reasons
- 11.8. it is hard to say, refusal to answer [NOT ON THE CARD, NOT TO BE READ]

If from questions 30-34 in part C it results that none of the household members uses bank services

12. Why does your household not use any bank services? Show CARD 8, ask to choose one of the options and cross the appropriate box.

- 12.1. we do not trust banks
- 12.2. the bank/cash machine is too far away
- 12.3. we have no regular income/savings
- 12.4. bank services are too expensive
- 12.5. we received a negative credit decision
- 12.6. other reasons
- 12.7. it is hard to say, refusal to answer [NOT ON THE CARD, NOT TO BE READ]

13. In comparison with the situation two years ago, has the income situation of your household:

Choose one of the options given below by crossing the appropriate box.

- 1 worsened.....
- 2 improved
- 3 remained unchanged

M. COMPUTER AND INTERNET**Now I would like to ask you about the matters connected with the Internet.*****Question is 1 for all households.***

1. At the moment more and more things can be done through the Internet. Below you will find a list of administrative matters which can be dealt with through the Internet. In what manner would you like to deal with these matters if the online method was also available?

Show CARD 9. Mark the answers by crossing the appropriate box next to the digits from 1 to 4. The specific digits mean:

1. I do not need the Internet to deal with this matter
2. I would like to use the Internet only for finding the information or downloading the necessary forms and then proceed with the matter in a traditional manner.
3. I would like to deal with the matter entirely via the Internet (including the payments).
4. I do not expect I will have to deal with this matter.

1.1. Tax declarations	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>
1.2. Services of the Labour Office concerning the job offers	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>
1.3. Matters connected with social benefits (e.g. unemployment benefits, care benefits, sickness benefits, scholarships)	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>
1.4. Matters connected with personal documents (such as passports, identity documents, driving licences)	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>
1.5. Vehicle registration	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>
1.6. Construction permits	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>
1.7. Police, city guards, public prosecutor's office – reporting complaints and crimes	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>
1.8. Access to public libraries (browsing catalogues, borrowing books)	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>
1.9. Ordering and receiving certificates or copies from civil status records (e.g. birth certificates, marriage certificates)	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>
1.10. Registration for nurseries, kindergartens, schools and higher education schools	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>
1.11. Change of the permanent address	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>
1.12. Administrative matters connected with business activity	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>
1.13. Health-related services (e.g. information on the services available in the public healthcare units, on the waiting time for a visit, admission to a hospital or a sanatorium, dates and places of health services provision)	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>
1.14. Matters connected with religious faith and activity of the Church	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>
1.15. Other administrative matters (in courts, gmina, poviat, voivodeship or central offices)	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>

Questions 2, 3 and 4 are asked to the households with a computer and Internet access (answer "YES" to question F. 9.13.)

2. For how long have you had the Internet access at home? Please specify the connection year.
3. How do the members of your household connect to the Internet at home? Show CARD 10, more than one answer may be checked, by crossing the appropriate boxes.

- 3.1. dial-up access (the telephone and Internet cannot be used at the same time)
- 3.2. permanent connection via a landline phone operator – neostrada
- 3.3. permanent connection via other landline phone operator – (netia, dialog, etc.)
- 3.4. permanent connection through a cable TV provider
- 3.5. other types of permanent connection, such as a local area network, local provider or shared connection in the neighbourhood
- 3.6. permanent connection through a mobile network, such as Orange Free, Blueconnect, iPlus, Play Online, Aster Mobile
- 3.7. access through a mobile phone (modem in the mobile phone)
- 3.8. other

4. If there is a permanent connection in the household, what is its speed? (kb/s read as kilobytes per second; Mb/s read as megabytes per second. If the speed varies depending on the time of day, ask about the maximum speed stated in the contract with the provider.)

- | | | |
|---|---|--|
| 1 <input type="checkbox"/> up to 144 kb/s | 5 <input type="checkbox"/> 6Mb/s | 9 <input type="checkbox"/> it is hard to say |
| 2 <input type="checkbox"/> 512 kb/s | 6 <input type="checkbox"/> 7-10Mb/s | |
| 3 <input type="checkbox"/> 1Mb/s | 7 <input type="checkbox"/> 11-20Mb/s | |
| 4 <input type="checkbox"/> 2Mb/s | 8 <input type="checkbox"/> above 20Mb/s | |

Question 5 is asked to the households without Internet access (answer "NO" to question F.9.13.)

5. Why is there no Internet access in your household? *Show CARD 11, up to 3 answers may be checked, by crossing the appropriate boxes.*

1. no appropriate equipment
2. no technical possibility of using a permanent Internet connection
3. sufficient possibility of using the Internet elsewhere
4. we do not need the Internet
5. there is nothing interesting on the Internet
6. privacy and security reasons
7. the Internet may be harmful, it may deprave the children, consume time
8. the costs of access are too high
9. no appropriate skills to use the Internet
10. other reasons
11. we plan to set up the access this year

THANK YOU FOR YOUR TIME.

1.2. Individual questionnaire

Subsequent number of the questionnaire in the voivodeship (the same as in Part I)

COUNCIL FOR SOCIAL MONITORING

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SOCIAL DIAGNOSIS 2011

An independent survey of the conditions and quality of life in Poland

PART II, individual

SEX

Identification number of the household (the same as in Part I/C)

Reference number of the person (to be copied from Part I/C) fixed number (to be copied from Part I/C)

Name (to be copied from Part I/C)

People differ between each other. They live in various conditions, they react to everyday events in a different manner, and they have varied ways to deal with what life brings.

This questionnaire concerns your personal perception of your own life. The majority of questions should be interesting for you, some of them may seem boring and tiresome but many will be easy to answer – after all it is your life they concern; although some of them may prove to be difficult as well. Please answer them the best way you can.

Sometimes you may have the impression that certain topics reappear and the same questions are asked, only in a changed manner. And you will be right. We are searching for the best way to ask questions. Do not be surprised if we jump from topic to topic – the questions in the sets have been listed randomly.

You may be sure you answers will remain confidential. All answers will be used only for scientific purposes as part of collective statistical analyses.

In the case of some questions various possible answers may be given to choose from. Please mark the one which describes your situation best. In some cases more than one answer can be checked. If the question has no ready answers to choose from, please enter the appropriate information in the indicated space.

We kindly ask you to fill in this questionnaire on your own, without any help from other family members. We would like to learn about your individual assessments and feelings and not the opinions discussed with other persons. If you have any problems with answering any of the questions, please ask the interviewer for help.

INSTRUCTIONS

In the questions where one or more answers may be selected please mark your choice by crossing the appropriate box, in the following manner: .

In the questions where your assessment should be given, please enter the digit matching your assessment in the box. If the scale of assessment for such questions looks as the one below

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.

1. Your **date of birth**
 day month year

2. What in your opinion is the **most important condition of a successful, happy life** (*PLEASE FIRST READ THROUGH ALL THE ANSWERS AND THEN CHOOSE NO MORE THAN THREE, by crossing the appropriate boxes*):

- 1 MONEY
- 2 CHILDREN
- 3 SUCCESSFUL MARRIAGE
- 4 WORK
- 5 FRIENDS
- 6 PROVIDENCE, GOD
- 7 CHEERFULNESS, OPTIMISM
- 8 HONESTY
- 9 KINDNESS AND BEING RESPECTED
- 10 FREEDOM
- 11 GOOD HEALTH
- 12 EDUCATION
- 13 STRONG PERSONALITY
- 14 OTHER

3. How do you perceive your entire life? Could you say it was... (*please cross the appropriate box*)

- 1 DELIGHTED
- 2 PLEASED
- 3 MOSTLY SATISFYING
- 4 MIXED
- 5 MOSTLY DISSATISFYING
- 6 UNHAPPY
- 7 TERRIBLE

4. When was life easier for you – before 1989 or at present?

- 1 life was easier for me before 1989
- 2 at present life is easier for me
- 3 it is hard to say
- 4 I am too young to remember the times before 1989

In the recent months: ("NOT APPLICABLE" means unmarried)

5. Your husband's expectations towards you have been so high you have not been able to meet them
 1 OFTEN 2 ONCE OR TWICE 3 NEVER 4 NOT APPLICABLE

6. Your husband has spent your shared money in a careless manner
 1 OFTEN 2 ONCE OR TWICE 3 NEVER 4 NOT APPLICABLE

7. Your husband's problems have worried you and made your life harder
 1 OFTEN 2 ONCE OR TWICE 3 NEVER 4 NOT APPLICABLE

In the recent months: ("NOT APPLICABLE" means no financially dependent children)				
8. You have had to listen to some complaints concerning your child/children (e.g. at school, from neighbours or other parents) <input type="checkbox"/> OFTEN <input type="checkbox"/> ONCE OR TWICE <input type="checkbox"/> NEVER <input type="checkbox"/> NOT APPLICABLE				
9. You have incurred some costs as a result of your child's behaviour <input type="checkbox"/> OFTEN <input type="checkbox"/> ONCE OR TWICE <input type="checkbox"/> NEVER <input type="checkbox"/> NOT APPLICABLE				
10. Your child has disregarded you and your help, advice and instructions <input type="checkbox"/> OFTEN <input type="checkbox"/> ONCE OR TWICE <input type="checkbox"/> NEVER <input type="checkbox"/> NOT APPLICABLE				
11. You have felt you are losing control over your child/children <input type="checkbox"/> OFTEN <input type="checkbox"/> ONCE OR TWICE <input type="checkbox"/> NEVER <input type="checkbox"/> NOT APPLICABLE				
12. You have spent too little time with your child <input type="checkbox"/> OFTEN <input type="checkbox"/> ONCE OR TWICE <input type="checkbox"/> NEVER <input type="checkbox"/> NOT APPLICABLE				

In the recent months:				
13. You have felt your source of income is uncertain and unstable <input type="checkbox"/> OFTEN <input type="checkbox"/> ONCE OR TWICE <input type="checkbox"/> NEVER <input type="checkbox"/> NOT APPLICABLE (no income)				
14. Your financial problems have worried you and made your life harder <input type="checkbox"/> OFTEN <input type="checkbox"/> ONCE OR TWICE <input type="checkbox"/> NEVER				

In the recent months: ("NOT APPLICABLE" means no paid job)				
15. You have felt your work is too tiresome, dirty or dangerous <input type="checkbox"/> OFTEN <input type="checkbox"/> ONCE OR TWICE <input type="checkbox"/> NEVER <input type="checkbox"/> NOT APPLICABLE				
16. You have felt overburdened with work duties which you have been unable to cope with <input type="checkbox"/> OFTEN <input type="checkbox"/> ONCE OR TWICE <input type="checkbox"/> NEVER <input type="checkbox"/> NOT APPLICABLE				
17. You have been unfairly treated by others at work <input type="checkbox"/> OFTEN <input type="checkbox"/> ONCE OR TWICE <input type="checkbox"/> NEVER <input type="checkbox"/> NOT APPLICABLE				

In the recent months:				
18. You have felt that the place you live in is too crowded, for instance, that there are too many persons living in your apartment, the neighbouring apartments or in the entire building <input type="checkbox"/> OFTEN <input type="checkbox"/> ONCE OR TWICE <input type="checkbox"/> NEVER				
19. You have feared because of crime, drug addiction and hooliganism in your district, housing estate or neighbourhood <input type="checkbox"/> OFTEN <input type="checkbox"/> ONCE OR TWICE <input type="checkbox"/> NEVER				
20. The problems connected with your neighbours or other persons in the neighbourhood have poisoned your life <input type="checkbox"/> OFTEN <input type="checkbox"/> ONCE OR TWICE <input type="checkbox"/> NEVER				
21. You have been annoyed with the decisions and actions taken by the local authorities <input type="checkbox"/> OFTEN <input type="checkbox"/> ONCE OR TWICE <input type="checkbox"/> NEVER				

In the recent months:				
22. You have suffered from ailments, such as bones aching or shortness of breath, etc., which has made it difficult for you to leave home, climb the stairs, etc. <input type="checkbox"/> OFTEN <input type="checkbox"/> ONCE OR TWICE <input type="checkbox"/> NEVER				
23. Your health problems have made it difficult for you to perform everyday activities or to take part in other activities <input type="checkbox"/> OFTEN <input type="checkbox"/> ONCE OR TWICE <input type="checkbox"/> NEVER				

In the recent months:

24. You have dealt with some administrative matter

1 YES 2 NO (if the answer is "NO", go to question 28)

25. You have been unable to deal with an administrative matter in an efficient, quick and easy manner

1 OFTEN 2 ONCE OR TWICE 3 NEVER

26. You have had to use connections or other ways to deal with some formal matter

1 OFTEN 2 ONCE OR TWICE 3 NEVER

27. You have felt entirely helpless and humiliated while dealing with some formal matter

1 OFTEN 2 ONCE OR TWICE 3 NEVER28 Did you vote in the last self-government elections in 2010? 1 YES 2 NO**29. What, in your opinion, is most important in life?**

1. fun, well-being, lack of stress
 2. sense of purpose, achieving important goals despite difficulties, pain and sacrifice

In the last year, have you...?30. started a better paid or an additional job 1 YES 2 NO31. invested any money in production, trade or services 1 YES 2 NO32. earned money in connection with the stocks, bonds or participation units in some fund
1 YES 2 NO33. gained new qualifications or skills in order to have a higher salary
1 YES 2 NO

34. Do you place bets (e.g. in games such as LOTTO, horse races, sports tournaments, etc.)?

1. YES, at least once a month 2. YES, at times 3. NO35. Considering all, **how would you assess your life in the recent times** – would you say you are...:

- 1 VERY HAPPY
 2 RATHER HAPPY
 3 RATHER UNHAPPY
 4 UNHAPPY

36. In the last year, have you used the services of healthcare units?36.1. financed by the National Health Fund 1 YES 2 NO36.2. paid for from own pocket 1 YES 2 NO36.3. paid for by the employer (under a medical services plan or health insurance)
1 YES 2 NO

37. In the recent months, how often have you been so depressed you have thought about suicide?

- 1 VERY OFTEN
 2 RATHER OFTEN
 3 RARELY
 4 NEVER

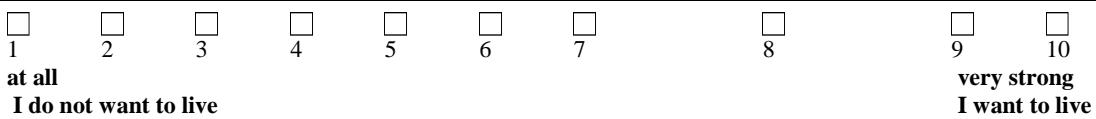
38. Do you feel loved and trusted? 1 YES 2 NO

39. On average, how often in a month do you take part in a church service or other religious meetings? (if less often than once in a month, please enter 0)

times a month

40. How many persons do you consider to be your friends?

41. At present, how strong is your willingness to live? (please cross the appropriate box on the scale below)



42. Do you feel lonely, though you would prefer not to? 1 YES 2 NO

43. In your opinion, were the reforms in Poland after 1989 in general successful or unsuccessful?

- 1 successful
- 2 unsuccessful
- 3 it is hard to say

44. Do you smoke? 1 YES 2 NO

45. — if YES, how many cigarettes a day do you smoke on average? cigarettes

46. — if NO, have you ever smoked? 1 YES 2 NO

47. During the last two years, have you been involved in any actions for the benefit of your local community (gmina, housing estate, town or neighbourhood)?

1 YES 2 NO

48. Please specify, how you usually react to problems or difficult situations in your life. (more than one answer may be checked, by crossing the appropriate boxes)

- 48.1. I seek advice and help from others
- 48.2. I pull myself together and start to act
- 48.3. I drink alcohol
- 48.4. I console myself that it could have been worse or that other have worse problems
- 48.5. I give up, I do not know what to do
- 48.6. I take tranquillisers
- 48.7. I pray to God for help
- 48.8. I do other things which help me forget about my problems and put me in a better mood

49. What was the educational attainment of your father (or main guardian) when you were 14?

- 1 primary not completed
- 2 primary
- 3 vocational
- 4 secondary not completed
- 5 secondary vocational
- 6 secondary general
- 7 higher not completed (including post-secondary)
- 8 higher
- 9 I do not know

50. During the last year, have you participated in any public meeting (outside your workplace)?

1 YES 2 NO

51. During the last year, have you performed unpaid work or services for persons outside the family or for a social organisation ?

1 YES 2 NO

52. Are you a member of any organisations, associations, parties, committees, councils, religious groups or clubs?

- 1 YES, one
2 YES, two
3 YES, three or more
4 NO

53. — if YES, have you hold any roles in such organisations? 1 YES 2 NO

54. Do you use a computer at work, at home or in any other place, at least from time to time?
1 YES 2 NO

55. How tall are you? centimetres

56. What is your weight? kg

57. In the boxes separated with horizontal lines below (N, O, P, etc.) there are various categories of feelings and behaviours. Read the four statements in each point carefully and then choose one which describes best your feelings and beliefs during the last month.

Please mark your choice by crossing the appropriate box (next to 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. 0. 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.

58. Below you will find several statements. Please specify to what extent these statements match your beliefs and attitudes. Provide your opinions by entering the selected digit in the appropriate box.

The specific digits mean:

- 1 - DEFINITELY YES
- 2 - YES
- 3 - RATHER YES
- 4 - NEITHER YES NOR NOT
- 5 - RATHER NOT
- 6 - NO
- 7 - DEFINITELY NOT

- 58.1. I admire people who have expensive houses, cars and clothes.
58.2. Despite some painful experiences, my life has sense and a great value.
58.3. In life the most important thing is to have a lot of fun.
58.4. The measure of a successful life is the possession of various material goods.
58.5. I like having things which others may be jealous of.
58.6. I like buying things which have no practical purpose.
58.7. Shopping itself gives me a lot of joy.
58.8. I have a lot of energy.
58.9. People mostly try to help others.
58.10. Homosexuals should be allowed to live according to their beliefs.
58.11. A true patriot should not speak ill of Poland and the Polish people.
58.12. The situation in the country would be better, if we did not care so much of treating everybody equally
58.13. In our country foreigners have too much say.
58.14. Some people are just more worthy than others
58.15. I would like to look good and attractive.
58.16. In an ideal world, all nations would be equal.
58.17. Material goods are very important to me.
58.18. We should do our best to treat people equally
58.19. I want to make new friends.
58.20. Some groups of persons are not worthy of respect.
58.21. We should seek to make the income of all persons more or less equal.
58.22. You cannot raise children well without corporal punishment.
58.23. Every man is the architect of his own fortune.

59. Considering all, do you think the last year was a good one for you?

1 YES 2 NO

60. Who or what had impact on the last year being a good one or a bad one for you? (more than one answer may be checked)

- 60.1. authorities
60.2. myself
60.3. other people
60.4. fate (providence)

61. Below you will find a list of some ailments. Please specify whether you suffered from them LAST MONTH.

If you did not suffer from a particular ailment last month, please cross the box in the column "I did not". If you suffered from a particular ailment for less than half of the month, cross the box in the middle column. If you suffered from a particular ailment for at least half of the month, please cross the box in the last column.

