

THE COUNCIL FOR SOCIAL MONITORING

SOCIAL DIAGNOSIS 2003

OBJECTIVE AND SUBJECTIVE QUALITY OF LIFE IN POLAND

edited by

Janusz Czapiński

Tomasz Panek

University of Finance and Management

SOCIAL DIAGNOSIS 2003

OBJECTIVE AND SUBJECTIVE QUALITY OF LIFE IN POLAND

edited by

Janusz Czapiński

Tomasz Panek

University of Finance and Management Press

Warsaw

2004

Primary management of the research project

THE COUNCIL FOR SOCIAL MONITORING:

Janusz Czapiński, Ph. D., professor of the University of Warsaw & the University of Finance and Management (chairman)

Tomasz Panek, professor, Warsaw School of Economics

Irena E. Kotowska, Ph. D., professor of the Warsaw School of Economics

Antoni Sułek, professor, University of Warsaw

Wiesław Łagodziński, M.Sc., Central Statistical Office

Julian Auleytner, professor, Pedagogical University of TWP

and experts:

Katarzyna Tymowska, Ph.D., University of Warsaw

Tadeusz Szumlicz, Ph.D., professor of the Warsaw School of Economics

Dominik Batorski, M.Sc., University of Warsaw

Authors of the report

Julian Auleytner

Dominik Batorski

Janusz Czapiński

Irena E. Kotowska

Tomasz Panek

Paweł Strzelecki

Antoni Sułek

Tadeusz Szumlicz

Katarzyna Tymowska

Reviewers:

Mirosława Marody, PhD, Professor of Sociology

Józef Oleński, PhD, Professor of Economy

Main sponsor of the project

COMMERCIAL UNION, POLAND

Other sponsors

University of Finance and Management

Pedagogical University of TWP

Ministry of the Economy, Labor and Social Policy

Pro Publico Bono Institute

Janssen-Cilag

Polish Oil and Gas Company (financial support for the English edition of the Report)

Research conducted by: Polish Statistical Association

Organizational and financial management of research: Office for Statistical Analyses and Research of the Polish Statistical Association

Interviewers: Central Statistical Office

Copyright © 2003 by the Council for Social Monitoring

ISBN

University of Finance and Management Press

01-030 Warsaw, Pawia pp. 55

wydawnictwo@vizja.pl

www.vizja.pl

The *Social Diagnosis* research project, although it is mainly financed from private means, is of a public character. All who are interested may download all tables with the frequency distribution of responses* and the database containing accumulated data from two waves (in the years 2000 and 2003) free of charge from the website www.diagnoza.com.

* In all sets of tables with frequency distribution of responses (Appendix 1, 2, 3, 4), the order of variables from the questionnaires (see annex – questionnaires) has been maintained.

Acknowledgements

The present research project is an extended continuation of a project initiated in 2000 (Czapiński, Panek, 2001). The originator of the Social Diagnosis was, in 1999, Wiesław Łagodziński, the spokesman for the chairman of the Central Statistical Office. If it were not for his commitment, the research would not have been completed either in 2000 or at present.

We would like to thank all our colleagues at the Council for Social Monitoring and the experts invited to cooperate with us for their significant contribution to the creation of the concept, the questionnaire and analysis of the data.

It is understandable that a substantial project like this one requires significant financial means. In 2000, the initiative of the Council for Social Monitoring was fortunate to coincide with the government's requirement for an independent analysis of the effects of reforms carried out. Thanks to Minister Teresa Kamińska, the Prime Minister's Office commissioned us to prepare the first edition of the *Social Diagnosis* and covered the major part of costs of the project. Ms. Teresa Kamińska was also involved, together with *Institute Pro Publico Bono*, in obtaining the financial resources necessary for the present second edition of the *Social Diagnosis*. This time, the main sponsor, financing half of the costs of the project was *Commercial Union*, the private insurance company. Three other sponsors who provided approximately 1/7 of the funding each were the Psychology and Management University in Warsaw, the Ministry of the Economy, Labor and Social Policy and the Pedagogical University of TWP; the remaining costs were covered by *Institute Pro Publico Bono* and *Janssen-Cilag*. Polish Oil and Gas Company financed English edition of this report. We would like to give our wholehearted thanks to all of our benefactors for their disinterested support for this public research project.

We are also grateful to Ms. Barbara Belok of the Office of Statistical Analyses and Research of the Polish Statistical Association for the administrative management of the project.

We would like to thank the President of the Central Statistical Office, Mr. Tadeusz Toczyński, for consenting to the participation of the most professional interviewers in the field research.

Janusz Czapiński

Tomasz Panek

About the authors

Julian Auleytner

Full professor, founder and rector of the Pedagogical University of Towarzystwo Wiedzy Powszechnej (Association for Adult Education), lectured at the Pedagogical University in Kielce, at the Academy of Catholic Theology in Warsaw and at the University of Macedonia in Thessaloniki; a stipendiary of K. Adenauer Foundation, vice President of the Council for Social Policy Affairs at the office of the President of the Republic of Poland, a member of Labor and Social Policy Sciences Committee and the Forecast Poland 2000 Committee at the Presidium of the Polish Academy of Sciences, the Steering Committee of the European Universities Continuing Education Network (EUCEN); author of more than 240 scientific publications.

Dominik Batorski

Graduate of the Institute of Sociology of the University of Warsaw; doctoral student at the Institute for Social Studies of the University of Warsaw. He is involved mainly in analysis of social and psychological conditions and consequences of the use of computers and the Internet. He is a member of the Association of Internet Researchers. He is also involved in analysis of social networks and social processes occurring within the networks. He is a lecturer at the Warsaw School of Social Psychology.

Janusz Czapiński

Professor at the Faculty of Psychology of the University of Warsaw and a vice president of the Finance and Management University. He is involved in social psychology and in the psychology of social change (macropsychology). Since 1991, he has conducted research on the quality of life in Poland during social change in cooperation with economists, sociologists, demographers and statisticians. He is the author of several concepts of emotional and cognitive mechanisms of adaptation, such as *the 'onion' theory of happiness*, *the commitment theory*, *the positive-negative asymmetry theory* (in cooperation with Guido Peeters of the Catholic University in Leuven, Belgium), *the social ungratefulness theory*, *the dynamic model of unemployment*, a member of several editors' councils of scientific journals and international scientific societies, the author of several dozen works in the area of social science, a TV, radio and press commentator on current social events, a member of various advisory bodies, a consultant to two Prime Ministers of the Third Republic of Poland.

Irena E. Kotowska

Professor at the Institute of Statistics and Demography at the Warsaw School of Economics, the head of the Demographic Unit, the Deputy Chairman of the Section of Social Sciences at the Polish Academy of Sciences. She is interested in the demographic transformation in Poland in the light of changes taking place in Europe; she has proposed interpretation of these changes within the framework of the second demographic transition theory. The first publication in Poland, dealing with the issue of demographic changes in Poland from the perspective of the second demographic transition was prepared under her supervision. She also deals with demographic forecasting, demography of households and changes on the labor market linked to demographic processes. She works with the Central Statistical Office on research in the area of demography, the labor market and living conditions of households. She is the co-author of the first panel research into the living conditions of households in Poland, the author of numerous publications in Polish and English and the editor-in-chief of *Studia Demograficzne (Demographic Studies)*.

Tomasz Panek

Professor at the Institute of Statistics and Demography of the Warsaw School of Economics, where he is a vice-director and also a head of the Applied Statistics Unit. He deals with statistical methods and their applications in analysis of social and economic phenomena and processes. His research interests include mainly the issues of living conditions of households, in particular the field of poverty and social inequalities. Since the beginning of the nineties, he has conducted, together with other statisticians, research on the change in living conditions of Polish households during the systemic transformation period. He is the author of several dozen works on this subject, published both in Poland and abroad. He is the co-author of the first panel research into the living conditions of households in Poland. He is the deputy editor-in-chief of *Statistics in Transition*.

Paweł Strzelecki

Graduate of the Warsaw School of Economics, an assistant at the Institute of Statistics and Demography at the School and an employee of the Department of Macroeconomic and Structural Analyses of the National Bank of Poland. His research interests include: demographic conditions of the labor market, factors influencing professional activity, structural unemployment, education and human capital.

Antoni Sulek

A graduate of the Czartoryski Secondary School in Puławy and the University of Warsaw (1968), a professor of sociology and since 2002 the director of the Institute of Sociology of the University in Warsaw. He is involved in sociological methodology, history of social research and public opinion polls and theory. He has written the following books: *Eksperyment w badaniach społecznych (Experiment in social research)* (1979, Ossowski Prize), *W terenie, w archiwum, w laboratorium (In the field, in the archive, in the laboratory)* (1990), *Sondaż polski (Polish opinion poll)* (2001) and *Ogród metodologii socjologicznej (The garden of sociological methodology)* (2002) and he has published *Logika analizy socjologicznej (Logic of sociological analysis)* (1979), *Poza granicami socjologii ankietowej (Beyond the boundaries of survey sociology)* (1989) and other collective works. He was a member of the CBOS (the Public Opinion Research Center) Council (1992-1997), and in years 1988-1989 and since 2001 he has been a consultant of OBOP (Public Opinion Research Center). He was a co-editor of the *Kultura i Społeczeństwo (Culture and Society)* quarterly (1988-1995) and a president; of the Polish Sociological Association (1994-1998), an advisor of the Civic Parliamentary Club (1989-1990) and the main advisor for social affairs of the Prime Minister of the Republic of Poland Jerzy Buzek (1999-2001). He is a member of the Committee of Sociology of the Polish Academy of Sciences and the Council of the Institute Pro Publico Bono.

Tadeusz Szumlicz

Professor at the Warsaw School of Economics. Director of the Department of Social Insurance. A director of Insurance and Pension Funds Doctoral Studies and Postgraduate Insurance Studies. He is interested mainly in the anticipative (insurance) model of social policy and social aspects of insurance protection. Participant in numerous social research projects into the standard of living, unemployment, insurance protection, and pension funds. Author of more than 200 publications in the area of social policy and insurance ("Social policy models", "Insurance as an instrument of social policy", "Vademecum of pension funds", "Retirement systems in the European Union Countries", commentaries in the "Gazeta Ubezpieczeniowa" – "Insurance Gazette"). He is a lecturer in social policy and insurance subjects at the Warsaw School of Economics, at the Faculty of Management of the University of Warsaw and at private universities. He is also involved in the dissemination of knowledge in the area of insurance, attaching great importance to the shaping of insurance awareness and foresight. He is the editor-in-chief of *Discussion Forum of Insurance and Pension Funds*.

Katarzyna Tymowska

Research worker in the Department of Economic Sciences of the University of Warsaw, founder and director of the Postgraduate Study in Health Economics which was established within the department in 1990, co-author of several systemic solutions implemented in the health care system in the early nineties and plans of changes in the financing of the health sector. Author of several dozen works in the area of health economics, consultant to numerous area health service administration units and their founding bodies, as well as to governmental and parliamentary teams preparing new legal regulations with regard to the health sector.

CONTENTS

1. INTRODUCTION	9
1.1. General outline of the project	9
1.2. Research issues	10
2. THE MAIN RESULTS AND CONCLUSIONS	13
3. RESEARCH METHOD	29
3.1. Organization of research	29
3.2. The sample selection method	29
3.3. Basic terms and classifications	30
3.4. Sample characteristics according to main classifications	32
3.4.1. <i>Characteristics of the sample of households</i>	32
3.4.2. <i>Characteristics of the sample of household members</i>	35
3.4.3. <i>Characteristics of the sample of individual respondents</i>	36
3.5. Measurement tools and indicators	38
4. LIVING CONDITIONS OF HOUSEHOLDS	39
4.1. Income and ways of managing it	39
4.1.1. <i>Income level and variability</i>	39
4.1.2. <i>Strategies of coping with financial difficulties and social assistance</i>	44
4.2. Nutrition	50
4.3. Material affluence	54
4.4. Housing conditions	65
4.5. Education	72
4.5.1. <i>Education level and status of household members</i>	72
4.5.2. <i>Education of children</i>	77
4.6. Culture and recreation	80
4.7. Health care	84
4.7.1. <i>Taking advantage of health care</i>	84
4.7.2. <i>Sources of financing of health care, and financial barriers limiting access to it</i>	87
4.7.3. <i>Opinions on health care</i>	92
5. INDIVIDUAL QUALITY OF LIFE	93
5.1. General psychological well-being	94
5.1.1. <i>Data from the whole sample</i>	94
5.1.2. <i>Data from the panel sample</i>	96
5.2. Domain satisfactions	97
5.2.1. <i>Data from the whole sample</i>	98
5.2.2. <i>Data from the panel sample</i>	98
5.3. The importance of the selected objective indicators of life condition for the subjective quality of life	100
5.4. Personal finances	107
5.4.1. <i>Current income and that expected in two years</i>	107
5.4.2. <i>Potential tax groups</i>	110
5.4.2.1. <i>Overall characteristics of tax groups</i>	110
5.4.2.2. <i>Taxpayers using help</i>	112
5.4.2.3. <i>Entrepreneurship in different tax groups</i>	113
5.4.2.4. <i>Civic activity of various tax groups</i>	114
5.4.2.5. <i>Educational aspirations of parents in various tax groups</i>	115
5.4.3. <i>Return rate from the investment in higher level education</i>	116
5.4.4. <i>Desired and actual additional forms of work remuneration</i>	120
5.4.5. <i>Attitudes to financial institutions</i>	121
5.4.6. <i>Insurance</i>	124
5.4.7. <i>Retirement plans</i>	132
5.5. Subjective evaluation of material living standards	138
5.5.1. <i>Data from the whole sample</i>	139
5.5.2. <i>Data from the panel sample</i>	140
5.6. Health and treatment	140
5.7. Life stress and psychosomatic symptoms	144
5.8. Coping strategies	151
5.9. Social support and trust in people	152

5.10. Personality and lifestyle.....	155
5.10.1. Values, self-esteem and attributional styles.....	155
5.10.2. Optimism	159
5.10.3. Risk-avoidance and risk-seeking	163
5.10.4. Religious practices	166
5.10.5. Self-destructive behaviours	172
5.10.5.1. Smoking cigarettes.....	172
5.10.5.2. Alcohol abuse	175
5.10.5.3. Using drugs.....	178
5.10.6. Crime perpetrators and victims.....	180
5.10.7. An overall indicator of social pathology.....	183
5.11. Evaluation of systemic transformation and its impact on respondents' lives	188
6. CIVIL SOCIETY	194
7. TOWARDS AN INFORMATION SOCIETY	203
7.1. Computers and the Internet in households.....	204
7.1.1. Owning of computers by households	204
7.1.2. Willingness to have a computer.....	206
7.1.3. Plans to purchase a computer	206
7.2. Internet access	207
7.2.1. Internet access in households.....	207
7.2.2. Willingness to have Internet access.....	208
7.2.3. Type of Internet access	208
7.2.4. How long households have had Internet access	209
7.2.5. Reasons for lack of Internet access	210
7.2.6. Declaration of willingness to get Internet access.....	212
7.3. Stationary and mobile phones.....	212
7.3.1. Households equipped with a stationary phone	212
7.3.2. Mobile phone.....	214
7.4. Use of computers and the Internet by households	215
7.4.1. Who has a computer at home, but does not use it?.....	216
7.4.2. Who takes advantage of Internet access at home?	216
7.4.3. Importance of a computer at home for use of new technologies	217
7.5. Individual use of a computer	218
7.5.1. Characteristics of users.....	218
7.5.2. Place of use of a computer	219
7.5.3. Time spent using a computer.....	221
7.5.4. Ability to use a computer.....	222
7.6. Use of the Internet	224
7.6.1. General description of Internet users.....	224
7.6.2. The place of Internet use	226
7.6.3. Time spent on Internet use.....	228
7.6.4. Amount of Internet experience (since when a person has been using the Internet).....	229
7.6.5. New Internet users.....	230
7.6.6. Methods of Internet use	231
7.6.7. Forms of Internet users' behavior - social communication	233
7.6.7.1. Contacts with family	235
7.6.7.2. Contacts with co-workers	236
7.6.7.3. Contacts with friends and acquaintances	236
7.6.7.4. Contacts with people who at present cannot be contacted in any other way.....	236
7.6.7.5. Contacts with people met on the Internet	237
7.6.7.6. Contacts with people of similar interests.....	237
7.6.7.7. Relation of a communicative tool to the type of social contact.....	237
7.7. Internet and computer use among children.....	239
7.8. Consequences of computer and Internet use.....	242
7.8.1. The importance of possessing a computer at home	243
7.8.2. The importance of Internet use for individuals.....	244
7.8.2.1. Hazards to the new Internet users' well-being.....	244
7.8.2.2. Social relations.....	244
7.8.2.3. Personal income	245
7.9. Formation of an information society in Poland and hazards to the process.....	245

8. SOCIAL EXCLUSION	247
8.1. The concept of social exclusion	247
8.2. Poverty and income inequalities.....	249
8.2.1. <i>The method of measurement and analysis</i>	249
8.2.1.1. <i>Assumptions of the poverty analysis</i>	249
8.2.1.2. <i>Identification of the poverty sphere</i>	250
8.2.1.3. <i>Equivalence scales</i>	251
8.2.1.4 <i>Aggregate poverty indices</i>	252
8.2.1.5. <i>Poverty nature</i>	253
8.2.1.6. <i>Poverty determinants</i>	254
8.2.2. <i>The results of the poverty analysis zone and of income inequality</i>	255
8.2.2.1. <i>Incidence and depth of poverty</i>	255
8.2.2.2. <i>Poverty nature</i>	257
8.2.2.3. <i>Determinants of poverty</i>	259
8.3. Disability	263
8.4. Unemployment	265
8.4.1. <i>Households on labor market</i>	265
8.4.2. <i>Individual respondents on the labor market</i>	265
8.4.2.1. <i>Socio-demographic characteristics of the unemployed</i>	265
8.4.2.2. <i>Change of employment status in the panel sample — a dynamic model of unemployment</i>	272
8.5. The threat of social exclusion.....	282
8.6. Three types of social exclusion	283
9. CONCLUSION: NEW POLAND —LOVING MOTHER OR WICKED STEPMOTHER?.....	288
Bibliography.....	296
List of tables and figures	301
Annex — questionnaires part 1	i
Annex — questionnaires part 2	xxii

1. INTRODUCTION

Janusz Czapiński

1.1. General outline of the project

There are two ways of describing the conditions and quality of life of a society, its development potential, the direction of changes, threats and challenges. One of these is based upon institutional indicators – macroeconomic (such as GDP or the inflation rate) and macrosocial (such as the registered unemployment rate, number of doctors per 100 thousand inhabitants, infant mortality, education or parliamentary election turnout). The other refers to the opinions and behaviors of citizens. Neither of these is fully accurate, reliable and sufficient. The fact that people become more affluent when GDP is increasing does not mean that they are more satisfied or more willing to demonstrate civic engagement. The registered unemployment rate does not necessarily have to reflect the actual ratio of people who are deprived of employment against their will. These two ways of describing society should be treated complementarily, they should balance and complement one another. Only when this condition is met, can politicians, business owners, and all citizens be provided with an answer to two important questions: what the situation is and why it is not better – that is, a relatively comprehensive and reliable diagnosis. And a good diagnosis is necessary for effective therapy and wise reforms that minimize the social cost.

Our project is an attempt to complement the diagnosis based upon institutional indexes, including the most recent general census (General National Census; GNC, 2002) with complex data regarding households, and the attitudes, frames of mind and behaviors of people who make up these households. It is a diagnosis of the conditions and quality of life of the Poles from their own point of view.

The complexity of our project means that we took into account in a single research project all of the important aspects of life of individual families and their members. This included both the economic (such as income, material situation) and non-economic ones (such as aspirations, health care, insurance, ways of coping with stress, life events, psychological well-being, lifestyle, pathological behaviors, participation in culture, use of modern communication technologies and many other aspects). In this sense, it is an interdisciplinary project. This is also reflected by the composition of the *Council for Social Monitoring*, that is, the main authors of the project and the team of experts invited to join them by the *Council*. These groups include economists, a demographer, a psychologist, sociologists, an insurance specialist, an expert in health economics, an educationalist and statisticians.

In accordance with the original concept, the research conducted within the project of the Social Diagnosis has taken the panel form: every few years, we go back to the same households and people. In *Social Diagnosis 2003*, about 2400 households and about 5000 individual respondents had participated in *Social Diagnosis 2000* 3 years earlier. Panel research has two advantages: it allows us to monitor the changes in the structure of the households and minimizes the errors of the sample when drawing conclusions with regard to the dynamics of the phenomena measured.

Social Diagnosis is focused not upon analysis of transient opinions, but more basic facts, behaviors, attitudes and experiences; it is not an ordinary descriptive survey – it is a scientific project. This is not only due to the fact that among the authors there are scientists, university employees and professors. The decisive factor is the professional system of work, based upon research experience of the members of the *Council for Social Monitoring* and the team of experts and – most of all – the theoretical context of the particular problems. Most variables taken into account in the project are not a result of intuition, informal observation or the demands of the sponsors, but of scientifically-based knowledge about the examined phenomena. An important objective of the *Diagnosis* is, apart from describing the Polish society, to verify scientific hypotheses. In the present report, which is aimed at the ‘general public’, it was necessary to limit

the discussion of theoretical issues to a minimum. The most important issue is the answer to an open question: what is Polish society like, 14 years after the systemic transformation and 3 years after the first research conducted within the confines of the same project?

We hope that the results of the implementation of this project will provide politicians, business owners and local government activists responsible for the preparation, implementation and amendment of reforms that change the living conditions of all citizens with valuable knowledge. We would also like to provide society with reliable information regarding its everyday life, since the perception that individuals have of their own situation in comparison with that of other people are usually based upon selective observation, stereotypes or views that are propagated by the media. These are often false or exaggerated (informing the public, for instance, of the worsening condition of psychological health in our society, of the complete paralysis of the health care services, of Retirees or older people being the social category that economically suffered most during the transformation process). We all deserve a relatively accurate, comprehensive and objective diagnosis of the main sources of our everyday problems, ideas of psychological discomfort, uncertainty of the future or difficulty in adapting to the new conditions, but also pointing out the benefits of subsequent systemic transformations. Private diagnoses are often too illusory, defensive, simplified, and, in general, mistaken.

The differences between the present and the previous research pertain to the sample and the scope, reflected by the content of the questionnaire (see annex). The sample was increased from approximately 3000 to about 4000 households (thanks to this, and also thanks to the fact that the minimum age of respondents has been decreased from 18 to 16 years of age – the sample of individual respondents increased from about 6500 to approximately 10 000 people). The change in the questionnaire consisted mainly of the removal of the group of questions pertaining to the territorial administration reform, an increase in the number of questions associated with insurance and the addition of two groups, regarding civic behaviors and attitudes and use of modern communication technologies (mobile phones, computers and the Internet).

Apart from the group of questions concerning the modern communication technologies, the analyses included in the present report, pertaining only to 2003, almost always include a sub-sample of individual respondents belonging to the same age group as in the previous research – 18 and older.

The field research was conducted by professional interviewers from the Central Statistical Office in March 2003, that is, during the same month as the previous research. It was an important methodological requirement, associated with the necessity of elimination of the seasonality effect.

1.2. Research issues

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

- (1) demographic and social structure of households,
- (2) living conditions of households associated with their material conditions, access to health care services, culture, recreation, education and modern communication technologies,
- (3) subjective quality of life, lifestyle, beliefs, attitudes and behaviors of individual respondents.

The indexes that describe the demographic and social structure of households are not subject to separate analysis in the present report; they serve only as means of stratification of groups of households and individuals in order to enable a comparison of conditions and quality of life according to various social categories, such as gender, age, education level, place of

residence, social and professional status, main source of income, civil status, type of household (created on the basis of the number of families and family type) and other criteria. Subject to analysis are, in fact, the living conditions of households and quality of life of individual citizens in association with the social change that determines the global context and general rules of functioning of a society. One of the main problems and questions that accompanies all social reforms is the distribution of advantages and costs that result from their implementation in particular social groups over varying time intervals. Also in this research project, we wanted to find out which categories of households and citizens find their feet in the new conditions and take advantage of the systemic transformations, and which social groups are unable to cope with the new situation, experiencing objectively or subjectively more losses than gains.

In this project, the distinction between social indicators of living conditions and individual quality of life is more or less consistent with the distinction between the objective description of the situation (conditions) and its psychological meaning, expressed by the subjective opinion of the respondent (quality of life)¹. This distinction is generally consistent with the type of unit examined and the measurement method. For the living conditions, the examined unit is the household as a whole, and for the quality of life – its individual members. The living conditions were measured by conducting an interview with one representative of the household (a well-informed person; most often, it was the head of the household). The quality of life, on the other hand, was measured using self-report questionnaire addressed to all available members of the examined households who have reached the age of 16.

The measurement of living conditions of the household included:

1. household income and way of managing income,
2. nutrition,
3. material affluence of the household, including modern communication technology equipment (mobile phone, computer, Internet access)
4. housing conditions,
5. social benefits received by the household,
6. education of children,
7. participation in culture and recreation,
8. taking advantage of health care services,
9. household situation on the labor market,
10. taking advantage of social benefits,
11. insurance and retirement security,
12. poverty and other aspects of social exclusion

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

1. general psychological well-being (including: the will to live, sense of happiness, satisfaction with life, depression),
2. psychosomatic symptoms (measurement of distress),
3. domain satisfactions with different areas and aspects of life,
4. subjective evaluation of the material standard of living
5. various types of stress (including “office stress” associated with contacts with public administration bodies, stress associated with health condition, stress associated with parenting, financial stress, stress associated with work, ecological stress, marital stress, problems associated with taking care of older people, stress associated with life events, such as assault, burglary, arrest),
6. coping strategies,
7. evaluation of contacts with the health care system

¹ The two categories are not entirely distinct and separable. Thus when describing the living conditions, we also used subjective evaluation scales, and in the part on the quality of life, we asked not only for opinions, but were also interested in behaviors (such as smoking, overuse of alcohol) and objective events (such as death of a loved person, renovation of the apartment/house).

8. personal finances (including: personal income, insurance and retirement security, return rate of investment in education),
9. system of values, self-esteem level of optimism, risk seeking, gambling, lifestyle and individual behaviors and habits (such as smoking, overuse of alcohol, use of drugs, religious practices),
10. civic attitudes and behaviors,
11. social support,
12. general evaluation of the transformation process and its influence upon the lives of the respondents,
13. use of computers and the Internet.

2. THE MAIN RESULTS AND CONCLUSIONS

Polish society is in a better condition than the Polish state. The Poles believe in education, modern communication technologies and health care. They are investing more and more in these areas. In terms of progress, they are catching up with the affluent Western societies. They are learning rational economic behaviors. They complain less than they used to and they are increasingly satisfied with various areas of life; the exception is the worsening opinion of the situation of the country and its prospects. Polish citizens are increasingly less able to perceive a connection between the actions of the authorities and the state of their own affairs. It looks as though we are living more and more apart from and in opposition to the state, often to the detriment of the common good. It is slowing down the process of development of a civic society. We see our accession to the EU as a chance for a radical improvement in the standard of living. We expect a 50-percent growth of personal income in the first year of our membership. Let us hope that in the future, this utopia will not turn even more against the basic structures of the state and the social order in general.

* * *

1. During the last 3 years, there has been a substantial increase (by 14%) of real average income of households. Households living on unearned sources, households of farmers, and married couples with many children are characterized by the lowest income. At the same time, the smaller the town or village, in which the household is located, the lower its income. The amount of income that households use is the decisive factor determining their ability to satisfy their needs in all areas of standards of living, analyzed during our research. Therefore, households belonging to the low-income groups mentioned above, most often find it difficult to satisfy their various needs.
2. Many households declared that at the present income level they found it somewhat difficult to make ends meet (every third household). During the last 3 years, the percentage of households stating that they found it difficult or very difficult to make ends meet at the present income level has decreased. As for management methods, most households declared that they lived economically and thanks to that they were able to afford everything (more than every third household) and that they lived very sparingly in order to save money for more expensive items (every fifth household).
3. About 40% of households declare that their income does not allow them to satisfy their everyday needs, which indicates a substantial decrease in comparison with the late nineties, when such declarations were made by 2/3 of all households, and also a substantial decrease in comparison with the year 2000. However, more than every second household declares that its situation with regard to income has worsened in comparison with 3 years earlier.
4. Goods that are perceived as the most desirable ones by households, which do not possess them and are not able to afford them, are: a washing machine, passenger car and VCR. Goods that are in the possession of the minority of households are: a summerhouse, piece of land for recreation, motorboat, dishwasher and computer. During the last 3 years, the equipment of households with all durable goods taken into account in the research project has increased substantially, mostly with regard to the following items: computer, CD player and microwave oven (by almost 18, more than 12 and almost 12% respectively).
5. Eight out of ten households declare that they have no savings. If a household has savings, most often they are the equivalent of income made in three months only. About 40% of the households examined declare that they are in debt; however, usually the debt amount is rather small. Eight out of ten households declare having no savings at all. During the last 3 years, the percentage of households having no savings has decreased slightly (by more than 1 percentage point), while the percentage of households taking advantage of credits and loans has not changed.

6. Households, which declared that they had savings in March 2003, most often saved money as a reserve for random events (more than 72%), old age security (more than 43%) and for medical treatment, or renovation of a house or apartment (about 40% each). During the last 3 years, there has been an insignificant decrease in the percentage of households that makes savings for everyday consumption expenses and as a reserve for random events, medical treatment and the purchase of durable goods.
7. When asked to evaluate changes in their material situation in comparison with that of 3 years ago, half of all households declared a change for worse, and about 40% - no change.
8. Households declared that within the last year, they were most often unable to satisfy their food needs with regard to alcoholic beverages and tobacco products (40%) and, subsequently, fish and fish preserves, confectionery (more than every third household) and meat and poultry preserves (every fourth household). With regard to most groups of food articles, we have observed a substantial increase in the ability to satisfy these needs within the last 3 years. However, half of all households declared that their ability to satisfy their food needs in comparison with 3 years ago had not changed, and more than 40% believed that it had worsened.
9. Installations and equipment most often lacked by households are hot running water (in 26% of apartments) and a stationary phone (18%). At the same time, the percentage of households equipped with all of the installations and equipment taken into consideration in the research project has increased during the last 3 years.
10. Every tenth household did not pay rent and other fixed charges on time, and every twentieth household failed to pay for electricity and gas, and make mortgage payments. Delays in payment of charges associated with use of the apartment were not very significant. The percentage of households failing to pay fixed charges on time has not changed within the last 3 years. However, it is alarming that the scale of overdue payments has greatly increased. The percentage of households failing to pay a mortgage on time has increased by more than 4% and by more than 2.6% in the case of payments overdue for more than 12 months. On the other hand, the percentage of households failing to make payments for electricity on time has decreased substantially during this period (eviction is less likely than cutting off the electricity or gas supply).
11. The great majority of all households examined (more than 75%) declared that their housing conditions in February 2003 had not changed since 3 years earlier, and about 11% of households declared that they had become worse.
12. Often, the financial situation of households in the school year 2002/2003 forced them to stop providing private lessons or extra-curricular activities for children (more than every fifth household). During the last 3 years, the percentage of households forced to decrease or suspend payments for school or to stop paying for private lessons increased (by almost 8 and almost 6% respectively).
13. The great majority of all households declare that they want their children to get higher education up to a master's degree.
14. The average expenses in three months for purchase of services at public and private health care units amounted to PLN 124 per household, which means that a slight real decrease has been observed in the last 3 years. On the other hand, the average expenses in three months for medicines and other pharmaceutical products associated with illness amounted to PLN 271, which indicates a slight real increase during the same period of time.
15. Almost 34% of all households did not have enough money last year to buy medicines prescribed or recommended by a doctor. Due to lack of money, almost 30% of households did not take advantage of dental services, and more than 17% were not able to

- visit a doctor. The scope of all three cases referred to above decreased in comparison with the year 2000 (by almost 2 to almost 8%). However, almost 58% of households declared that their ability to satisfy their needs with regard to health care had not changed in comparison with 3 years earlier, and more than 38% believed that it had worsened.
16. More than 1/3 of households were forced to give up selected forms of participation in cultural activities due to financial reasons. The number of households which had to give up participation in cultural events due to financial reasons decreased by more than 4.5% in comparison with the year 2000.
 17. The percentage of households not able to take advantage of recreational trips due to financial reasons has increased. It ranged between 24% of households in the case of group excursions for children and more than 62% in the case of adults. Within the last 3 years, this figure has decreased by almost 9% in the case of family trips and by 2% in the case of trips for adults.
 18. More than 37% of households were not able to buy a book, and more than 32% a newspaper due to financial reasons. During the last 3 years, the percentage of households not able to buy a book has decreased by 6%, and the percentage of those unable to afford a newspaper has increased by 1.4%. More than 50% of households declare that their ability to satisfy their needs associated with culture and recreation has not changed compared to last year, and more than 40% declared that it has worsened.
 19. According to the objective approach (in accordance with the adjusted social minimum), 25% of the examined households lived below the poverty threshold in February 2003, and according to the subjective approach – 57%. The percentage of households characterized by poverty has decreased on a national scale by more than 7% within the last 3 years objectively, and by more than 4% subjectively. The highest percentages of households characterized by poverty (objectively speaking) were among households living on unearned sources (61%), farmers (56%) and couples with many children (53%) and non-family households multi-person households (43%). As many as 50% of households with the unemployment lived in poverty, while the same percentage in the case of households with no unemployed people amounted to 17. The percentage of households living in poverty increased visibly as the size of place of residence decreased. The only socio-economic groups, in which the scope of poverty has increased within the last 3 years, are groups of self-employed households maintained households living on unearned sources.
 20. It is necessary to emphasize the fact that a great majority of households living below the poverty threshold did not belong to complete poverty sphere. Moreover, these figures have to be considered overstated, since households demonstrate a tendency to understate their income in the declarations made (by about 15%), and in the case of farmer households, in the examined month (March), there is a seasonal decrease in income. The analysis of the poverty depth shows that it is not very deep in Poland.
 21. For most households participating in both stages of the research, poverty was of a permanent character. Among households living in poverty in light of the objective assessments in the year 2000, as many as 56% were also living in poverty in 2003. Households characterized by permanent poverty, according to the feelings of the households, in 2003, constituted as many as 76% of those characterized by poverty in the year 2000.
 22. The level of education of the head of the household is an unambiguous and at the same time the strongest determinant of the risk of falling below the threshold of poverty, according to the both objective and subjective approaches. The lower the level of education of the head of the household, the greater the risk of poverty. According to the both the subjective and the objective approaches, groups of households characterized by the greatest risk of poverty are households living on unearned sources, old age or disability pensions, as well as households of farmers and pensioners. Households with

unemployed people are also characterized by a significant level of risk of falling below the threshold of poverty.

23. Almost 13% of households receive assistance in some form. Most often, it is financial assistance (65%), material assistance (57%), and the least often it is in the form of services (16%).
24. Taking into consideration the groups characterized by the highest level of the risk of poverty, it can be stated that assistance was usually provided for those who really needed it: households living off sources other than earnings, people receiving disability pensions, families with many children and single-parent families.
25. A relatively good targeting of assistance may result from the fact that most often it is provided by family living in Poland – 58% of households indicated this source of assistance. However, another significant source of support were social welfare centers (47%). As was observed in the previous research, it turned out once again that charity organizations, religious organizations, trade unions or district centers for family support provide assistance only to a very small extent.
26. The estimates of legal or biological disability are consistent with the findings of the General National Census 2002 – altogether, people disabled in accordance with the legislation in force (qualified on the basis of a doctor's opinion) and biologically disabled (no opinion issued) constituted almost 14% of the examined population. Slightly more than a half of all disabled were of working age and about 20% of them were not older than 40.
27. The level of education among the disabled is much lower than that of all respondents altogether, which may be associated with the specific age structure. However, disability along with the low education level may result in a high risk of being excluded from the labor market. In general, disabled people constituted only 5% of all employed and 4% of unemployed respondents. Only about 30% of all disabled people between 16 and 59 years of age are economically active – every fourth person works, while unemployed people make up 6%.
28. According to the research criteria, consistent with those applied in the Labor Force Survey (BAEL), the employment rate in February 2003 was equal to 46.1%, which means that it was slightly higher than that determined on the BAEL for the first quarter of 2003 (43.6%). Among those employed, 12.4% were working part-time.
29. The extent of unused labor resources, evaluated on the share of employment in the population aged 15 and older is much greater for women than men –the rate of employment of women amounted to 40%, while for men it was equal to 53.2%. The employment rate among inhabitants of rural areas was about 47.6%, while among inhabitants of towns and cities – 45.3%.
30. Among those without job, constituting 53.9% of the respondents, as many as three-fourths were not looking for a job. In relation to the population surveyed, this pertained to 35% of men and 50% of women. Women, more often than men, declared that they were not looking for a job because their age was not appropriate and because they had to take care of the home and children or disabled members of the household, while men, more often than women, pointed to education, raising their qualifications and health reasons.
31. Among household members aged 15 and older, 8.7% can be classified as unemployed in accordance with the definition provided by BAEL, and 86% of these are registered at employment offices. The unemployment rate amounted to 16.9% (according to BAEL – 20.5%). The risk of unemployment is slightly higher among women than men (17.4% as opposed to 16.5%), and the unemployment rate among the inhabitants of urban areas is slightly greater than among inhabitants of rural areas (17.2% as opposed to 16.4%).

32. The share of households with employed people decreased in comparison with the year 2000 (70% as opposed to 72%), while the share of households with unemployed people increased from 20% to 21%. As previously, there were 6.5% of households with unemployed people and with no employed people at the same time. The risk of unemployment, expressed as a percentage of households with unemployed people, is slightly greater in the rural areas and it amounts to 22% as opposed to 20% in towns and cities, although among all households with unemployed members, urban households constituted 64%.
33. Although a great majority of households with unemployed members constituted households with a single unemployed person (81%), as many as 32% of households had no employed members, and in 47% there was only one employed person.
34. 12% of all members of the examined households aged 15 and older were registered at employment offices as unemployed, while only 67% of them meet the criteria of BAEL. Among economically active women, the percentage of the registered unemployed amounts to 22.4%, while in the case of men it is equal to 19.2%. Every fifth person in urban labor force, as well as in rural labor force is registered as unemployed.
35. There were 19.6% registered unemployed people aged 18 and older among the labor force between 18 and 60 years old (women) or 28 and 65 years old (men), excluding old age and disability pensioners and full-time students; 16.6% registered unemployed people, ready to take up a job; 14.8% registered unemployed people, ready to take up a job and looking for a job; 13.5% registered unemployed people, ready to take up a job, looking for a job, not working full time and with the monthly personal income lower than PLN 850, that is, people that could be considered as genuinely unemployed. Thus the difference between the registered unemployment rate and the real unemployment rate amounted to over 6%.
36. Among the actual unemployed in the panel sample, 40.5% were permanently unemployed (unemployed both in 2000 and in 2003), while others lost their jobs after the year 2000.
37. Only 14% of the registered unemployed (the same as in BAEL) declared that they received unemployment benefits, while only 7% declared that they participated in training programs for the unemployed.
38. Among the unemployed registered at labor offices, there are more people over 44 years old. This may be associated with their entitlement to social insurance, acquired by registration, the importance of which is different for older and younger people. On the other hand, the level of education of both groups of the unemployed is similar: although among the registered unemployed there is a somewhat higher number of those with the lowest education level, mainly among women.
39. Regardless of the criterion of unemployment, unemployed men most often occupied the position of a child in the family (about one half); almost every fifth man was a head of the household or – slightly less often – a partner of the head of the household. On the other hand, almost every second unemployed woman was a partner of the head of the household, and the second largest group were unemployed women, occupying the position of the child in the family (36-39%). Thus unemployment of men can be regarded as a factor that limits mainly gaining of material independence, considered being one of the fundamental premises for establishing one's own family, and then as a factor that limits development of the family. Unemployment of women afflicts more those women who already have families, than those who have not established their own families yet.
40. Lack of skills increases the risk of unemployment, influences the unemployment duration, and poses a threat of return to unemployment. However, the difficult situation on the labor market, which has not changed during the last several years, also makes it difficult to find a job for persons of higher categories of education. Among respondents who remained unemployed for a long time, the share of those who graduated from post-secondary and vocational schools is increasing as well.

41. Education still does not protect women as efficiently as men against the risk of unemployment and of remaining unemployed for longer than one year. Long-term unemployment afflicts women more severely not only in terms of range (percentage of women who have been unemployed for more than one year), but also in terms of the period of unemployment – 23% of women looked for a job for one to two years and as many as 42% - two years or longer (for men, these figures are 22% and 24% respectively).
42. The phenomenon of recurrent unemployment is indicated both by the number of people registered at the labor offices within the last 5 years and by the overall time of unemployment during this period. Almost every fifth respondent was registered at the labor office as an unemployed person within the last 5 years. Most respondents registered once (68%), almost every fourth respondent – two times, every tenth respondent – more than two times (three to eight). For most of the 18% of women and 20% of men who were unemployed during this period, the total unemployment time was longer than one year, while there are differences depending upon gender and place of residence (53% of men and 63% of women, 54% inhabitants of towns and cities and 63% inhabitants of rural areas). A greater risk of long-term unemployment among women is also indicated by the fact that every fifth woman remained unemployed for a period of four to five years (more often in rural than in urban areas), while the same applies to about 8% of men.
43. The unemployment incidence and total unemployment duration in the last 5 years are quite visibly dependent upon the level of education. The differences in the education level between groups categorized according to the unemployment duration are greater than between employed and unemployed.
44. The analysis of the poverty scope, depth and permanence indicates an increasing significance of unemployment of household members with respect to their economic situation. The objective scale of poverty incidence among households with unemployed members has increased within the last three years, while it has significantly decreased among households with no unemployed members. As a result, in March 2003, the percentage of poor households with unemployed members was almost three times higher than among households with no unemployed members. The depth of poverty, significantly greater among households with unemployed members in the year 2000, also increased more for these households in 2003.
45. When looking at households' mobility of between the sphere of poverty and outside the increasing material deprivation of households with unemployed members is observed. The decrease in the poverty incidence (based on the objective scale) for households with no unemployed members results from the fact that those households much more often shifted from poverty than fell below the poverty threshold. On the other hand, in the case of households with unemployed members, their inflow into poverty was not only greater than outflow, but also the risk of moving from the group of non-poor to poor households was three times greater. The permanent poverty of households with unemployed members is indicated by the fact that as many as 75% of households classified as poor ones in the year 2000 remained in the same group in 2003. In the case of households with no unemployed members, this percentage amounted to 46.
46. The income in households of those who lost their jobs after the year 2000 was as low as the income of households which had had unemployed members, already in the year 2000. Loss of a job did not cause a decrease of income of these households in 2003 in nominal values, and in real values the decrease of income of these households was the same as in the case of households with permanently unemployed members. It means that the risk of unemployment is greater in the case of poor households, but is not a reason for greater decrease of income of these households.
47. According to the dynamic model of unemployment, the risk of losing a job is associated with individual characteristics, not only socio-demographic ones (education, age, gender), but also psychological ones, which are usually perceived only as consequences of loss of

a job, such as alcoholism, a tendency to break the law, depression, decreased will to live, dissatisfaction with life, pessimism. A bad psychological condition, addictions and anomy (behaviors that are not consistent with social norms) increase the risk of unemployment, and loss of a job may strengthen these negative symptoms, thus decreasing the chances of getting the job back (increasing the risk of permanent unemployment).

48. There is no single syndrome of social exclusion. There are three independent types of it: 1) structural exclusion – associated with poverty, place of residence (posing a greater threat to inhabitants of rural areas), low level of education of a given person and his/her father; 2) physical exclusion – associated mainly with age and disability; and 3) normative exclusion – associated with addictions (alcohol, drugs), social discrimination, loneliness and unemployment.
49. The general psychological well-being of Poles is not changing; on the other hand, satisfaction with most domains of life is growing, particularly with safety in the place of residence and housing conditions. However, satisfaction with the situation in the country and prospects for the future is decreasing rapidly.
50. The most important prerequisite for subjective well-being in 2003 is a large number of friends, followed by young age and a lot of money.
51. We are once again becoming a sociable society: after a short-lived, rapid decrease in the number of friends, we are winning them back quickly. Today, on average, we have 6-7 friends, that is, 1-2 more than in the year 2000.
52. Some psychosomatic symptoms are increasing, particularly those associated with the digestive and excretory systems, but in general, the stress of living is decreasing.
53. The system of values has changed slightly. Health is still the most valuable thing for Poles; the importance of money and family is decreasing slightly, while the value of work is increasing.
54. The Poles are, in general, satisfied with themselves, although this positive self-esteem is not too high.
55. We do not like to take risks. Like other societies, most Poles are satisfied with winning less, provided that they are sure of the positive outcome, and – unlike other nations – most Poles are willing to suffer a small loss, instead of risking a greater one in order to attempt not losing at all.
56. The Poles, like other nations, are characterized by defensive optimism and – unlike the Western societies – expansive *pessimism*: they believe that they are less threatened by various misfortunes than other people, but they tend to believe that it is more probable for others to become successful than for themselves.
57. As previously, the Poles tend to blame fate and authorities (50% and 39% respectively) for their failures, and they tend to attribute their successes within the last year to themselves (76.5%). This effect of *social ungratefulness* towards the authorities has become weaker in comparison with the year 2000, but only because the Poles feel more and more “immune to the state” and they see the connection between their own lives and the situation of the country and the activities of politicians as being increasingly weak. This attitude towards the state is more and more visible, and it exerts an increasing influence upon the condition of the state. It is illustrated, among other things, by the pace of increase in real income of households, which has been twice that of GDP per capita within the last three years.
58. The frequency of institutional religious practices (participation in religious services and other ceremonies) has decreased by 11 percent points in comparison with the year 2000. The percentage of those who do not engage in religious practices is increasing (from 26% in the year 2000 to 30% in 2003). However, the frequency of praying in difficult situations is not decreasing (31% in the year 2000 and 32.5% in 2003). These changes

suggest an ongoing process of “privatization” of faith rather than the secularization of Polish society.