IN THE PAST MONTH:	I did not suffer	I suffered less than 15 days	I suffered at least for one half of the month
61.1. strong headaches	1□	2□	3□
62.2. stomach pains or flatulence	1□	2□	3□
61.3. pain or tension in the neck or arm muscles	1□	2□	3□
61.4. chest or heart pains	1□	2□	3□
61.5. dry mouth or throat	1□	2□	3□
61.6. attacks of excessive sweating	1□	2□	3□
61.7. shortness of breath	1□	2□	3□
61.8. shortness of breath	1□	2□	3□
61.9. accelerated heartbeat (palpitation)	1□	2□	3□
61.10. shivers or convulsions	1□	2□	3□
61.11. pressure on the bladder and more frequent urinating	1□	2□	3□
61.12. a feeling tiredness not associated with work	1□	2□	3□
61.13. constipation	1□	2□	3□
61.14. nosebleeds	1□	2□	3□
61.15. sudden changes of blood pressure	1□	2□	3□

62. 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 cannot be too careful in dealing with people
 3 □ it is hard to say

63. Please assess the specific areas of your life and state to what extent you are satisfied with them. Please give your answers by crossing the box next to the appropriate digit for the given area of life. The specific digits mean:

- 1 – VERY SATISFIED
 2 – SATISFIED
 3 – RATHER SATISFIED
 4 – RATHER NOT SATISFIED
 5 – NOT SATISFIED
 6 – VERY NOT SATISFIED
 7 – not applicable

To what extent are you satisfied with:

63.1. your relations with your close family members	1□ 2□ 3□ 4□ 5□ 6□ 7□
63.2. the financial situation of your family	1□ 2□ 3□ 4□ 5□ 6□ 7□
63.3. your relations with friends (a group of friends)	1□ 2□ 3□ 4□ 5□ 6□ 7□
63.4. your health condition	1□ 2□ 3□ 4□ 5□ 6□ 7□
63.5. your life achievements	1□ 2□ 3□ 4□ 5□ 6□ 7□
63.6. the situation in the country	1□ 2□ 3□ 4□ 5□ 6□ 7□
63.7. your housing conditions	1□ 2□ 3□ 4□ 5□ 6□ 7□
63.8. the town/city you live in	1□ 2□ 3□ 4□ 5□ 6□ 7□
63.9. your future prospects	1□ 2□ 3□ 4□ 5□ 6□ 7□
63.10. your sexual life	1□ 2□ 3□ 4□ 5□ 6□ 7□
63.11. your education	1□ 2□ 3□ 4□ 5□ 6□ 7□
63.12. the manner in which you spend your free time	1□ 2□ 3□ 4□ 5□ 6□ 7□
63.13. your work	1□ 2□ 3□ 4□ 5□ 6□ 7□
63.14. children	1□ 2□ 3□ 4□ 5□ 6□ 7□
63.15. marriage	1□ 2□ 3□ 4□ 5□ 6□ 7□
63.16. safety in your town/city of residence	1□ 2□ 3□ 4□ 5□ 6□ 7□

64. With which of the following statements on democracy do you agree most?

- 1 democracy is a superior form of governance
 2 sometimes non-democratic rule is better than democracy
 3 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

65. During the last three months, your own (personal) monthly net income (less taxes) has on average amounted to:PLN **66. What monthly net income (less taxes) do you expect to receive in two years?**PLN **67. Below you will find a list of various behaviours. Some of them may concern you directly, others may concern only other people. Please specify your attitude towards the behaviours listed below.***Mark the answers by entering the appropriate number (1-5) into the boxes next to each example. The specific digits mean:*

- 1 - I DO NOT CARE 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

Do you care if:

- 67.1. someone pays lower taxes than he/she should
 67.2. someone avoids paying the fares for the public transport (e.g. buses, trains)
 67.3. someone unjustly draws unemployment benefit
 67.4. someone does not pay the rent for the apartment (though he/she is able to)
 67.5. someone unjustly receives disability benefits (on the grounds of being unable to work)
 67.6. someone files an insurance claim under false pretences

68. We would like to know how many persons you contact with regularly for social and personal reasons (at least several times a year). Please give the approximate number of such persons:

68.1. among close family members

68.2. among friends

68.3. among acquaintances (work/school colleagues, neighbours and others)

69. How many of them live in the same town/city or within 10 km from you? **70. In the last week, how much time on average have you spent daily watching TV?**

- 1 I do not watch TV
 2 less than an hour
 3 one to two hours
 4 two to three hours
 5 three to four hours
 6 more than four hours

71. In the last month, how many times have you gone to:

- 71.1. cinema, theatre, concert
 71.2. restaurant, cafe, pub
 71.3. meeting with friends

IN THE LAST YEAR, have you:72. visited a psychologist (psychiatrist) YES NO73. drunk too much alcohol YES NO74. tried drugs/designer drugs YES NO75. lost a close person YES NO76. been unable to find a job after graduation YES NO NOT APPLICABLE77. been moved to a lower position at work YES NO NOT APPLICABLE

78. been omitted in promotions at work	<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> NOT APPLICABLE
79. been promoted at work	<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> NOT APPLICABLE
80. had serious problems with your superior	<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> NOT APPLICABLE
81. started your own business	<input type="checkbox"/> YES <input type="checkbox"/> NO
82. lost a lot of money doing business	<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> NOT APPLICABLE
83. been robbed	<input type="checkbox"/> YES <input type="checkbox"/> NO
84. been mugged and beaten	<input type="checkbox"/> YES <input type="checkbox"/> NO
85. your home or car have been broken into	<input type="checkbox"/> YES <input type="checkbox"/> NO
86. been charged with a criminal offence	<input type="checkbox"/> YES <input type="checkbox"/> NO
87. been detained by the police	<input type="checkbox"/> YES <input type="checkbox"/> NO
88. been accused in a civil court case	<input type="checkbox"/> YES <input type="checkbox"/> NO
89. caused a traffic collision or accident	<input type="checkbox"/> YES <input type="checkbox"/> NO
90. a close acquaintance of yours has been arrested or has broken the law	<input type="checkbox"/> YES <input type="checkbox"/> NO
91. been discriminated against on the basis of your nationality, appearance, beliefs or other reasons	<input type="checkbox"/> YES <input type="checkbox"/> NO
92. your apartment (house) has been seriously damaged	<input type="checkbox"/> YES <input type="checkbox"/> NO
93. had your apartment (house) renovated	<input type="checkbox"/> YES <input type="checkbox"/> NO
94. had problems with the owner or administrator of the building you live in (lived in)	<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> NOT APPLICABLE
95. been seriously ill	<input type="checkbox"/> YES <input type="checkbox"/> NO

96. Do you plan to go abroad within the next two years, in order to work?

- 1 YES, to the European Union country – state which one.....
 2 YES, to a country outside the European Union – state which one.....
 3 NO

97. — if YES, for how long?

- 1 less than a year
 2 one to two years
 3 more than two years
 4 forever
 5 it depends on how I will be doing there

98. Do you trust:	
98.1. commercial banks?	1 <input type="checkbox"/> YES 2 <input type="checkbox"/> NO 3 <input type="checkbox"/> I HAVE NO OPINION
98.2. National Bank of Poland	1 <input type="checkbox"/> YES 2 <input type="checkbox"/> NO 3 <input type="checkbox"/> I HAVE NO OPINION
98.3. Sejm	1 <input type="checkbox"/> YES 2 <input type="checkbox"/> NO 3 <input type="checkbox"/> I HAVE NO OPINION
98.4. President	1 <input type="checkbox"/> YES 2 <input type="checkbox"/> NO 3 <input type="checkbox"/> I HAVE NO OPINION
98.5. European Parliament	1 <input type="checkbox"/> YES 2 <input type="checkbox"/> NO 3 <input type="checkbox"/> I HAVE NO OPINION
98.6. police	1 <input type="checkbox"/> YES 2 <input type="checkbox"/> NO 3 <input type="checkbox"/> I HAVE NO OPINION
98.7. government	1 <input type="checkbox"/> YES 2 <input type="checkbox"/> NO 3 <input type="checkbox"/> I HAVE NO OPINION
98.1. Social Insurance Institution (ZUS)	1 <input type="checkbox"/> YES 2 <input type="checkbox"/> NO 3 <input type="checkbox"/> I HAVE NO OPINION
98.9. stock exchange	1 <input type="checkbox"/> YES 2 <input type="checkbox"/> NO 3 <input type="checkbox"/> I HAVE NO OPINION
98.10. Open Pension Funds (OFE)	1 <input type="checkbox"/> YES 2 <input type="checkbox"/> NO 3 <input type="checkbox"/> I HAVE NO OPINION
98.11. courts	1 <input type="checkbox"/> YES 2 <input type="checkbox"/> NO 3 <input type="checkbox"/> I HAVE NO OPINION
98.12. insurance companies	1 <input type="checkbox"/> YES 2 <input type="checkbox"/> NO 3 <input type="checkbox"/> I HAVE NO OPINION
98.13. own family members	1 <input type="checkbox"/> YES 2 <input type="checkbox"/> NO 3 <input type="checkbox"/> I HAVE NO OPINION
98.14. neighbours	1 <input type="checkbox"/> YES 2 <input type="checkbox"/> NO 3 <input type="checkbox"/> I HAVE NO OPINION

99. Do you think that social campaigns and other actions aimed at health improvement or protection among the Polish people – such as anti-smoking campaign, campaign against designer drugs or promotion of vaccines – are effective and change the behaviour of the Polish people?

1. definitely yes
2. rather yes
3. rather no
4. definitely no
5. it is hard to say / I do not know

100. Do you practise any sport or physical activity?

- 100.1. no, I do not practise any sport or physical activity
- 100.2. aerobics
- 100.3. running/jogging/nordic walking
- 100.4. gym
- 100.5. cycling
- 100.6. skiing or other winter sports
- 100.7. swimming
- 100.8. football or other team sports
- 100.9. yoga
- 100.10. martial arts
- 100.11. other

101. In your opinion, which features distinguish a reliable bank?

(you may check no more than 3 answers)

- 1 many years' presence on the market
- 2 being a Polish bank
- 3 being a foreign bank
- 4 being a private bank
- 5 being a state-owned bank
- 6 high quality customer service
- 7 individual consulting
- 8 the most functional online service
- 9 a consultant whom I have known for many years
- 10 recommendations from friends
- 11 frequent advertisements on TV and in other media
- 12 advertisements with famous persons
- 13 large number of units
- 14 vast product range

102. What in your opinion are the tasks of the National Bank of Poland? (you may mark several answers)

- 1 establishing the currency exchange rate of PLN
- 2 issue of coins and banknotes in Poland
- 3 dealing with the bank accounts of the ministries and central offices
- 4 fighting inflation
- 5 economic education
- 6 financing the State budget
- 7 managing Poland's currency reserves
- 8 supervising the banking sector
9. I do not know what the tasks of the National Bank of Poland are

103. Have you ever heard about proximity payments, such as

1. Yes, I use a proximity payment card.
2. Yes, I know how they work but I do not have such a card.
3. No

-104 – if answer 2 was selected: **Would like to make proximity payments via a mobile phone?**

1. Yes
2. No

105. Which of the causes of the Polish airplane's catastrophe in Smoleńsk on 10 April 2010 is in your opinion most probable? (please mark no more than two of the following causes)

- 1 the pilots' or flight controllers' error
- 2 attack or conspiracy against the Polish president
- 3 the pilots being under pressure
- 4 general chaos in the institutions responsible for the flight
- 5 other causes
- 6 it is hard to say

106. Which of the political parties do you sympathise with most? (in the brackets – the name of the party leader)

- 1 Law and Justice, PiS (Jarosław Kaczyński)
- 2 Polish People's Party, PSL (Waldemar Pawlak)
- 3 Democratic Left Alliance, SLD (Grzegorz Napieralski)
- 4 Poland Comes First, PJN (Joanna Kluzik-Rostkowska)
- 5 Civic Platform, PO (Donald Tusk)
- 6 other
- 7 none
- 8 it is hard to say

107.1, 107.2. Do you think that conversion of PLN into EUR in the coming years would be beneficial for Poland and for you?

	for Poland	for me
definitely yes	1. <input type="checkbox"/>	1. <input type="checkbox"/>
rather yes	2. <input type="checkbox"/>	2. <input type="checkbox"/>
rather no	3. <input type="checkbox"/>	3. <input type="checkbox"/>
definitely no	4. <input type="checkbox"/>	4. <input type="checkbox"/>
it is hard to say	5. <input type="checkbox"/>	5. <input type="checkbox"/>

The next pages include the sets of questions addressed only to certain persons. Please check which conditions you meet and go to the appropriate parts of the questionnaire:

the persons who have ever worked professionally (also those who work at the moment) – question 108

the persons who work professionally at the moment – questions 109-115

the persons who changed their job in the period 2007-2011, irrespective of whether they work at present or not – questions 116-117

the persons who did not work professionally in the period 2007-2011 – questions 118-119

the persons who have a bank account – questions 120-121

the persons who have ever lived with a partner for at least three months – question 122

the persons having children who at present live with them – question 123

the persons who use a computer – questions 124-125

the persons who use the Internet – questions 126-133

the persons who are self-employed, with a registered business activity – questions 134-137

FOR THE PERSONS WHO HAVE EVER WORKED PROFESSIONALLY (ALSO THOSE WHO WORK AT THE MOMENT)

108. Think about all the periods when you worked professionally. Please enter the starting and the ending year of such subsequent periods in the columns. End of work means there was a pause in employment longer than 3 months (maternity leave, unemployment, education, etc.). If you were on maternity leave (a leave of 4-5 months directly after a child birth), please treat this period as a period of professional work. If you took a child care leave (an additional leave which may be used after the maternity leave, of up to 3 years), please treat this period also as a period without professional work (in the case of more than 6 such periods, please describe only the last 6).						
Subsequent number of professional work	1	2	3	4	5	6
108.1. Starting year (two last digits)	<input type="text"/>					
108.2. Ending year (two last digits); if this is your current job, leave the space blank	<input type="text"/>					

FOR THE PERSONS WHO WORK PROFESSIONALLY AT THE MOMENT

109. How many hours do you work on average in a week? <input type="text"/> hours
--

110. Is it possible at your main job to:		
110.1. change the time you start or finish your work day	<input type="checkbox"/> YES	<input type="checkbox"/> NO
110.2. leave your work for at least an hour	<input type="checkbox"/> YES	<input type="checkbox"/> NO
110.3. perform some of your professional duties at home	<input type="checkbox"/> YES	<input type="checkbox"/> NO

111. Do you currently hold a managerial position?	<input type="checkbox"/> YES	<input type="checkbox"/> NO
112. -- if YES, how many subordinates are you in charge of? <input type="text"/>		
113. What is in your opinion most important in professional work? (please read through all the answers and then choose no more than 3, by crossing the appropriate boxes)		
1 <input type="checkbox"/> lack of tensions and stress		
2 <input type="checkbox"/> high degree of independence		
3 <input type="checkbox"/> personal development opportunities		
4 <input type="checkbox"/> work matching one's skills		
5 <input type="checkbox"/> quick promotion opportunities		
6 <input type="checkbox"/> stability of employment		
7 <input type="checkbox"/> convenient work hours		
8 <input type="checkbox"/> possibility of working at home		
9 <input type="checkbox"/> long leave		
10 <input type="checkbox"/> having a profession which is respected by others		
11 <input type="checkbox"/> appropriate pay		
12 <input type="checkbox"/> other factors		

114. Which conditions would make you take up a job abroad?

(you may choose no more than 2 answers)

- 1 a salary higher than the current one
- 2 a more interesting job than the current one
- 3 more promotion or personal development opportunities than at the moment
- 4 guaranteed employment for at least one year
- 5 I would not take up a job abroad, regardless of its conditions

115. Which solutions would in your opinion facilitate combining professional and family duties, including parental duties? Please enter numbers from 1 (the most important solutions) to 10 (the least important solutions) in the appropriate boxes.

- 115.1 part-time work
- 115.2. shift work
- 115.3. flexible work hours
- 115.4. possibility of working partly at home
- 115.5. more days off in a week
- 115.6. longer maternity leave
- 115.7. longer paid child care leave
- 115.8. higher social benefits (e.g. child care benefit, benefits for children, etc.)
- 115.9. better possibilities of child care outside home for children under 7 (more nurseries and kindergartens, the time of childcare outside home adjusted to the parents' work hours)
- 115.10. better possibilities of child care outside home for children aged 7-12 (more additional classes at schools, local care centres, etc.)

FOR THE PERSONS WHO CHANGED THEIR JOB IN THE PERIOD 2007-2011, IRRESPECTIVE OF WHETHER THEY WORK AT PRESENT OR NOT**116. Why did you change your job in the period 2007-2011? (you may choose more than one reason)**

- 116.1. own decision in order to start a better/better paid job
- 116.2. my employment contract for a specified time expired
- 116.3. for reasons outside my control (health condition, dismissal, leave, company's restructuring, company's insolvency, retirement)
- 116.4. other reasons

117. Was the change of job connected also with the change of your profession? 1 YES 2 NO

FOR THE PERSONS WHO DID NOT WORK PROFESSIONALLY IN THE PERIOD 2007-2011**118. Why did you not work in the period 2007-2011? (please choose up to 3 reasons, by crossing the appropriate boxes)**

- 1 education, gaining new qualifications
- 2 taking care of the home
- 3 child-rearing
- 4 taking care of the disabled and older household members
- 5 health condition, disability
- 6 unsuitable age
- 7 lack of qualifications required by the employers
- 8 retirement
- 9 difficulties with finding a job
- 10 receiving social benefits
- 11 I did not want to work

119. Which conditions would make you take up a job in Poland? (please choose up to 2 answers)

- 1 possibility of working part-time
- 2 possibility of working at least partly at home
- 3 possibility of having flexible work hours
- 4 possibility of receiving more support from other household members in terms of family duties
- 5 possibility of using proper care services for the children or the ill
- 6 possibility of retaining the right to receive social benefits
- 7 convenient conditions of working and commuting for disabled persons
- 8 other
- 9 I do not want to work at all

FOR THE PERSONS WHO HAVE A BANK ACCOUNT

120. Please state if you have performed the following activities when using your personal bank account:

in the last year

in the last month

In the last week

120.1. withdrawal of money from a cash machine

120.2. withdrawal of money at a bank branch

120.3. payment with a payment card at a shop

120.4. placing a transfer order at a bank branch

120.5. placing a transfer order via the Internet

121. What are the main reasons for using the services of the bank in which you have your personal account?

(please mark no more than two most important reasons)

1. convenient location of the branch/cash machine
2. the bank's good reputation
3. attractive offer
4. good customer service
5. I opened the account in this bank and it remained this way / I got used to it

FOR THE PERSONS WHO HAVE EVER LIVED WITH A PARTNER FOR AT LEAST THREE MONTHS

122. Please state the starting and the ending year of the period in which you lived with your partner.

If there were more such instances, please enter the years of living with the succeeding partners in the subsequent columns.

The subsequent number of the partner	1	2	3	4	5	6
122.1. The year in which you started to live with the partner (two last digits)	<input type="checkbox"/> <input type="checkbox"/>					
122.2. The year in which you finished living with the partner (two last digits); if this is your current relationship, please leave the space blank	<input type="checkbox"/> <input type="checkbox"/>					

FOR THE PERSONS HAVING CHILDREN WHO AT PRESENT LIVE WITH THEM

123. Please state the year of birth of the child or children who live with you at present

The subsequent number of the child	1	2	3	4	5	6
Year of birth (two last digits)	<input type="checkbox"/> <input type="checkbox"/>					

FOR THE PERSONS WHO USE A COMPUTER

124. How many hours have you spent using a computer in the last week? hours

125. Did you perform the following activities when using a computer?

Please cross the appropriate boxes.

	YES	NO
125.1. copying or moving a file or a folder	<input type="checkbox"/>	<input type="checkbox"/>
125.2. copying, cutting and pasting in order to replicate or move the selected fragments of a document	<input type="checkbox"/>	<input type="checkbox"/>
125.3. using the basic mathematical functions in a spread sheet	<input type="checkbox"/>	<input type="checkbox"/>
125.4. creating an electronic presentation	<input type="checkbox"/>	<input type="checkbox"/>
125.5. installing new devices (e.g. printer, modem, scanner)	<input type="checkbox"/>	<input type="checkbox"/>
125.6. writing a computer programme in a programming language	<input type="checkbox"/>	<input type="checkbox"/>

FOR THE PERSONS WHO USE THE INTERNET
126. Do you use any social media portals and have your profile on them?

- | | | |
|------------------------------|------------------------------|-------------------------------|
| 126.1. on Facebook | <input type="checkbox"/> YES | 2 <input type="checkbox"/> NO |
| 126.2. on Nasza Klasa | <input type="checkbox"/> YES | 2 <input type="checkbox"/> NO |
| 126.3. on a different portal | <input type="checkbox"/> YES | <input type="checkbox"/> NO |

127. Do you use the Internet to manage your bank account?

1. I have no bank account
2. I manage my bank account almost only or entirely only via the Internet
3. I deal with current matters connected with my bank account via the Internet but sometimes I also deal with certain matters at the bank unit
4. I manage my bank account via the Internet occasionally, for most matters I visit the bank unit

128. Please state whether you have performed the following activities when using the Internet:

(please read through the list of possible Internet activities below and mark which of them you have ever performed and which of them you have performed in the last week, by crossing the appropriate boxes)

Activity	Ever	In the last week
128.1. reading and sending e-mails	1. <input type="checkbox"/>	2. <input type="checkbox"/>
128.2. using instant messengers (e.g. gadu-gadu, etc.)	1. <input type="checkbox"/>	2. <input type="checkbox"/>
128.3. using chats	1. <input type="checkbox"/>	2. <input type="checkbox"/>
128.4. using discussion groups or forums	1. <input type="checkbox"/>	2. <input type="checkbox"/>
128.5. calling via the Internet (VoIP, Skype)	1. <input type="checkbox"/>	2. <input type="checkbox"/>
128.6. creating or modifying websites	1. <input type="checkbox"/>	2. <input type="checkbox"/>
128.7. collecting materials necessary for education or work	1. <input type="checkbox"/>	2. <input type="checkbox"/>
128.8. participating in online courses or trainings	1. <input type="checkbox"/>	2. <input type="checkbox"/>
128.9. job seeking, sending offers concerning employment	1. <input type="checkbox"/>	2. <input type="checkbox"/>
128.10. buying products and services online (excluding auctions)	1. <input type="checkbox"/>	2. <input type="checkbox"/>
128.11. participating in online auctions	1. <input type="checkbox"/>	2. <input type="checkbox"/>
128.12. playing network games online	1. <input type="checkbox"/>	2. <input type="checkbox"/>
128.13. downloading free software	1. <input type="checkbox"/>	2. <input type="checkbox"/>
128.14. downloading free music and films	1. <input type="checkbox"/>	2. <input type="checkbox"/>
128.15. creating and publishing own texts (e.g. on a blog), images, music or other work online	1. <input type="checkbox"/>	2. <input type="checkbox"/>
128.16. obtaining information from the websites of public institutions	1. <input type="checkbox"/>	2. <input type="checkbox"/>
128.17. downloading or filling in official forms	1. <input type="checkbox"/>	2. <input type="checkbox"/>
128.18. listening to music or a radio station online	1. <input type="checkbox"/>	2. <input type="checkbox"/>
128.19. watching TV or video files online	1. <input type="checkbox"/>	2. <input type="checkbox"/>
128.20. reading newspapers or books online	1. <input type="checkbox"/>	2. <input type="checkbox"/>

129. How often do you use:	everyday	1 to 4 times a week	Once or twice a month	Less often than once a month	Never
129.1. Internet search engines (e.g. Google)	1. <input type="checkbox"/>	2. <input type="checkbox"/>	3. <input type="checkbox"/>	4. <input type="checkbox"/>	5. <input type="checkbox"/>
129.2. mobile phone to send short text messages (SMS)	1. <input type="checkbox"/>	2. <input type="checkbox"/>	3. <input type="checkbox"/>	4. <input type="checkbox"/>	5. <input type="checkbox"/>
129.3. mobile phone to take pictures	1. <input type="checkbox"/>	2. <input type="checkbox"/>	3. <input type="checkbox"/>	4. <input type="checkbox"/>	5. <input type="checkbox"/>

130. Do you use mobile bank services (Internet connection via a mobile phone)?

1. YES
 2. No, although I do connect to the Internet via a mobile phone
 3. I do not connect to the Internet via a mobile phone

131. -- if NOT, will you use mobile bank services this year?

1. definitely yes
 2. rather yes
 3. rather no
 4. definitely no
 5. it is hard to say

132, 133. Which operations do you perform or would you like to perform via mobile bank services?

	I already perform these	I would like to perform these
checking my account	132.1. <input type="checkbox"/>	133.1. <input type="checkbox"/>
opening deposit accounts	132.2. <input type="checkbox"/>	133.2. <input type="checkbox"/>
placing transfer orders	132.3. <input type="checkbox"/>	133.3. <input type="checkbox"/>
taking out loans	132.4. <input type="checkbox"/>	133.4. <input type="checkbox"/>
loan repayments	132.5. <input type="checkbox"/>	133.5. <input type="checkbox"/>

FOR THE PERSONS WHO ARE SELF-EMPLOYED, WITH A REGISTERED BUSINESS ACTIVITY, PERFORMING SERVICES FOR AT LEAST TWO EMPLOYERS**134. How many persons do you currently employ as your permanent employees?**

135. What has been the highest number of persons performing work for your company in the last year?

136. How many banks does your company cooperate with?

1. I do not cooperate with any bank
 2. with one bank
 3. with two banks or more

137. Does your company use bank financing? 1. Yes 2. No

THANK YOU FOR YOUR TIME

WE WOULD LIKE TO ONCE AGAIN ASSURE YOU THAT ALL PROVIDED INFORMATION WILL BE USED ONLY IN COLLECTIVE STATISTICAL SCIENTIFIC STUDIES.

on behalf of the COUNCIL FOR SOCIAL MONITORING

dr hab. Janusz Czapinski, professor. at the University of Warsaw and the University of Finance and Management

1.3 Instructions for interviewers

INSTRUCTIONS CONCERNING THE ORGANISATION AND PRINCIPLES OF FILLING IN THE QUESTIONNAIRES UNDER SOCIAL DIAGNOSIS 2011 R6

Initial notes

The survey "Social Diagnosis" is a cyclical study, repeated on the same sample of households.

In the current sixth wave (*R6*) we are planning to interview all the households which took part in the fifth panel wave and consented to further participation in the survey (*R5*), as well as the households from a new sample.

The 2011 study will include only those households (questionnaire for the household) from *R5* which were present on the collective list sent to the Voivodeship Statistical Offices by e-mail. If this list includes a household, however, any of its present members is absent from such list, such a person is assigned a number following the last number from the 2009 list. If the household no longer includes a person from the list, such person retains its number and in Part I Section C lines 40, 43, 44 and 46 are filled in.

The most important information identifying the persons examined in the previous wave is their **fixed number** – it should be carefully and visibly rewritten from the collective list. NOTE: this number varies from the one in 2009.

The information on the household is collected based on the interview with the household head or a person well aware of the household matters (Part I of the questionnaire). All household members aged 16 and above (as of 1 March 2011, i.e. all persons born after 1 March 1995) fill in Part II of the questionnaire on their own in the interviewer's presence. If any respondent is unable to fill in this part on his or her own, the interviewer is obliged to help them. Part II of the questionnaire has been prepared in two versions – a male and a female one. Men may not be given the female versions and vice versa as the questionnaire has the respondent's gender coded in it.

The definitions, classification and groupings are in majority in accordance with the research based on the samples of households conducted by the Central Statistical Office (GUS). The proposed extensions or slightly different classifications come from the recommendations of Eurostat for the survey of households.

In the case of the households which were examined under *R5*, apart from the full form for the sixth wave, you will receive also a part of the information from Section C of the *R5* form (*identification number of the household, the status of the household in the study (consents to further participation – 1, conditionally consents to further participation – 3,) number of the voivodeship, powiat and gmina, address, telephone number, place of residence category, subsequent numbers of the household members, fixed numbers of the household members, their names, gender and the year of birth*). We ask you to conduct the interview in Section C based on this information from the fifth research wave, i.e. taking into account all the persons in the household present on the list of persons from *R5* as well as any new persons in the households from *R5*. **Remember to retain the *R5* numbers for the persons in the household and to assign the fixed numbers to them**, while the persons who joined the household after the 2009 survey or were not present on the list are assigned with the numbers following the last number of the person from *R5*. **If the number of persons is higher than 8, all persons with the numbers above 8 are described on a separate sheet for Section C.** For the persons who permanently left the household after the *R5* survey, please fill in only the following lines: 43, 44 and 46.

Our aim is to conduct the individual interviews (Part II of the questionnaire) with all household members aged 16 and above, even with those who for various reasons were not interviewed during the first, second, third, fourth or fifth wave.

If there is more than one household living at the same address, the household which the interviewer visited first and which consented to take part in the survey is examined.

The cards to be shown to respondents do not feature such answers as "I do not know" or "It is hard to say", however, these answers may be present in the questionnaire and may be marked if a respondent spontaneously answers the question this way. In the questions which are not accompanied with the card, such answers are not read to respondents, but are marked (if they are present on the scale of answers) when a respondent spontaneously answers the question this way.

Please inform the examined households that, as in the previous years, they will take part in a lottery with 15 money prizes, with the value of PLN 700 each.

Detailed principles

PART I

Section A. HOUSEHOLD CHARACTERISTICS

point 0 – please enter the one-digit number to mark the status of the household in the survey

symbol

- 1 the household took part in the fifth study wave (*R5*) and still lives at the same address ⇒ go to point 1
- 2 the household took part in the fifth study wave but has changed the place of residence or all household members have moved to a multi-occupancy accommodation facility ⇒ an interview is not conducted (such households are no longer monitored)
- 3 a new household (did not take part in the fifth study wave), randomly chosen in this wave

point 1 – enter the seven-digit number of the territorial unit according to the new territorial division of the country (voivodeship, powiat, gmina)

point 3 – enter the one-digit number for the place of residence category of the household's present place of residence, according to the list below:

symbol

- 1 cities with more than 500,000 inhabitants
- 2 cities with 200,000 to 500,000 inhabitants
- 3 cities with 100,000 to 200,000 inhabitants
- 4 cities with 20,000 to 100,000 inhabitants
- 5 cities below 20,000 inhabitants
- 6 rural areas

point 4 – enter the household identification number. The identification number is composed of five digits and does not change in the subsequent survey cycles. Therefore, the households which took part in the previous wave (*R5*) will have now the same number as in 2009 and new households will have a new number taken from the pool of numbers for the given voivodeship to be assigned to such household (51000 to 60000).

point 5a – A family is composed of the household members bound by marriage (formal or informal), blood ties or adoption. Thus, the following types of families may be distinguished: regular families – a married or unmarried couple with no children, a married or unmarried couple with children; single-parent family – a mother with children, a father with children.

Non-family households are the household where there is no family (as defined above). There are non-family one-person households and non-family multi-person households (e.g. a grandmother with a grandson, siblings residing together, persons residing together but not related by blood). If there is no family in the household, enter 0.

Point 5b – enter the one-digit number for the main source of income in the household, in accordance with the list of symbols below (if there are several equally important sources of income, enter 7):

symbol

- 1 households of employees
- 2 households of farmers
- 3 households of self-employed persons, except for individual agricultural holding, liberal professions
- 4 households of retirees
- 5 households of pensioners
- 6 households with income received but not earned and other than old age or disability pension
- 7 several equally important sources of income in the household

Section B. INFORMATION ON THE CONDUCTED INTERVIEW

Question 5 – ask whether the household consents to take part in the survey in 2013

Section C. HOUSEHOLD COMPOSITION

1 the person's reference number – for the households interviewed in 2009 please assign the household members with the same numbers as in 2009. If there is a household member who was omitted on the list sent to the Voivodeship Statistical Office, assign the first unoccupied number. A new person in the household already interviewed in 2009 is assigned with a subsequent number. If there are more than 8 household members, in the case of the other persons (number 9, 10, etc.) the data in C section are entered on a separate sheet, which should be folded with the questionnaire after the interview.

2 fixed number – the number assigned to the persons who took part in R5 and included on the list of the households which qualified for the survey in 2011 in column 6.

point 4 – please enter the one-digit symbol for the relationship with the household head:
symbol

- 1 household head
- 2 husband, wife
- 3 partner
- 4 son, daughter
- 5 son-in-law, daughter-in-law (partner of the child)
- 6 grandson, granddaughter
- 7 father, mother, father-in-law, mother-in-law
- 8 grandfather, grandmother
- 9 brother, sister
- 10 other person

The household head is the person who provides the household with all or the majority of the means of living.

line 5 – enter the one-digit symbol of the family number for each person:
symbol

- 1 for the members of the first family,
- 2 for the members of the second family,
- 3 for the members of the third family,
- 4 – 8 for the members of the fourth and further family,
- 0 for the persons who are not family members in a family household or for the persons in a non-family or a special household

line 6 – enter the one-digit symbol for the relationship with the family head. The family head is the man in the case of a regular family (a married or unmarried couple with or without children) or a single parent in a single-parent family:

- symbol
- 1 family head
 - 2 wife
 - 3 partner
 - 4 son, daughter
 - 5 other person outside the family
 - 0 person in a non-family or special household

Note! In each questionnaire both line 4 and 6 should be filled in.

line 10 – enter the one-digit symbol for gender:

- symbol
- 1 men
 - 2 woman

line 11 – enter the one-digit symbol of the marital status for all household members:

- symbol
- 1 unmarried
 - 2 married
 - 3 widow(er)
 - 4 divorced

- 5 legally separated (based on a court decision)
6 practically separated (the spouses do not live together without a court decision)

line 16 – enter the two-digit symbol for the educational attainment:

- symbol
10 higher education with at least a PhD title
11 higher education with at least an MA degree or an equivalent degree
12 higher education with an Engineer or Bachelor degree
20 post-secondary education
30 secondary vocational
40 secondary general
50 basic vocational
51 lower secondary
60 primary completed
70 no education (primary not completed, no school education)
99 not applicable (person aged 0-12)

line 17 – enter the total number of years in education, regardless of whether the relevant education was completed. The years of any postgraduate studies or training courses are not included. A training course is an extra-curricular education aimed at gaining or upgrading one's professional qualifications, any courses aimed at preparing for any exams, as well as language courses, computer courses, driving courses, etc.

line 18 – enter the two-digit symbol for the specialisation of the completed education:

- symbol
14 pedagogics
21 art
22 liberal arts (religion, foreign languages, mother tongue, history, archaeology, philosophy)
31 social sciences (psychology, sociology, demography, political science, economy)
32 journalism and information
34 economy and administration (management, marketing, finance, banking, insurance, accounting and taxes, science about management and administration)
38 law
42 biological sciences
44 physical sciences
46 mathematics and statistics
48 computer science
52 technical science (engineering, industry, construction)
54 production and processing
58 architecture and construction
62 agriculture, forestry, fishing
64 veterinary medicine
71 public health
72 healthcare (medicine, dentistry, nursing, pharmacy)
76 social welfare (social services)
81 services for the population and transport services
85 environmental protection and sanitary and public utility services
86 protection and safety
90 armed forces and country protection
91 other
92 no specialisation (e.g. primary, lower secondary or secondary general education)
98 not applicable (persons who have not completed primary education yet or without primary education)
99 lack of data

line 19 – enter the one-digit symbol for the educational attainment of the person, defined as using or not using various educational services provided under the public education system, by other institutions (public and private) outside the school system (concerns the current situation) or self-education

- symbol
1 nursery or kindergarten
2 education in a day school
3 evening, extramural and external education

- 4 using various forms of education outside the school system (training courses, etc.)
- 5 individual course of education
- 8 not using any educational services

For persons with 1, 2, 3 or 4 in line 19, fill in line 20 and possibly 21 (if the person uses more than one educational service). If 5 or 8 is entered in line 19, go to line 22.

lines 20-21 – enter the two-digit symbol of the type of educational service (two most important ones):
symbol

- 11 nursery, public kindergarten
- 12 nursery, private kindergarten
- 21 education in a public primary and lower secondary school
- 22 education in a private primary and lower secondary school
- 30 education in a basic vocational school, vocational traineeship
- 41 education in a public general secondary school
- 42 education in a private general secondary school
- 51 education in a public vocational secondary school
- 52 education in a private vocational secondary school
- 61 education in a public post-secondary school
- 62 education in a private post-secondary school
- 71 public higher education school
- 72 private higher education school
- 81 postgraduate studies in a public higher education school
- 82 postgraduate studies in a private higher education school
- 83 PhD studies in a public higher education school
- 84 PhD studies in a private higher education school
- 90 training courses and trainings financed by the employer
- 91 training courses and trainings financed from the Labour Fund
- 92 training courses and trainings financed from the European Social Fund
- 93 training courses and trainings financed with own resources of the household
- 94 other forms of mastering skills (such as driving lessons, learning how to play an instrument, learning a foreign language)
- 98 I do not know

line 22 – enter the symbol

symbol

- 1 if the person has a driving licence
- 2 if the person has no driving licence

lines 23-28 – for each language, enter:

- 1 if the person knows how to speak and write in this language
- 2 if the person knows how to write in this language
- 3 if the person does not know this language

line 35 – enter the one-digit symbol for the disability category:

symbol

- 1 for the persons who have a valid certificate from the Social Insurance Institution (ZUS)
- 2 for the persons who have a valid certificate from the Disability Evaluation Board at the Poviat Centre of Family Support (ZOoN at PCPR)
- 3 for the persons who have a valid certificate from the Social Insurance Institution and ZOoN at PCPR
- 4 for the persons who have stated that due to disability or disease they have completely or partly limited ability to perform such activities as learning, working or taking care of own household but they do not have a certificate from the medical board
- 5 disability of children aged below 16
- 0 other cases
- 8 not applicable (the person is not a disabled person)

line 36 – for the persons with 1, 2 or 3 in line 31

symbol

- 1 certificate on a severe disability or complete inability to work and live alone or on the first invalidity class
- 2 certificate on a moderate disability or a considerable inability to work or on the second invalidity class
- 3 certificate on a slight disability or a considerable inability to work or advisability of changing one's profession or on the third invalidity class

lines 37-38 – these concern a source of income of specific persons; please enter the two-digit symbols for the main and the additional source of income

symbol

- 11 permanent paid employment in the public sector
- 12 permanent paid employment in the private sector
- 13 temporary paid employment in the public sector
- 14 temporary paid employment in the private sector
- 15 use of an agricultural holding
- 16 helping in an agricultural holding
- 17 employer outside an individual holding in agriculture
- 18 permanent work for one's own account (also self-employment)
- 19 temporary work for one's own account
- 20 Helping in work for one's own account
- 21 old age pension (apart from the agricultural social insurance system)
- 22 old age pensions for individual farmers (under insurance in the Agricultural Social Insurance Fund, KRUS)
- 23 disability pensions
- 24 family pensions
- 25 maternity benefits
- 26 unemployment benefits
- 27 other benefits from the Labour Fund
- 28 allowance for persons on child care leaves (former child care benefits)
- 29 other social insurance benefits (such as child birth allowance, funeral allowance, sickness allowance)
- 30 family benefits and allowance in accordance with the Act on Family Benefits of 2003, as amended, housing allowance
- 31 social assistance benefits
- 32 other social assistance benefits (such as benefits for persons bringing up children, special purpose benefits and extraordinary benefits)
- 33 children maintenance
- 34 other income of a social benefit nature (including scholarships)
- 35 income from own property (interest, dividends, etc.)
- 36 income from the rental of a house, apartment or garage
- 37 foreign old age and disability pensions
- 38 benefits under a voluntary sickness and accident insurance system
- 39 compensation under other insurance schemes
- 40 donations, maintenance from private persons
- 41 other income
- 42 other revenues (sale of property, savings, credits)
- 43 being supported by other household members

line 39 – enter the one-digit symbol concerning the reasons for a temporary absence (absence to date or expected absence longer than 1 months)

symbol

- 1 stay at a hospital or nursing home
- 2 stay away from the household due to education
- 3 military service
- 4 other institutions (jail, prison, etc.)
- 5 work in the country, outside the place of residence
- 6 work abroad
- 7 education in the country, outside the place of residence

- 8 education abroad
- 9 business travel
- 0 other

line 40 – enter the one-digit symbol for the membership of the person in the household symbol

- 1 the person was a member of the household subjected to the study under the 5th study wave (and is in the panel sample of persons) and still is a member of this household
- 2 the person permanently left the household
- 3 the person died
- 4 a new person born after the 5th study wave, of a mother who took part in that wave
- 5 the person was not a member of the household subjected to the study under the 5th wave (and is not in the panel sample of persons) if one of the following conditions is met:
 - it is a household subjected to the 5th wave and this person became its member after the 5th wave (came from the outside)
 - b) the household is a new household in the survey (none of the household members was a member of the household which took part in the 5th wave)
- 6 the person was in the group to be subjected to the 5th wave but was mistakenly not included in the survey (the person is in the panel sample of persons)
- 7 the person returned to the household: was a member of the household in the 1st, 2nd, 3rd and 4th study wave but was not the household member in the 5th study wave (and is in the panel sample of persons).