59. The percentage of smokers is decreasing (at present, slightly more than 30% of adults admit that they are addicted to smoking, that is, about 10 percent points less than 10 years ago). The number of cigarettes smoked per day is also decreasing (three years ago – 17, at present approximately 16).
60. The percentage of people who overuse alcohol is decreasing (by approximately 1 percent point since the year 2000). At present, 4.36% of adults admit that they overuse alcohol; men overuse alcohol about eight times more often than women; inhabitants of large towns and cities do so much more often than the inhabitants of small towns and rural areas, middle-aged people overuse alcohol more often than older and young people; those who are poor do so much more often than those who are affluent; self-employed overuse alcohol almost twice as much as hired employees, and unemployed people – about 1.5 times more often than those who are employed. Overuse of alcohol is a strong predictor of job loss.
61. While the number of people overusing alcohol is dropping, the tendency to use drugs has been systematically increasing within the last several years. The population of those who admit that they use drugs has increased about three times in comparison with the early nineties and constitutes almost 1% of the adult population, that is, 280 thousand. The social and territorial range of drug addiction is also increasing. Although men and inhabitants of large towns and cities are still dominant, women and inhabitants of small towns and rural areas have begun to use drugs more and more often as well. At present, apart from the groups mentioned above, addiction to drugs poses the greatest threat to students (in general, young people aged 18 to 24), the unemployed, private sector employees, and, territorially, Dolnośląskie, Kujawsko-pomorskie, Lubuskie and Pomorskie voivodships.
62. Comparison of the frequency of experiences associated with breaking the law in the panel sample between 2000 and 2003 indicates a statistically significant decrease in the percentage of victims of theft, while the percentage of people brought to trial has increased substantially (which may be due to an increase in the effectiveness of the police and courts). The frequency of experiences associated with crime belonging to other categories analyzed by us, has not changed since the year 2000.
63. It is worth noting that among people accused of criminal acts or arrested by the police, the percentage of victims of assault and fights is much greater than in the general population. It means that many crimes are committed within criminal environments. Those who break the law are more at risk of being victims of other criminals than are law-abiding citizens.
64. The average personal net income declared for the last quarter amounted to PLN 858, which, in comparison with the official statistics of the Central Statistical Office, has been estimated to be understated by approximately 15%. The distribution of average income in accordance with various social criteria varies greatly. Income declared by people with university and college education is 2.7 times greater than that declared by those with primary education. On the other hand, there is a strikingly small difference between self-employed (PLN 1428) and hired employees, both in the public (PLN 1264) and private sector (PLN 1134). With regard to voivodships, people with the highest income live in Pomorskie, Mazowieckie and Śląskie voivodships, and with the lowest – in Podkarpackie voivodship and, successively, Warmińsko-mazurskie, Lubelskie and Kujawsko-pomorskie voivodships. The larger the city or town, in which the respondent resides, the higher income: the income of inhabitants of cities with populations higher than 500 thousand is 1.7 times higher than that of inhabitants of rural areas.
65. A similar tendency can be observed in the percentage distribution across income tax brackets. The percentage of people with university and post-secondary education whose

- income is above the second income tax bracket is more than 11 times greater than the percentage of potential taxpayers subject to 30 and 40 percent taxation among those with primary education. The percentage of self-employed whose income is subject to 30 or 40 percent taxation is two times greater than among hired workers (30.4 to 15.5).
66. We also asked about the expected net personal income two years from now (at the end of the first year of Poland's membership in the EU). We wanted to isolate the group of people who have the greatest financial hopes with regard to the first period of our membership in the EU.
67. Respondents expect their personal income to increase on average by PLN 527 after Poland joins the European Union, that is, by 59.4%. However, these expectations vary greatly both with regard to the amount and the percentage change in comparison with their present income. The expected income amount is determined mainly by the present level of income and factors that are strongly correlated with income: the higher the present income, the higher the expected income. However, the scope of differences, and particularly the percentage rate depends upon somewhat different socio-demographic factors, and with regard to the present financial situation, the relation is partially reversed: the lower the present income, the higher percentage of increase is expected. The unemployed expect their financial situation to improve the most after Poland joins the EU (increase of 176%), as well as young people (24 years old or younger – expected increase of 143%), particularly students (increase of 235%) and farmers (126%). Self-employed are slightly less optimistic – they expect their present income to double. The financial expectations of retirees in relation to Poland joining the EU are the lowest (expected increase in income by 22%) and older people in general (aged 60 or older). Disability pensioners are moderately optimistic (45%), as well as hired workers in the public sector (43%) together with – although their expectations are slightly higher – those in the private sector (66%).
68. The historic reforms, conducted in Poland after 1989, are still difficult to evaluate – as many as 37% of all respondents are unable to tell whether they have been a success or not. Those who have an opinion usually view the result of reforms as negative: 6% perceive them as successful and 57% as unsuccessful. In every social group, people evaluate the reforms more or less similarly. The gap between positive and negative opinions is growing: the number of people who view the changes after 1989 as unsuccessful is increasing (in the years 2000-2003, this number increased by 10 percent points), while the number of those who give a positive opinion of the reforms is decreasing (by almost 2 percent points). The opinions regarding the reforms worsened most visibly in those groups that previously had the most positive attitudes.
69. Evaluation of the reforms conducted in 1989 is influenced not only by the personal situation of the respondents, but also by their political views. Groups, which value democracy the most (young people with a higher education level, in a better material situation, living in large towns and cities), are more willing to believe that the reforms have been successful.
70. There is a general notion that the reforms conducted after 1989 influenced the life of the people. 64% of our respondents believe so; the vast majority of every social group experiences this influence. In comparison with the year 2000, this influence has neither decreased nor increased.
71. As many as 68% of respondents view the influence of changes that took place after 1989 upon their own lives as negative, and only 19% view it as positive. In 1997-2000, the percentage of Poles believing that the transformation exerted a negative influence upon their lives increased, but in 2000-2003 the increase slowed down – only 3 percent points more respondents view this influence as a negative one.
72. Although all social groups are subject to the influence of systemic changes, not all of them have experienced equally the benefits and disadvantages of these changes. Those

who found it positive, live mainly in large towns and cities, and are young people with a good education. Those who suffered from it, live in rural areas and small towns, have primary and vocational education and are mainly older people.

73. The condition of a civic society is expressed mainly by the tendency of the citizens to associate. The level of association among Poles is low. Only 12% of the respondents admit that they are members of organizations, associations, parties, committees, councils, unions or religious groups. About 5% of all respondents performed various functions in organizations voluntarily. The upper social categories are better organized and their representatives more often become managers of organizations that they belong to.
74. The most easily accessible civic experience is participation in a public meeting; during a meeting, one can get familiar with various issues in general, express his or her opinion, influence the decisions made. 19% of respondents attended a public meeting last year, and more than a half of them (58%) voiced their opinions there. The opinions of well educated people are represented disproportionately, while the opinions of those with a low level of education are not sufficiently represented even at the lowest level of organized social life.
75. Collective action in local communities is a higher form of civic activity. During the last three years, 13% of respondents were involved in activities on behalf of their own community (this is a 5% increase in comparison with the year 2000). Such actions are usually initiated and organized by local authorities and parishes, less often by schools and social organizations; even less often they are organized by individuals. People who are better educated and in a better material situation and those who occupy higher social positions, more often act for the common good.
76. Participation in local government elections and interest in the activities of the local authorities is a minimal form of participation of citizens in exercising power at the local level. The upper social categories are more interested and participate more actively in local politics, and thanks to greater participation in elections they exert more influence upon the election of the local authorities. Once again, it turns out that the civic society is characterized by stratification.
77. Theorists of democracy point to the relation between civic society and trust: trust among people is conducive to development of a civic society, and voluntary organizations and cooperation create trust. Only every tenth respondent stated that "most people could be trusted", while eight out of ten respondents said that "one could never be too careful." Trust in people increases along with the education and income level, while large towns and cities are characterized by more positive results than any other type of community.
78. In comparison with the year 2000, more respondents took advantage of health care services; this pertains both to out-patient treatment and hospital treatment. The number of households taking advantage of health care services financed by the state increased more than the number of households paying for health care themselves. During only three months before the research, 87% had contact with doctors at state health-care institutions and 27% at private clinics. Three years earlier, a similar percentage of households took advantage of services rendered by private clinics, but the percentage of households taking advantage of services rendered by public institutions was much lower (71%). Within the last year, at least one member of almost 1/3 households was hospitalized. Nearly 40% of adult respondents took advantage of services for which they paid from out-of-pocket, during the last year.
79. There are still differences in the frequency of out-patient treatment: inhabitants of towns and cities, people with better education and those with income in the upper quartile more often take advantage of such treatment than inhabitants of rural areas, than those with lower education and income level. At present, there are no differences with regard to hospitalization by population of rural areas and big towns and cities (previously,

inhabitants of rural areas were hospitalized more often). The reason for the increased use of these services are stimuli behind contracts with hospitals, motivation to shift costs from out-patient treatment to hospitals and the fact that numerous public hospitals perform social functions in the case of many patients, living in both large towns or cities and rural areas.

80. The number of respondents paying for dental services has decreased (although still more than a half of all respondents who take advantage of these services pay for them themselves). The increase in the number of respondents who take advantage of services financed from public sources has increased (the exception here are large towns and cities, where many people still pay for services at private clinics). This illustrates the improvement in quality of these services, among other things, due to the fact that participation of private dental offices in the public health care security system has increased.
81. Every eleventh household has changed its family doctor; farmers and disability pensioners did so less often than representatives of other social groups. The main reasons for change were: the selected doctor changed jobs, the new doctor treated the patient better than the previous one and the office of the new doctor was located closer to home.
82. The selection of a specialist doctor was most often determined by close proximity to the place of residence, the recommendation of the doctor providing ongoing health care and the suggestion of the doctor issuing the referral. Such a distribution of factors determining the behaviors of patients should be conducive to the creation of a network of family doctors and specialists working together.
83. Selection of a hospital was determined first of all by the suggestions of the doctor issuing the referral, then the close proximity to the place of residence (this factor is very important for inhabitants of rural areas and small towns), decisions of ambulance service staff taking the patient to hospital and information regarding the hospital that the respondent had. The ambulance emergency service employees exerted greater influence upon selection of the place of hospitalization in the case of young people (many hospitalizations due to accidents) and people 65 years of age and older (many situations of rapid worsening of health condition).
84. A small number of households experienced a situation in which a doctor failed to provide a referral for medical tests for one of its members, stating that there were no financial resources to pay for such tests. However, only one in four households experienced a situation like that, and in 11% of cases the doctor informed the patient that the tests they wanted to perform were unnecessary.
85. Almost 5% of households took advantage of health care services financed by an employer (slightly more than three years earlier). In large towns and cities, in the group of people with university education, among middle-aged people and those with higher income, the percentage of people taking advantage of services financed by an employer is higher than in other groups.
86. Administrative problems and fear of making additional payments made fewer respondents than three years earlier give up medical care. The number of respondents who failed to purchase prescription drugs due to lack of money has decreased as well, but it still pertains to 30% of households.
87. The number of people stating that they had sufficient information regarding how to take advantage of health care services has increased (79% at present, while three years ago it was 58%). Moreover, some increase in confidence in the health service may also indicate some slight improvement in the subjectively perceived sense of safety. People with higher education and income levels are still less eager to declare confidence than others. The percentage of people who did not know where to obtain medical assistance for themselves or their relatives has decreased in comparison with the situation of 3 years ago. At present, 42% of households declare that it is now more difficult to get access to medical services than it used to be (in the year 2000 – 51%).

88. Analysis of the cases of those respondents who failed to take advantage of health care services (both due to economic and administrative barriers) shows that if it was not for various difficulties, we should expect a significant increase in the already high real demand for medical services.
89. One in four employed people did not discontinue paid work despite obtaining sick leave from a doctor.
90. 10% of adult respondents who take advantage of medical services believe that the conditions of medical treatment have improved, 42% - that they have not changed, 31% - that they have worsened. These opinions pertain to the health care system as a whole (private clinics rendering paid services, and institutions financed from public sources).
91. The situation of health care and access to health care services rendered within the system, in the opinion of the respondents, is not as catastrophic as the media often depicts it to be.
92. In the years 2000-2003, the spending of households on medicines and pharmaceutical products associated with illness increased substantially. The increase in amounts spent on so-called "thank-you gifts" was insignificant, while the amounts spent on genuine thank-you gifts slightly decreased.
93. In the total amount of expenses for medical care paid by household members, the most significant are costs of official purchase of services and medicines and not expenses for informal payments made while using medical services. 4.2% of households purchased genuine thank-you gifts, while 3.3% spent money on so-called "thank-you gifts".
94. Willingness to purchase a voluntary medical insurance policy is very low. Among people who were willing to purchase such policy, the largest percentage (12%) would not spend more than PLN 100 on it.

95. In comparison with the nineteen nineties, the profitability of various forms of studying and types of studies has changed. The rate of return on investment in bachelor's degree studies in the case of men is close to zero, and in the case of women – more than two times lower than the rate of return on investment in master's degree studies. Profitability of a degree in Economics is decreasing, while that of medical studies has been growing. The most profitable for women are law studies, while for men – medical studies.
96. Data regarding the scope of use of education services (full-time and part-time studies, all types of postgraduate studies) confirm the deprivation of inhabitants of rural areas with regard to access to education already in the group of people between 16 and 19 years of age, which increases with subsequent education levels.
97. Willingness to study among people aged 25 or older, measured as the percentage of those attending schools and universities and any extramural education, is lowest among inhabitants of rural areas. People between 30 and 39 years of age demonstrate a low education activity, while those older than 39 are not willing to take advantage of education services.
98. The territorial differences in education propensity of people aged 25 or older is visibly unfavorable for inhabitants of the rural areas and the smallest towns, especially among men.
99. Women have higher education aspirations than men; this is particularly strongly visible among inhabitants of rural areas.
100. The progress in skill development by adults is highly selective and its range is quite small. This particularly significant result, along with data on differences in education levels between the urban and the rural population, allows us to state that there are increasing disproportions between development opportunities of inhabitants of urban and rural areas. Despite a substantial improvement in the education structure of the population as a whole within the last three years (a decrease of the percentage of people with vocational or lower education from 60% to 56% and an increase in the percentage of respondents with university and post-secondary education from 12% to 14%), the education gap between the urban and the rural areas has not decreased.

101. 73% of inhabitants of rural areas and 43% of inhabitants of towns and cities have vocational or lower education, while people with university education constitute less than 5% of inhabitants of rural areas and 15% of inhabitants of towns and cities². In 2000, these figures amounted to 75% and 60%; and 4% and 12% respectively. Such remarkable differences in education of the rural and urban population prove the existence of an education gap which is not only associated with various age structures of both populations. It is mainly a result of a varying degree of use of education services.
102. There are substantial differences between the education level of men and women, mainly within rural areas. As many as 78% of men living in the rural areas have vocational or lower education, while for women this figure is 68%. Only 3% of men living in rural areas have university education, the percentage of women with university education is two times higher. In towns and cities, the percentages of men and women with university education are similar (14% of women and 15% of men), while there are far fewer women with vocational or lower education than men (43% women and 51% men).
103. A discrepancy between the demand for education services, resulting from the existing level of education of the Poland's population, and requirements determined by technological progress on one hand, and the data presented above on educational activity of the above-mentioned groups of the adult population on the other, proves that it is necessary to quickly improve the qualifications of those over 30. However, our results indicate that extramural education activities are still rarely used for skills improvement. Therefore, it is necessary to develop various forms of supplementary education and raising of qualifications (part time, evening courses and distance learning, postgraduate studies, and other training) and activity aimed at increasing educational activity of people over 24.
104. Employers provide various forms of additional compensation for their employees. However, the research results indicate that it is not a common phenomenon. Most often, they provide bonuses in the form of life insurance.
105. Employees would be most satisfied with additional compensation in the form of money and additional pension funds.
106. The economic transformation has led to an unquestionable increase in the importance of financial institutions. Unfortunately, the research results show that the level of confidence in these institutions is very low in Poland, while confidence in Polish institutions is much higher than in foreign ones. Most respondents, however, have not formed a definite opinion on the subject.
107. Most respondents declare trust in banks (68% gave positive answers among those who expressed their opinion) and the least number have confidence in the stock exchange (only 15% gave positive answers).
108. Confidence in open pension funds, which are supposed to be institutions of public trust, is very low (only 30% gave positive answers among those respondents who have a definite opinion).
109. The scope of use of various forms of insurance protection by households is not extensive. Among the forms of obligatory insurance, motor third-party liability insurance is the dominant type. The most popular types of voluntary insurance are basic homeowners insurance and motor hull insurance. However, it is necessary to underline that only 42% of households have purchased homeowner insurance, while cars are insured voluntarily only by one fourth of all households.
110. The least popular types of property insurance include: loan insurance, liability insurance in private life, professional liability insurance, liability insurance due to an economic activity and agricultural insurance (most often of crops). It is also worth noting that some

² The previous percentages were provided for university and post-secondary education.

of these types of insurance are more and more often purchased as compulsory ones due to the introduction of various insurance obligations.

111. Most life insurance policies purchased by households are group insurance policies (for low compensation), initiated by employers. As many as 62% of the employed respondents take advantage of group insurance policies, purchased through their company; however, it is significant that the beneficiaries of such insurance policies usually pay the entire premium (62%) or a part of it. The second group is unit-linked life insurance; however, these have been purchased by only 9% of households (in this case, the employer pays the premium more often than the insured person). Only 3% of households have purchased child's deferred assurance, although these are a very important form of protection against the consequences of the death of the family breadwinner.
112. Among other types of personal insurance (accident insurance and sickness insurance), the most important ones are accident insurance policies (against the consequences of unfortunate random events). One out of two households has such insurance which is also very often in the form of group insurance. Usually, the employee pays the premium for accident insurance policy.
113. Most beneficiaries of insurance protection are households, in which a man is the head of the household. The influence of the age of the head of the household upon the purchase of insurance policies is rather low. On the other hand, a positive influence of university education of the head of the household on taking advantage of insurance protection is very visible.
114. There is a very strong relation between the purchase of insurance products and income per capita in the household, while the relation between savings of households and purchase of insurance products is visibly weaker. A change in the income strongly influences the purchase of insurance products. The research results show clearly that a lowering of the household income within the last three years resulted in a reduced use of insurance protection.
115. One of the most significant decisions made by future retirees in the new pension system is the selection and possible change of an open pension fund. Among employed people up to 50 years of age, 41% state that they have not selected a fund, 53% state that they have selected one and have not changed it, while less than 6% have changed the fund selected earlier. It turns out that varying factors influenced the decision regarding selection of the open pension fund. The largest percentage, although still less than 17%, of the future retirees took into consideration the results achieved by the funds so far. On the other hand, confidence in a given fund (3% of answers) and low payments (3%) turned out to be completely insignificant factors when selecting a fund.
116. 25% of all respondents take advantage of some form of additional retirement security. Among those who have not provided themselves with additional retirement security, only 15% are planning to do it.
117. Among the forms of additional retirement security, selected by those who are planning to get it, the dominant form is unit-linked life insurance, but as many as 66% of respondents do not know yet which type of security they will choose.
118. The intention to get additional retirement security is conditioned by whether the employer will pay the contribution among 38% of the respondents. A similar percentage of respondents are willing to get additional retirement security if the contribution and investment profits are tax-free. One-third of all respondents declare that they are planning to get additional retirement security regardless of tax allowances.
119. Every third household is equipped with a computer (33.5%), and half of these have Internet access (17% of all households). Households in larger towns and cities and with higher income are more often equipped with modern technology. Also the presence of

- children in the household is an important factor influencing possession of a computer and Internet access.
120. Three-fourths of households use a modem to get their Internet connection. Cable Internet – which, in general, is rarely present – is much more frequent in urban than in rural areas.
 121. More than a half of households without a computer would like to have one, although they cannot afford it due to financial reasons. Judging by declarations regarding plans of purchase of new equipment among those who cannot afford it, we should not expect a substantial increase in the number of users. The purchase of a computer in the near future is planned by 8% of households, while 28% of these are already equipped with at least one computer. Thus the pace of replacement of old computers with new ones is quite slow, so in many households the equipment may already be outdated. In as many as 37% of households planning to purchase a computer, there are people who use a computer in other places. Thus the use of computers in places other than at home is a strong motivation to purchase such equipment.
 122. The increase in the number of households having Internet access is becoming faster and faster. Households, which obtained Internet access at the beginning of 2002, make up as many as 45% of all users. The main reason for lack of access is high costs.
 123. 35.5% of people aged 16 or older declare that they use a computer at least from time to time. The same number of men and women use computers. Much more often, these are young people with a high education level, living in large towns and cities and households with a higher income.
 124. Many people, who have a computer and/or Internet access at home, do not use these technologies. As many as 12% of Poles have a computer at home, but do not use it. 8% of those who have Internet access at home do not use it.
 125. Slightly more than two thirds of respondents, who use a computer at least from time to time, use it at home; 43% use a computer at work, 24% at school or university, 22% at friends or relatives, and almost 13% take advantage of Internet cafes. More than half the people, who use a computer, do so in more than one place. Every fourth person uses a computer both at work and at home.
 126. Computer users spend on average almost 15 hours per week using it. Men, younger people, inhabitants of larger towns and cities, people with university education, higher income and private sector employees use them more often.
 127. Use of computer at work influences very strongly the time spent using the computer. Women, who work with computers, use this equipment for 15 hours more and men for 10 hours more per week than those who do not use a computer at work. Also people, who have a computer at home, use it much more often than those who have access to it only in other places. For men, the difference amounts to 8 hours per week, and for women more than 5 hours.
 128. Declared computer skills are heavily dependent upon age. They are also higher in the case of men, people with better education, living in larger towns and cities than among women, people with lower education levels and inhabitants of small towns and villages. Regardless of other factors, higher income is also associated with better computer skills.
 129. There are definitely fewer people able to use a computer well among retirees, people who are not professionally active and among the unemployed. These groups are particularly threatened with “digital exclusion” – deprivation of benefits associated with the development of technology, also because of the fact that there are far fewer people using computers within these groups.
 130. 25% of Poles aged 16 or more have used the Internet. This group constitutes 71% of all computer users. Within the last week before the research was conducted, 20% of people aged 16 or more used the Internet. 22% of men and 18% of women spent at least one hour surfing the Net. The greatest differences can be observed in groups divided in accordance with age, education and place of residence. Higher income of households and presence of young people under 24 are also conducive to use of the Internet.

131. More than half of Internet users access the Net at home. Every third user surfs the Internet at work, 28% do so at school or university, 22% at friends or relatives, while 19% of Internet users use an Internet cafe. 30% of the Internet users surf the Net in more than one place.
132. The vast majority of people, who have used the Internet, use it moderately intensively. More than three fourths of those who have used the Internet spent no more than 7 hours surfing the Net during the last week (14% did not use the Internet at all, while 41% used it only for 1 to 3 hours). People, who use the Internet for 8 to 19 hours per week, constitute 19% of all Internet users. 8 % of users spend more than 20 hours per week surfing the Net. Men dominate both groups.
133. As for the amount of time spent surfing the Internet, the most important factor was whether a given respondent had Internet access (especially cable Internet) at home and use of the Internet at work. Age is another factor that strongly influences the amount of time spent using the Internet. Older people spend much less time surfing the Net. Inhabitants of larger towns and cities use it more frequently. People, who have used the Internet for a long time, spend much more time surfing the Net. Experience also directly influences the way of using the Net and the number of tasks performed.
134. There are great differences between those who have just begun to use the Internet, and those who have used it for more than one year. Both groups of users are different in practically all respects. The experienced users have taken advantage of more functions of the Internet and they have contacted more people, using it. This also pertains to contacts and tasks performed during the last week. The new users, on average, use the Internet for 3 and half hours per week, while in the case of people who have used it for more than 15 months, the amount of time spent surfing the Net is double.
135. In rural areas and small towns there are much fewer households equipped with computers and Internet access. Moreover, if we compare only the households that have computers, there are still far fewer Internet users in rural areas and small towns. It is also much more difficult to access the Internet, and the time spent surfing is much shorter. The users are less experienced and skilled. Another effect of the small number of users are difficulties with obtaining assistance and advice from friends or relatives.
136. 60% of children below 16 years of age use computers, and 24% use the Internet. Boys take advantage of these technologies slightly more often than girls; the same is true for children who have access to them at home.

3. RESEARCH METHOD

Tomasz Panek, Janusz Czapiński and Irena Elżbieta Kotowska

3.1. Organization of research

The *Social Diagnosis 2003* research project is a joint scientific undertaking of the members of the *Council for Social Monitoring*. The research concept and logistics, as well as analysis of results, were performed by the *Council for Social Monitoring* in cooperation with a group of experts.

Two types of complementary questionnaires were applied in the survey (see annex). The first one serves as a source of information on living conditions of households and it is addressed to the heads of households. The questionnaire includes variables characterizing the household and its individual members, as well as areas of life, taken into consideration in the research project. The second questionnaire, designed for all members of the examined households aged 16 or older, was aimed at gathering information regarding the quality of life of individual people.

The field work, conducted by professional interviewers from the Central Statistical Office in March 2003 on a specially drawn sample (see below), comprised 4077 households and 9845 household members who were aged 16 or older³. Out of these, 60% of households and 52% of household members also participated in the first wave of the panel in March 2000. In relation to the samples from the year 2000, the research was repeated for 79% of households and 74% of individual respondents. Information regarding these research units, comprising our panel, served as a basis for the analysis of changes in the demographic structure, living conditions and quality of life of households and their members in the years 2000-2003.

The interviews were conducted under the supervision of the Office for Statistical Analyses and Research of the Polish Statistical Association.

In order to encourage the respondents to participate in the second stage of the research, we informed them that there would be a draw of 10 prizes of PLN 1000 among the participants, which is what happened.