NOTE

Lines 41-46 are filled in exclusively in the households which took part in the fifth study wave (R5) in 2009. They concern the persons who were the household members in the previous study and left the household or the persons who appeared in the household in between the previous and the present study wave:

lines 41-42 – enter the date of arrival in the household – month (Arabic numerals) and year (two last digits)

lines 43-44 – enter the date of leaving the household – month (Arabic numerals) and year (two last digits)

line 45 – enter the one-digit symbol for the reason for arrival in the household
the symbol of the reason for ARRIVAL in the household

- 1 marriage, cohabitation
- 2 divorce, separation, breakdown of an informal relationship
- 3 birth
- 4 other
- 8 not applicable

line 46 – enter the one-digit symbol for the reason for leaving the household
the symbol of the reason for LEAVING the household

- 1 marriage, cohabitation
- 2 divorce, separation, breakdown of an informal relationship
- 3 death
- 4 starting own household in the country
- 5 starting own household abroad
- 6 other
- 8 not applicable

line 47

symbol

- 1 interview conducted

The interview was not conducted, although the household was contacted, because

- 2 the person was not able to answer the questions (illness, alcohol intoxication)
- 3 the person did not return a filled in questionnaire
- 4 the person initially refused to be interviewed (it is possible he or she will consent to take part in the study in the subsequent years)

- 5 the person definitely refused to take part in the study now or in the future
- It was not possible to contact the person because:
- 6 the person was temporarily away from the household (e.g. a short-term business trip)

- 7 the person was not at home, no one in the household gave them the form to be filled in on his or her own

Section D. ECONOMIC ACTIVITY OF THE HOUSEHOLD MEMBERS AGED ABOVE 15

this section concerns persons who are aged 15 as of 1 March 2011, i.e. born before the end of February 1996

line 1 – enter the person's number, the same as the one in Section C, line 1

lines 2, 3 – symbols and routing principles have been stated in the form

line 5 – enter the symbol

symbol

1. based on an employment contract for a specified period of time (apart from the contracts listed below, being non-standard forms of employment (6-11), and for a period longer than one year)
2. based on an employment contract for an unspecified period of time
3. self-employed entrepreneur hiring employers
4. self-employed
5. helping in a family business without pay

6. temporary job (based on fixed-term employment contracts, such as replacement contracts, contracts for specific work)
7. other short-term contracts (such as summer traineeships, employment contracts for a period shorter than one year)
8. trial period employment
9. paid employment on the basis of a civil law contract (contract of mandate, contract for specific work)
10. paid employment without a formal contract or with an oral agreement
11. other

Line 6 – symbols and routing principles have been stated in the form; full-time job means employment on a full-time basis at one workplace

line 7 – enter the symbol of the most important reason

symbol

1. cannot find a full-time job
2. does not want to work full-time
3. is forced to as he or she has no possibility of ensuring proper care to his or her children
4. is forced to as he or she has no possibility of ensuring proper care to an ill, old or disabled person
5. has also another job
6. other reasons

line 8 – this question is asked to all respondents; symbols and routing principles have been stated in the form

line 9 – symbols stated in the form

line 10 – this question is asked to all respondents; routing principles have been stated in the form
symbol

- 1 YES and I am currently unemployed
- 2 YES and I am currently employed
- 3 NO and I am currently unemployed but I have already found a job
- 4 NO and I am currently unemployed
- 5 NO and I am currently employed

line 11 – enter the symbol of the main reason:

symbol

- 1 education, gaining new qualifications
- 2 taking care of the home
- 3 due to child care
- 4 due to taking care of disabled and older household members
- 5 due to the health condition
- 6 due to an unsuitable age
- 7 due to the lack of qualifications
- 8 is retired
- 9 is convinced he or she will not find a job anyway
- 10 does not want to lose the right to receive social benefits
- 11 does not want to work at all
- 12 other reasons

line 12 – symbols stated in the form

line 13 – 14 enter the number of years and/or months not in employment; for the persons who have never worked enter 97 and go to line 23; in the remaining cases go to line 19

line 15 – enter the one-digit symbol for the ownership structure of the institution being the main workplace

symbol

- 1 state-owned
- 2 owned by the units of the territorial self-government
- 3 private
- 4 cooperative, owned by a social or religious organisation
- 8 not applicable (in the case of the unemployed)

line 16 – enter the one-digit symbol for the ownership structure of the institution being the additional workplace

symbol

- 1 state-owned
- 2 owned by the units of the territorial self-government
- 3 private
- 4 cooperative, owned by a social or religious organisation
- 8 not applicable (in the case of the unemployed)
- 9 not applicable (in the case of persons who do not have an additional employment)

line 17 – symbols stated in the form (according to the administrative division)

line 18 – enter the three-digit symbol of the profession, in accordance with the current classification of professions used in the research of the Central Statistical Office (GUS). This classification is used also in the Labour Force Survey and in the EU SILC.

line 19 – enter the three-digit symbol of the profession, in accordance with the current classification of professions used in the research of the Central Statistical Office (GUS). This classification is used also in the Labour Force Survey and in the EU SILC.

line 20 – enter how many times this person has been registered in the Labour Office as an unemployed person

line 21 – enter the total number of months not in employment

line 23 – symbols and routing principles have been stated in the form

lines 24, 25, 26 – enter the two-digit symbol of the type of educational service symbol

- 21 education in a public primary and lower secondary school
- 22 education in a private primary and lower secondary school
- 30 education in a basic vocational school, vocational traineeship
- 41 education in a public general secondary school
- 42 education in a private general secondary school
- 51 education in a public vocational secondary school
- 52 education in a private vocational secondary school
- 61 education in a public post-secondary school
- 62 education in a private post-secondary school
- 71 studies in a public higher education school – full-time studies
- 72 studies in a public higher education school – evening or extramural studies
- 73 studies in a private higher education school
- 81 postgraduate studies in a public higher education school
- 82 postgraduate studies in a private higher education school
- 83 PhD studies in a public higher education school
- 84 PhD studies in a private higher education school
- 90 training courses and trainings financed by the employer
- 91 training courses and trainings financed from the Labour Fund
- 92 training courses and trainings financed from the European Social Fund
- 93 training courses and trainings financed with own resources of the household
- 94 other forms of mastering skills (such as driving lessons, learning how to play an instrument, learning a foreign language)
- 95 individual course of education
- 98 I do not know

line 27 – symbols stated in the form

line 28 – symbols and routing principles have been stated in the form

line 29 – enter the number of travels

**line 30, 31 – enter the symbol
symbol**

1 Austria	6 Greece	11 Germany	16 other EU Member States (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 Netherlands	13 Sweden		19 Australia
4 Finland	9 Ireland	14 Great Britain		20 other countries
5 France	10 Luxembourg	15 Italy		

lines 32 - 33 – enter the number of months

line 34 – enter the symbol if the person meets the following condition: he/she was abroad in the period 2007-2011 for longer than 6 months and returned to Poland last year (after 1 January 2010).

symbol

- 1 as had been planned before going abroad
- 2 had been dismissed/finished the employment
- 3 had completed education
- 4 could not find a job abroad
- 5 due to family reasons
- 6 due to the decrease in the income level abroad in comparison to the income level in the country
- 7 due to health reasons
- 8 only temporarily to deal with certain matters in the country
- 0 other reason
- 9 it is hard to say

Section F. HOUSEHOLD AFFLUENCE

Question 13 – irrespective of when the household was started; if the respondent does not remember, enter 33; if there is more than one computer in the household, enter the date of purchase of the first one.

Section I. SOCIAL ASSISTANCE

Question 1 – concerns various sources of assistance, both from private persons and from institutions, such as gmina or town centres of social assistance, Poviat Centres of Family Support, Regional Centres of Social Policy, secular charitable organisations (including non-governmental organisations operating in the area of social assistance, in this charitable organisations, i.e. charitable associations, foundations, committees, societies, charitable actions, such as Polish Red Cross (PCK), Polish Committee for Social Assistance (PKPS), Foundation for Social Actions (FDS)), religious organisation (such as Caritas) and parishes, trade unions and workplaces.

Section L. INCOME SITUATION

question 1 and 2 – in the case of a definite refusal to answer, enter 99999. In the case of a non-definite refusal to answer or difficulties with stating the exact amount, ask to specify the range and enter the symbol in the single box in the right-hand corner. If the given range is higher than any of the following, enter the symbol of the range closest to the upper value. If the respondent specifies the exact value of income, or if he/she definitely refuses to answer, the box for the income range remains blank.

symbol of the income range

1. up to PLN 300	9. PLN 6,001- 7,000
2. PLN 301 – 600	10. PLN 7,001 – 8,000
3. PLN 601 – 1,000	11. PLN 8,001 – 9,000
4. PLN 1,001 – 2,000	12. PLN 9,001 – 10,000
5. PLN 2,001 – 3,000	13. PLN 10,001 – 15,000
6. PLN 3,001 – 4,000	14. PLN 15,001 – 20,000
7. PLN 4,001 – 5,000	15. above PLN 20,000
8. PLN 5,001 – 6,000	

Question 5 – answer 5 is checked also when the household does not have to repay the credit

Section M. COMPUTER AND THE INTERNET

Question 2. if the respondent does not remember, enter 9999

The remaining sections in Part I do not include any specific definitions of the answer categories and any related doubts will be cleared during the training.

PART II, individual questionnaire

The interviewer fills in only the first page (by rewriting the household number, the person's number, the fixed number for the persons from the panel sample and the name from section C), the rest of the questionnaire is filled in in the presence of the interviewer.

In extraordinary situations the respondent may fill in the questionnaire without the interviewer being present. In such a case an envelope should be attached to the questionnaire in order to prevent other household members from looking into the filled in questionnaire before it is collected by the interviewer.

Please explain the rules of filling in the questionnaire (page two) in a clear manner, especially the meaning of the scales with numbers and word definitions only next to the extreme values. Please draw the respondents' attention to the fact that the date of birth on page 3 may not be written with Roman numerals (e.g. 15 02 78, and not 15 II 78).

Annex 2. Principles of defining panel samples

2.1. Basic principles of defining the status of persons to be subjected to panel study

In the subsequent panel waves, the group of persons to be subjected to the study (individual interviews) consists of two sub-groups: the individuals from the panel sample of persons and the individuals outside the panel sample of persons. The panel sample of persons comprises persons who are members of the households subjected to the study under the first panel wave (wave R=1). In the subsequent panel waves (waves R=3 and R=4), only those persons who died in between the panel waves are excluded from the panel sample of persons. Similarly, the children born to women from the panel sample of persons are added to this panel sample. All persons from the panel sample of persons above 16 years of age undergo individual interviews. In this way, the group of persons to be subjected to the panel study is updated in the subsequent panel waves, in order to account for demographic changes.

The subgroup of persons outside the panel sample of persons but also to be subjected to individual interviews in the subsequent waves of the study (according to the same rules as from the panel sample of persons) comprises all individuals who during the given wave (starting from R=3) of the study form a household with at least one person from the panel sample of persons (they live in the households to be subjected to the study). Thus, these persons were not members of the households from the panel sample of households subjected to the study in wave R=2, but became members of such households in the subsequent panel waves (starting from R=3). However, when such persons move to households where not one member belongs to the panel sample of persons, they are then excluded from further study.

The presented rules of determining the groups of persons to be subjected to panel study in subsequent waves require that the “status” of such groups be updated each time, as it results from its status in the previous panel waves.

2.2. Principles of identifying the households to be subjected to panel study

All households which took part in the first wave of the study (R=1) form the panel sample of households. Due to the dynamic changes taking place in the sample of households over time, it is necessary to establish the principles specifying which households subjected to the study in its second wave would take part in the study also in its subsequent waves. This is determined based on the results of surveys among households from the neighbouring panel waves (the earlier one, (R-2), and the one after it, (R+1)) as well as on the changes in the structure of the households subjected to the study.

The principles of identifying the households to be subjected to the study (HSS) in wave (R-1) on the basis of their status in waves (R-2) and (R+1) have been presented in table 1. The households not to be subjected (HNSS) to the study in wave (R-1) are excluded from the panel sample of households.

Table 2.1. Principles of identifying the households from the panel sample of households in wave (R-1)

Status of the household in wave (R-2)	Status of the household in wave (R-1)		
	Interviewed	Not interviewed due to: inability to take part in the study (e.g. old age, illness), lack of contact, initial refusal	Not interviewed due to: definite refusal, impossible to be located
Interviewed in (R-2)	HSS	HSS	HNSS
Not interviewed in (R-2)	HSS	HNSS	HNSS
A new household in (R-1), not subjected to an interview in (R-2) ⁷⁸	HSS	HSS	HNSS

The analysis presented in Table 1 demonstrates that the households which were not interviewed in two subsequent panel waves are excluded from the panel sample of households. Moreover, the households where, due to structural changes, there is not a single person from the original panel sample of persons left are also excluded from the panel sample of households. On the other hand, the households whose all members moved to collective households (this concerns mainly single-person households) are not subjected to the questionnaire survey in the given panel wave but they remain in the panel sample of households. They are subjected to the so-called “monitoring” procedure which enables their inclusion in the questionnaire survey once they become private households again. The households which temporarily move abroad are handled in a similar manner.

⁷⁸ A new household, added to the panel sample of households, that has been created by a person from the panel sample of persons or added to the panel sample as a result of the fact that at least one person from the panel sample of persons moved to the household.

The panel sample of households is increased with any new households created by the persons from the panel sample of persons and with the households to which the persons from the panel sample of persons move.

2.3. Principles of identifying the persons to be subjected to the panel study in the subsequent panel waves

All adult persons from the panel sample of households in the given study wave undergo an individual interview under this wave (*R-1*), regardless of whether they belong to the panel sample of persons or not. These are mainly the persons subjected to the study in the previous study wave (*R-2*), including the persons who were not interviewed in the previous wave due to various reasons. Moreover, all adult persons who became members of the households from the panel sample of households after the previous study wave (*R-2*) also undergo individual interviews.

Those persons who were not interviewed in two subsequent panel waves are excluded from the panel sample of persons (they were members of the households where no interviews were conducted under those waves, that is the households to be excluded from the panel sample of households, or they refused to take part in the study for the second time). The persons from the panel sample of persons who moved to collective households or temporarily moved abroad are also not to be interviewed. However, they are not excluded from the panel sample of persons, but “monitored” so that it is possible to include them in the subsequent panel waves of the study. The information on such persons is gathered (most often from other members of their households), including the information on the reasons for their temporary absence. Finally, the persons outside the panel sample of persons who, though interviewed in wave (*R-2*) as belonging then to the households from the panel sample of households, later moved to the households where there are no persons from the panel sample of persons, are not interviewed in the given study wave (*R-1*). Such persons are excluded from further research.

Annex 3. Methods of analysing human capital and labour market flows

3.1. Accuracy of the human capital measurement model – exploratory and confirmatory factor analysis

Before creating the synthetic human capital index, the degree to which the variability of the pointer variables is reflected by a latent variable was examined with the use of the exploratory factor analysis⁷⁹. This procedure was conducted three times – for *Social Diagnosis 2007*, *Social Diagnosis 2009* and *Social Diagnosis 2011*. It was demonstrated that the set of variables proposed to measure human capital may diagnose well the latent variable “human capital”. In the case of the wave of 2007, five diagnostic variables may be replaced with one latent variable, which in 67.27⁸⁰ per cent reflects the diversity of the set of pointer variables, in the case of the wave of 2009 – in 70.39⁸¹ per cent, and in the case of the wave of 2011 – in 58.88⁸² per cent. Moreover, each time the measure of the model’s quality – RMSEA – did not exceed the recommended value of 0.05 (Browne, Cudeck, 1993). Own values, factor loadings and the value of RMSEA for a one-factor solution have been presented in table 1.

Table 3.1. Own values, factor loadings and the value of RMSEA for a one-factor solution

Wave	Social Diagnosis 2007				
Own values	3.618 0.647 0.397 0.324 0.014				
Factor loadings					
YEARS OF EDUCATION	0.595				
ENGLISH	0.801				
TRAINING COURSES	0.687				
COMPUTER	0.988				
SEARCH ENGINE	0.959				
Wave	Social Diagnosis 2009				
Own values	3.775 0.566 0.355 0.273 0.031				
Factor loadings					
YEARS OF EDUCATION	0.679				
ENGLISH	0.830				
TRAINING COURSES	0.731				
COMPUTER	0.962				
SEARCH ENGINE	0.954				
Wave	Social Diagnosis 2011				
Own values	3.299 0.669 0.556 0.281 0.195				
Factor loadings					
YEARS OF EDUCATION	0.636				
ENGLISH	0.852				
TRAINING COURSES	0.701				
COMPUTER	0.941				
SEARCH ENGINE	0.661				

Next, the quality of the measurement model for human capital was examined, with the use of the confirmatory factor analysis. The analyses were conducted for each wave of the research separately as well as for a combined set of data. In the latter case, the estimated model had imposed equality conditions for all factor loadings, as well as for the absolute term for the variable [number of years of education] and the thresholds for the scale of answers for the remaining four pointer variables (measurement invariance).

The results of the model estimation for specific waves were highly satisfactory. The values of the measures of fit were also satisfactory. For each wave, the value of the goodness-of-fit indices, CFI and TFI, exceeded the level of 0.97 and 0.95 accordingly, while the value of the mismatching index for RMSEA was below 0.05⁸³. Moreover, all pointer variables were statistically significant and the factor loadings next to them were positive as expected.

The results of the estimation of the model maintaining a complete measurement variance between the waves (i.e. a model with imposed equality conditions for all factor loadings, for the absolute term for the variable [number of years of education] and the thresholds for the scale of answers for the remaining four pointer variables) have been presented in table 2.

⁷⁹ The relevant calculations were made in the Mplus programme; the unweighted least square method was used for estimation.

⁸⁰ $3.36342/5 = 0.6727$ [in: Muthen, <http://www.statmodel.com/>]; The sum of the squares of factor loadings was 3.36342.

⁸¹ $3.51986/5 = 0.7039$ [in: Muthen, <http://www.statmodel.com/>]; The sum of the squares of factor loadings was 3.51986.

⁸² $2.9942/5 = 0.5888$ [in: Muthen, <http://www.statmodel.com/>]; The sum of the squares of factor loadings was 2.9942.