3.2. The sample selection method

During the first wave, conducted in March 2000, 3007 households were examined, including all of the accessible adult household members (that is, 6725 people). During the second wave, conducted in March 2003, it was assumed that at least 4000 households would be examined. First of all, we attempted to interview again the same households as during the first wave and all of their members, born no later than March 1988. As a result, we managed to examine 2373 of the households which had participated in the first stage of the research, and 4875⁴ of their members. In order to reach the target number of households to be examined during the second stage of research, a complementary basic sample was drawn, as well as two additional samples of the same structure and numbers.

Households were drawn for research, both in the first and in the second wave, using the two-stage stratified sampling method. Before the sampling, households were stratified according to voivodship, and then, within voivodships, according to class of place of residence, taking into consideration large towns (more than 100 thousand inhabitants), small towns (less than 100

³ For the needs of the present report, data from 4009 households and 9635 individual respondents was used. Data from other households and other respondents was omitted due to the necessity of performing an additional verification of conformity of the electronic version with the paper version.

⁴ For the needs of the present report, data from 2353 households and 4775 individual respondents was used. Data from other households and other respondents was omitted due to the necessity of performing an additional verification of conformity of the electronic version with the paper version.

thousand inhabitants) and rural areas. The first stage sampling units in the urban strata in individual voivodships were statistical regions (comprising at least 250 houses or apartments), and in rural strata – statistical districts. During the second stage, dwellings were drawn systematically from a randomly generated list of dwellings, independently within each stratum created during the first stage.

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

In order to make the data obtained during the research representative, both for research conducted in 2003 and for the 2000-2003 panel on a national scale and for individual voivodships and classes of places of residence, it was weighted. The values of analytical weights depended upon the differences between the frequency of shares of the examined households in accordance with classification profiles obtained in the total classification according to voivodship and 3 classes of place of residence and the real frequency of these shares in the general population in 2002 (data from the General National Census of 2002). Then the sample was adjusted to take into account the structure of population according to voivodship, place of residence expressed as urban and rural areas, age, gender and education level. Such a procedure allowed us to obtain the target sample size and to keep it representative on a national scale and in accordance with the classification profiles.

3.3. Basic terms and classifications

In the research project conducted in 2003, two basic types of units were taken into consideration: households and their members aged 16 or older. Within the confines of households, one-person households and multi-person households were subject to analysis. A one-person household is a single person who makes a living independently, without sharing his or her income with anyone, regardless of whether he or she lives alone or with other people. On the other hand, a multi-person household is a group of people living together and sharing income.

The following classification profiles of households were applied during research:

- socio-economic group, according to major source of income,
- class of place of residence,
- household type, determined on the basis of the number of families and type of family,
- voivodship of residence.

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

- households where the only or main (dominant) source of income is income from paid work in the public or private sector, craftsmanship, or work on the basis of agency agreements – *employee households*;
- households where the only or main (dominant) source of income is the total income from hired work and the farm use of a total area of arable land of more than 1 ha – *employee-farmer households*;

- households where the only or main (dominant) source of income is income from a farm with an area of arable land exceeding 1 ha (including users of plots of up to 1 ha of arable land, if income from these comprises the only or main source of income) – *farmer households*;
- households where the only or main (dominant) source of income is self-employment, private business or work as a freelancer – *self-employed households*;
- households where the only or main (dominant) source of income is retirement – *retiree households*;
- households where the only or main (dominant) source of income is a disability benefits – *pensioner households*;
- households where the only or main (dominant) source of income is from sources other than paid work (except for old age and disability pensions) – *households living on unearned sources*.

In the proposed classification, the household type, based upon the number of families and type of family, includes the following categories:

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

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

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

Apart from the classification mentioned above, we took into account special circumstances of households with regard to their ability to acquire income. Special circumstances are defined on the basis of information regarding unemployed or disabled people. We also differentiate between legally verified disability (ruling of a medical commission) and biological disability (on the basis of a declaration of disability or a chronic illness, limiting the ability to perform basic functions) which – in our opinion – allows us to take into account the actual, and not only formally documented threat of social exclusion, resulting from disability.

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

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

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

- primary and lower,
- vocational,
- secondary,
- university and post-secondary.

In the classification of people according to household income level, three classes of households were taken into account: where income per capita is lower than the first quartile of

income distribution, greater than the first quartile and lower than the fourth quartile and greater than the third quartile.

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

- public sector employees,
- private sector employees,
- self-employed excluding farmers,
- farmers,
- disability pensioners,
- retirees,
- the unemployed,
- students,
- other people who are not professionally active

3.4. Sample characteristics according to main classifications

3.4.1. Characteristics of the sample of households

Tables 3.1-3.3 present the characteristics of the whole sample of households and their members in accordance with the most significant socio-demographic profiles after weighting using analytical weight.

Table 3.1. Households by socio-economic group and class of place of residence

Socio-economic group	Class of place of residence				Total			
	Cities above 500k	Towns 200-500k	Towns 100-200k	Towns 20-100k	Towns below 20k	Rural areas	N	%
Employees	294	224	177	375	241	381	1691	41.99
Farmers	3	1	2	6	3	150	165	4.10
Employee-Farmers	3	3	2	6	12	151	177	4.40
Retirees and disability pensioners	185	207	126	308	171	523	1520	37.75
Self-employed	52	47	20	54	34	67	274	6.81
Living on unearned sources	23	20	14	51	35	56	199	4.95
Total N	561	502	340	800	496	1328	4027	
Total %	13.92	12.46	8.45	19.88	12.32	32.97		100.00

Table 3.2 Households by household type and class of place of residence

Household type	Class of place of residence				Total			
	Cities above 500k	Towns 200-500k	Towns 100-200k	Towns 20-100k	Towns below 20k	Rural areas	N	%
One-family								
Couples without children	101	102	62	148	81	186	679	16.97
Couples with 1 child	113	96	58	141	92	192	693	17.32
Couples with 2 children	113	96	75	165	102	236	786	19.65
Couples with 3 and more children	29	29	22	75	69	211	435	10.88
One-parent family	62	53	40	94	58	136	444	11.09
Multi-family	34	27	17	41	36	194	350	8.74
Non-family								
One-person	83	80	52	102	39	106	462	11.55
Multi-person	25	17	11	27	14	58	153	3.81
Total N	559	499	338	795	491	1319	4001	
Total %	13.78	12.51	8.44	19.87	12.27	32.96		100.00

Table 3.3. Households by voivodship and class of place of residence

Voivodship	Class of place of residence				Total			
	Cities above 500k	Towns 200-500k	Towns 100-200k	Towns 20-100k	Towns below 20k	Rural area	N	%
DOLNOŚLĄSKIE	81	2	27	66	43	88	308	7.64
KUJAWSKO-POMORSKIE		50	21	26	35	73	206	5.11
LUBELSKIE		71		51	31	105	259	6.43
LUBUSKIE			16	33	24	35	108	2.69
ŁÓDZKIE	95			89	15	91	290	7.20
MAŁOPOLSKIE	88		13	39	44	124	309	7.67
MAZOWIECKIE	186	23	14	84	66	168	541	13.43
OPOLSKIE			31	23	18	42	113	2.81
PODKARPACKIE			46	53	24	83	206	5.12
PODLASKIE		40		26	16	48	129	3.21
POMORSKIE		73	11	52	23	66	225	5.58
ŚLĄSKIE	29	156	88	106	30	126	536	13.30
ŚWIĘTOKRZYSKIE		39		24	17	52	133	3.30
WARMIŃSKO-MAZURSKIE			38	27	28	54	148	3.66
WIELKOPOLSKIE	76		18	74	46	119	334	8.29
ZACHODNIOPOMORSKIE		50	18	27	35	54	183	4.55
Total N	555	504	340	800	496	1328	4027	
Total %	13.78	12.51	8.46	19.88	12.32	32.97		100.00

The distribution of households by source of income and place of residence is similar to that obtained in the household budget survey. Households of employees were the most numerous ones; the next largest group were households of retirees and disability pensioners. The worsening of the situation on the labor market in the years 2000-2003, as well as the gradual increase in the number of older people led to changes in the share of these two groups of households: the share of employee households decreased (from 45% to 42%), while the share of households of retirees and disability pensioners increased (from 35% to 38%). The share of farmers' households turned out to be stable over time (4%), just like the percentage of households of employee-farmers (also 4%). Households of self-employed people in both examined years constituted 7% of all households. The percentage of households living on unearned sources increased slightly (from 4% to 5%).

The members of employees' households constituted almost one half of the examined population (47%), while the members of households of retirees and disability pensioners – 28%. The share of population living in households of farmers and households of employee-farmers amounted to 12%, and the members of households of self-employed people – 8%. People from households living on unearned sources constituted less than 5% of all surveyed households.

Two-thirds of all households were living in towns and cities, while 14% (15% in the year 2000) lived in cities of more than 500 thousand inhabitants, and about 12% in towns of 200 to 500 thousand inhabitants. The share of households from small and the smallest towns, that is, of 20-100 thousand, and less than 20 thousand inhabitants, amounted respectively to approximately 20% (21% in the year 2000) and 12%.

Commenting on the changes in the structure of households by family type, we would like to refer to the patterns determined on the basis of the General National Census (GNC) of 1988 and 2002. These show a decrease in the share of one-family households (from 75% to 69%), while the share of non-family households increased (from 20% to 26%), which is mainly a result of an increase in the percentage of one-person households (from 18% to 25%). The share of families with children has decreased, while the percentage of one-parent families has increased.

Among the households examined in 2003, 76% are made up of a one-family (70% in the year 2000), while couples without children make up almost 22% (25% in 2000) in this group of households (about 17% of all households). The share of one-parent families is higher than that determined on the basis of the General National Census 2002, and the direction of changes is different from that observed on the scale of the population as a whole. The share of couples with no children is similar to that determined on the basis of data provided in the GNC, and the percentage of one-parent families is smaller than recorded during the census (19%).

Excessive representation of one-family households, as well as multi-family households in the sample is accompanied by insufficient representation of non-family households, particularly one-person households. The percentage of multi-family households (almost 9%) is almost two times higher than that recorded during the General National Census 2002, while the share of non-family households – despite their number increasing in the analyzed period – is lower by 10 percent points (16%).

Summing up, despite an increase in the share of one-family households, which is not consistent with the tendencies observed for the whole population, the structure of households by family type in the sample of 2003 is more similar to that of the whole population than the structure of the sample of the year 2000.

In the sample, nearly 80% of people belonged to one-family households, while the members of households consisting of more than one family constituted 15%.

The territorial structure of households is stable over time. Most households are located in the Mazowieckie and Śląskie voivodships (approximately 13% of all households, compared with 14% in the year 2000), then there are Wielkopolskie, Dolnośląskie, Łódzkie and Małopolskie voivodships which altogether constitute approximately 58% of the whole examined group of households (60% in the year 2000).

Among the members of households examined, 10% (1303) were temporarily away. Unfortunately, only 7% of these households answered the question regarding the reasons for absence. Reasons given most often included studies (40%) and work abroad (27%).

The panel sample was used during analysis of movement of household members. In the years 2000-2003, the households increased by 327 people, half of whom were women. Most often, the reason for becoming a household member was giving birth to a child (44%), reasons classified as "other" (30%) and marriage (23%). Noticeably more people left households (499) in the years 2000-2003 - 45% of these were women. The main reason for leaving a household was death (29%), establishment of one's own household (26%) and marriage (25%).

3.4.2. Characteristics of the sample of household members

Table 3.4. Household population by socio-demographic characteristics⁵

Socio-demographic characteristics	Women		Men		Total	
	N	%	N	%	N	%
Age						
Up to 24 years old	2242	32.94	2364	36.92	4606	34.87
25-34 years old	885	13.00	959	14.97	1844	13.96
35-44 years old	904	13.28	904	14.12	1808	13.69
45-59 years old	1419	20.85	1286	20.09	2705	20.48
60-64 years old	308	4.53	248	3.88	556	4.21
65 and over	1048	15.40	641	10.02	1690	12.79
Place of residence						
Cities above 500 thousand	887	13.03	766	11.97	1653	12.51
Towns 200-500 thousand	734	10.79	705	11.02	1439	10.90
Towns 100-200 thousand	531	7.80	474	7.41	1005	7.61
Towns 20-100 thousand	1276	18.75	1145	17.89	2422	18.33
Towns below 20 thousand	841	12.35	849	13.27	1690	12.79
Rural area	2538	37.29	2462	38.46	5000	37.85
Voivodship						
DOLNOŚLĄSKIE	527	7.74	484	7.57	1011	7.66
KUJAWSKO-POMORSKIE	361	5.30	349	5.45	710	5.38
LUBELSKIE	374	5.49	380	5.94	754	5.71
LUBUSKIE	177	2.60	172	2.69	349	2.65
ŁÓDZKIE	466	6.84	419	6.54	885	6.70
MAŁOPOLSKIE	568	8.35	543	8.48	1111	8.41
MAZOWIECKIE	906	13.30	872	13.61	1777	13.45
OPOLSKIE	196	2.89	173	2.70	369	2.79
PODKARPACKIE	382	5.61	332	5.19	714	5.41
PODLASKIE	219	3.22	196	3.07	416	3.15
POMORSKIE	391	5.74	370	5.77	761	5.76
ŚLĄSKIE	842	12.37	803	12.55	1645	12.46
ŚWIĘTOKRZYSKIE	236	3.47	213	3.33	449	3.40
WARMIŃSKO-MAZURSKIE	250	3.68	236	3.69	487	3.68
WIELKOPOLSKIE	620	9.11	563	8.80	1183	8.96
ZACHODNIOPOMORSKIE	291	4.28	295	4.61	586	4.44
Education						
Primary and below	1933	33.26	1483	27.72	3416	30.61
Vocational	1081	18.61	1793	33.52	2874	25.76
Grammar school	88	1.51	103	1.93	191	1.71
Vocational school	1090	18.76	1050	19.63	2140	19.18
Secondary school	675	11.61	284	5.3	958	8.59
University and post-secondary education	944	16.25	637	11.9	1581	14.17
Income per capita						
First quartile	2163	33.86	2183	36.30	4345	35.04
Middle 50%	3118	48.82	2851	47.41	5969	48.14
Fourth quartile	1107	17.32	979	16.28	2086	16.82
Social-professional status						
Public sector employees	911	13.44	772	12.10	1683	12.79
Private sector employees	823	12.15	1107	17.35	1931	14.67
Self-employed	170	2.50	361	5.66	531	4.04
Farmers	293	4.32	390	6.11	683	5.19
Disability pensioners	691	10.20	440	6.90	1131	8.60
Retirees	1114	16.44	747	11.71	1861	14.14
Students	1329	19.61	1325	20.76	2654	20.17
Unemployed	403	5.95	464	7.26	867	6.59
Other professionally inactive	1042	15.38	775	12.15	1817	13.81
Total N	6806		6402		13209	
Total %	51.51		48.49		100.00	

⁵ The table provides weighted values

Among the 13.2 thousand members of the examined households, women, like previously (in the year 2000), constituted 51%. Slightly more than one-third of all women and men lived in the rural areas (about 38%, compared to 36% in the year 2000), inhabitants of small and medium-sized towns made up 31% of both populations, approximately one-fourth lived in large towns and cities (table 3.1).

As in the year 2000, almost every fifth woman and every fifth man were in the non-mobile age (45-59 years old), the percentage of women aged 60 and over increased (from 17% to 20%), while the percentage of men in this age group decreased slightly (from 15% to 14%). The share of children and youth up to 24 years of age was not more than 33% on a national scale (table 3.4).

A significant feature of members of households is the level of education. 56% of respondents have a vocational or lower education level (52% of women and 61% of men), while in the year 2000 this figure amounted to 60%. Those with university and post-secondary education constitute 14% (16% of women and 12% of men), which represents a slight decrease (12%).

Slightly more than one third of all respondents (13%) belonged to households where income per capita was lower than the first quartile, while less than one fifth (17%) were members of households with income per capita not lower than the third quartile. Only 37% of all respondents were employees, self-employed or farmers. The percentage of retirees and disability pensioners amounted to 22%; every fifth respondent was a student.

3.4.3. Characteristics of the sample of individual respondents

Table 3.5 presents characteristics of the whole sample and the panel sample of individual respondents in accordance with the most important socio-demographic profiles after weighting using analytical weight.

The age structure of the panel sample differs from the whole sample as expected – respondents from the panel sample are 3 years older in 2003. The lower percentage of people aged between 20 and 24 in comparison with the whole sample may also be a result of the passage of time, as well as the mobility of respondents aged 20-24 (establishing their own household, marriages and leaving households which participated in the research in the year 2000).

Passage of time may also explain the change in the structure of education (among the respondents belonging to the panel group, the percentage of people with university education is slightly higher and there are less people with primary education only) and a significant decrease in the number of students.

Table 3.5. Number and percentage of respondents belonging to different samples⁶

Group of respondents	Number of respondents		Percentage	
	Whole sample	Panel sample	Whole sample	Panel sample
Total	9665	4885	100,0	100,0
Gender				
Men	4497	2270	46,5	46,5
Women	5167	2615	53,5	53,5
Age				
16-17 years old	374		3,9	
18-24 years old	1365	450	14,1	9,2
25-34 years old	1681	910	17,4	18,6
35-44 years old	1678	986	17,4	20,2
45-59 years old	2524	1407	26,1	28,8
60-64 years old	513	296	5,3	6,0
65 and older	1529	838	15,8	17,2
Place of residence				
Cities above 500 thousand	1213	667	12,9	13,7
Towns 200-500 thousand	1021	495	10,8	10,1
Towns 100-200 thousand	722	370	7,7	7,6
Towns 20-100 thousand	1787	909	19,0	18,6
Towns below 20 thousand	1169	597	12,4	12,2
Rural areas	3506	1846	37,2	37,8
Voivodship				
Dolnośląskie	757	392	7,8	8,0
Kujawsko-pomorskie	470	224	4,9	4,6
Lubelskie	589	304	6,1	6,2
Lubuskie	268	109	2,8	2,2
Łódzkie	675	343	7,0	7,0
Małopolskie	810	441	8,4	9,0
Mazowieckie	1296	709	13,4	14,5
Opolskie	271	119	2,8	2,4
Podkarpackie	502	257	5,2	5,3
Podlaskie	312	142	3,2	2,9
Pomorskie	572	297	5,9	6,1
Śląskie	1169	595	12,1	12,2
Świętokrzyskie	310	136	3,2	2,8
Warmińsko-mazurskie	359	156	3,7	3,2
Wielkopolskie	869	455	9,0	9,3
Zachodniopomorskie	437	206	4,5	4,2
Education				
Primary and below	2657	1156	27,7	24,5
Vocational	2636	1419	27,5	30,0
Secondary	3208	1489	33,4	31,5
University and post-secondary	1099	662	11,4	14,0
Income per capita				
First quartile	2121	1121	24,7	25,1
Middle 50%	4392	2273	51,1	50,9
Fourth quartile	2084	1068	24,2	23,9
Social-professional status				
Public sector employees	1573	942	16,3	19,3
Private sector employees	1766	932	18,3	19,1
Self-employed	490	276	5,1	5,7
Farmers	640	348	6,6	7,1
Disability pensioners	996	502	10,3	10,3
Retirees	1712	974	17,7	20,0
Students	1013	155	10,5	3,2
The unemployed	802	413	8,3	8,5
Other professionally inactive	661	339	6,8	6,9

⁶ These are weighted values; due to lack of data, there may be less people in individual profiles than in the total sample.

3.5. Measurement tools and indicators

All measurement tools used during the research project were questionnaires (see the annex). The “demographic” questionnaire, used to analyze the household structure and the basic socio-demographic characteristics of all its members (part I, sections C and D) and the living conditions questionnaire (part I, sections E to M) were addressed to a single representative of each examined household whose answers were recorded by the interviewer during the interview. The quality of life and lifestyle questionnaire (part II) was addressed to all of the available household members, aged 16 or older who agreed to participate in the research project, and it was filled out by the respondents without assistance from the interviewer.

Most indicators are the “raw” answers contained in the questionnaires; some of them, however, are analytical indicators, created using simple arithmetic operations, based upon the “raw” data. A short description of the indicators pertaining to particular variables can be found in the chapters that describe these variables.

Most of the measures are the original concepts of the authors of the project. Some have been derived from other researchers. Derivatives took various forms: short form, modification or only application of a general idea. Measures that were not created by the members of our team include:

Happiness Scale (Gurin, Verloff, Feld, 1960) (annex, part II, Q 40);

Evaluation of Life-as-a-whole Scale – based upon the *Delighted-Terrible Scale* (Andrews and Withey, 1976) (annex, part II, Q 3);

a shortened *Beck Depression Inventory*, Beck et al., 1961; translated by M. Lewicka and J. Czapiński (annex, part II, Q 57);

Unrealistic Optimism Scale – based upon a concept by Weinstein (1980, 1987) (annex, part II, Q 110);

Scales of Risk-avoidance/Risk-seeking — based upon a concept by Kahneman and Tversky (1979) (annex, part II, Q 98 and 101).

4. LIVING CONDITIONS OF HOUSEHOLDS

4.1. Income and ways of managing it

4.1.1. Income level and variability

Tomasz Panek

Income is the main factor conditioning the fulfillment of the needs of a household. In the research project, we analyzed the category of income including all current cash and non-cash net income of households.

In order to function as a measure of the ability to fulfill the needs of households, household income should be adjusted by the level of these needs. In practice, this adjustment usually means that the income is divided by the number of household members, which results in the so-called income per capita. Thus it is assumed that the level of needs of a household is directly proportional to the number of household members. However, this assumption disregards the existence of specific savings, associated with joint management within the confines of a household. These savings are primarily a result of the distribution of some of the regular costs incurred by a household, among a greater number of people. In the analyses conducted, household income was adjusted by dividing it by the so-called equivalence scales, estimated on the basis of household expenditures. These scales take into consideration the differences in the level of needs, resulting from the household size and the age of its members. The equivalent incomes, obtained in this way, are comparable for households of varying demographic characteristics. Moreover, the categories of income per household and per capita were presented separately.

Income of households associated with farming (farmer and employee-farmer households) is subject to a significant influence of seasonal factors. Therefore, besides the monthly income of households, earned in March 2003, the average net income per month throughout the year 2002 was also examined.

To assess the income variability both in the entire population of households examined and in individual groups, the first and ninth decile of income distribution were used. The first decile (D_1) meant the income level, below which 10% and above which 90% of households were located. The ninth decile (D_9), on the other hand, represented the income level, below which 90% and above which 10% of households are located. The higher the D_9/D_1 ratio, the greater the income variability in the examined population of households.

Apart from the objective perspective, a subjective one was used as well to assess the income of households. From the subjective perspective, evaluation of the income of a household is based upon the opinions of the household members. Households indicated the lowest amount of net income per month that would allow them to make ends meet. These are, in a way, certain subjective poverty lines, that is, income levels allowing the fulfillment of current needs at a minimum level acceptable for the households. Households also assessed the extent to which they were able to make ends meet at the existing income level (with a varying degree of difficulty or ease).

During their life cycle, households make choices between current and future consumption, in order to ensure a desirable level of consumption during the entire period of their existence. The current income of households can be used not only to fulfill current needs, but also to create property or to increase savings. Moreover, in order to finance their needs, households may, if the current income level is not satisfactory, take advantage of outside sources of income (credit, loans). The way of managing current income is determined both by its level and the degree of attainment of the desired level of consumption. During research, the income levels declared by households as ensuring them a satisfactory standard of living now and in the future were examined. These may be treated as certain subjective lines of prosperity, that is, levels of income allowing for fulfillment of the current needs of households and allowing them

to achieve objectives associated with the establishment of a desirable level of property. Moreover, ways of managing income by households were examined, as well as methods of coping with situations in which the regular household income does not allow for the fulfillment of current needs. Finally, a comparison was made, also on the basis of the declarations of households, of their present income situation with that observed three years ago, when the first wave of research was conducted.