⁸³ For the wave of 2007: CFI – 0.971; TLI = 0.952; RMSEA = 0.035;

For the wave of 2009: CFI – 0.983; TLI = 0.966; RMSEA = 0.043;

For the wave of 2011: CFI – 0.994; TLI = 0.987; RMSEA = 0.039;

Table 3.2. Results of the model of human capital with a complete measurement variance

Pointer variable (observable)	Factor loadings	SE	Standardised loadings
Years of education	1.000*	0.000	0.630
English	0.430*	0.006	0.885
Training courses	0.344*	0.005	0.708
Computer	0.423*	0.007	0.870
Search engine	0.087*	0.002	0.178
Measures of fit			
CFI	TLI	RMSEA	
0,964	0,953	0,076	

*Variables which are significant in the case of statistical significance of 0.001;

The values of the measures of fit were satisfactory. The statistics for the CFI and TLI exceeded the value of 0.95, while the value of the RMSEA index did not exceed 0.08. These results demonstrate that the model with a complete measurement variance is well fit for the data. Therefore, human capital measured in accordance with the presented proposition is invariable in its essence in the subsequent waves of the research.

All variables qualified as the indices of human capital are statistically significant and the factor loadings next to them were positive as expected. Thus, the results obtained confirm that not only education and additional trainings, but also civilisational skills determine the existence of human capital, though the importance of the two former factors should not be undermined.

3.2. Synthetic human capital index – Categorical Principle Component Analysis (CATPCA)

In order to examine how the level of human capital changed in Poland over the period 2007-2011, and to analyse the diversification of its level in the Polish society, it was necessary to express the level of human capital with one synthetic index. To this end, the Categorical Principal Component Analysis, CATPCA⁸⁴, was used, due to the categorical character of four out of five pointer variables. In order to enable a comparison of the levels of human capital in 2007, 2009 and 2011, the analysis was conducted on the combined sets of data from *Social Diagnosis 2007*, *Social Diagnosis 2009* and *Social Diagnosis 2011*.

⁸⁴ As mentioned by Górnjak (2000, p. 316), the categorical principal component analysis, as opposed to the factor analysis, enables an unambiguous calculation of the values of variables representing the dimensions measured by the set of pointer variables.

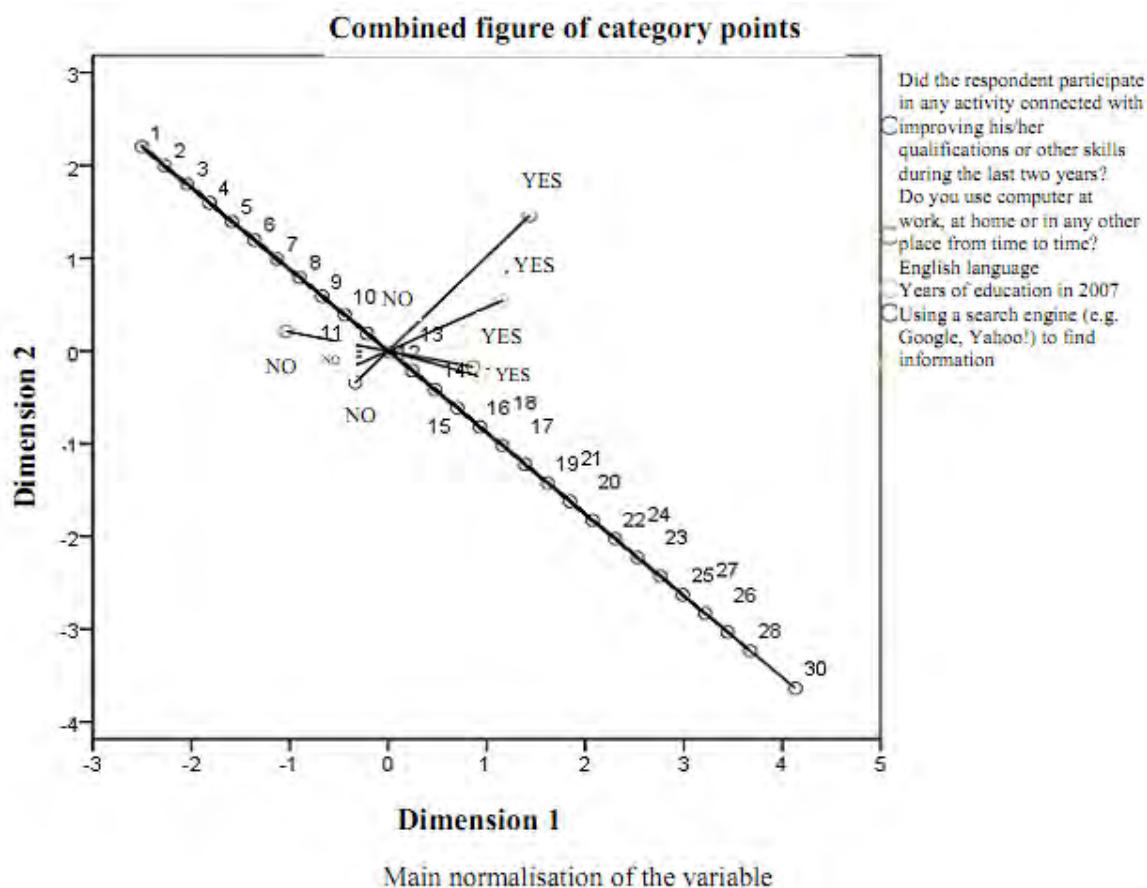


Figure 3.1. Results of the Categorical Principal Component Analysis – points of the categories of answers

It was confirmed that the set of variables proposed to measure the human capital may diagnose well the latent variable “human capital”. It turned out that in the three waves in total five variables may be replaced with one synthetic variable with the use of the CATPCA, and this variable in 54.42 per cent⁸⁵ reflects the diversification of the set of pointer variables. Moreover, the results of the transformation of the quantified answer categories (fig. 1) and the values of the factor loadings (tab. 3) allow the treatment of the first principal component as a synthetic human capital index.

Table 3.3. Loadings of the pointer variables for the first principal component and the share of the variance of specific pointer variables explained by the first principal component

	Loadings for the first principal component ⁸⁶	Share of the variance ⁸⁷ explained by the first principal component
Years of education	0.757	0.623
English	0.838	0.705
Training courses	0.638	0.409
Computer	0.856	0.733
Search engine	0.552	0.305

⁸⁵ The ratio of the first own value and the sum of all own values – 2.721/5 = 0.5442.

⁸⁶ Main normalisation of the variable

⁸⁷ Coordinates of the centre of gravity

Annex 4. Methodology of poverty analysis

4.1. Identifying the poverty sphere

4.1.1. Objective approach

In the objective approach, the poverty line was based on the minimum value of income for the 4th quarter of 2011, adjusted with a relevant consumer price index calculated by the Institute for Labour and Social Studies for a single-person household of employees. The poverty line for March 2009 constituted the value of the poverty line of March 2011, adjusted with a relevant consumer price index. For all other types of households, the poverty line was calculated as the product of the adjusted minimum value of income and an appropriate equivalence scale.

The minimum value of income is equivalent to the value of the basket of consumer goods established for a household having specific social and demographic features. The contents of such basket should provide the household with such living conditions which enable solely "survival" in good health and being able to work (Deniszcuk, Sajkiewicz, 1996). This means that the minimum value of income is the line of extreme poverty.

4.1.2. Subjective approach

In the subjective approach to determining the poverty line, the subjective poverty line method was used (Goethart, Halberstadt, Kapteyn and Van Praag, 1997; Panek 2011). In this method, the households themselves indicate the lowest levels of income necessary for them to make ends meet, which are treated as their specific poverty lines. The levels of income put forward by specific households depend mainly on their size (the number of persons in the household) and their actual income.

This relation may be presented in the form of the following regression equation:

$$\ln y_{\min} = \alpha_0 + \alpha_1 \ln L + \alpha_2 \ln y, \quad (1)$$

where:

L – number of persons in the household,

y – actual income of the household,

y_{\min} – the lowest level of income necessary to make ends meet, indicated by the household itself.

The parameters of the above regression function, estimated with the use of the least squares method, were the basis for calculating the poverty line for subsequent years of the study. The poverty line is obtained as the value of income y^* , which – when substituted for y_{\min} and y – satisfies equation (1). The values of the poverty line (y^*) dependent on the number of persons in the household were finally established on the basis of the following formula:

$$y^* = \exp \frac{\alpha_0 + \alpha_1 \ln x}{1 - \alpha_2}. \quad (2)$$

4.2. Equivalence scales

4.2.1. Objective approach

The equivalence scales adopted in the objective approach were estimated, both under the classical and multidimensional concept, on the basis of the procedure using the information on the amount of expenditure of the households (Szulc, 1996). This procedure takes into account the fact that the households of a different composition spend income in different ways. For example, in the households of young persons less is spent on medical care and more on food, unlike the households of older persons. At the same time, it was assumed that the structure of consumption in the households reflects their actual needs.

A household of employees of a single person aged between 30 and 59 was established as the point of reference (that is, as a "standard" household, with the equivalence scale of 1). The value of the equivalence scale for any other household may be then interpreted as the number of "standard" households it includes (that is, the number of "standard" persons in our case). The equivalence scales were estimated on the basis of the following formula:

$$\ln m_i = \frac{1}{2} \sum_{j=1}^m \sum_{s=1}^n w_{sj} \ln \frac{A_{ji}}{A_{jr}}, \quad (3)$$

where:

m_i – equivalence scale for the i household,

w_{sj}, w_{sr} – percentage of expenditure of the i and r household for good or group of goods s . In this case the r household is the standard household.

w_{sj} – elasticity of expenditure for good s in relation to demographic characteristic j ($j=1,2,..,m$).

A_i, A_r – vectors of demographic characteristics of the i and r household.

In the presented study, the vectors of demographic characteristics were based on the number of adult persons in the household (above 16 years), the number of children (below 10 years and from 10 to 15 years) and the age of the head of household (16-29 years, 30-60 years and above 60).

The m_{sj} parameters are obtained through the estimation of the model of consumption demand, with the following explanatory variables: the expenditure of the household, the number of adult persons and children in the household and the prices of consumer goods. These are interpreted as the demographic elasticities of expenditure on specific goods. Thus, the equivalence scale obtained on the basis of equation (3) is a geometric mean of the elasticities of expenditure in relation to the demographic variables weighted with the shares of expenditure on specific goods in the total expenditure.

4.2.2. Subjective approach

In the subjective approach, the estimates for the equivalence scales were based on the poverty lines calculated for households with different numbers of persons in the household, with the use of formula (2). A single-person household was assumed as the “standard” household being the point of reference (with the equivalence scale of 1). The value of the equivalence scale for a L -person household is obtained by dividing the value of its poverty line by the value of the poverty line for a one-person household:

$$m_L = \frac{y^* \text{C}_L}{y^* \text{C}_1} \quad (4)$$

4.3. Aggregate poverty indices

Four aggregate poverty indices were used in the study, providing supplementary information on the poverty sphere (Panek, 2011). The first index, assessing poverty incidence, is the headcount ratio; that is, the percentage of households living below the poverty line:

$$I_H = \frac{n_u}{n}, \quad (5)$$

where:

n_u – number of poor households in the population subjected to the study,

n – total number of households subjected to the study.

This index has the value of 0 when there are no poor households and 1 if all households suffer poverty.

The second measure of poverty is the index which assesses poverty depth; that is, the average relative distance of the poor households’ “wealth” (average net income of a household suffering poverty) from the poverty line. In the study, the poverty gap index was used:

$$I_u = \frac{1}{n_u} \sum_{i=1}^{n_u} \left(\frac{y^* - y_i^e}{y^*} \right). \quad (6)$$

The poverty gap index is an unweighted average of individual poverty depth indices (of each poor household). It measures the average distance between the equivalent income of poor households and the poverty line, and, thus, its value shows how poor the households from the population of the poor are. This index has the value of 0 when there are no poor households in the population subjected to the study and the value of 1 when the income of all poor households equals zero.

Another index applied in the poverty analysis is the income gap index assessing poverty intensity:

$$I^o = \frac{1}{n} \sum_{i=1}^{n_u} \left(\frac{y^* - y_i^e}{y^*} \right). \quad (7)$$

This index may be also presented as the product of the headcount ratio and the poverty gap; that is, describing two characteristics of poverty jointly, and assessing both poverty incidence and depth:

$$I^o = H \cdot I^u. \quad (8)$$

This measure is different from the poverty gap as it concerns the entire population of households subjected to the study, and not only the poor households. The sum of poverty gaps of all households (the gaps of non-poor households are naturally 0) is here divided by the number of all households subjected to the study.

The poverty gap index measures the costs of eliminating poverty (in relation to the poverty line), since it indicates the amount of equivalent income (measured as a percentage of the poverty line) which should on average be transferred to each poor household in order for the income of all households subjected to the study to be above the poverty line.

The last index used in the analysis is the index which assesses poverty severity, taking into account not only poverty incidence and the distance between poor households' income and the poverty line (poverty depth), but also income inequalities between the poor. This index is the poverty gap square defined in the following manner:

$$DU = \frac{1}{n} \sum_{i=1}^{n_u} \left(\frac{y^* - y_i^{eu}}{y^*} \right)^2. \quad (9)$$

It may also be presented in a form which indicates the impact of specific poverty aspects on the phenomenon being analysed:

$$DU = H \left(\frac{y^* - \bar{y}_i^{eu}}{y^*} \right)^2 + \frac{S^2 \bar{y}_i^{eu}}{\bar{y}^{*2}}. \quad (10)$$

where:

\bar{y}_i^{eu} - average equivalent income of poor households,

$S^2 \bar{y}_i^{eu}$ - variance of the equivalent income in the population of poor households.

As opposed to the income gap index, under this index, the greater the distance from the income determining the poverty line and the equivalent income of poor households, the higher weights are assigned to such households. Therefore, poverty severity among poor households, and at the same time the value of this index, rise together with the increase in the distance between the households' equivalent income and the poverty line. The weights assigned to the households are directly proportional to the size of their income gaps. For example, if the income gap of a household amounts to 10 per cent of the poverty line, the household is assigned the weight amounting to 10 per cent of the sum of weights of all households taking part in the study. This index has the value of 0 when there are no poor households in the population subjected to the study. The value of the index increases together with the increase in the number of the poor, their income gaps and income inequalities between the poor. The index has its maximum value; that is 1, when all households have income equal to zero in the population studied.

4.4. Analysis of changes in poverty over time

When analysing the dynamic phenomena related to poverty, it is particularly important whether a specific household is suffering poverty temporarily or whether this condition is of a permanent character (Panek, 2011). This is particularly significant when formulating the tasks under social policy aimed at fighting poverty, as these should focus on counteracting permanent poverty. Identifying the character of poverty is possible solely by means of a panel approach which consists in the observation of the same households in all periods (years). Hence, in the presented study on poverty, the assessment of the changes in poverty was based on the information concerning only those households which took part in all last three phases of the study, i.e. in 2007, 2009 and in 2011.

The analyses conducted as part of the study examined the character of poverty by means of analysing the mobility of the household in relation to its being below or above the poverty line.

Table 4.1. The scheme of flows of the households between the status of being below or above the poverty line

Status of being below/above the poverty line in period $t-1$	Status of being below/above the poverty line in period t		$n_{j,t-1}$
	non-poor households ($j=0$)	poor households ($j=1$)	
non-poor households ($j=0$)	$n_{00,t-1,t}$	$n_{01,t-1,t}$	$n_{0,t-1}$
poor households ($j=1$)	$n_{10,t-1,t}$	$n_{11,t-1,t}$	$n_{1,t-1}$
$n_{j,t}$	$n_{0,t}$	$n_{1,t}$	n

The assessment of households' mobility in relation to their status of being below or above the poverty line is based on the analysis of the flows of households between these statuses in two comparable periods (years). The scheme of flows of households between the status of being below or above the poverty line under the classical approach is presented in table 1.

In the case of poverty analysis in relation to the income situation of households, the values on the diagonal of the matrix of flows $N = [n_{jj',t-1,t}]$ indicate the number of households which did not change

their status of being below or above the poverty line in the two comparable periods (i.e. in both comparable periods (years) these households were or were not below the poverty line). The number of households which “moved” above the poverty line is below the diagonal, and the number of households which “moved” below the poverty line is above the diagonal.

The indices of mobility, which are synthetic assessments of the scale of mobility of the households in relation to their being above or below the poverty line, are calculated on the basis of the matrix of flows. A classical mobility index often used in practice and calculated based on the matrices of flows is the Shorrocks index (1978), described with the following formula:

$$M^S = \frac{n - tr(\mathbf{N})}{n}, \quad (11)$$

where:

$tr(\mathbf{N})$ – trace of the matrix of flows⁸⁸,

whereby:

$n_{jj',t-1,t}$ – number of households which in period $t-1,t$ moved from the status of being below or above the poverty line j to status j' .

Index (11) may have the value from the range of $[-1, 1]$. The higher the value of the index, the greater the mobility of the households.

When decomposing index (11), and expanding its analytical capacities, we obtain the following:

$$M^S = \frac{n - tr(\mathbf{N})}{n} = \frac{\sum_{j>j'} n_{jj'} + \sum_{j<j'} n_{jj'}}{n} = \frac{\sum_{j>j'} n_{jj'}}{n} + \frac{\sum_{j<j'} n_{jj'}}{n} = M^{S+} + M^{S-}, \quad (12)$$

The first of the components on the right side of the equation indicates the percentage of households which moved above the poverty line in the comparable periods. The second component of the sum is the percentage of households which moved below the poverty line in the studied period. As a supplementation for mobility index (11), T. Panek (2001) proposed the index of the character of the households' mobility:

$$CM = \frac{\sum_{j>j'} n_{jj'}}{n} - \frac{\sum_{j<j'} n_{jj'}}{n} = M^{S+} - M^{S-}, \quad (13)$$

This index may have the value from the range of $[-1; 1]$. Its positive values mean that the flows of households in the direction above the poverty line prevail. On the other hand, its negative values mean that the flows of households in the direction below the poverty line prevail. The higher the absolute value of the index, the greater the prevalence of one type of flows over the other.

4.5. Determinants of poverty

A widely used method of establishing the sources of poverty divides the researched population into groups according to selected social and economic features, and then assesses this phenomenon inside these groups by means of poverty indices most often by means of the percentage of the poor. High values of the poverty index in the given group of households, with a concurrent high diversity of such values between the groups under the given classification suggest that this variant of the feature characterising the selected group of households generates poverty.

However, the assessments of the impact of specific variables on generating poverty may independently be biased since the relation of such variables with other variables is not taken into account. For example, high values of poverty index in the group of rural households indicate that living in the countryside generates poverty. However, a high value of poverty index for this group of households is a combined effect not only of the place of residence, but also of other factors; e.g. a higher number of children in rural households in comparison to urban households, a lower level of education of the members of such households in comparison with the households from the cities. Thus, in order to specify the determinants of poverty necessary to estimate the “net” impact of specific variables on generating poverty requires the application of multidimensional methods of analysing correlations and the multiple regression in particular.

In order to specify the impact of the features underlined in the study on the degree of the risk of poverty, probit or logit models may be applied (Greene, 1997). In these models, the dependent variable is the marker variable which has the value of 1 if the household was below the poverty line and otherwise the value of 0.

The probit model may look as follows:

⁸⁸ Values on the diagonal of the matrix, i.e. the number of household members, which have not changed their poverty sphere status in the periods under comparison.

$$\Phi^{-1} \left[p(X) \right] = \alpha_0 + \alpha_1 X_1 + \alpha_2 X_2 + \dots + \alpha_k X_k + \varepsilon, \quad (14)$$

where:

X – vector of the potential determinants of poverty (explanatory variables),

$p(X)$ – probability of the household's falling below the poverty line, in a specified set of potential determinants of poverty (independent variables),

$\Phi^{-1}(p)$ – inverse cumulative standard normal distribution function

ε – the rest of the model.