The average net income per household in February⁷ 2003 for the examined households amounted to PLN 1887, and per capita – PLN 676. In comparison with the situation observed three years earlier, it was a real increase of 11% per household and almost 14% per person. The highest net average income was achieved by households of the self-employed (PLN 2593 per household and PLN 782 per capita respectively). The groups of households with the highest average net income per person are, besides the ones mentioned above, the retiree and employee households (PLN 809 and 685 respectively). Visibly the lowest level of net average income was observed in the case of households of those living on unearned sources and farmers (PLN 372 and 403 respectively). The groups of households characterized by the highest and the lowest level of equivalent income (comparable for households of varying demographic composition) are the same groups as in the case of income per capita. In comparison with February 2000, a real decrease of the equivalent income level was observed only in the group of households living on unearned sources, while the greatest increase in this period was recorded in retiree households.

Net income per capita and net income per equivalent unit, which are a realistic measure of the level of affluence of households, were visibly the lowest in the case of households of couples with many children (PLN 353 and 623 respectively). The real decrease of average income per month per consumption unit within the last 3 years was experienced only by non-family multi-person households. The income also decreased in the group of households with unemployed members.

The net income per capita, as well as income per equivalent unit were lower by PLN 245 on average in the group of households with unemployed members than in the group of households with no unemployed members (the income in these households amounted to PLN 467 and 732 and PLN 742 and 987 respectively).

Both income per equivalent unit and – to a somewhat lesser degree — income per capita is visibly correlated with the class of place of residence. The smaller the city/town of residence, the lower the average income per equivalent unit (in the largest cities, it amounted to an average of PLN 1278, and rural areas – PLN 928). Visibly the lowest is the average income per equivalent unit in the Podkarpackie, Podlaskie and Warmińsko-mazurskie voivodships (an average of PLN 782, 790 and 799 respectively), and the highest – in the Mazowieckie and Pomorskie voivodships (an average of PLN 1150 and 1015 respectively). In all classes of place of residence and voivodships, a substantial increase in the average real income per month per equivalent unit has been observed within the last 3 years. The greatest increase can be observed in households occupying the smallest towns and the Lubuskie, Śląskie and Warmińsko-mazurskie voivodships.

The variability of household incomes was measured by the D_9/D_1 ratio in income distribution (table 4.1-4.4). The most adequate category of income here is income per equivalent unit, serving as a basis for comparison of income of households, characterized by varying demographic composition.

⁷ The question asked by researchers pertained to income in the previous month.

Table 4.1. Variability of household net income by socio-economic group in March 2003

Socio-economic group	Deciles for net income per month in PLN								
	per household			per capita			per equivalent unit		
	first	ninth	ninth/first	first	ninth	ninth/first	first	ninth	ninth/first
Employees	1000.00	3600.00	3.60	250.00	1249.99	5.00	421.85	1673.71	3.97
Farmers	500.00	3000.00	6.00	150.00	749.99	5.00	262.29	1115.81	4.25
Employee-Farmers	1000.00	4000.00	4.00	216.66	939.99	4.34	362.99	1311.45	3.61
Retirees and pensioners	600.00	2000.00	3.33	233.33	999.99	4.29	319.67	1189.85	3.72
of which: retirees	740.00	2900.00	3.92	416.66	1299.99	3.12	544.87	1594.78	2.93
pensioners	600.00	2000.00	3.33	233.33	999.99	4.29	319.67	1189.85	3.72
Self-employed	1000.00	5000.00	5.00	260.00	1499.98	5.77	467.21	2085.48	4.46
Living on unearned sources	300.00	2000.00	6.67	91.67	699.99	7.64	168.20	956.62	5.69
Total	700.00	3200.00	4.57	245.00	1199.99	4.90	384.77	1573.74	4.09

Table 4.2. Variability of household net income by household type in March 2003

Household type	Deciles for net income per month in PLN								
	per household			per capita			per equivalent unit		
	first	ninth	ninth/first	first	ninth	ninth/first	first	ninth	ninth/first
One-family:									
married couples without children	1000.00	3000.00	3.00	499.99	1499.98	3.00	606.55	1967.18	3.24
married couples with 1 child	900.00	3500.00	3.89	283.33	1166.66	4.12	457.80	1672.23	3.65
married couples with 2 children	900.00	3500.00	3.89	225.00	874.99	3.89	381.23	1368.44	3.59
married couples with 3 and more children	800.00	3200.00	4.00	140.00	599.99	4.29	255.95	1098.46	4.29
one-parent families	650.00	2500.00	3.85	240.00	999.99	4.17	339.20	1311.45	3.87
Multi-family	1200.00	4300.00	3.58	225.00	804.16	3.57	380.77	1392.10	3.66
Non-family: one-person	540.00	1600.00	2.96	539.99	1599.98	2.96	563.34	1647.52	2.92
multi- person	500.00	2000.00	4.00	365.50	1349.99	3.69	319.67	1245.88	3.90
Total	700.00	3200.00	4.57	245.00	1199.99	4.90	384.77	1573.74	4.09

Table 4.3. Variability of households net income by the class of place of residence in 2003

Class of place of residence	Deciles for net income per month in PLN								
	per household			per capita			per equivalent unit		
	first	ninth	ninth/first	first	ninth	ninth/first	first	ninth	ninth/first
Cities:									
more than 500k	804.00	4200.00	5.22	304.50	1599.98	5.25	530.01	2125.83	4.01
200-500k	800.00	3500.00	4.38	286.00	1399.99	4.90	466.17	1792.53	3.85
100-200k	816.00	3200.00	3.92	300.00	1299.99	4.33	456.15	1704.89	3.74
20-100k	700.00	3000.00	4.29	275.00	1199.99	4.36	424.77	1487.74	3.50
<20k	780.00	3000.00	3.85	237.50	999.99	4.21	411.14	1413.25	3.44
Rural area	615.00	3000.00	4.88	200.00	866.66	4.33	316.76	1178.91	3.72
Total	700.00	3200.00	4.57	245.00	1199.99	4.90	384.77	1573.74	4.09

Table 4.4. Variability of household's net income by voivodship in 2003.

Voivodship	Deciles for net income per month in PLN								
	per household			per capita			per equivalent unit		
	first	ninth	ninth/first	first	ninth	ninth/first	first	ninth	ninth/first
Dolnośląskie	670.00	3280.00	4.90	228.57	1299.99	5.69	338.58	1594.37	4.71
Kujawsko-pomorskie	700.00	3160.00	4.51	196.00	1099.99	5.61	337.48	1442.60	4.27
Lubelskie	610.00	3000.00	4.92	250.00	1034.99	4.14	368.67	1557.21	4.22
Lubuskie	780.00	3000.00	3.85	250.00	1249.99	5.00	405.01	1606.53	3.97
Łódzkie	630.00	3300.00	5.24	240.00	1099.99	4.58	364.90	1487.74	4.08
Małopolskie	800.00	3500.00	4.38	271.43	1133.32	4.18	455.73	1538.58	3.38
Mazowieckie	780.00	4200.00	5.38	275.00	1499.98	5.45	433.34	1967.18	4.54
Opolskie	800.00	3500.00	4.38	266.66	1166.66	4.38	410.29	1481.36	3.61
Podkarpackie	700.00	3000.00	4.29	216.66	1049.99	4.85	334.09	1357.58	4.06
Podlaskie	600.00	3000.00	5.00	233.33	999.99	4.29	338.58	1311.45	3.87
Pomorskie	930.00	3500.00	3.76	253.33	1249.99	4.93	456.35	1704.89	3.74
Śląskie	800.00	3000.00	3.75	300.00	1199.99	4.00	439.35	1557.35	3.54
Świętokrzyskie	640.00	3000.00	4.69	233.33	1006.59	4.31	340.54	1418.86	4.17
Warmińsko-mazurskie	650.00	2950.00	4.54	187.50	999.99	5.33	312.13	1444.13	4.63
Wielkopolskie	800.00	3300.00	4.13	234.00	1099.99	4.70	410.21	1517.03	3.70
Zachodniopomorskie	750.00	3000.00	4.00	225.00	1189.99	5.29	356.95	1484.37	4.16
Total	700.00	3200.00	4.57	245.00	1199.99	4.90	384.77	1573.74	4.09

The greatest variability of income in 2003 was observed among households living on unearned sources other than pensions and households of the self-employed. Among various household types, the most diversified were incomes of married couples with many children. Variability of income per equivalent unit in the group of households with unemployed members is visibly higher than in the group of households with no unemployed members. On the other hand, variability of household income per equivalent unit, according to class of place of residence, is not high. The greatest variability was observed among households inhabiting the largest cities. Among voivodships, the highest level of variability of equivalent income of households was observed in Dolnośląskie, Warmińsko-mazurskie and Mazowieckie voivodships.

The variability of the average monthly income of households per equivalent unit has substantially increased within the last 3 years not only on a national scale, but also in all groups of households identified according to socio-economic group and class of place of residence. Only in groups of households with 2 children, in households with unemployed members and households located in the Mazowieckie, Lubuskie, Kujawsko-pomorskie and Warmińsko-mazurskie voivodships, the income inequalities have decreased.

The lowest net income per month, which in the opinion of the examined households allowed them to make ends meet in 2003, was PLN 679 per capita and PLN 934 per equivalent unit. These aspirations have not been subject to a significant real increase within the last 3 years. The highest aspirations with regard to their income situations, allowing for fulfillment of needs at a minimum acceptable level, were declared by households characterized by the highest level of real income, that is, households of the self-employed and retirees (PLN 1055 and 1007 per equivalent unit respectively) and non-family one-person households, as well as households of married couples without children (PLN 1055 and 1007 respectively per equivalent unit). The lowest aspirations with regard to their income were declared by households with the lowest levels of real income, that is, those living on unearned sources and farmers (PLN 687 and 698 per equivalent unit respectively) and households of married couples with many children and non-family multi-person households (PLN 691 and 780 per equivalent unit respectively). Within the last 3 years, we have observed a real decrease in these aspirations in groups of households living on unearned sources, and self-employed, non-family one-person, one-parent family and multi-family households.

The level of net income per month that would allow them to make ends meet, declared by households with no unemployed members, is significantly higher than in the case of households with the unemployed (PLN 732 and 487 respectively in the case of income per capita and PLN 987 and 742 respectively with regard to income per equivalent unit). A real decrease in this level was observed in comparison with March 2000 in the group of households with unemployed members.

The level of aspirations with regard to the lowest net income per month allowing households to make ends meet decreases along with the size of the place of residence. The lowest level of net monthly income per equivalent unit, allowing households to make ends meet, was declared by rural households. Territorially, these were the Kujawsko-pomorskie and Podkarpackie voivodships (PLN 827 and 838 per equivalent unit respectively). In all classes of place of residence, this level did not change to a statistically significant extent in comparison with the situation observed 3 years ago. A real decrease of this level in the examined period was observed only in groups of households inhabiting the Lubuskie, Warmińsko-mazurskie, Małopolskie and Łódzkie voivodships.

The average level of monthly net income that would ensure a satisfactory standard of living, according to the opinions of households, formulated in March 2003, amounted to PLN 1337 per capita and 1856 per equivalent unit. The highest amounts in this regard were declared by households of the self-employed and employees (PLN 2335 and 1997 per equivalent unit) and households of married couples without children, couples with 1 child and one-person non-family households (PLN 2124, 2028 and 2074 per equivalent unit respectively).

The larger the place of residence, the greater the estimated net monthly income in PLN that would ensure a satisfactory standard of living now and in the future. Households inhabiting

the largest cities estimated PLN 2426 per equivalent unit, and those located in rural area – PLN 1532. Voivodships estimating the highest income levels were: Mazowieckie, Lubuskie and Dolnośląskie (PLN 2309, 2065 and 2022 per equivalent unit respectively).

The desirable amount of income per capita and equivalent unit increased in real value less than monthly income, both in general and in individual groups of households, in comparison with the year 2000; the increase was the greatest in households of employees and retirees, in the case of couples with 2 children, non-family one-person households, those living in small and medium-sized towns (from 20 to 200 thousand inhabitants) and in the Dolnośląskie, Lubuskie, Mazowieckie, and Podkarpackie voivodships. The fact that estimated income is falling behind real income may indicate a decline in aspirations and/or an increased ability to manage the financial resources available to households.

4.1.2. Strategies of coping with financial difficulties and social assistance

Tomasz Panek, Janusz Czapiński and Irena Elżbieta Kotowska

In March 2003, households declared most often that at the present level of income they were able to make ends meet with some difficulty (more than 33%), almost 25% of households did it with difficulty and more than 26% - with great difficulty (figure 4.1). The highest percentage of households making ends meet with great difficulty was found in the group of households living on unearned sources (almost 66%) and disability pensioners (more than 41%). In groups of households identified in accordance with household type, these were the most numerous among one-parent families (more than 40% in this group) and married couples with many children (almost 40%). As many as 47% of households with unemployed members made ends meet with great difficulty at the present income level. On the other hand, households with no unemployed members usually were able to make ends meet with some difficulty (almost 37%). Households making ends meet with great difficulty usually inhabited rural area (more than 29%) and the Lubuskie (more than 35%), Dolnośląskie (almost 35%) and Podkarpackie (over 31%) voivodships.

In comparison with the situation 3 years earlier, the percentage of households able to make ends meet with great difficulty at the present income level decreased in general by 5% (figure 4.1), and it increased significantly only in groups of households of employees living on unearned sources (by almost 6 percent points), of the self-employed (by more than 2%) and households with unemployed members (by almost 4 percent points). The increasing percentage of households, which assess the occurring changes pessimistically, has been observed in groups of households inhabiting the largest cities (an increase of more than 10 percent points) and the Pomorskie and Małopolskie (by more than 2 percent points) voivodships and the Lubuskie voivodship (by 1.5 percent points).

Assessing the management of financial means in March 2003, households usually declared that they lived economically and thus were able to afford everything (almost 35%) or that they lived very economically in order to save for more significant purchases (almost 20%). Households declaring that they did not have enough money even for the cheapest food (those evaluating their income situation as being the worst), which in general constituted more than 3%, were most often found in the group of households living on unearned sources (more than 23%) and non-family households consisting of more than one person (more than 8% of households in this group).

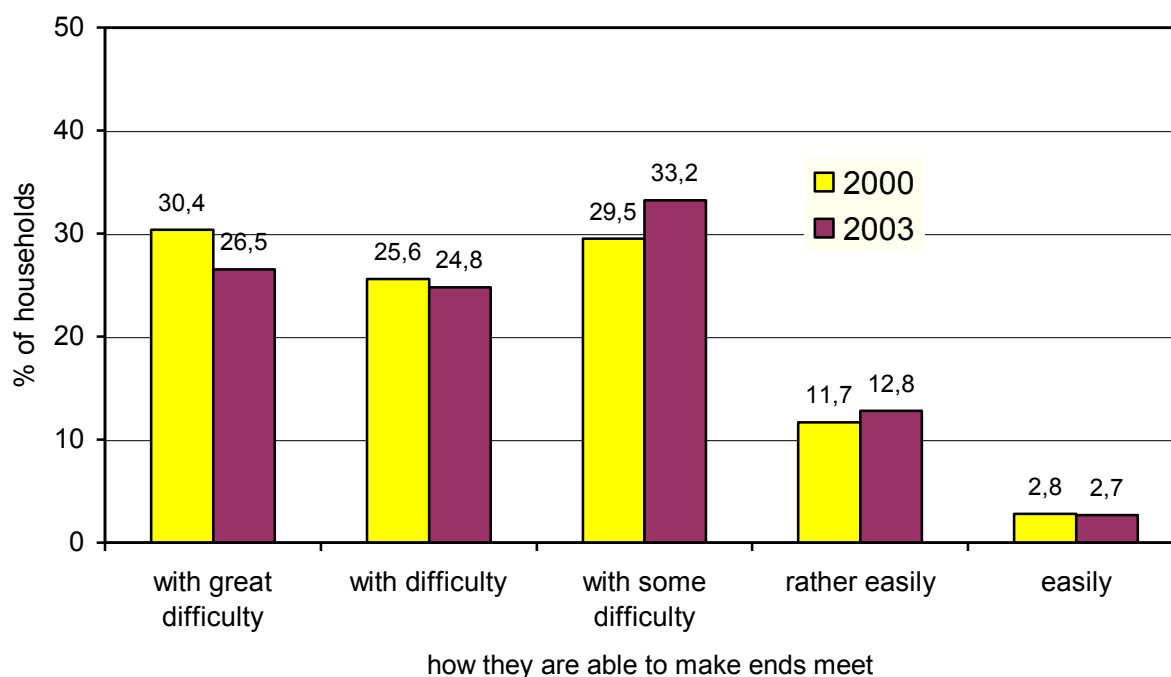


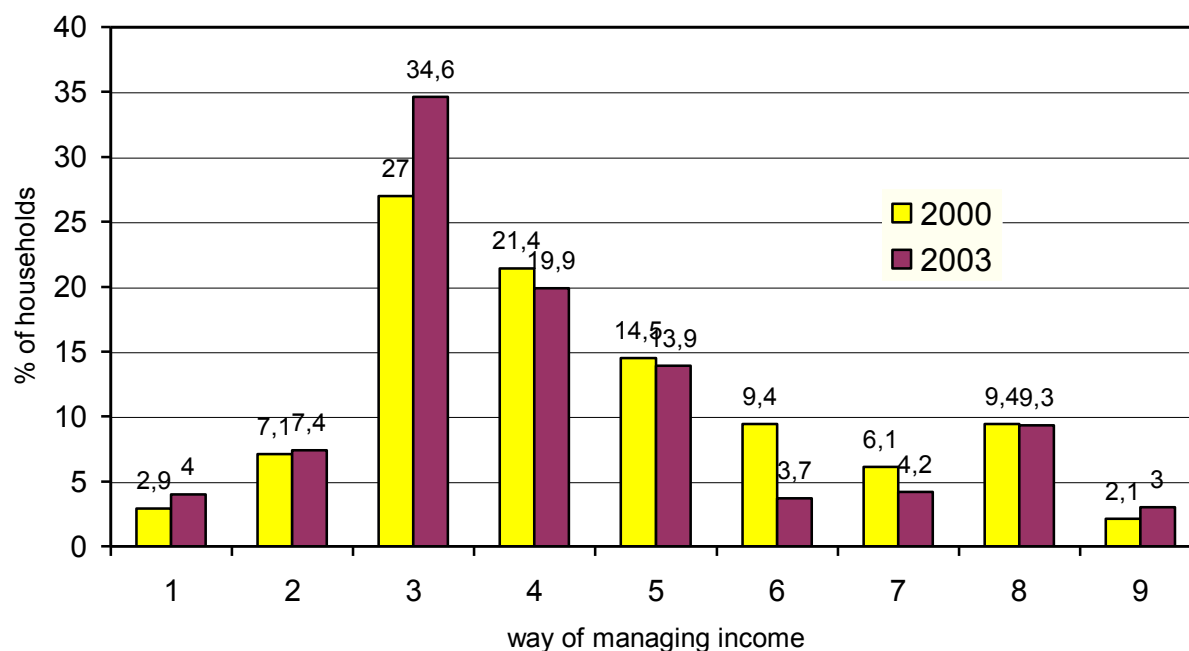
Figure 4.1. Ability of households to make ends meet at the present level of income earned in the years 2000 and 2003 in a panel sample

Both households with unemployed members and households with no unemployed members most often declared that they lived economically and thus were able to afford everything (37% and 20% respectively). However, more than 17% of households with unemployed members declared that they had enough money only for the cheapest food, but they could not afford clothes, and more than 7% declared that they did not have enough money for the cheapest food. On the other hand, in the group of households with no unemployed members, this way of income management was declared only by 7% and less than 2% of households respectively.

The group of households, which evaluate their situation with regard to income as the worst, was not diversified with regard to class of place of residence and voivodship. Voivodships characterized by the highest relative percentage of households declaring their income situation as being the worst were the Dolnośląskie (almost 7%), Kujawsko-pomorskie, Śląskie and Mazowieckie (4% and more households from these voivodships).

Within the last 3 years, the percentage of households declaring that they did not have money even for the cheapest food increased by 1.2 percent points, while the proportion of households declaring that they had enough money for everything and were even able to make savings for the future, increased slightly more – by 1.7 percent points; the increase in the number of households which lived economically and thus were able to afford everything was the greatest (by almost 5 percent points; figure 4.2). This indicates a general increase in economic resourcefulness, while diversification in this regard is also rising. The highest increase of extremely pessimistic evaluations was observed in groups of households living on unearned sources (by about 17.5 percent points), of retirees (by more than 5%), with unemployed members (by more than 4 percent points) and in non-family multi-person households (by more than 5 percent points). Most of these households inhabited the smallest towns (an increase of more than 3 percent points in this group of households) and the following voivodships: Dolnośląskie (an increase of almost 5 percent points), Śląskie and Kujawsko-pomorskie (an increase of almost 4 percent points). The greatest increase in extremely optimistic evaluations (“we can afford everything and even save for the future”) was observed in households of the self-employed (by 3.5 percent points), married couples without children (by about 4 percent points), inhabitants of

medium-size towns (by between 2.2 to 3.2 percent points) and the Pomorskie (by 6.2 percent points) and Mazowieckie (by 4.7 percent points) voivodships.



- 1 – we can afford everything and we are even able to save for the future
 2 – we can afford everything without having to give anything up, but we are unable to make savings
 3 – we live economically and we are able to afford everything
 4 – we live very economically to afford more expensive purchases
 5 – we have enough money for the cheapest food, clothes, rent and payment of credit
 6 – we have enough money for the cheapest food, clothes and rent, but it is not enough for payment of credit
 7 – we have enough money for the cheapest food, and clothes, but it is not enough to pay the rent
 8 – we have enough money for the cheapest food but it is not enough for clothes
 9 – we do not have enough money even for the cheapest food

Figure 4.2. Way of managing income by households in the years 2000 and 2003 in a panel sample

Less than 41% of households declared in March 2003 that their regular income did not allow them to fulfill their current needs. The greatest number of these belonged to groups of households living on unearned sources (more than 76%) and disability pensioners (almost 58%), as well as of households of married couples with many children (more than 54%) and one-parent families (more than 53%). In the group of households with the unemployed, such declarations were made by as many as almost 67% of households, while in the group of households with no unemployed members – only less than 34%. Households with regular income not allowing to fulfill their current needs were most often located in rural areas and towns of 20 to 100 thousand inhabitants (almost 43% each) and the Podkarpackie (more than 47%), Warmińsko-mazurskie and Lubelskie voivodships (more than 46% each). In general, however, the territorial diversification in this regard is not very high.

In comparison with the situation of 3 years earlier, the percentage of households declaring that their regular income did not allow for fulfillment of their current needs decreased by almost 5 percent points (table 4.5). A rapid decrease in the percentage of such households, however, took place earlier (from 66.2% in 1997 to 45.3% in the year 2000; table 4.5). At present, much less than a half – 40.6% of households – complain that their regular income does not allow them to fulfill their current needs, and this decrease in comparison with the previous phase of research – although not as spectacular as it had been earlier – is also statistically significant (table 4.7). The present change is proportional to the increase in real income. In this context, however, it is worth noting that on one hand, the needs, which require increasing

amounts of money to be fulfilled, are becoming increasingly universal (cf. chapter 4.3), while on the other hand – aspirations with regard to real money income allowing for the fulfillment of needs at a minimum acceptable level are not increasing. Thus the needs of the Poles are increasing, but they do need an increase in real income in order to be able to fulfill them. It means that their ability to manage their financial resources is increasing, although they do not have substantial savings and less often use them to fill gaps in regular income, as well as less often obtain loans and credit to save their budget (tables 4.6 and 4.7).

Table 4.5. Percentage of households declaring that their regular income does not allow them to fulfill their current needs in the years 1992-2003

1992 N=3402	1993 N=2306	1994 N=2302	1995 N=3020	1996 N=2333	1997 N=2094	2000 N=3000	2003 N=3876
70.6	74.2	68.8	64.5	64.8	66.2	45.3	40.6

Source of data: 1992-1997 — Czapiński, 1998; 2000 — Social Diagnosis 2000 (computer database).

During the last 2 years, the percentage of households declaring that their regular income did not allow them to fulfill their current needs increased only in the group of households living on unearned sources and households of the self-employed (by almost 10 percent points and 4 percent points respectively), households with unemployed members (by almost 6 percent points) and inhabiting the largest cities (by almost 5 percent points), as well as the following voivodships: Wielkopolskie, Łódzkie and Podkarpackie (by almost 5, more than 2 and almost 2 percent points respectively).