The explanatory variables included in the models as the potential determinants of poverty may be presented, similarly as the explanatory variable, by means of a set of marker variables. When estimating the models with the sets of marker variables, in each such set one of the marker variables (variants of the feature) is omitted in order to avoid multicollinearity. This means that the parameters next to the independent variables of the model are relative indicators of the risk of entering the poverty sphere. The higher the positive value of the parameter next to the given variable (variant of the feature), the higher the risk of falling below the poverty line among the households displaying this feature variant, in comparison with the households whose model does not contain this feature variant. On the other hand, the negative value of the parameter next to the given variable (feature variant) indicates a lower risk of falling below the poverty line (in relation to the omitted feature variant).

Annex 5. Ranking of socio-demographic and professional groups in relation to eight dimensions of the quality of life in 2011

5.1. Towns and cities

Civilisation level

Rank	City/Town	Average	SD	N
1	Toruń	0.70	0.82	139
2	Warsaw	0.65	0.85	1220
3	Poznań	0.52	0.96	315
4	Kraków	0.50	0.93	557
5	Szczecin	0.47	0.95	286
6	Gdańsk	0.44	0.85	327
7	Lublin	0.40	0.79	246
8	Wrocław	0.38	0.88	474
9	Olsztyn	0.38	0.69	95
10	Gorzów Wlkp.	0.37	0.84	106
11	Gliwice	0.36	0.84	130
12	Bydgoszcz	0.26	0.90	266
13	Sosnowiec	0.26	0.90	175
14	Kędzierzyn Koźle	0.25	0.87	75
15	Białystok	0.18	0.87	199
16	Gdynia	0.18	0.98	137
17	Katowice	0.17	0.91	222
18	Częstochowa	0.16	0.93	184
19	Łódź	0.15	0.89	611
20	Jaworzno	0.13	1.01	129
21	Zabrze	0.07	0.99	97
22	Kielce	0.06	0.95	150
23	Wałbrzych	-0.10	0.89	167
24	Bielsko-Biała	-0.16	1.00	169
25	Kętrzyn	-0.20	0.83	63
26	Radom	-0.23	1.01	177

Social well-being

Rank	City/Town	Average	SD	N
1	Gdańsk	0.15	0.92	344
2	Jaworzno	0.12	0.92	140
3	Białystok	0.10	0.91	202
4	Toruń	0.08	0.89	142
5	Kraków	0.08	0.92	561
6	Bydgoszcz	0.07	0.87	265
7	Warsaw	0.07	1.00	1175
8	Częstochowa	0.07	0.91	186
9	Gliwice	0.07	1.00	130
10	Gdynia	0.05	0.85	138
11	Radom	0.03	0.86	177
12	Szczecin	0.01	0.94	288
13	Łódź	-0.04	1.03	616
14	Katowice	-0.04	1.14	220
15	Bielsko-Biała	-0.05	1.00	184
16	Zabrze	-0.06	1.02	96
17	Kielce	-0.07	1.12	154
18	Wrocław	-0.08	0.98	471
19	Wałbrzych	-0.08	0.96	174
20	Poznań	-0.08	0.98	309
21	Kędzierzyn Koźle	-0.11	0.92	75
22	Lublin	-0.12	1.16	230
23	Sosnowiec	-0.14	1.16	172
24	Gorzów Wlkp	-0.16	1.22	121
25	Olsztyn	-0.16	0.99	120
26	Kętrzyn	-0.29	1.07	69

Material well-being

Rank	City/Town	Average	SD	N
1	Warsaw	1.01	1.59	1142
2	Poznań	0.71	1.36	290
3	Gdynia	0.54	1.30	120
4	Wrocław	0.52	1.04	445
5	Szczecin	0.49	1.23	282
6	Kraków	0.42	1.05	554
7	Toruń	0.35	1.14	143
8	Jaworzno	0.35	0.88	120
9	Gdańsk	0.29	1.07	323
10	Sosnowiec	0.23	0.77	141
11	Katowice	0.17	1.06	213
12	Bydgoszcz	0.16	0.93	256
13	Olsztyn	0.14	0.97	122
14	Łódź	0.12	1.01	612
15	Kędzierzyn Koźle	0.12	0.82	62
16	Zabrze	0.12	0.90	93
17	Gliwice	0.09	0.80	124
18	Gorzów Wlkp	0.01	0.74	121
19	Kielce	0.00	0.89	148
20	Lublin	-0.04	0.80	245
21	Częstochowa	-0.06	0.83	190
22	Białystok	-0.10	0.74	198
23	Wałbrzych	-0.13	0.78	171
24	Kętrzyn	-0.25	0.78	69
25	Bielsko-Biała	-0.28	0.81	152
26	Radom	-0.32	0.83	182

Pathologies (the lower the value, the more pathologies)

Rank	City/Town	Average	SD	N
1	Jaworzno	0.22	0.49	144
2	Kielce	0.13	0.74	157
3	Łódź	0.08	0.84	618
4	Kętrzyn	0.07	0.64	68
5	Gorzów Wlkp	0.03	0.71	121
6	Kraków	0.03	0.81	561
7	Radom	0.03	1.11	182
8	Gdynia	0.02	0.92	138
9	Wałbrzych	0.00	1.10	176
10	Zabrze	0.00	0.91	99
11	Częstochowa	-0.03	1.13	190
12	Lublin	-0.05	0.84	254
13	Białystok	-0.06	1.02	203
14	Gdańsk	-0.06	0.95	352
15	Sosnowiec	-0.06	0.93	174
16	Bielsko-Biała	-0.10	1.36	188
17	Katowice	-0.11	1.04	225
18	Toruń	-0.14	0.93	144
19	Gliwice	-0.15	0.98	131
20	Warsaw	-0.17	1.05	1233
21	Wrocław	-0.19	1.28	479
22	Olsztyn	-0.22	1.49	127
23	Poznań	-0.24	1.18	318
24	Bydgoszcz	-0.25	1.29	268
25	Szczecin	-0.27	1.28	290
26	Kędzierzyn Koźle	-0.31	1.55	75

Social capital

Rank	City/Town	Average	SD	N
1	Warsaw	0.32	1.06	1152
2	Toruń	0.28	1.28	135
3	Katowice	0.20	1.22	214
4	Gdynia	0.18	0.93	138
5	Poznań	0.17	1.16	305
6	Kraków	0.13	1.09	560
7	Kędzierzyn Koźle	0.11	1.24	75
8	Częstochowa	0.11	1.15	185
9	Lublin	0.10	1.06	236
10	Zabrze	0.08	1.15	92
11	Gdańsk	0.06	0.91	314
12	Olsztyn	0.06	0.94	113
13	Wrocław	0.04	0.89	458
14	Kielce	0.03	1.11	133
15	Gorzów Wlkp.	0.02	1.16	119
16	Szczecin	0.01	1.00	274
17	Jaworzno	-0.01	1.13	134
18	Bydgoszcz	-0.02	1.01	248
19	Bielsko-Biała	-0.06	1.04	174
20	Radom	-0.07	0.93	169
21	Białystok	-0.11	0.95	200
22	Łódź	-0.15	0.89	591
23	Gliwice	-0.16	0.99	122
24	Sosnowiec	-0.21	0.80	158
25	Walbrzych	-0.27	0.86	166
26	Kętrzyn	-0.29	0.67	66

Physical well-being

Rank	City/Town	Average	SD	N
1	Kędzierzyn Koźle	0.22	0.88	75
2	Szczecin	0.18	0.92	286
3	Jaworzno	0.14	0.96	142
4	Olsztyn	0.14	0.80	112
5	Gdańsk	0.13	0.94	340
6	Kraków	0.12	0.95	560
7	Toruń	0.11	0.92	144
8	Walbrzych	0.10	0.95	169
9	Łódź	0.08	0.95	599
10	Warsaw	0.04	0.95	1198
11	Gliwice	0.02	0.83	125
12	Bydgoszcz	0.01	1.11	246
13	Lublin	-0.01	0.93	242
14	Poznań	-0.01	0.95	296
15	Wrocław	-0.03	1.06	441
16	Gdynia	-0.03	1.04	131
17	Bielsko-Biała	-0.04	0.99	186
18	Białystok	-0.07	0.99	195
19	Sosnowiec	-0.07	0.96	169
20	Kielce	-0.08	1.12	153
21	Gorzów Wlkp.	-0.11	1.12	109
22	Kętrzyn	-0.12	1.17	69
23	Radom	-0.18	1.02	174
24	Częstochowa	-0.25	1.05	185
25	Katowice	-0.28	1.10	215
26	Zabrze	-0.29	1.20	97

Psychological well-being

Rank	City/Town	Average	SD	N
1	Toruń	0.44	0.75	142
2	Jaworzno	0.28	0.91	137
3	Kraków	0.24	0.88	561
4	Bydgoszcz	0.20	0.91	261
5	Gdynia	0.18	0.80	138
6	Poznań	0.18	0.89	308
7	Kielce	0.17	1.08	154
8	Szczecin	0.16	0.93	285
9	Gdańsk	0.15	1.05	349
10	Warsaw	0.12	0.95	1207
11	Wrocław	0.11	0.99	477
12	Olsztyn	0.09	1.13	123
13	Gorzów Wlkp.	0.06	1.13	121
14	Łódź	0.04	1.02	614
15	Częstochowa	0.04	0.81	189
16	Walbrzych	0.00	0.93	174
17	Katowice	-0.02	1.03	220
18	Lublin	-0.05	0.93	245
19	Gliwice	-0.06	0.96	131
20	Kędzierzyn Koźle	-0.08	0.94	75
21	Sosnowiec	-0.09	0.95	168
22	Zabrze	-0.09	1.07	97
23	Białystok	-0.11	0.98	202
24	Radom	-0.12	0.82	177
25	Bielsko-Biała	-0.17	0.94	183
26	Kętrzyn	-0.65	1.29	64

Life stress (the lower the value, the greater the stress)

Rank	City/Town	Average	SD	N
1	Kętrzyn	0.31	0.62	68
2	Jaworzno	0.30	0.75	140
3	Bielsko-Biała	0.24	0.95	188
4	Gdynia	0.09	0.79	135
5	Gorzów Wlkp.	0.06	0.99	118
6	Łódź	0.06	0.96	601
7	Toruń	0.05	1.10	143
8	Białystok	-0.03	0.98	200
9	Kielce	-0.03	1.24	155
10	Kraków	-0.04	0.98	556
11	Radom	-0.06	0.96	179
12	Kędzierzyn Koźle	-0.08	1.25	75
13	Poznań	-0.09	0.98	284
14	Bydgoszcz	-0.10	1.03	260
15	Zabrze	-0.10	1.14	98
16	Warsaw	-0.11	0.95	1191
17	Katowice	-0.14	0.97	210
18	Olsztyn	-0.17	1.19	119
19	Szczecin	-0.18	0.99	289
20	Wrocław	-0.19	0.95	463
21	Częstochowa	-0.20	1.15	190
22	Walbrzych	-0.23	1.17	174
23	Sosnowiec	-0.24	1.07	166
24	Gdańsk	-0.35	1.00	348
25	Lublin	-0.52	1.20	224
26	Gliwice	-0.61	1.23	127

5.2. Voivodeships

Civilisation level

Rank	Voivodeship	Average	SD	N
1	Mazowieckie	0.11	1.03	3464
2	Pomorskie	0.10	0.94	1451
3	Wielkopolskie	0.06	0.95	2236
4	Dolnośląskie	0.05	0.98	1957
5	Śląskie	0.04	0.97	3177
6	Małopolskie	0.02	1.03	2142
7	Zachodniopomorskie	0.00	1.02	1153
8	Opolskie	-0.01	1.03	697
9	Lubuskie	-0.03	0.98	640
10	Podlaskie	-0.03	1.09	796
11	Kujawsko-pomorskie	-0.09	0.99	1348
12	Łódzkie	-0.09	0.96	1723
13	Podkarpackie	-0.10	1.02	1384
14	Lubelskie	-0.11	1.03	1401
15	Warmińsko-mazurskie	-0.17	0.94	875
16	Świętokrzyskie	-0.21	1.03	825

Material well-being

Rank	Voivodeship	Average	SD	N
1	Mazowieckie	0.23	1.33	3463
2	Dolnośląskie	0.14	0.90	1945
3	Pomorskie	0.12	1.06	1450
4	Wielkopolskie	0.08	0.95	2075
5	Małopolskie	0.04	0.95	2136
6	Śląskie	0.04	0.89	2981
7	Opolskie	0.01	0.85	666
8	Zachodniopomorskie	0.01	1.05	1123
9	Podlaskie	-0.04	0.94	813
10	Lubuskie	-0.05	0.85	657
11	Łódzkie	-0.09	0.91	1721
12	Warmińsko-mazurskie	-0.11	0.85	937
13	Kujawsko-pomorskie	-0.22	0.93	1338
14	Podkarpackie	-0.22	0.82	1378
15	Świętokrzyskie	-0.28	0.88	819
16	Lubelskie	-0.31	0.88	1438

Social capital

Rank	Voivodeship	Average	SD	N
1	Mazowieckie	0.10	0.99	3302
2	Lubelskie	0.08	1.00	1369
3	Pomorskie	0.05	0.99	1425
4	Świętokrzyskie	0.04	0.96	785
5	Podkarpackie	0.03	1.08	1366
6	Dolnośląskie	0.02	1.00	1911
7	Małopolskie	0.00	0.99	2163
8	Wielkopolskie	0.00	1.07	2158
9	Zachodniopomorskie	-0.01	0.99	1134
10	Lubuskie	-0.03	1.04	633
11	Opolskie	-0.03	1.03	684
12	Podlaskie	-0.06	0.96	801
13	Śląskie	-0.06	1.00	3111
14	Warmińsko-mazurskie	-0.06	0.88	859
15	Łódzkie	-0.08	0.94	1648
16	Kujawsko-pomorskie	-0.11	0.99	1303

Social well-being

Rank	Voivodeship	Average	SD	N
1	Podkarpackie	0.09	1.00	1411
2	Małopolskie	0.07	0.95	2199
3	Lubelskie	0.06	1.03	1409
4	Pomorskie	0.05	0.98	1494
5	Podlaskie	0.03	0.99	816
6	Opolskie	0.01	1.01	697
7	Śląskie	0.01	0.97	3249
8	Mazowieckie	0.00	1.01	3453
9	Dolnośląskie	-0.01	1.04	1973
10	Kujawsko-pomorskie	-0.02	0.95	1355
11	Łódzkie	-0.02	1.01	1732
12	Wielkopolskie	-0.02	1.01	2263
13	Lubuskie	-0.05	1.06	661
14	Zachodniopomorskie	-0.09	0.95	1164
15	Świętokrzyskie	-0.14	1.10	858
16	Warmińsko-mazurskie	-0.14	0.99	926

Pathologies (the lower the value, the more pathologies)

Rank	Voivodeship	Average	SD	N
1	Łódzkie	0.10	0.78	1765
2	Małopolskie	0.08	0.81	2206
3	Podkarpackie	0.06	0.96	1437
4	Lubelskie	0.04	0.87	1466
5	Warmińsko-mazurskie	0.03	1.00	958
6	Kujawsko-pomorskie	0.02	1.01	1390
7	Świętokrzyskie	0.02	1.07	866
8	Podlaskie	0.01	1.03	818
9	Śląskie	-0.01	1.01	3287
10	Dolnośląskie	-0.03	1.05	1995
11	Mazowieckie	-0.03	0.98	3590
12	Opolskie	-0.03	1.20	710
13	Pomorskie	-0.03	1.06	1528
14	Zachodniopomorskie	-0.06	1.13	1178
15	Lubuskie	-0.07	1.23	670
16	Wielkopolskie	-0.08	1.08	2328

Physical well-being

Rank	Voivodeship	Average	SD	N
1	Warmińsko-mazurskie	0.13	0.98	905
2	Opolskie	0.06	0.92	697
3	Zachodniopomorskie	0.04	1.00	1164
4	Mazowieckie	0.03	0.96	3468
5	Pomorskie	0.03	1.02	1484
6	Śląskie	0.03	0.94	3188
7	Kujawsko-pomorskie	0.00	0.99	1327
8	Wielkopolskie	0.00	1.02	2216
9	Dolnośląskie	-0.07	1.02	1906
10	Świętokrzyskie	-0.05	1.05	847
11	Lubelskie	-0.04	1.05	1400
12	Podlaskie	-0.04	1.02	802
13	Łódzkie	-0.01	0.97	1705
14	Małopolskie	-0.01	1.01	2182
15	Podkarpackie	-0.01	1.05	1405
16	Lubuskie	-0.21	1.18	639

Psychological well-being

Rank	Voivodeship	Average	SD	N
1	Pomorskie	0.11	0.97	1521
2	Wielkopolskie	0.09	0.97	2270
3	Małopolskie	0.06	0.95	2205
4	Kujawsko-pomorskie	0.05	0.96	1350
5	Śląskie	0.02	0.96	3231
6	Lubuskie	-0.01	1.09	660
7	Podkarpackie	-0.01	0.97	1404
8	Warmińsko-mazurskie	-0.01	1.06	913
9	Zachodniopomorskie	-0.01	1.01	1162
10	Dolnośląskie	-0.04	1.01	1976
11	Łódzkie	-0.04	1.05	1740
12	Mazowieckie	-0.04	0.98	3535
13	Lubelskie	-0.07	1.02	1437
14	Opolskie	-0.07	0.99	695
15	Świętokrzyskie	-0.09	1.18	859
16	Podlaskie	-0.16	1.07	820

Life stress (the lower the value, the greater the stress)

Rank	Voivodeship	Average	SD	N
1	Warmińsko-mazurskie	0.12	0.96	916
2	Opolskie	0.10	0.99	700
3	Kujawsko-pomorskie	0.06	1.03	1336
4	Małopolskie	0.06	0.96	2186
5	Wielkopolskie	0.05	1.00	2203
6	Śląskie	0.04	1.00	3185
7	Łódzkie	0.00	0.98	1701
8	Podkarpackie	0.00	0.92	1381
9	Podlaskie	-0.02	1.09	815
10	Świętokrzyskie	-0.03	1.09	854
11	Mazowieckie	-0.04	1.01	3460
12	Pomorskie	-0.04	1.00	1490
13	Lubelskie	-0.06	1.04	1391
14	Dolnośląskie	-0.08	0.99	1909
15	Zachodniopomorskie	-0.09	0.97	1167
16	Lubuskie	-0.10	1.01	628