In March 2003, households declared that when their income did not allow them to satisfy their current needs, they most often limited their current needs (almost 93%, which is a substantial increase in comparison with the year 2000) or obtained loans (43%, a very significant decrease in comparison with the year 2000), or they sought the assistance of their relatives (almost 36%, no change in relation to the year 2000 in the panel sample; see table 4.7). Only in every fifth household, which found itself in a situation like this, did a household member take on an extra job (no change since the year 2000).

There was no significant diversification among groups of households identified according to all the criteria applied during research, with regard to the percentage of those who declare that they limit their current needs if their income becomes too low. Within the last 3 years, this method of dealing with financial problems increased most significantly in the group of households of the self-employed (by almost 32 percent points), married couples without children (by almost 16 percent points) and those living in large towns with more than 200 thousand inhabitants (by more than 11 percent points) and in the Śląskie and Opolskie voivodships (by almost 18 and more than 15 percent points respectively).

Most often, loans were obtained by households of employees (more than 54%) and employee-farmers (almost 51%) and multi-family households (more than 57%), as well as married couples with many children, when their regular income was not sufficient to satisfy their current needs. Behaviors of this type occurred most often also among households inhabiting the Pomorskie (almost 53%) and Opolskie (more than 50%) voivodships. Diversification with regard to class of place of residence was not significant. A substantial increase of the percentage of households undertaking such activities, in comparison with the situation 3 years ago, was observed only in groups of multi-family households (by more than 11 percent points) and households located in Zachodniopomorskie and Świętokrzyskie voivodships (by more than 9 percent points).

Table 4.6. The percentage of households declaring various ways of coping with financial difficulties in fulfilling their current needs in the years 1992-2003*.

Ways of coping with financial difficulties	1992 N=2402	1993 N=1700	1994 N=1580	1995 N=1940	1996 N=1500	1997 N=1380	2000 N=1350	2003 N=1560
Limitation of needs	91.2	93.3	91.6	88.8	91.1	93.5	88.7	92.6
Taking on additional jobs	25.9	29.4	33.6	32.9	33.2	35.6	22.9	22.0
Using savings	21.5	20.8	18.7	15.1	17.5	18.3	16.6	9.4
Obtaining loans	42.9	43.3	44.4	44.6	44.1	48.6	50.7	43.0
Seeking assistance of relatives	41.6	44.7	40.1	42.9	39.9	43.8	40.3	35.5
Seeking assistance of church	1.2	1.0	1.0	0.8	0.5	1.2	1.3	0.7
Taking advantage of social assistance	7.1	7.5	8.0	7.1	6.7	6.0	11.7	13.2
Selling off property	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	5.7	7.0
Taking up other activities	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	19.0	20.1
Taking up no activity	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	13.1	12.7

*in relation to households whose income does not allow them to satisfy their current needs

Source of data: 1992-1997 — Czapiński, 1998; 2000 — Social Diagnosis 2000 (computer database).

Table 4.7. Comparison of the percentage of households resulting from two measurements - in the years 2000 and 2003 - on a panel sample (of the same households), whose regular income does not allow for the fulfillment of basic needs, which, in this situation, apply various ways of coping with the difficulties

Variable	Wave	Per cent	Standard deviation	Difference	t	Degrees of freedom	Level of significance	Correlation
Regular income does not allow for fulfillment of current needs	2000	47	49.9	5	4.08	2315	0.000	0.378**
	2003	43	49.5					
Using savings	2000	16	36.7	8	4.60	637	0.000	0.120**
	2003	8	27.4					
Selling off property	2000	6	24.1	-1	-0.59	647	0.553	0.107**
	2003	7	25.4					
Limiting of needs	2000	88	32.2	-5	-3.48	654	0.001	0.059
	2003	94	24.5					
Obtaining of credit/loans	2000	54	49.9	9	3.57	651	0.000	0.242**
	2003	45	49.8					
Seeking assistance of relatives	2000	39	48.8	2	0.91	650	0.363	0.231**
	2003	37	48.3					
Seeking assistance of church	2000	2	15.5	2	2.36	646	0.018	0.192**
	2003	1	9.6					
Taking advantage of social assistance	2000	16	36.6	0	0.19	646	0.850	0.358**
	2003	16	36.9					
Taking on additional jobs	2000	24	42.8	2	0.87	648	0.384	0.177**
	2003	22	41.6					
Taking up other activities	2000	20	39.8	0	-0.24	648	0.813	0.223**
	2003	20	40.2					
Taking up no activity	2000	12	32.1	-1	-0.36	626	0.715	0.091*
	2003	12	32.8					

* p < 0.05

** p < 0.01

Seeking the assistance of relatives in a situation when the regular income did not allow for the fulfillment of current needs, was characteristic mainly of households living on unearned sources (almost 50%) and non-family multi-person households (also almost 50%). Households

dealing with financial problems in this way inhabited mainly the largest cities (more than 39%) and the Mazowieckie voivodship (more than 47%). A significant increase in responses of this type within the last 3 years occurred in households of the self-employed and of retirees (by almost 23 and more than 5 percent points respectively), in multi-family households and in households of couples with 1 child (by almost 7 percent points) and those inhabiting the largest cities (by almost 6 percent points) and the Podlaskie, Mazowieckie and Lubuskie voivodships (by almost 11, more than 8 and almost 8 percent points respectively).

In a situation when regular income did not allow for the fulfillment of current needs, both households with unemployed members and those with no unemployed members usually responded in a way similar to groups of households identified in accordance with other criteria. However, it is worth noting the much higher frequency of seeking social assistance in such a situation in the group of households with unemployed members than in the group of those with no unemployed members (more than 22% and almost 9% respectively) and the fact of taking up an extra job by a household member (more than 28% and less than 19% of households belonging to these groups respectively).

Active ways of dealing with a situation in which regular income did not allow for the fulfillment of current needs, were preferred relatively most often by households of the self-employed (more than 30% of households) and by married couples with many children (more than 32%), while the least frequently – by households of retirees and pensioners (less than 16%) and non-family multi-person households (less than 9%). Households preferring activities of this type most often inhabited the largest cities (almost 25%) and rural areas (more than 23%), as well as the Pomorskie voivodship (almost 31%). The preference for active ways of dealing with financial difficulties increased most visibly in groups of households associated with farming (by about 4.5 and more percent points), married couples with many children (by more than 11%) and households located in small towns (of 20 to 100 thousand inhabitants) and rural areas (by almost 7 and almost 2 percent points respectively), as well as the Śląskie, Świętokrzyskie, Mazowieckie and Łódzkie voivodships (by almost 14, 9, 6 and 6 percent points respectively).

More than 50% of households declared that their income situation worsened in comparison with 3 years earlier, while 41% stated that it did not change. A pessimistic view of the changes was most often formulated in households of farmers (almost 77%) and households living on unearned sources (more than 71%), as well as one-parent families (more than 61%) and families with many children (more than 59%). In the group of households with no unemployed members, such declarations were made only by 46% of households. Households believing that their income situation in comparison with that of 3 years ago worsened, were most often located in the largest cities and in rural areas (more than 53% each) and in the Małopolskie (almost 57%) and Łódzkie (almost 56%) voivodships.

The percentage of households receiving any kind of assistance amounted also to 13%. Most often, it was financial assistance (65%), then material assistance (57%), and, least frequently, assistance in the form of services (16%). The range of assistance is strongly diversified in accordance with socio-economic group and household type. Territorial differences are much less significant.

Definitely the greatest scale of assistance was observed in the case of households living on unearned sources— 46%. The next group is households of disability pensioners – every fifth household was receiving assistance. The same pertained to 10% of households of employees and the same percentage of households of farmers. Less often, assistance was provided for households of retirees and the self-employed (7%), and the least often it was aimed at households of employee-farmers (6%).

The family households with three or more children, as well as one-parent families took advantage of social assistance much more frequently than the remaining categories of families (23% and almost 18% respectively). The range of assistance provided for one-person households and couples with 2 children was similar – 8% each.

The highest percentage of households obtaining social assistance was observed in the Lubelskie and Warmińsko-mazurskie voivodships (21% and 19% respectively), and then in the

Opolskie and Kujawsko-pomorskie voivodships (17% each). In the remaining voivodships, the assistance ranged between 9% and 13%. In distribution by class of place of residence, there was no significant diversification with regard to the scope of assistance – it was slightly more frequently directed to inhabitants of rural areas (14%) than towns or cities (12-13%).

Financial assistance received by households most often, is diversified with regard to the class of place of residence. It pertained to almost 70% of households taking advantage of assistance, located in towns and cities (the exception were towns between 100 and 200 thousand inhabitants) and 61% of households located in rural areas. The range of material assistance was between 49% (towns of 20 to 100 thousand inhabitants) and 61% (rural areas, towns between 200 and 500 thousand inhabitants and below 20 thousand).

Assistance was most often provided by family members living in Poland – 58% of households indicated this source. The second most significant source of assistance was social assistance centers (47%), and then friends or acquaintances (16%). The importance of other sources of assistance (secular charity organizations, religious organizations, trade unions, district centers for family support), expressed as the percentage of households receiving assistance from these entities (a total of about 12%) was not great.

Taking into consideration households that declare the greatest financial difficulties, it can be said that assistance was provided in general to those groups that really needed it: households living on unearned sources, disability pensioners, families with many children and one-parent families. The accuracy of addressing assistance may be due to the fact that it is most often rendered by family members living in Poland, who are well familiar with the situation of the household in need. However, the second important source of assistance is social assistance centers.

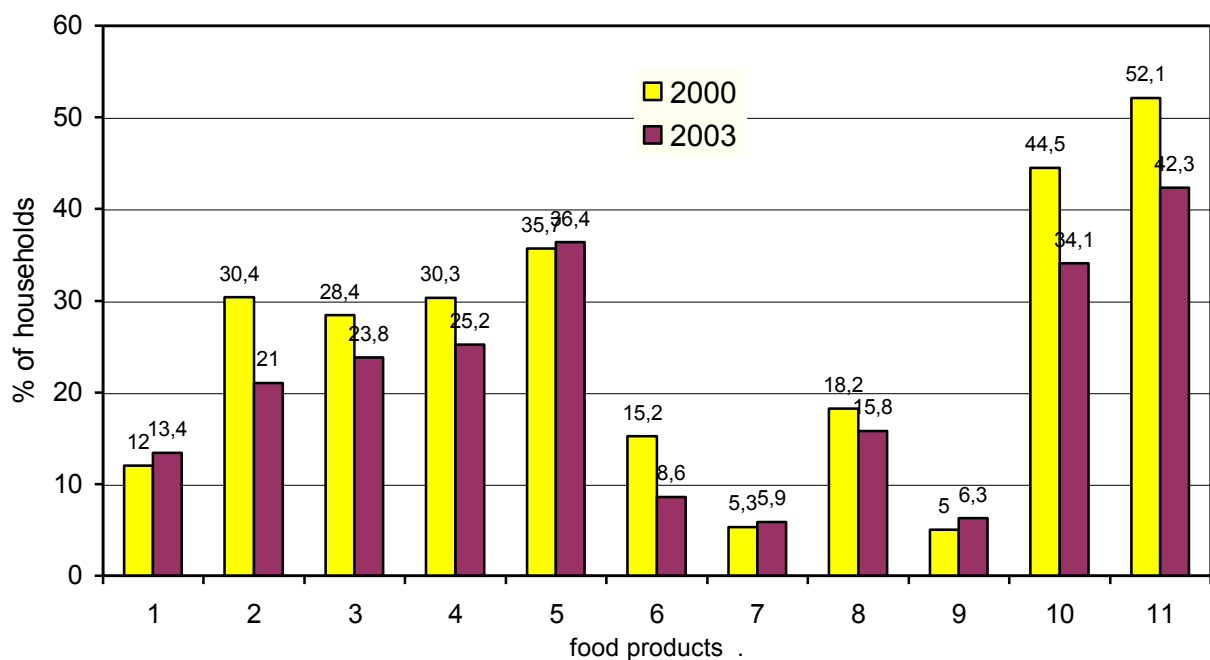
4.2. Nutrition

Tomasz Panek

The research included analysis of the frequency of situations in which households cannot afford a sufficient quantity of basic food items. Also the sources from which food items are obtained by households without the use of money were analyzed. Moreover, subjective opinions regarding changes in the level of fulfillment of food needs of households in comparison with the situation 3 years earlier were presented.

In March 2003, households declared most often that in the previous year they were not able to fulfill their food needs due to financial reasons with regard to alcohol and tobacco products (about 42% of households), fish and fish preserves and confectionery products (about 36 and 34% respectively), meat and poultry preserves (about 25%) and meat and poultry (below 24%). Only in the case of fish and fish preserves, there has been a substantial increase in the percentage of households unable to fulfill their needs in this regard within the last 3 years (by 1.8 percent points). In the case of a great majority of the analyzed groups of food items, we have observed a substantial improvement of the situation, the greatest in the case of confectionery products and fruit and fruit preserves (a decrease in the percentage of households unable to fulfill their food needs in this regard due to financial reasons by almost 9.6 and 9.5 percent points) (figure 4.3.).

The groups of households which were most often unable to purchase food items from the 5 groups, for which the scale of unfulfilled needs was the highest in March 2003, were households living on unearned sources (about 63%, 64%, 60%, 53% and 50% respectively for the food items, mentioned above) and households of retirees (about 57%, 51%, 50%, 42% and 38% respectively). A significant worsening of the situation with regard to the ability to fulfill the food needs within the last 3 years has been observed only in the group of households living on unearned sources (in the case of vegetables and vegetable preserves and fish and fish preserves - by more than 12 percent points).



- 1 – vegetables and vegetable preserves
- 2 – fruit and fruit preserves
- 3 – meat and poultry
- 4 – meat and poultry preserves
- 5 – fish and fish preserves
- 6 – butter
- 7 – milk
- 8 – milk products
- 9 – sugar
- 10 – confectionery (sweets, chocolate etc.)
- 11 – alcohol and tobacco products

Figure 4.3. The range of unsatisfied needs of households with regard to food items in the years 2000 and 2003 in a panel sample

The types of households most often declaring a lack of financial means to purchase selected groups of food items included one-parent family households. Difficulties with regard to purchasing various kinds of food items were indicated by about 54%, 46%, 45%, 33%, and 32% of households respectively. Another type of household usually not able to purchase the selected types of food items, were non-family multi-person households (about 54%, 44%, 49%, 38% and 36% respectively). A worsening of the ability to fulfill the needs of households with regard to most food items in relation to March 2000 has been observed, in fact, only in the group of non-family one-person households.

The percentage of households unable to afford the purchase of food items due to financial reasons, was significantly higher in the group of households with unemployed members than in the group of households with no unemployed members (for each food item analyzed in the research project). For each of the listed products which were given up most often, the necessity of giving them up was declared in these two groups respectively by about 55% and about 39%, more than 54% and almost 32%, above 50% and almost 30%, as well as almost 40% and approximately 21% of households. In fact, the situation has improved within the last 3 years in both groups of households. A substantial increase in the percentage of households with unemployed members, unable to fulfill their needs with regard to food items due to financial

reasons, was observed only in relation to fish and fish preserves, sugar, vegetables and vegetable preserves (by more than 5.3 and 2 percent points respectively).

Households forced to give up the purchase of selected food items due to financial reasons inhabited mostly rural areas (such situations were declared for the food items mentioned above, by about 49%, 43%, 40%, 29% and 27% of rural households respectively) and small towns of 20 to 100 thousand inhabitants (about 45%, 38%, 37%, 27% and 26% respectively). The highest percentage of households facing financial difficulties with regard to fulfillment of their needs for selected food items was observed in the following voivodships: Świętokrzyskie (about 52%, 46%, 44%, 28% and 24% respectively) and Lubelskie (about 52%, 43%, 42%, 26%, and 25% respectively).

Within the last 3 years, a substantial increase in the percentage of households unable to fulfill their food needs due to financial reasons was observed, in fact, only in the largest cities with regard to fish and fish preserves (by almost 5 and more than 5 percent points respectively), vegetables and vegetable preserves (by more than 5 and more than 2 percent points respectively) and milk (almost 2 and almost 3 percent points respectively). In the case of classification of households by voivodship, a significant worsening of the situation in this regard was observed primarily in the Zachodniopomorskie and Śląskie voivodships (an increase of the percentage of households which, due to financial reasons, are unable to fulfill their needs with regard to fish and fish preserves, meat and poultry, meat and poultry preserves, milk products and vegetables and vegetable preserves in these voivodships amounted to almost 10 and more than 2, more than 8 and more than 10, more than 8 and more than 10, almost 8 and almost 7 and almost 6 and almost 5 percent points respectively).

Almost 42% of households declared in March 2003 that within the last year, they used food items obtained free of charge from their own piece of land, almost 25% - food items obtained free of charge from relatives and almost 2% - products obtained free of charge from other people or institutions. The percentage of households using food items obtained free of charge has increased by almost 1 percent point within the last three years. At the same time, this percentage decreased by 1 percent point in the case of food items obtained from their own piece of land. (figure 4.4).

The highest percentage of households using food items obtained from their own piece of land was observed, apart from households of farmers and employee-farmers, among households of pensioners and retirees (more than 41% and 40% respectively). Households living on unearned sources (about 35%) and households of employees (about 33%) most often obtained food items free of charge from relatives. The variability of groups of households identified according to the research classification criteria with regard to the frequency of use of food items obtained free of charge from other people and institutions was not significant.

Among various types of households, the ones which most often used food items obtained from their own piece of land, were multi-family households (about 68%) and households of families with many children (about 56%). This situation is caused by the fact that there is a significant number of households belonging to these two types among farmers. Most often, food items were obtained from relatives free of charge by households of families with many children (about 32%) and married couples with 2 children (about 31%). Differences between groups of households, identified, for instance, according to type of economic activity, with regard to the frequency of using food items obtained free of charge, were not significant.

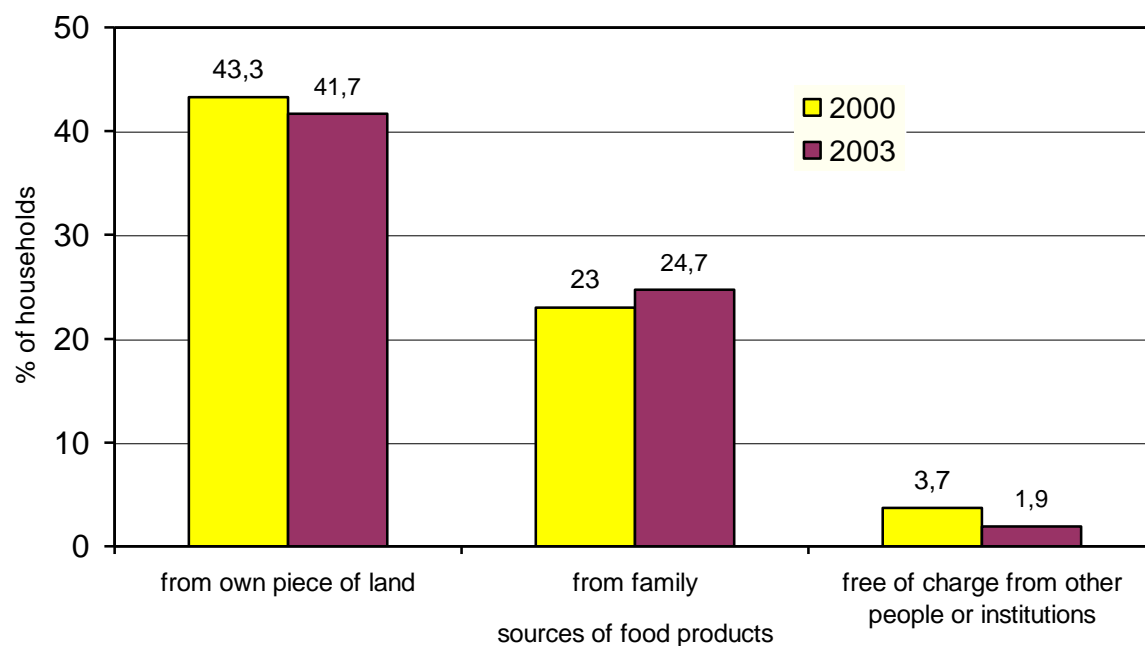


Figure 4.4. Scope of use of food items obtained free of charge from various sources by households in the years 2000 and 2003 in the panel sample

If we take into consideration the class of place of residence, households obtaining food items free of charge from their own piece of land were present mostly in rural areas (about 76%) and in the smallest towns (about 41%), while those obtaining food items free of charge from relatives – in the largest towns and cities (almost 30%). Relatively the greatest number of households obtaining food items free of charge from their own piece of land inhabited the Warmińsko-mazurskie (more than 54%) and Lubelskie (more than 53%) voivodships. Food items were obtained free of charge from relatives mainly by households in the Lubelskie (about 32%) and Pomorskie (more than 30%) voivodships.

The greatest increase in the percentage of households using food items obtained free of charge from their own piece of land in comparison with March 2000 was observed in the groups of households living on unearned sources (by almost 6 percent points), married couples with 1 child (by more than 2 percent points), inhabiting the smallest towns (by almost 3 percent points) and the following voivodships: Wielkopolskie, Łódzkie and Warmińsko-mazurskie (almost 5 and more than 3 percent points respectively). A significant increase was observed in the last 3 years in the percentage of households using food items obtained free of charge from relatives in the following groups: households of the self-employed (by more than 10 percent points), non-family multi-person households (by almost 9 percent points), multi-family households (by more than 6 percent points) and married couples with 1 child (by more than 5 percent points). These households most often inhabited the largest cities and small towns of 20 to 100 thousand inhabitants (an increase of more than 5 and almost 5 percent points respectively). In the case of food items obtained free of charge from other people or institutions, a significant increase in the frequency of such assistance was observed in the last 3 years in the group of households living on unearned sources (by almost 12 percent points) and inhabiting the Pomorskie voivodship (by almost 9 percent points). In the group of households with unemployed members, the percentage of households obtaining food items from each of the free sources identified increased slightly during this period.

More than 51% of households declared in March 2003 that fulfillment of their food needs in comparison with 3 years earlier had not changed, almost 43% declared that it had worsened, and only 6% felt that the situation had improved. A change for the worse was declared most often by households living on unearned sources (more than 62%) and disability pensioners (more than 58%). Among various household types, mainly families with many children (almost 52%) and one-parent families (more than 49%) felt that the situation had changed for the worse.

Negative opinions regarding fulfillment of food needs were much more often formulated by households with unemployed members than by households with no unemployed members (almost 59% and about 38% respectively in these groups).

Diversification of households declaring that their situation with regard to fulfillment of food needs had worsened according to class of place of residence was not significant. Most often, these households were located in small towns from 20 to 100 thousand inhabitants (more than 44%). Voivodships in which households most often believed that the level of fulfillment of their food needs had decreased, were the Lubelskie, Kujawsko-pomorskie and Łódzkie voivodships (more than 48% each).

4.3. Material affluence

Tomasz Panek

In order to evaluate the material affluence of households, ownership of selected durable goods and savings and the scope of use of external sources of financing in the form of credit and loans were analyzed.

In the case of a lack of durable goods owned by households, it was verified, whether the situation was caused by inability to afford them due to financial reasons or by the fact that the households did not need them.

In the evaluation of affluence of households with regard to savings, not only the amounts, but also the forms of savings were examined, taking into consideration investments in both financial markets and material goods. Also the purposes of making savings by households were analyzed.

In order to evaluate the system of lending to households, the scope of use of loans and credit by households and their debt levels were examined. We focused on the structure of creditors and ways of using credit to finance households, identifying the financing of the current needs and expenses associated with increasing financial and material property.

The subjective opinions of households with regard to changes in their material affluence in comparison with the situation 3 years earlier were analyzed as well.

One of the basic elements of affluence of households is ownership of durable goods. Among the durable goods identified during research, the most universal ones in March 2003 were a TV set and a refrigerator (figure 4.5). As few as less than 2% of the examined households did not have a TV set, and less than 4% did not have a refrigerator. Durable goods owned least often by households were a motorboat (less than 2%), a summer cottage and a dishwasher (4% and 5% respectively), a piece of land for recreation (less than 12%) and a microwave oven (less than 19%).