5.3. Subregions (NUTS3)

Civilisation level

Rank	Subregion	Average	SD	N
1	Warszawski	0.39	0.96	1999
2	Poznański	0.31	0.98	686
3	Szczeciński	0.28	1.00	446
4	Tyski	0.27	0.88	234
5	Bydgosko-Toruński	0.26	0.95	526
6	Krakowski	0.24	1.03	991
7	Gdański	0.24	0.92	815
8	Wrocławski	0.20	0.92	778
9	Sosnowiecki	0.17	0.96	573
10	Lubelski	0.15	0.95	448
11	Gorzowski	0.13	0.90	284
12	Białostocki	0.13	0.96	356
13	Gliwicki	0.12	0.92	307
14	Łódzki	0.10	0.90	820
15	Legnicko-Głogowski	0.07	0.99	295
16	Katowicki	0.07	0.95	529
17	Kaliski	0.05	0.86	503
18	Tarnowski	0.04	0.99	317
19	Opolski	0.04	1.02	415
20	Rzeszowski	0.03	1.04	360
21	Jeleniogórski	0.02	1.00	413
22	Starogardzki	0.02	0.91	323
23	Rybnicki	0.00	0.97	320
24	Częstochowski	-0.04	0.97	449
25	Leszczyński	-0.05	0.90	392
26	Przemyski	-0.06	1.04	292
27	Lomżyński	-0.06	1.15	251
28	Koszaliński	-0.07	1.02	448
29	Nyski	-0.08	1.04	282
30	Krośnieński	-0.10	0.98	415
31	Bielski	-0.10	1.01	501
32	Koniński	-0.10	0.95	416
33	Bytomski	-0.11	0.95	265
34	Kielecki	-0.13	1.03	519
35	Skieriewicki	-0.14	0.99	231
36	Olsztyński	-0.14	0.92	362
37	Zielonogórski	-0.15	1.03	356
38	Elęcki	-0.16	0.94	139
39	Sląski	-0.17	0.96	313
40	Piški	-0.17	0.92	239
41	Piotrkowski	-0.18	0.97	404
42	Bialski	-0.20	1.14	209
43	Puławska	-0.20	1.05	330
44	Oświęcimski	-0.20	0.96	367
45	Wałbrzyski	-0.21	0.98	467
46	Ciechanowsko-Płocki	-0.21	0.94	421
47	Elbląski	-0.21	0.95	374
48	Ostrołęcko-Siedlecki	-0.23	1.06	549
49	Chelmsko-Zamojski	-0.26	0.99	413
50	Grudziądzki	-0.27	0.90	286
51	Tarnobrzeski	-0.29	1.02	317
52	Suwalski	-0.29	1.18	189
53	Nowosądecki	-0.30	0.98	466
54	Włocławski	-0.32	1.00	540
55	Sandomiersko-Jędrzejowski	-0.34	1.02	306
56	Stargardzki	-0.35	0.93	258
57	Radomski	-0.39	1.00	495
58	Sieradzki	-0.48	0.96	267

Social well-being

Rank	Subregion	Average	SD	N
1	Rzeszowski	0.22	1.08	360
2	Nowosądecki	0.20	0.85	500
3	Puławska	0.17	0.94	328
4	Jeleniogórski	0.15	0.97	424
5	Rybnicki	0.15	0.87	316
6	Białostocki	0.12	1.01	361
7	Legnicko-Głogowski	0.11	1.07	300
8	Sląski	0.11	1.00	316
9	Chelmsko-Zamojski	0.10	0.94	420
10	Kaliski	0.10	1.00	503
11	Bydgosko-Toruński	0.09	0.86	525
12	Tarnowski	0.09	0.96	321
13	Tarnobrzeski	0.07	0.95	318
14	Katowicki	0.07	1.02	537
15	Skieriewicki	0.06	0.94	239
16	Gdański	0.06	0.93	851
17	Bytomski	0.06	0.93	267
18	Krośnieński	0.05	1.00	436
19	Częstochowski	0.05	0.95	458
20	Krakowski	0.03	0.96	1004
21	Lubelski	0.01	1.19	438
22	Zielonogórski	0.01	0.97	364
23	Ciechanowsko-Płocki	0.01	1.13	420
24	Warszawski	0.01	0.99	1959
25	Opolski	0.01	0.96	413
26	Przemyski	0.01	0.91	297
27	Gliwicki	0.01	0.99	307
28	Nyski	0.00	1.08	284
29	Oświęcimski	-0.01	1.00	374
30	Ostrołęcko-Siedlecki	-0.01	0.92	569
31	Leszczyński	-0.01	0.94	405
32	Poznański	-0.01	1.06	673
33	Grudziądzki	-0.02	0.96	286
34	Łódzki	-0.02	1.00	827
35	Starogardzki	-0.02	1.10	327
36	Łomżyński	-0.03	1.00	263
37	Stargardzki	-0.03	0.89	269
38	Wrocławski	-0.04	1.03	774
39	Piotrkowski	-0.04	0.99	406
40	Elbląski	-0.04	0.94	382
41	Sieradzki	-0.05	1.14	261
42	Radomski	-0.05	1.06	499
43	Suwalski	-0.05	0.92	192
44	Szczeciński	-0.05	0.96	449
45	Bielski	-0.06	0.96	527
46	Elęcki	-0.06	0.91	147
47	Sosnowiecki	-0.07	0.98	600
48	Tyski	-0.08	1.04	244
49	Włocławski	-0.10	1.02	547
50	Koniński	-0.10	0.99	426
51	Bialski	-0.12	0.97	223
52	Gorzowski	-0.13	1.16	297
53	Sandomiersko-Jędrzejowski	-0.13	1.11	320
54	Kielecki	-0.15	1.09	538
55	Koszaliński	-0.16	0.99	445
56	Wałbrzyski	-0.17	1.06	471
57	Piški	-0.17	1.01	257
58	Olsztyński	-0.26	1.06	397

Material well-being

Rank	Subregion	Average	SD	N
1	Warszawski	0.65	1.45	1951
2	Poznański	0.47	1.14	599
3	Wrocławski	0.38	0.95	751
4	Szczeciński	0.31	1.17	447
5	Tyski	0.27	0.96	237
6	Rybnicki	0.26	0.85	269
7	Krakowski	0.24	1.01	977
8	Gdański	0.22	1.09	799
9	Sosnowiecki	0.18	0.86	506
10	Jeleniogórski	0.12	9.89	419
11	Opolski	0.11	0.77	381
12	Bydgosko-Toruński	0.10	1.03	522
13	Starogardzki	0.07	0.87	339
14	Lódzki	0.06	0.97	826
15	Gliwicki	0.06	0.80	296
16	Łomżyński	0.05	1.00	261
17	Oświęcimski	0.03	0.75	364
18	Białostocki	0.03	0.87	358
19	Katowicki	0.02	1.03	505
20	Leszczyński	0.01	0.79	377
21	Elęcki	0.00	0.85	144
22	Legnicko-Głogowski	-0.03	0.82	300
23	Gorzowski	-0.05	0.74	302
24	Elbląski	-0.05	0.78	381
25	Zielonogórski	-0.06	0.93	355
26	Pielski	-0.06	0.95	242
27	Bielski	-0.07	0.75	471
28	Kaliski	-0.07	0.73	496
29	Tarnowski	-0.08	1.16	320
30	Slupski	-0.09	1.16	312
31	Rzeszowski	-0.11	0.82	353
32	Skierniewicki	-0.12	0.88	238
33	Nyski	-0.13	0.93	285
34	Częstochowski	-0.13	0.80	448
35	Wałbrzyski	-0.14	0.78	471
36	Lubelski	-0.15	0.91	458
37	Koszaliński	-0.16	0.95	401
38	Kielecki	-0.19	0.93	526
39	Olsztyński	-0.19	0.90	412
40	Koniński	-0.19	0.84	361
41	Krośnieński	-0.22	0.76	429
42	Przemyski	-0.22	0.91	289
43	Bytomski	-0.23	0.95	248
44	Stargardzki	-0.23	0.86	275
45	Piotrkowski	-0.24	0.82	395
46	Ciechanowsko-Płocki	-0.27	0.94	442
47	Suwalski	-0.28	0.96	192
48	Nowosądecki	-0.30	0.68	476
49	Ostrołęcko-Siedlecki	-0.30	0.85	564
50	Puławski	-0.31	0.82	341
51	Sieradzki	-0.34	0.74	262
52	Tarnobrzeski	-0.34	0.79	308
53	Radomski	-0.38	0.90	504
54	Grudziądzki	-0.42	0.85	297
55	Włocławski	-0.42	0.77	523
56	Bialski	-0.43	0.86	227
57	Chełmsko-Zamojski	-0.43	0.90	412
58	Sandomiersko-Jędrzejowski	-0.45	0.77	292

Pathologies (the lower the value, the more pathologies)

Rank	Subregion	Average	SD	N
1	Nowosądecki	0.21	0.57	499
2	Przemyski	0.21	0.50	302
3	Włocławski	0.20	0.58	561
4	Sieradzki	0.17	0.69	270
5	Skierniewicki	0.15	0.68	242
6	Bytomski	0.12	0.68	259
7	Łódzki	0.11	0.79	840
8	Slupski	0.11	0.92	330
9	Chełmsko-Zamojski	0.10	0.80	426
10	Koszaliński	0.09	1.01	451
11	Elbląski	0.08	0.92	384
12	Ostrołęcko-Siedlecki	0.07	0.81	593
13	Nyski	0.06	0.86	286
14	Częstochowski	0.06	1.01	463
15	Jeleniogórski	0.05	0.95	426
16	Puławski	0.05	0.85	349
17	Krakowski	0.05	0.83	1017
18	Krośnieński	0.05	1.00	441
19	Łomżyński	0.05	1.07	266
20	Bielski	0.05	1.03	531
21	Tarnowski	0.04	0.79	318
22	Kielecki	0.04	1.10	545
23	Legnicko-Głogowski	0.03	0.85	297
24	Bialski	0.03	0.78	223
25	Piotrkowski	0.03	0.88	413
26	Rzeszowski	0.01	1.01	368
27	Tarnobrzeski	0.01	1.13	326
28	Tyski	0.01	1.02	250
29	Grudziądzki	0.00	1.31	299
30	Sosnowiecki	0.00	0.93	615
31	Sandomiersko-Jędrzejowski	0.00	1.01	321
32	Olsztyński	0.00	1.02	423
33	Gorzowski	-0.01	0.86	300
34	Oświęcimski	-0.01	1.02	372
35	Suwalski	-0.01	1.12	192
36	Koniński	-0.01	1.12	433
37	Białostocki	-0.02	0.96	358
38	Elecki	-0.02	1.14	150
39	Lubelski	-0.03	0.97	468
40	Rybnicki	-0.03	0.96	324
41	Radomski	-0.04	1.15	505
42	Gliwicki	-0.04	0.87	310
43	Leszczyński	-0.05	0.95	411
44	Walbrzyski	-0.06	1.09	477
45	Ciechanowsko-Płocki	-0.06	1.08	442
46	Warszawski	-0.06	0.96	2044
47	Wrocławski	-0.07	1.13	791
48	Gdański	-0.07	1.12	860
49	Starogardzki	-0.08	1.05	338
50	Kaliski	-0.08	1.15	519
51	Opolski	-0.09	1.38	424
52	Pielski	-0.09	1.11	267
53	Stargardzki	-0.10	1.10	274
54	Zielonogórski	-0.12	1.47	370
55	Poznański	-0.13	1.06	699
56	Bydgosko-Toruński	-0.14	1.13	534
57	Szczeciński	-0.18	1.24	453
58	Katowicki	-0.19	1.25	542

Social capital

Rank	Subregion	Average	SD	N
1	Rzeszowski	0.20	1.20	354
2	Warszawski	0.19	1.02	1907
3	Puławski	0.14	0.98	309
4	Piński	0.14	1.16	249
5	Lubelski	0.10	1.03	445
6	Stargardzki	0.10	1.03	262
7	Jeleniogórski	0.09	1.06	419
8	Gdański	0.08	1.01	816
9	Chełmsko-Zamojski	0.07	0.97	399
10	Łęcki	0.07	1.04	135
11	Opolski	0.06	1.05	415
12	Krośnieński	0.06	1.15	414
13	Suwalski	0.06	1.01	185
14	Częstochowski	0.06	1.04	455
15	Sandomiersko-Jędrzejowski	0.06	0.95	297
16	Wrocławski	0.05	0.98	754
17	Piotrkowski	0.04	1.00	396
18	Krakowski	0.04	1.02	1002
19	Oświęcimski	0.04	0.98	359
20	Leszczyński	0.04	1.06	372
21	Bydgosko-Toruński	0.03	1.10	500
22	Sieradzki	0.03	1.04	239
23	Poznański	0.03	1.07	658
24	Starogardzki	0.02	1.04	318
25	Kielecki	0.02	0.97	488
26	Śląski	0.01	0.88	291
27	Rybnicki	0.00	0.98	302
28	Gorzowski	-0.01	1.10	291
29	Tarnowski	-0.01	0.97	310
30	Radomski	-0.01	0.95	481
31	Bielski	-0.02	1.03	486
32	Katowicki	-0.02	1.04	514
33	Kaliski	-0.02	1.09	477
34	Szczeciński	-0.02	0.99	426
35	Legnicko-Głogowski	-0.03	1.00	288
36	Bialski	-0.04	1.03	216
37	Ciechanowsko-Płocki	-0.05	0.97	388
38	Tarnobrzeski	-0.05	1.01	313
39	Gliwicki	-0.05	1.03	295
40	Wałbrzyski	-0.06	0.99	446
41	Zielonogórski	-0.06	0.99	341
42	Ostrołęcko-Siedlecki	-0.06	0.87	520
43	Grudziądzki	-0.07	1.03	277
44	Białostocki	-0.07	0.97	351
45	Olsztyński	-0.07	0.85	371
46	Koszaliński	-0.07	0.97	445
47	Łódzki	-0.09	0.83	352
48	Nowosądecki	-0.10	0.92	493
49	Tyski	-0.12	0.85	243
50	Łomżyński	-0.14	0.91	265
51	Koniński	-0.14	0.95	403
52	Przemyski	-0.15	0.88	786
53	Skieriewicki	-0.16	0.87	227
54	Nyski	-0.16	0.97	269
55	Sosnowiecki	-0.16	0.95	569
56	Bytomski	-0.21	0.95	252
57	Włocławski	-0.25	0.83	530

Physical well-being

Rank	Subregion	Average	SD	N
1	Bytomski	0.28	0.81	258
2	Bielski	0.17	0.88	520
3	Tyski	0.17	0.84	244
4	Elbląski	0.17	1.01	373
5	Łódzki	0.11	0.93	816
6	Olsztyński	0.11	0.92	382
7	Nowosądecki	0.10	0.99	498
8	Ostrołęcko-Siedlecki	0.10	0.95	568
9	Śląski	0.10	0.98	317
10	Warszawski	0.09	0.93	1981
11	Nyski	0.09	0.92	282
12	Szczeciński	0.08	0.95	448
13	Bialski	0.07	1.06	216
14	Przemyski	0.07	1.07	298
15	Łęcki	0.07	1.08	149
16	Poznański	0.07	0.90	661
17	Włocławski	0.06	0.90	542
18	Rzeszowski	0.06	1.00	356
19	Kaliski	0.05	0.90	484
20	Krakowski	0.04	1.02	1000
21	Opolski	0.04	0.92	414
22	Częstochowski	0.04	0.97	453
23	Tarnowski	0.03	0.87	319
24	Koszaliński	0.03	1.02	451
25	Skieriewicki	0.02	0.99	232
26	Starogardzki	0.02	1.08	337
27	Legnicko-Głogowski	0.01	0.91	292
28	Bydgosko-Toruński	0.01	1.04	501
29	Lubelski	0.00	1.01	451
30	Gdański	0.00	1.01	829
31	Stargardzki	0.00	1.04	266
32	Tarnobrzeski	-0.01	0.97	321
33	Łomżyński	-0.01	1.11	257
34	Rybnicki	-0.01	0.91	308
35	Koniński	-0.01	1.14	415
36	Puławski	-0.03	1.09	340
37	Jeleniogórski	-0.04	1.04	420
38	Suwalski	-0.04	0.99	191
39	Sosnowiecki	-0.04	0.92	597
40	Kielecki	-0.04	1.10	534
41	Piński	-0.04	1.03	253
42	Sandomiersko-Jędrzejowski	-0.05	0.97	313
43	Białostocki	-0.06	0.96	354
44	Wrocławski	-0.08	1.03	723
45	Ciechanowsko-Płocki	-0.08	1.02	423
46	Katowicki	-0.09	1.03	519
47	Grudziądzki	-0.12	1.05	288
48	Krośnieński	-0.12	1.13	429
49	Chełmsko-Zamojski	-0.14	1.05	392
50	Gliwicki	-0.14	0.99	295
51	Wałbrzyski	-0.15	1.04	467
52	Piotrkowski	-0.16	0.97	402
53	Leszczyński	-0.16	1.17	402
54	Sieradzki	-0.19	0.99	256
55	Radomski	-0.19	1.01	490
56	Zielonogórski	-0.20	1.18	354
57	Gorzowski	-0.22	1.18	286
58	Oświęcimski	-0.32	1.06	365

Psychological well-being

Rank	Subregion	Average	SD	N
1	Bydgosko-Toruński	0.21	0.90	520
2	Elbląski	0.19	0.96	370
3	Kaliski	0.19	0.90	505
4	Legnicko-Głogowski	0.17	0.89	305
5	Slupski	0.17	0.99	328
6	Tyski	0.16	0.92	245
7	Poznański	0.16	0.94	678
8	Nowosadecki	0.13	0.91	499
9	Starogardzki	0.12	0.94	339
10	Leszczyński	0.11	0.99	402
11	Bytomski	0.10	0.98	261
12	Tarnowski	0.09	0.92	321
13	Przemyski	0.09	0.93	295
14	Gdański	0.09	0.97	854
15	Stargardzki	0.09	0.96	275
16	Krakowski	0.08	0.97	1013
17	Rybnicki	0.08	0.89	314
18	Szczeciński	0.08	0.93	442
19	Łódzki	0.07	1.03	835
20	Krośnieński	0.07	0.94	432
21	Warszawski	0.05	0.95	2005
22	Gorzowski	0.04	1.08	301
23	Częstochowski	0.04	0.96	462
24	Skieriewicki	0.03	0.99	240
25	Bielski	0.03	0.89	514
26	Wrocławski	0.01	1.03	781
27	Włocławski	0.01	1.01	547
28	Kielecki	0.00	1.18	543
29	Puławski	-0.01	1.05	341
30	Katowicki	-0.01	1.01	533
31	Koniński	-0.02	0.98	422
32	Jeleniogórski	-0.03	1.00	411
33	Sosnowiecki	-0.03	0.95	598
34	Lubelski	-0.05	0.96	453
35	Zielonogórski	-0.05	1.10	358
36	Nyski	-0.05	0.93	276
37	Opolski	-0.07	1.03	419
38	Ostrołęcko-Siedlecki	-0.08	1.04	586
39	Rzeszowski	-0.08	1.02	358
40	Gliwicki	-0.08	1.04	309
41	Chelmsko-Zamojski	-0.09	1.07	417
42	Oświęcimski	-0.11	0.96	372
43	Tarnobrzeski	-0.11	0.96	319
44	Białostocki	-0.11	1.00	361
45	Łomżyński	-0.13	1.21	266
46	Elęcki	-0.13	1.06	149
47	Bialski	-0.14	1.02	225
48	Pilski	-0.14	1.08	263
49	Koszaliński	-0.15	1.10	445
50	Grudziądzki	-0.16	0.91	286
51	Ciechanowsko-Płocki	-0.16	1.04	437
52	Olsztyński	-0.16	1.12	394
53	Piotrkowski	-0.19	1.04	408
54	Radomski	-0.21	0.95	502
55	Sieradzki	-0.22	1.11	258
56	Sandomiersko-Jędrzejewski	-0.25	1.16	316
57	Wałbrzyski	-0.27	1.00	474
58	Suwalski	-0.27	0.98	192

Life stress (the lower the value, the greater the stress)

Rank	Subregion	Average	SD	N
1	Bytomski	0.43	0.91	263
2	Slupski	0.41	0.92	318
3	Elbląski	0.33	0.84	375
4	Pilski	0.32	0.95	267
5	Nowosadecki	0.27	0.84	498
6	Ostrołęcko-Siedlecki	0.19	0.97	570
7	Włocławski	0.16	1.00	538
8	Suwalski	0.14	1.03	192
9	Jeleniogórski	0.13	0.88	415
10	Chelmsko-Zamojski	0.13	0.92	409
11	Bielski	0.13	0.93	513
12	Leszczyński	0.12	1.03	399
13	Łódzki	0.11	0.96	813
14	Koniński	0.11	0.89	414
15	Nyski	0.10	0.95	277
16	Opolski	0.10	1.02	423
17	Krośnieński	0.10	0.87	419
18	Tyski	0.10	0.86	247
19	Przemyski	0.09	0.87	283
20	Elęcki	0.09	0.90	145
21	Puławski	0.07	0.96	337
22	Grudziądzki	0.06	1.05	289
23	Częstochowski	0.06	1.05	457
24	Rybnicki	0.05	0.89	311
25	Skieriewicki	0.04	0.98	228
26	Krakowski	0.02	0.99	1005
27	Kielecki	0.01	1.14	540
28	Tarnowski	0.00	0.97	319
29	Sieradzki	-0.01	0.91	257
30	Katowicki	-0.01	0.96	517
31	Koszaliński	-0.02	0.92	451
32	Tarnobrzeski	-0.03	0.95	320
33	Lomżyński	-0.03	1.21	266
34	Starogardzki	-0.03	0.98	326
35	Bydgosko-Toruński	-0.04	1.05	514
36	Legnicko-Głogowski	-0.05	0.96	285
37	Warszawski	-0.05	0.98	1961
38	Poznański	-0.05	0.98	642
39	Oświęcimski	-0.06	0.99	363
40	Olsztyński	-0.07	1.04	396
41	Gorzowski	-0.09	0.98	284
42	Białostocki	-0.09	1.02	355
43	Sandomiersko-Jędrzejewski	-0.09	1.00	314
44	Kaliski	-0.09	1.06	481
45	Bialski	-0.10	1.08	212
46	Zielonogórski	-0.10	1.04	345
47	Sosnowiecki	-0.11	1.05	580
48	Szczeciński	-0.12	0.97	447
49	Radomski	-0.13	1.01	500
50	Ciechanowsko-Płocki	-0.14	1.09	423
51	Wałbrzyski	-0.15	1.04	458
52	Rzeszowski	-0.15	0.97	359
53	Stargardzki	-0.15	1.06	268
54	Wrocławski	-0.17	1.01	747
55	Gdański	-0.22	0.99	846
56	Gliwicki	-0.23	1.17	302
57	Piotrkowski	-0.25	1.02	402
58	Lubelski	-0.31	1.13	432

5.4. Socio-demographic groups

Civilisation level

Rank	Socio-demographic group	Average	SD	N
1	Higher and post-secondary education	0.90	0.63	5700
2	Private entrepreneurs	0.67	0.69	1134
3	School and university students	0.64	0.54	2600
4	Age: 25-34	0.60	0.73	5165
5	Public sector employees	0.59	0.73	3251
6	Age: below 24	0.50	0.61	3448
7	Towns with more than 500,000 inhabitants	0.48	0.91	3176
8	Married couples with 2 children	0.38	0.79	5280
9	Age: 35-44	0.36	0.79	4044
10	Private sector employees	0.36	0.76	6291
11	Unmarried	0.36	0.88	6932
12	Towns with 200,000-500,000 inhabitants	0.28	0.93	2514
13	Married couples with 1 child	0.27	0.90	4556
14	Secondary general education	0.24	0.75	7999
15	Married couples with 3 or more children	0.14	0.81	2854
16	Man	0.11	0.93	12017
17	Towns with 100,000-200,000 inhabitants	0.11	0.96	1869
18	Towns with 20,000-100,000 inhabitants	0.08	0.95	4992
19	Married couple	0.04	0.93	14434
20	Towns with fewer than 20,000 inhabitants	-0.02	0.96	3249
21	The unemployed	-0.06	0.90	1726
22	Multi-family households	-0.07	0.88	3141
23	Woman	-0.10	1.05	13252
24	Age: 45-59	-0.11	0.89	6761
25	Single parent families	-0.11	1.01	2323
26	Non-family multi-person households	-0.14	1.09	204
27	Other professionally inactive	-0.17	0.95	2193
28	Divorced/separated	-0.18	0.99	1207
29	Married couples with no children	-0.25	1.08	3840
30	Basic vocational education	-0.26	0.76	7690
31	Rural areas	-0.29	1.00	9469
32	Farmers	-0.34	0.77	989
33	Age: 60-64	-0.55	0.89	1725
34	Non-family one-person households	-0.71	1.13	3037
35	Pensioners	-0.84	0.89	1780
36	Retirees	-0.84	0.94	5109
37	Widow(er)	-1.10	0.87	2649
38	Age: 65+	-1.11	0.87	4123
39	Primary and lower education	-1.31	0.69	3855

Social well-being

Rank	Socio-demographic group	Average	SD	N
1	School and university students	0.18	0.91	3055
2	Age: below 24	0.16	0.95	3916
3	Private entrepreneurs	0.16	0.90	1117
4	Married couples with no children	0.14	0.83	3810
5	Married couples with 3 or more children	0.10	1.02	3062
6	Married couple	0.10	0.90	14344
7	Multi-family households	0.09	0.94	3145
8	Farmers	0.08	1.06	969
9	Married couples with 2 children	0.08	0.93	5403
10	Higher and post-secondary education	0.07	0.91	5634
11	Public sector employees	0.06	0.93	3218
12	Married couples with 1 child	0.06	0.91	4551
13	Man	0.05	1.03	12138
14	Age: 25-34	0.05	0.92	5135
15	Basic vocational education	0.04	1.02	8051
16	Private sector employees	0.04	0.96	6208
17	Rural areas	0.03	1.01	9686
18	Age: 35-44	0.02	0.97	3998
19	Towns with 200,000-500,000 inhabitants	0.02	0.98	2523
20	Secondary general education	0.02	0.96	7949
21	Towns with more than 500,000 inhabitants	0.01	0.99	3130
22	Unmarried	0.00	1.04	7361
23	Age: 60-64	-0.01	1.04	1716
24	Towns with 20,000-100,000 inhabitants	-0.03	1.01	5086
25	Towns with fewer than 20,000 inhabitants	-0.04	0.95	3306
26	Retirees	-0.04	1.03	5142
27	Woman	-0.05	0.97	13522
28	Towns with 100,000-200,000 inhabitants	-0.06	1.01	1929
29	Age: 45-59	-0.07	1.05	6697
30	Other professionally inactive	-0.11	1.01	2217
31	Age: 65+	-0.12	1.05	4157
32	The unemployed	-0.19	1.15	1734
33	Primary and lower education	-0.22	1.13	3984
34	Single parent families	-0.22	1.09	2390
35	Pensioners	-0.25	1.09	1783
36	Non-family multi-person households	-0.29	1.13	199
37	Widow(er)	-0.34	1.14	2669
38	Non-family one-person households	-0.42	1.23	3021
39	Divorced/separated	-0.48	1.23	1220

Material well-being

Rank	Socio-demographic group	Average	SD	N
1	Private entrepreneurs	0.78	1.17	1045
2	Higher and post-secondary education	0.67	1.13	5368
3	Towns with more than 500,000 inhabitants	0.62	1.34	3041
4	Public sector employees	0.45	0.95	3112
5	Married couples with 1 child	0.32	1.04	4396
6	Private sector employees	0.24	0.96	6054
7	Married couples with 2 children	0.24	0.91	5246
8	Age: 25-34	0.23	0.93	4916
9	Age: 35-44	0.20	1.01	3858
10	Married couple	0.17	0.97	13933
11	Towns with 200,000-500,000 inhabitants	0.15	1.02	2445
12	Married couples with no children	0.13	1.16	3768
13	School and university students	0.12	0.96	2957
14	Secondary general education	0.11	0.87	7686
15	Man	0.06	1.01	11838
16	Age: 45-59	0.04	1.04	6562
17	Multi-family households	0.04	0.78	3079
18	Towns with 20,000-100,000 inhabitants	0.03	0.92	4904
19	Age: below 24	0.00	0.92	3787
20	Towns with fewer than 20,000 inhabitants	-0.01	0.90	3211
21	Towns with 100,000-200,000 inhabitants	-0.02	0.89	1855
22	Unmarried	-0.04	1.01	7103
23	Woman	-0.06	0.99	13102
24	Age: 60-64	-0.10	1.00	1686
25	Married couples with 3 or more children	-0.12	0.79	2935
26	Basic vocational education	-0.20	0.80	7881
27	Farmers	-0.22	0.81	944
28	Rural areas	-0.24	0.85	9485
29	Other professionally inactive	-0.26	0.89	2118
30	Retirees	-0.30	0.93	5079
31	Divorced/separated	-0.34	0.99	1186
32	Single parent families	-0.40	0.87	2321
33	Non-family multi-person households	-0.42	0.81	185
34	The unemployed	-0.48	0.86	1678
35	Age: 65+	-0.49	0.89	4128
36	Pensioners	-0.52	0.83	1755
37	Widow(er)	-0.61	0.84	2657
38	Non-family one-person households	-0.62	0.96	3008
39	Primary and lower education	-0.71	0.78	3971

Pathologies (the lower the value, the more pathologies)

Rank	Socio-demographic group	Average	SD	N
1	Age: 65+	0.22	0.59	4238
2	Retirees	0.19	0.67	5237
3	Widow(er)	0.18	0.70	2721
4	Woman	0.14	0.73	13759
5	Farmers	0.11	0.78	1003
6	Age: 60-64	0.08	0.88	1742
7	Public sector employees	0.08	0.76	3310
8	Multi-family households	0.08	0.86	3229
9	Rural areas	0.07	0.92	9897
10	Married couples with no children	0.07	0.86	3887
11	Married couple	0.06	0.87	14657
12	Primary and lower education	0.04	1.07	4083
13	Higher and post-secondary education	0.02	0.86	5757
14	Pensioners	0.02	0.91	1801
15	Non-family one-person households	0.02	0.97	3071
16	Age: 45-59	0.01	0.99	6856
17	Towns with fewer than 20,000 inhabitants	0.01	1.04	3381
18	Secondary general education	0.01	0.95	8079
19	Other professionally inactive	-0.01	1.10	2257
20	Married couples with 2 children	-0.01	0.98	5501
21	Towns with 20,000-100,000 inhabitants	-0.02	1.03	5172
22	Age: 25-34	-0.05	1.02	5201
23	Age: 35-44	-0.05	0.98	4107
24	Basic vocational education	-0.05	1.10	8229
25	Married couples with 3 or more children	-0.05	1.07	3130
26	Married couples with 1 child	-0.06	1.10	4655
27	Single parent families	-0.06	1.15	2435
28	Towns with 100,000-200,000 inhabitants	-0.07	1.11	1953
29	Private sector employees	-0.07	1.09	6333
30	Towns with 200,000-500,000 inhabitants	-0.08	1.04	2580
31	Non-family multi-person households	-0.08	1.17	206
32	Towns with more than 500,000 inhabitants	-0.10	1.03	3208
33	School and university students	-0.12	1.20	3127
34	Private entrepreneurs	-0.15	1.15	1143
35	Unmarried	-0.15	1.21	7525
36	Man	-0.16	1.21	12431
37	Age: below 24	-0.18	1.30	4004
38	The unemployed	-0.22	1.28	1760
39	Divorced/separated	-0.22	1.34	1223

Social capital

Rank	Socio-demographic group	Average	SD	N
1	Higher and post-secondary education	0.44	1.19	5460
2	Public sector employees	0.40	1.20	3082
3	Farmers	0.29	1.09	927
4	Private entrepreneurs	0.26	1.11	1075
5	Non-family multi-person households	0.21	1.08	195
6	Towns with more than 500,000 inhabitants	0.14	1.04	3067
7	Age: 35-44	0.13	1.06	3847
8	Married couples with 2 children	0.10	1.04	5184
9	Age: 45-59	0.09	1.06	6439
10	Married couple	0.09	1.04	13710
11	Age: 60-64	0.08	1.04	1651
12	Married couples with 1 child	0.06	1.06	4375
13	Man	0.05	1.04	11679
14	Secondary general education	0.05	0.97	7650
15	Towns with 200,000-500,000 inhabitants	0.04	1.03	2408
16	Married couples with no children	0.02	0.98	3636
17	Retirees	0.00	0.99	4894
18	Towns with fewer than 20,000 inhabitants	-0.01	1.00	3206
19	Rural areas	-0.01	0.99	9249
20	Married couples with 3 or more children	-0.02	0.99	2942
21	Towns with 100,000-200,000 inhabitants	-0.03	1.01	1861
22	Woman	-0.04	0.96	12973
23	Age: 25-34	-0.04	0.93	4944
24	Divorced/separated	-0.05	0.98	1175
25	Towns with 20,000-100,000 inhabitants	-0.07	0.97	4862
26	Private sector employees	-0.07	0.91	5989
27	Non-family one-person households	-0.08	0.98	2955
28	Age: 65+	-0.09	0.95	3936
29	Unmarried	-0.10	0.94	7140
30	School and university students	-0.11	0.96	2967
31	Multi-family households	-0.11	0.91	3000
32	Single parent families	-0.12	0.94	2287
33	Other professionally inactive	-0.14	0.90	2128
34	Widow(er)	-0.15	0.94	2565
35	Age: below 24	-0.17	0.93	3793
36	Basic vocational education	-0.18	0.87	7731
37	Pensioners	-0.20	0.89	1708
38	The unemployed	-0.24	0.81	1671
39	Primary and lower education	-0.36	0.77	3770

Physical well-being

Rank	Socio-demographic group	Average	SD	N
1	School and university students	0.53	0.57	3072
2	Age: below 24	0.52	0.60	3928
3	Age: 25-34	0.45	0.65	5099
4	Unmarried	0.38	0.78	7357
5	Private entrepreneurs	0.36	0.65	1108
6	Private sector employees	0.34	0.66	6131
7	Married couples with 3 or more children	0.27	0.80	3034
8	Age: 35-44	0.25	0.73	3961
9	Higher and post-secondary education	0.25	0.81	5592
10	Married couples with 2 children	0.25	0.81	5350
11	Public sector employees	0.24	0.70	3205
12	The unemployed	0.22	0.86	1721
13	Farmers	0.21	0.71	974
14	Man	0.10	0.96	12045
15	Married couples with 1 child	0.10	0.92	4507
16	Secondary general education	0.07	0.95	7831
17	Other professionally inactive	0.06	0.97	2180
18	Towns with more than 500,000 inhabitants	0.05	0.97	3092
19	Basic vocational education	0.05	0.97	7943
20	Single parent families	0.04	1.00	2371
21	Rural areas	0.03	0.99	9562
22	Multi-family households	0.03	0.94	3100
23	Towns with fewer than 20,000 inhabitants	-0.01	1.01	3270
24	Towns with 200,000-500,000 inhabitants	-0.02	1.01	2483
25	Married couple	-0.02	0.95	14135
26	Towns with 20,000-100,000 inhabitants	-0.04	1.02	5042
27	Towns with 100,000-200,000 inhabitants	-0.05	1.03	1886
28	Non-family multi-person households	-0.05	1.02	199
29	Woman	-0.09	1.02	13290
30	Age: 45-59	-0.15	1.00	6594
31	Divorced/separated	-0.27	1.11	1192
32	Married couples with no children	-0.30	1.08	3740
33	Age: 60-64	-0.50	1.07	1682
34	Non-family one-person households	-0.57	1.22	2967
35	Primary and lower education	-0.58	1.17	3945
36	Retirees	-0.63	1.10	5001
37	Widow(er)	-0.82	1.17	2602
38	Age: 65+	-0.86	1.14	4033
39	Pensioners	-10.38	1.12	1754

Psychological well-being

Rank	Socio-demographic group	Average	SD	N
1	School and university students	0.50	0.79	3015
2	Age: below 24	0.43	0.83	3875
3	Private entrepreneurs	0.40	0.78	1134
4	Age: 25-34	0.37	0.82	5158
5	Higher and post-secondary education	0.33	0.82	5698
6	Married couples with 2 children	0.27	0.87	5403
7	Public sector employees	0.25	0.83	3263
8	Private sector employees	0.23	0.86	6282
9	Unmarried	0.21	0.95	7345
10	Age: 35-44	0.18	0.89	4062
11	Married couples with 1 child	0.17	0.93	4580
12	Married couples with 3 or more children	0.17	0.92	3079
13	Towns with more than 500,000 inhabitants	0.13	0.95	3167
14	Married couple	0.10	0.91	14469
15	Secondary general education	0.09	0.93	7988
16	Towns with 200,000-500,000 inhabitants	0.08	0.95	2533
17	Man	0.07	0.98	12281
18	Multi-family households	0.04	0.94	3153
19	Towns with fewer than 20,000 inhabitants	0.01	0.98	3343
20	Farmers	0.01	0.86	987
21	Basic vocational education	0.00	0.98	8047
22	Towns with 20,000-100,000 inhabitants	-0.03	1.01	5096
23	Towns with 100,000-200,000 inhabitants	-0.04	1.02	1937
24	Rural areas	-0.04	1.02	9703
25	Married couples with no children	-0.05	0.96	3855
26	Woman	-0.07	1.02	13497
27	Other professionally inactive	-0.07	1.08	2221
28	Non-family multi-person households	-0.14	1.00	202
29	Age: 45-59	-0.16	1.00	6751
30	The unemployed	-0.25	1.09	1742
31	Age: 60-64	-0.32	1.00	1735
32	Single parent families	-0.36	1.09	2387
33	Retirees	-0.46	1.00	5144
34	Non-family one-person households	-0.61	1.10	3044
35	Age: 65+	-0.64	1.03	4155
36	Primary and lower education	-0.64	1.10	4004
37	Divorced/separated	-0.68	1.13	1224
38	Pensioners	-0.70	1.08	1772
39	Widow(er)	-0.79	1.04	2672

Life stress (the lower the value, the greater the stress)

Rank	Socio-demographic group	Average	SD	N
1	Age: 65+	0.60	0.58	4112
2	School and university students	0.58	0.68	2922
3	Widow(er)	0.57	0.62	2641
4	Age: below 24	0.54	0.68	3744
5	Non-family one-person households	0.50	0.62	3012
6	Non-family multi-person households	0.48	0.73	200
7	Retirees	0.47	0.69	5083
8	Unmarried	0.36	0.75	7181
9	Primary and lower education	0.34	0.85	3958
10	Pensioners	0.28	0.84	1752
11	Married couples with no children	0.19	0.82	3744
12	Age: 60-64	0.18	0.83	1692
13	Single parent families	0.14	0.88	2337
14	Rural areas	0.08	0.97	9540
15	Woman	0.06	0.97	13260
16	Towns with fewer than 20,000 inhabitants	0.02	0.99	3270
17	Other professionally inactive	0.02	0.92	2125
18	Basic vocational education	0.01	1.00	7885
19	Towns with 20,000-100,000 inhabitants	-0.02	1.03	5010
20	Towns with 100,000-200,000 inhabitants	-0.05	1.04	1907
21	Man	-0.07	1.02	12061
22	Towns with more than 500,000 inhabitants	-0.07	0.96	3092
23	Secondary general education	-0.08	1.02	7833
24	Divorced/separated	-0.09	0.95	1197
25	Age: 25-34	-0.12	0.97	5079
26	Multi-family households	-0.12	1.01	3104
27	Married couples with 3 or more children	-0.13	1.09	3011
28	Higher and post-secondary education	-0.14	1.01	5606
29	The unemployed	-0.14	0.97	1688
30	Towns with 200,000-500,000 inhabitants	-0.17	1.06	2502
31	Married couples with 1 child	-0.18	1.03	4526
32	Married couples with 2 children	-0.20	1.12	5317
33	Married couple	-0.28	1.07	14237
34	Age: 45-59	-0.32	1.04	6658
35	Public sector employees	-0.36	1.02	3233
36	Farmers	-0.37	0.98	967
37	Private sector employees	-0.38	1.07	6223
38	Private entrepreneurs	-0.48	1.08	1123
39	Age: 35-44	-0.51	1.07	3998