During the last 3 years, equipment of households with almost all the durable goods taken into consideration in our research has increased significantly (figure 4.5). The highest increase in equipment with durable goods was observed with regard to a computer, a CD player and a microwave oven (by almost 18, more than 12 and almost 12 percent points respectively).

The most poorly equipped were households living on unearned sources, excluding retiree pensions, and households of disability pensioners. As for the household type, these were most often non-family households and one-parent families. The range of durable goods owned by households with no unemployed members is slightly higher for most goods than it is in the case of households with unemployed members. On the other hand, the range of durable goods owned

by households identified with regard to the class of place of residence and voivodship is different for various types of goods.

Lack of some durable goods in households often is not caused by inability to purchase them due to financial reasons, but by the fact that these goods are not needed. The most desirable goods, which the households were not able to afford, in March 2003, were primarily a washing machine, a passenger car and a videotape recorder (figure 4.6), and in the case of relatively rarely owned goods – a summer cottage, a piece of land for recreation, a motorboat, a dishwasher and a computer.

In the last 3 years, there has been a decrease in the percentage of households that do not have certain durable goods due to financial reasons, for each type of goods identified for research purposes (figure 4.6).

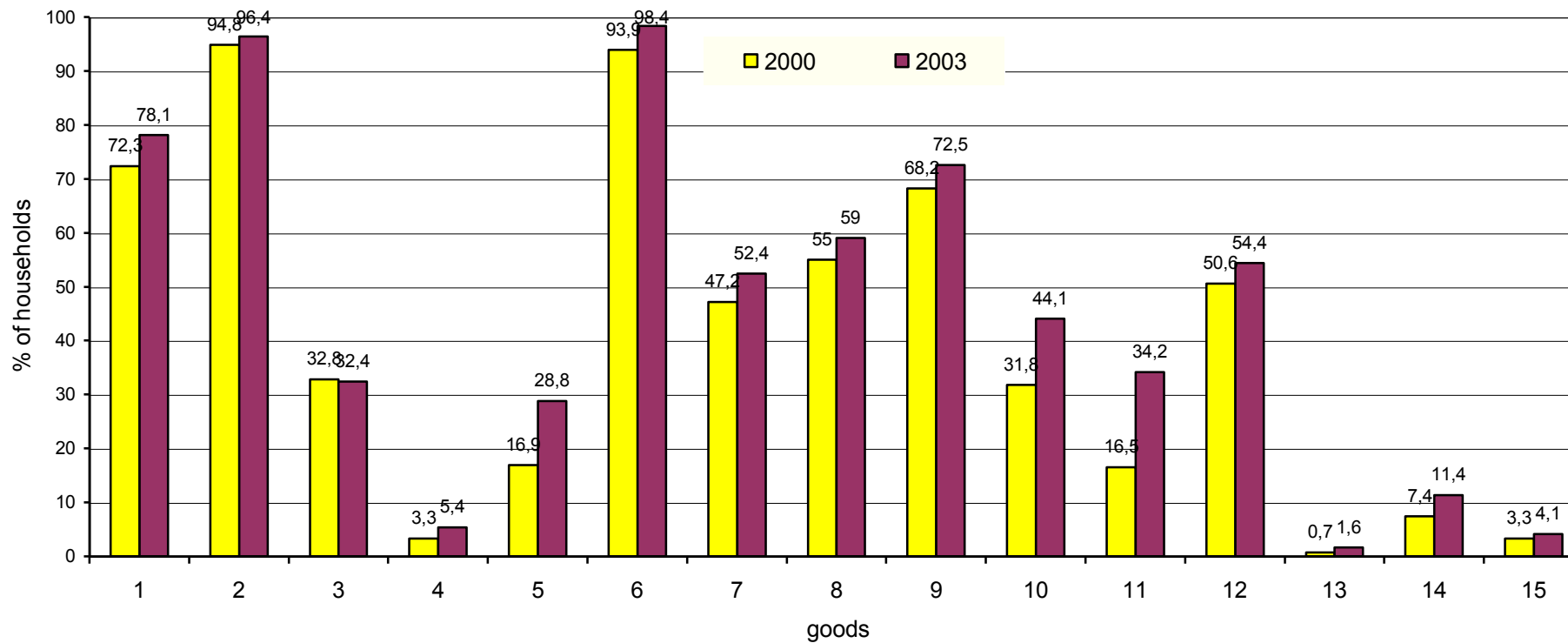
Differences between groups of households in this regard, identified in accordance with the criteria applied during research, go in various directions, but they are, in fact, rather insignificant. The greatest differences in this respect have been observed between the groups of households with no unemployed members and those with unemployed members. The percentages of households with unemployed members, which cannot afford some goods due to financial reasons, are significantly higher than the percentages of households with no unemployed members, particularly in the case of a computer (more than 56% and almost 29% of households in these groups respectively), Internet access (more than 47% and more than 28% of households in these groups respectively), a passenger car (almost 41% and almost 23% of households in these groups respectively) and a CD player (almost 40% and 20% of households in these groups respectively)⁸.

In March 2003, almost 78% of households did not have any savings. Among those declaring that they had savings, households with savings at the maximum level of the equivalent of their income for 3 months are dominant (more than 11% of households have savings of this amount) (figure 4.7).

Within the last 3 years, there has been an insignificant (by more than 1 percent points) decrease in the percentage of households having no savings at all.

Definitely the least often, savings are declared by households of pensioners (less than 11%), households living on unearned sources (less than 12%) and employee-farmers (less than 14%). Households with no savings are most often found among one-parent families and families with many children (almost 88% and 87% respectively). The percentage of households with no unemployed members, which have no savings, is significantly lower than in the group of households with unemployed members (almost 75% and almost 88% of households respectively).

⁸ These figures refer to all households in particular groups, and not only to those which do not have specific goods, as in figure 4.6.



- 1 – washing machine
- 2 – refrigerator
- 3 – freezer
- 4 – dishwasher
- 5 – microwave oven
- 6 – color TV
- 7 – cable or satellite TV equipment

- 8 – VCR
- 9 – radio cassette recorder
- 10 – CD player
- 11 – personal computer
- 12 – passenger car
- 13 – motorboat, sailing boat
- 14 – piece of land for recreation
- 15 – summer cottage

Figure 4.5. Selected durable goods owned by households in the years 2000 and 2003 in the panel sample

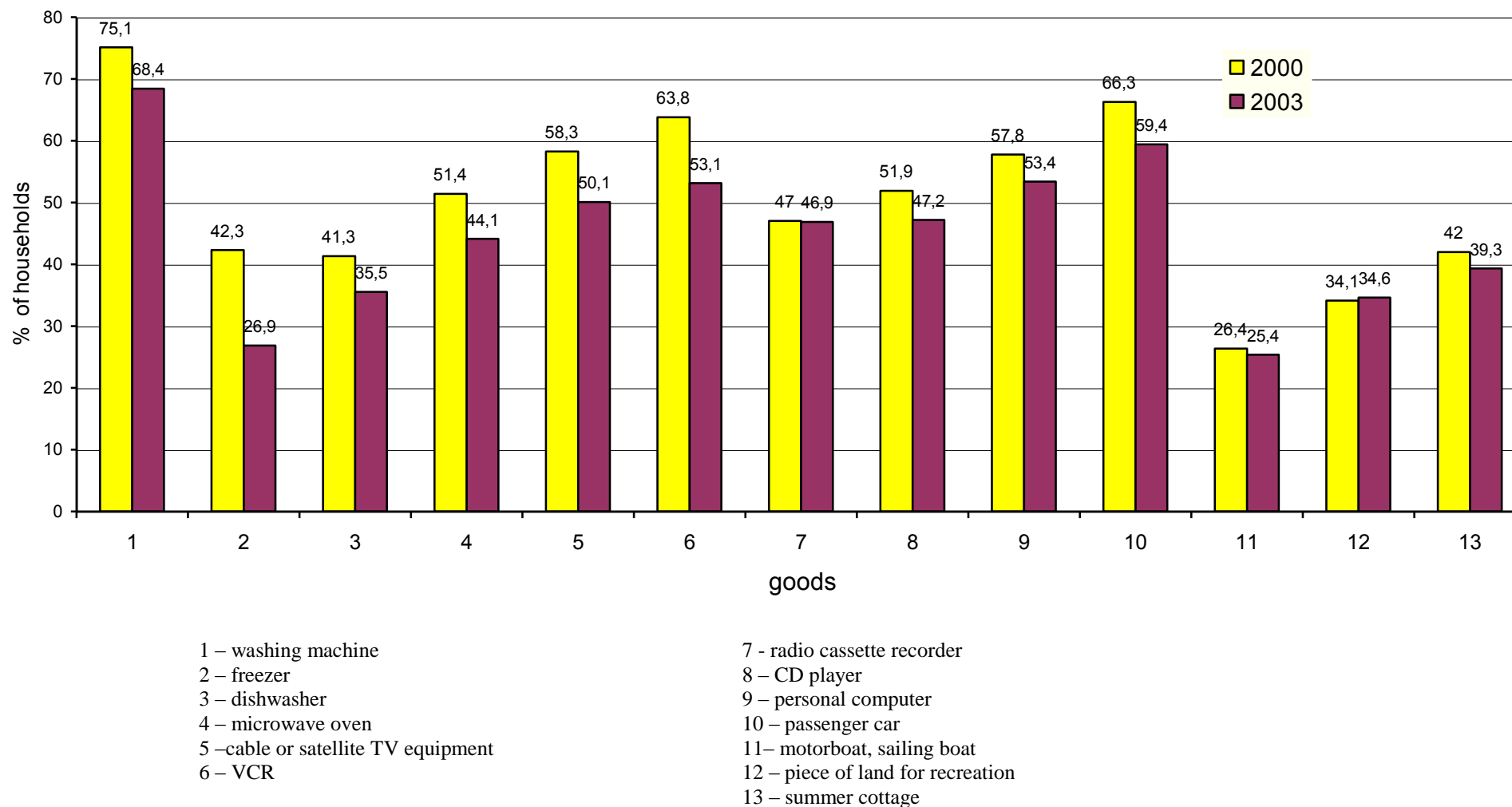


Figure 4.6. Percentage of household, in which lack of goods is caused by lack of financial resources for purchase in the years 2000 and 2003 in the panel sample

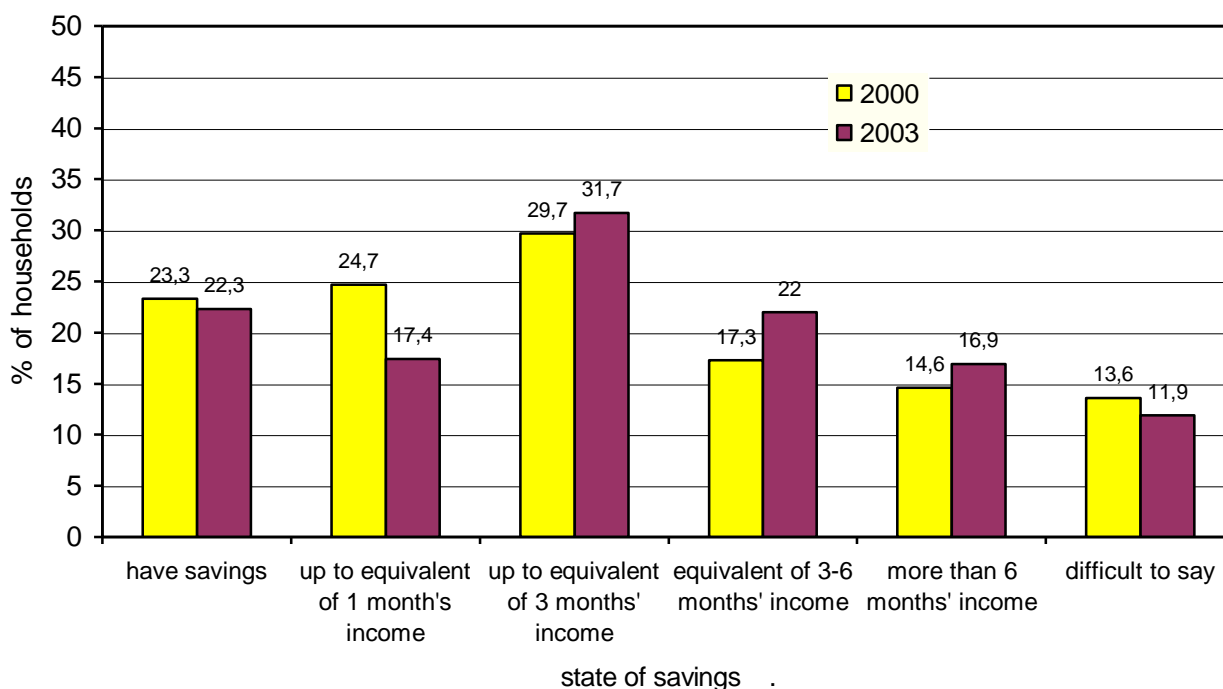
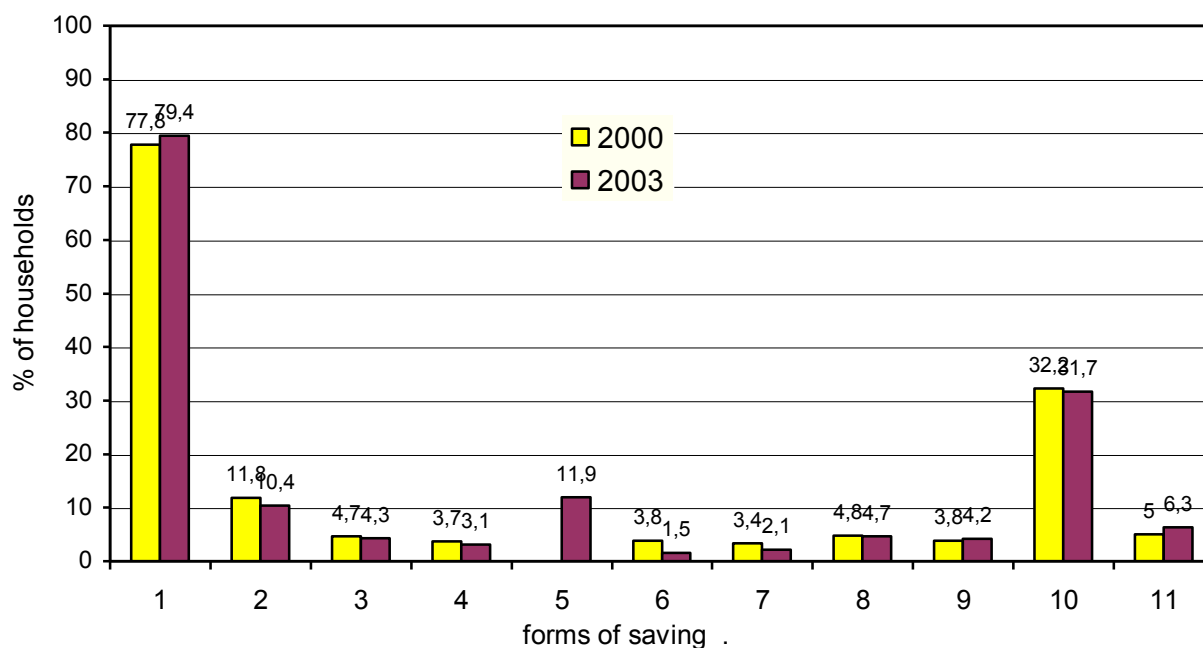


Figure 4.7. Percentage of households which have savings, and percentage of households with various amounts of savings among all households that have savings in the years 2000 and 2003 in the panel sample

A decrease in the level of savings within the last 3 years was experienced primarily by households of the self-employed (more than 13 percent points less households declare that they have savings) and one-parent families, non-family one-person and non-family multi-person households (more than 6 percent points each in the first two groups and more than 4 percent points in the third group). The percentage of households that have savings decreased visibly also in the group of households with unemployed members (by almost 4 percent points).

The smaller the place of residence is, the greater the percentage of households with no savings. Households, which declare they have no savings, are most often located in rural areas and the smallest towns (85% and almost 80% respectively). Diversification among voivodships is rather low. Voivodships in which the highest percentage of households do not have savings are the Kujawsko-pomorskie (more than 84%) and Podkarpackie, Zachodniopomorskie and Świętokrzyskie (more than 81% each). In comparison with March 2000, a significant decrease in the percentage of households that have savings was observed in large towns and cities (by more than 5 percent points in towns of 200 to 500 thousand inhabitants and by almost 3 percent points in cities of more than 500 thousand inhabitants). On the other hand, voivodships in which the greatest decrease in the percentage of households with savings was observed, were Opolskie and Zachodniopomorskie (by more than 8 percent points), as well as Podlaskie and Warmińsko-mazurskie (by more than 7 percent points).



- 1 – bank deposits in PLN
- 2 – bank deposits in foreign currencies
- 3 – in bonds
- 4 – in investment funds
- 5 – in pension funds (in the year 2000, this answer was not included)
- 6 – in securities quoted on the stock exchange
- 7 – stocks and shares in private joint-stock companies
- 8 – investment in real estate
- 9 – investment in material goods other than real estate
- 10 – in cash
- 11 – in any other form

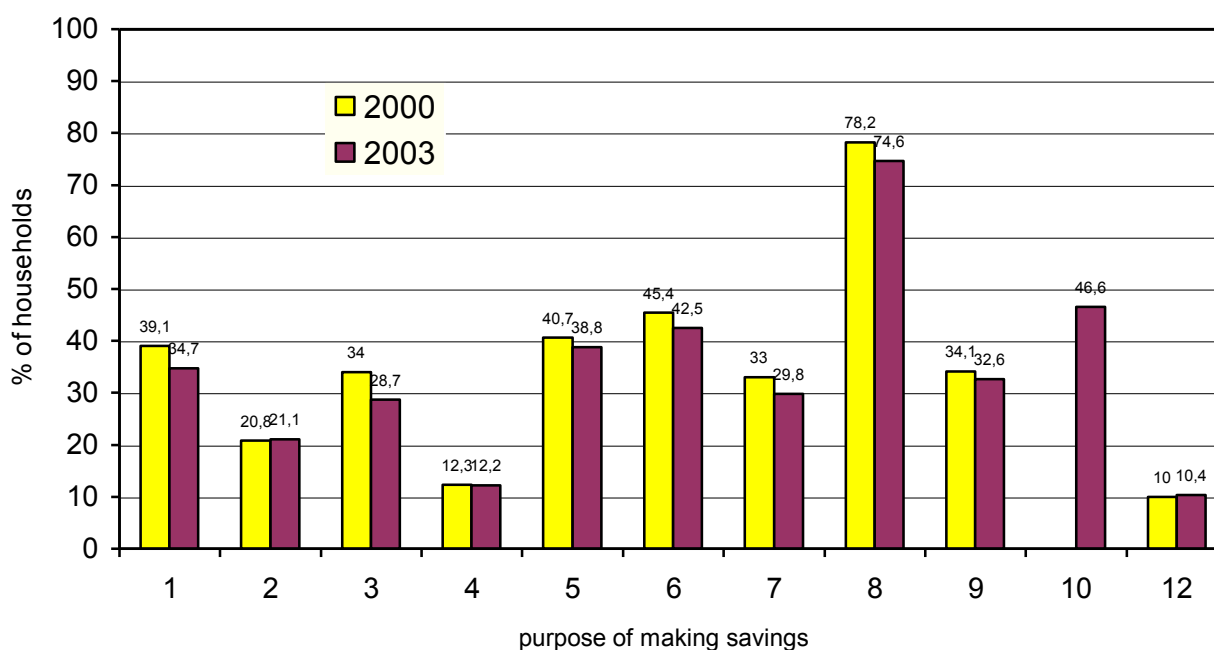
Figure 4.8. Forms of saving by households in the years 2000 and 2003 in the panel sample

Almost 18% of households in March 2003 had savings in the form of bank deposits in PLN, and more than 7% - in cash (figure 4.8). Bank deposits in PLN were most often used by households of the self-employed and households of employees (more than 27% and almost 22% respectively), while savings in cash were made by relatively the highest number of households of the self-employed (more than 11%). Among households of different types, bank deposits in PLN were made mainly by households of couples with no children (more than 30%). Cash savings were also most often found in households of this type (almost 11%). Both in the group of households with no unemployed members and with unemployed members, the most commonly used form of savings were bank deposits in PLN (in more than 20% and more than 8% of households belonging to these groups respectively) and cash (almost 8% and more than 5% of households belonging to these groups respectively). The larger the city/town of residence, the higher the percentage of households which saved in the form of bank deposits in PLN. In the largest cities, the percentage of households making such savings amounted to almost 30%.

Cash savings were preferred mostly by households living in large towns of more than 200 thousand inhabitants (more than 8%) and in rural areas (more than 7%). Bank deposits in PLN were owned mainly by households located in the Pomorskie, Mazowieckie and Podlaskie voivodships (almost 24% and more than 21% each respectively). The highest percentage of households having cash savings was found in the following voivodships: Podlaskie, Pomorskie, Opolskie and Świętokrzyskie (more than 10% of households in each voivodship).

In the last 3 years, we have observed a slight decrease in the percentage of households which make savings in almost all forms, including bank deposits in PLN and cash savings (table 4.8). A particularly high decrease in the percentage of households which had savings during this period was observed in the case of bank deposits in PLN in the group of households of the self-employed (by almost 15 percent points), one-parent households (by more than 4 percent points),

households with unemployed members (by almost 3 percent points), those inhabiting large towns (by almost 3 percent points in towns of 200 to 500 thousand inhabitants and by almost 2.5 percent points in towns of 100 to 200 thousand inhabitants), as well as in Świętokrzyskie and Zachodniopomorskie voivodships (by more than 7%). The most significant decrease in the percentage of households which had cash savings in this period was observed in the group of households of the self-employed (by almost 5 percent points), non-family one-person households (by almost 4 percent points) and households inhabiting the smallest towns (by more than 3 percent points), the largest towns and cities with more than 200 thousand inhabitants (by more than 2 and the Wielkopolskie voivodship (by almost 6 percent points).



- 1 – reserve for current consumer expenditures
- 2 – regular charges (e.g. rent)
- 3 – purchase of durable goods
- 4 – purchase of a house (apartment)
- 5 – renovation of house, apartment
- 6 – medical treatment
- 7 – recreation
- 8 – reserve for unexpected events
- 9 – securing the future of children
- 10 – security for old age (this answer was not available in the year 2000)
- 12 – no specific purpose

Figure 4.9. Purposes of making savings by households in the years 2000 and 2003 in the panel sample.

Households which declared that they had savings in March 2003 most often treated them as a reserve for unexpected events (more than 72% and almost 75% in the panel sample; figure 4.9), security for old age (more than 43%), as well as for medical treatment or renovation of a house or apartment (about 40% of households each). Within the last 3 years, we have observed a slight general decrease in the percentage of households making savings for current consumer expenses (by more than 4%), as a reserve for random events (by almost 4%) and for medical treatment (by 3%), as well as for the purchase of durable goods (by 5%) (figure 4.9). In general, however, none of these changes is statistically significant.

Savings made as a reserve for random events were most often observed in households of retirees and disability pensioners (more than 81% and more than 75% of households respectively declared that savings were made for these purposes). This purpose of saving was also most often mentioned by non-family households consisting of more than one person and couples with no children (more than 77% in each case). In households with unemployed members, savings were

most often made also as a reserve for random events (in almost 73% and 69% of households respectively). The variability of groups of households saving for a reserve for random events was not significant with regard to class of place of residence and voivodship.

In comparison with March 2000, the percentage of households treating savings as a reserve for random events dropped by 4%. This decrease was the most significant in groups of households of farmers (by more than 43%), non-family one-person households and single-parent families (by more than 44% and more than 38% respectively) and households inhabiting large towns of more than 100 thousand inhabitants (by more than 16.5%) and the Zachodniopomorskie and Łódzkie voivodships (more than 25%). At the same time, there was a significant increase in the percentage of households interested in saving for this purpose in groups of households living on unearned sources (by more than 48%), in households with unemployed members (by more than 11%), in multi-family households (by more than 24%) and in households located in the smallest towns (by almost 17%).

Providing security for old age was the purpose of savings most often mentioned by households of retirees and of the self-employed (more than 59% and 44% of households respectively), couples with no children (more than 57%) and those living in towns of 200 to 500 thousand inhabitants (almost 53%) and in the Podlaskie voivodship (more than 65% of households).

Among the socio-economic groups, savings were most often made for medical treatment by households of retirees and disability pensioners (more than 54% and 50% respectively), as in the case of reserves for random events. On the other hand, among different types of households, this purpose of saving was indicated most often by non-family one-person households and couples with no children (more than 47% each). Most often, savings for medical treatment were made by households living in large towns of 200 to 500 thousand inhabitants (more than 56% of households) and in the Opolskie voivodship (more than 50% of households).

The percentage of households saving for medical treatment has not changed significantly during the last 3 years. A significant increase in this respect was observed in the group of non-family one-person households (by more than 20 percent points) and in towns of 100 to 200 thousand inhabitants (by almost 14 percent points), while the highest decrease took place in the group of households of disability pensioners (by almost 24 percent points), single-parent families (by 28.5 percent points) and households located in large towns (by almost 14 percent points).

Most often, savings for renovation of an apartment or a house were made by households of disability pensioners, farm workers and the self-employed (more than 42% each). Among the types of households, this purpose of savings was indicated primarily by multi-family households and couples with 2 children (more than 49% each). Renovation of a house/apartment was most often the purpose of savings made by households living in the smallest towns (more than 43%) and rural areas (more than 42%). This purpose of savings was most often declared in the Opolskie and Dolnośląskie voivodships (54% each). Savings as a reserve for current consumer expenses was the second basic purpose of saving in households living on unearned sources and households with unemployed members (about 58% and almost 50% of households belonging to these groups respectively).

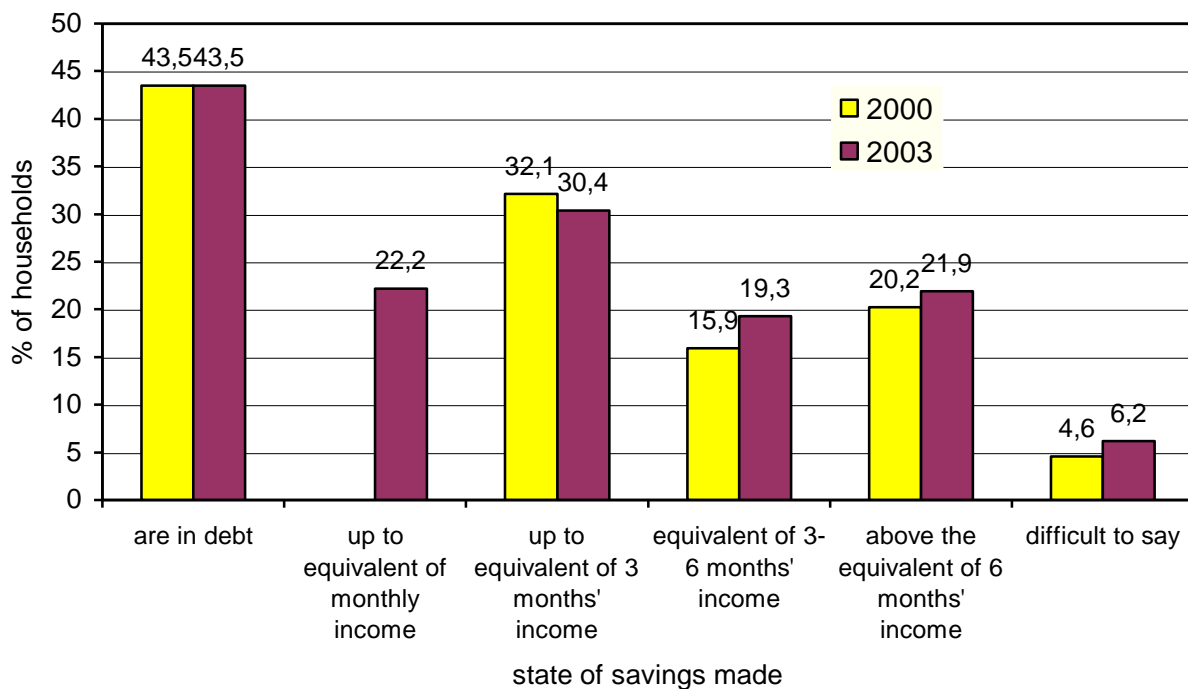


Figure 4.10. The percentage of households in debt and the percentage of households with various levels of debt among the households in debt in the years 2000 and 2003 in the panel sample

More than 43% of the examined households declared having loans and credit in March 2003 (figure 4.10). The percentage of households with loans and credit has not changed significantly during the last 3 years. The debt of households was usually equivalent to one month to three months' income (almost 13% of all households and 30% of households in debt declared a debt at this level; figure 4.10).

In debt were primarily households of employees (more than 55%), farmers (almost 52%) and households of the self-employed (more than 50%). As for the household type, the highest percentage of households in debt was observed in the group of families with many children (more than 56%) and couples with 2 children (more than 54%). The debt of households with unemployed members was higher by more than 9% than in households with no unemployed members (almost 51% and almost 42% of households respectively).

In comparison with March 2000, we have observed a significant increase in the percentage of households in debt among the households of disability pensioners (by almost 7%), households with unemployed members (by more than 3 percent points) and non-family one-person households (by almost 8 percent points). Relatively the highest increase in the percentage of households in debt in the last 3 years has been observed in the largest cities (by 4 percent points) and in the Łódzkie voivodship (by more than 9 percent points).

The frequency of households being in debt according to the class of place of residence and voivodship is characterized by a relatively low diversity. The highest percentages of households in debt were observed in towns of 200 to 500 thousand inhabitants and below 20 thousand (more than 46% each) and in the Dolnośląskie and Pomorskie voivodships (about 56% and 53% respectively). The increase in percentage of households in debt during the last 3 years has been relatively the highest in the largest cities (by 4 percent points) and in the Łódzkie voivodship (by more than 9 percent points).

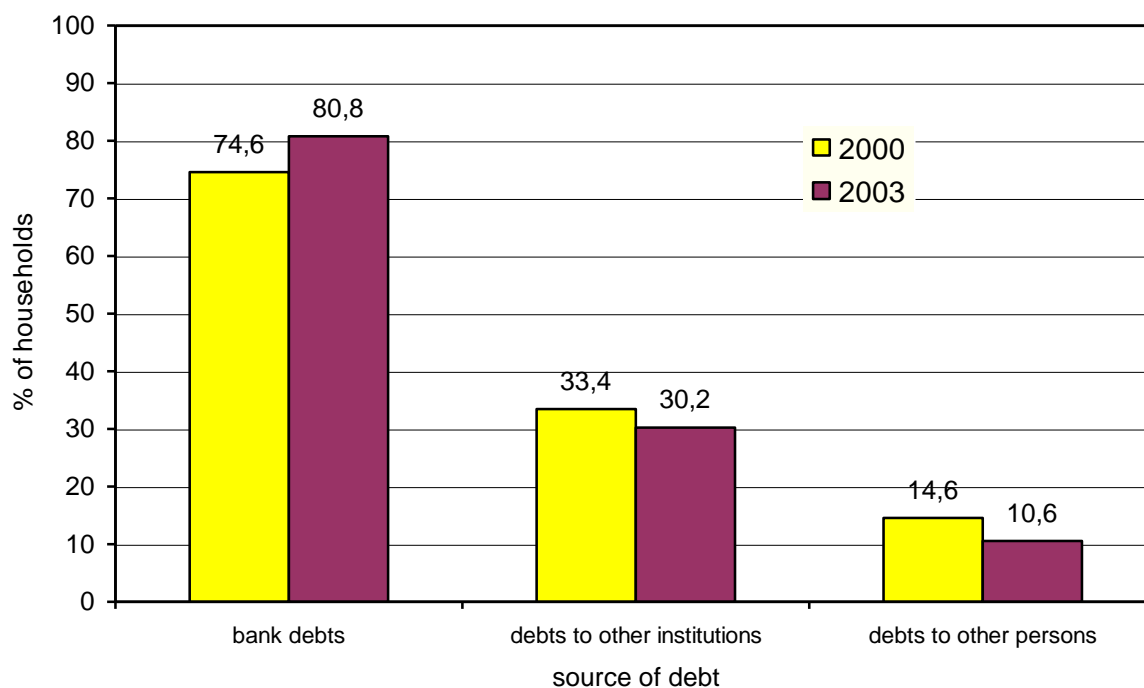


Figure 4.11. Source of debt of households in the years 2000 and 2003 in the panel sample

The source of external financing for more than 80% of households taking advantage of loans and credit were banks, and for about 30% - other institutions (figure 4.11). Only less than 11% of households are in debt to private individuals. Within the last 3 years, the percentage of households taking advantage of bank loans increased only slightly – by 3%, which was accompanied by a similar decrease of borrowing money from private individuals (figure 4.11).

Most often, bank loans were obtained by households of farmers (more than 95% of households in debt, belonging to this group). Mostly households of employees were in debt to other institutions (more than 38% of households in debt), while households living on unearned sources most often borrowed money from private individuals (more than 27% of households in debt belong to this group). Bank credit and loans were the main source of financing in the case of households of married couples with 1 child and multi-family households (84% and 83% of these households in debt respectively), while credit and loans obtained from other institutions were found primarily in the case of couples with 2 children and non-family one-person households (more than 35% of households in debt belong to these groups) and loans from private individuals – in the case of non-family households consisting of more than one person (in more than 22% of households in debt of this type). Worth noting is the significantly higher percentage of households with unemployed members than those with no unemployed people, taking advantage of loans and credit from private individuals (16.5% and almost 10% of households in these groups respectively).

Bank loans were popular primarily among households located in towns of 100 to 200 thousand inhabitants and less than 20 thousand (84% and almost 84% of households in debt respectively) and in the Zachodniopomorskie voivodship (almost 88% of households in debt). Loans from institutions other than banks were most often obtained by households located in large towns of more than 200 thousand inhabitants (more than 36% of households in debt) and in the Pomorskie and Świętokrzyskie voivodships (almost 41% and more than 36% of households in debt respectively). Households located in the largest cities of more than 500 thousand inhabitants and towns of 100 to 200 thousand inhabitants (more than 13% of households in debt) and in the Dolnośląskie and Warmińsko-mazurskie voivodships (more than 16% and 15% of

households in debt respectively) obtained relatively the greatest number of loans from private individuals.

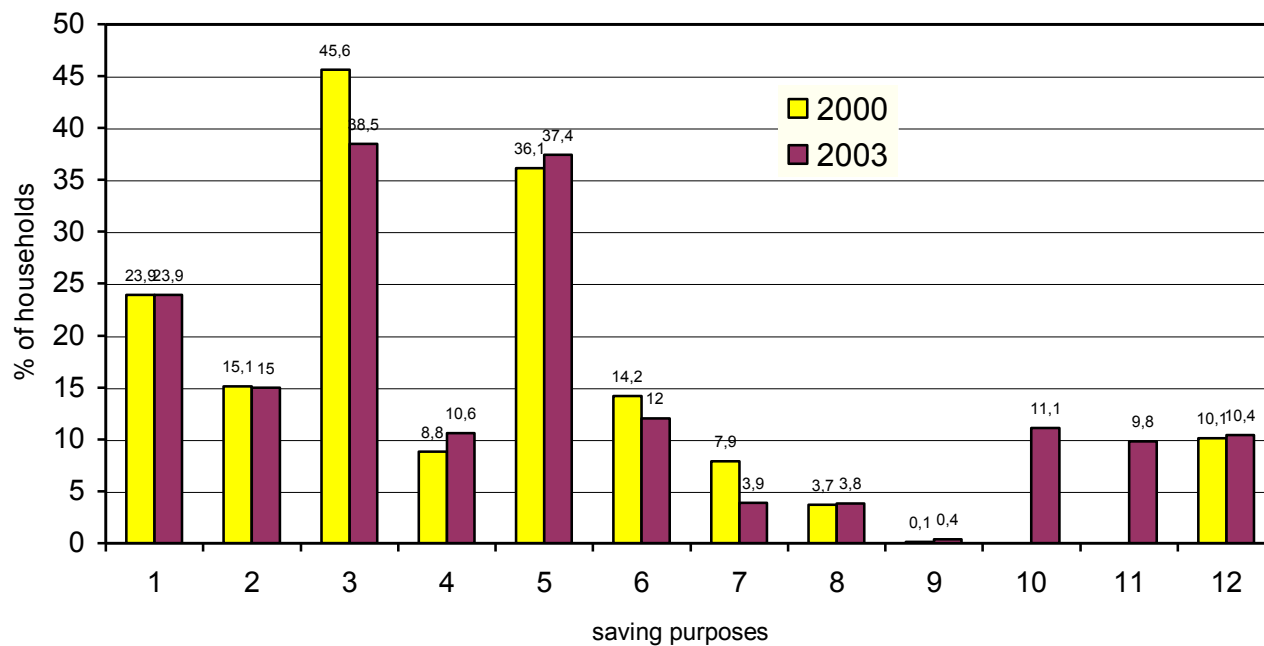
The highest increase in the percentage of households having bank credit since March 2000 has been observed in the case of households of disability pensioners and retirees (by almost 11 and almost 10 percent points respectively), non-family one-person households (by more than 19 percent points) and households located in the largest cities (by about 16.5 percent points). At the same time, the percentage of households living on unearned sources, borrowing money from private individuals, increased substantially (by almost 22 percent points).

In order to determine the purpose of the external sources of financing of households, the purposes of credit and loans incurred by households were examined (figure 4.12). Almost 39% of households examined in March 2003, used credit and loans to finance the purchase of durable goods, 37% — for renovation of a house or apartment, and less than 24% - for current consumer expenses. Within the last 3 years, we have observed a substantial decrease in the percentage of households incurring credit to purchase durable goods and to purchase or to take out a lease on work tools (by 7 and 4 percent points respectively).

Credit for the purchase of durable goods was most often incurred by households of retirees and the self-employed (almost 47% of borrowers in these two groups). Households of employee-farmers used credit relatively most often for renovation of a house or apartment (more than 41% of households in debt). The current consumer expenses were covered with credit incurred mostly by households living on unearned sources (in the case of more than 36% of households in debt) and by households of disability pensioners (in the case of more than 29%). An important financial source for the purchase of durable goods, taking into consideration the classification according to household type, were credit and loans incurred primarily by households of couples with no children and non-family one-person households (almost 43% and 42% respectively). For households of couples with 1 child and couples with 2 children, the credit was an important source of finance for the renovation of a house or apartment (in almost 38% of cases). On the other hand, current expenses were most often financed by credit and loans in households of couples with many children and couples with 2 children (in more than 27% of cases).

In the case of the group of households with no unemployed members, credit and loans were most often incurred for the purchase of durable goods, renovation of a house or apartment and for current consumer expenses (more than 39%, almost 36% and more than 20% of households in this group respectively). The purchase of durable goods was also most often the purpose for incurring credit and loans by households with unemployed members (almost 38% of households). Other prevalent purposes of credit and loans in this group were current consumer expenses and renovation of a house or apartment (almost 32% of households belonging to this group incurred credit and loans for each of these purposes).

The purchase of durable goods was most often financed from credit and loans by households located in large towns of 200 to 500 thousand inhabitants (in more than 49%) and in the Śląskie and Podlaskie voivodships (in almost 47% and more than 45% of households). Households located in rural areas and the smallest towns, as well as in Dolnośląskie and Śląskie voivodships (more than 42%) most often used credit for renovation of a house or apartment (almost 38% and 37% of households incurring credit or loans respectively). Inhabitants of the largest cities (almost 30%), as well as the Łódzkie (more than 28%), Dolnośląskie and Śląskie voivodships (almost 27%) most often spent credit and loans on current consumer expenses.



- 1 – reserve for current consumer expenses
- 2 – regular charges (e.g. rent)
- 3 – purchase of durable goods
- 4 – purchase of house (apartment)
- 5 – renovation of house, apartment
- 6 – medical treatment
- 7 – purchase of work tools
- 8 – recreation
- 9 – purchase of securities
- 10 – payment of debts incurred earlier (this answer was not available in the year 2000)
- 11 – development of own economic activity (this answer was not available in the year 2000)
- 12 – education

Figure 4.12. Purposes of loans and credit incurred by households among households in debt in the years 2000 and 2003 in the panel sample.

Evaluating the changes in material affluence in March 2003 in comparison with the situation 3 years ago, almost 53% of households declared that it has worsened and almost 40% - that it has not changed. Negative answers were most often provided by households living on unearned sources (almost 71%) and one-parent families (more than 60%). The number of households with unemployed members believing that their material affluence in March 2003 was worse in comparison with the situation 3 years ago, is visibly greater than the number of households with no unemployed members which gave a negative answer (almost 69% and more than 48% of households belonging to these groups respectively). Households declaring that their material situation has worsened were located mainly in rural areas (almost 55%), as well as in the Łódzkie (more than 62%) and Dolnośląskie (more than 59%) voivodships.

4.4. Housing conditions

Tomasz Panek

Evaluation of the housing conditions included the access of households to a separate dwelling and population density in dwellings occupied by households. Then we focused on the character of occupation of dwellings by households (such as ownership of a private building or apartment, rental of apartment etc.).

The next part of our analysis was focused on equipment of the dwellings of households with basic installations and types of heating systems. Also the scope of overdue charges of households, associated with occupation of dwellings (rent, gas, electricity and mortgage payments), and the scale of overdue payments not covered by households were examined.

Finally, we analyzed the subjective opinions of households with regard to changes in their housing conditions in comparison with 3 years ago.

Almost 4% of the examined households did not have a separate dwelling in March 2003. This percentage has decreased slightly (by about 0.5 percent points) in comparison with the situation 3 years earlier.

Most often, households of this type were found among farmers and households living on unearned sources (more than 8% and 5% respectively). Only in households of farmers, there was a significant increase in the percentage of households lacking a separate dwelling in this period (by almost 5 percent points).

Lack of a separate dwelling was most often found in the case of multi-family households, households of married couples with 2 children, couples with 1 child and non-family multi-person households. Only in the group of households of married couples with 1 child and couples without children, there was a slight increase in the frequency of occupation of a separate dwelling in comparison with March 2000 (by about 0.8 and 0.5 percent points respectively).

In the group of households with no unemployed members, almost 4% did not occupy a separate dwelling, and in the group of households with unemployed members, it was little more than 3%. In both groups, the percentage of households occupying separate dwellings increased in comparison with the year 2000 (by about 0.5 percent points).

Households that do not occupy separate dwellings are most often located in the smallest towns and in rural areas (more than 4% of households in both of these classes of place of residence). Voivodships with the highest percentage of households not occupying separate dwellings were the Kujawsko-pomorskie, Zachodniopomorskie, Śląskie and Mazowieckie (more than 5% each). Improvement of the situation with regard to access to separate dwellings within the last 3 years has been influenced by a substantial increase in the percentage of households occupying a separate dwelling in rural areas and large towns of 100 to 200 thousand inhabitants (by almost 2 and more than 1 percent points respectively). Voivodships in which we can observe a substantial decrease in access to separate dwellings in the analyzed period, are the Śląskie and Mazowieckie voivodships (about 2.5 percent points each).

The average usable space of dwelling per 1 person in the examined households in March 2003 was more than 23 m²; this has increased slightly in comparison with the situation 3 years earlier.

The greatest population density of dwellings was observed in households of employees and households living on unearned sources (less than 20 m² and slightly more than 20 m² of usable space per capita respectively). The density increased significantly in the examined period only in the group of households living on unearned sources (by about 2 percent points).

Among household types, the greatest density was observed in dwellings of married couples with many children and in multi-family households (about 15 m² of usable space per capita). The population density of dwellings increased in comparison with March 2000 in non-family households, both one-person and multi-person (by more than 2.6 and about 1.4 percent points respectively).

In the group of households with unemployed members, the population density of dwellings was much higher than in the group of households with no unemployed members (on average, it was the equivalent of almost 18 m² per capita and more than 25 m² per capita). In both of these groups, there has been a slight decrease in the dwelling population density within the last 3 years.

The variability of groups of households with regard to population density according to class of place of residence and voivodship is not significant. In all groups of households identified in accordance with class of place of residence, a slight decrease in the dwelling population density was observed in comparison with March 2000. A significant increase in the

dwelling population density in this period was observed only in households located in the Kujawsko-pomorskie and Świętokrzyskie voivodships (by more than 1.6 and 0.9 percent points respectively).

The greatest number of the examined households (slightly more than 40%) lived in privately owned buildings. In comparison with the situation 3 years earlier, this indicates a slight increase (by about 0.7 percent points). The visible majority of these are households associated with agriculture (more than 90% of households belonging to these groups). In comparison with March 2000, the percentage of households living in their own building increased mostly in groups of households of the self-employed and employee-farmers (by almost 5 and more than 3 percent points respectively).

More than 41% of households with no unemployed members and more than 38% of households with unemployed members lived in their own building. In both types of households, there has been a slight increase in the percentage of those living in their own building since March 2000.

In the groups of households identified according to type, the highest percentage of those living in their own building was observed in the group of multi-family households (more than 65%) and families with many children (more than 56%). The greatest increase in the percentage of households living in their own building in the last 3 years has been observed in the group of families with many children (by 3.6 percent points).

The great majority of households owning a building lived in rural areas (almost 80%). Voivodships, in which households most often lived in their own building, were the Świętokrzyskie, Podkarpackie and Małopolskie (more than 51% each). A significant increase in the number of households living in their own building took place in the last 3 years only in the group of rural households (by about 1.4%). The greatest increase in this regard was observed in the following voivodships: Lubuskie, Warmińsko-mazurskie and Pomorskie (more than 5 percent points in each of the first two voivodships and by more than 4.5 percent points in the third one).

The next most typical form of dwelling in March 2003 was an owner-occupied apartment in an apartment building. More than 21% of the examined households lived in such dwellings. In comparison with the situation 3 years earlier, there was a significant increase in the percentage of households owning an apartment in an apartment building.

Among socio-economic groups, such dwellings were most often owned by households of the self-employed (more than 29%) and employees (more than 25%). A significant increase in the percentage of households living in such apartments since March 2000 took place in the groups of households of retirees (by more than 3 percent points), pensioners and employee-farmers (by more than 2.4 percent points). At the same time, we observed a significant decrease in the percentage of such apartments in the groups of households living on unearned sources and farmers (by about 2.4 and almost 1.8 percent points respectively). The directions of changes in the dwelling type, however, were completely different. In the case of households living on unearned sources, there was a significant increase in the percentage of those occupying welfare apartments (by more than 2 percent points), while the households of farmers moved primarily to apartments in private apartment buildings, rented or owned.

Most often, owner-occupied apartments in groups according to household type were found in non-family one-person households (more than 30%) and in households of married couples without children (more than 26%). A significant increase in the percentage of households owning apartments took place in the last 3 years in groups of non-family and one-parent households (by about 4 and 3.5 percent points respectively).

In principle, the larger the place of residence, the higher the percentage of households owning apartments. In towns of 200 to 500 thousand inhabitants, there were more than 31% of such households, while in rural areas – only about 4%. Households owning apartments most often lived in the Podlaskie (more than 29%) and Świętokrzyskie (more than 27%) voivodships. The greatest increase in the percentage of households occupying apartments owned by themselves has been observed in large towns of 100 to 500 thousand inhabitants (from more than

3.8 to almost 5 percent points) and in the Lubuskie and Podkarpackie voivodships (by more than 7 and almost 6 percent points respectively). At the same time, there was a significant decrease in the number of households occupying such apartments, living in the largest cities (by almost 2 percent points) and in the Małopolskie voivodship (by more than 3 percent points).

Among households with unemployed members, the second most popular form of dwelling was a rented apartment (former housing allocations, apartments belonging to state-owned companies). Apartments of this type were occupied by almost 20% of households, belonging to this group. The percentage of such apartments has increased in this group by almost 2.5 percent points within the last 3 years.

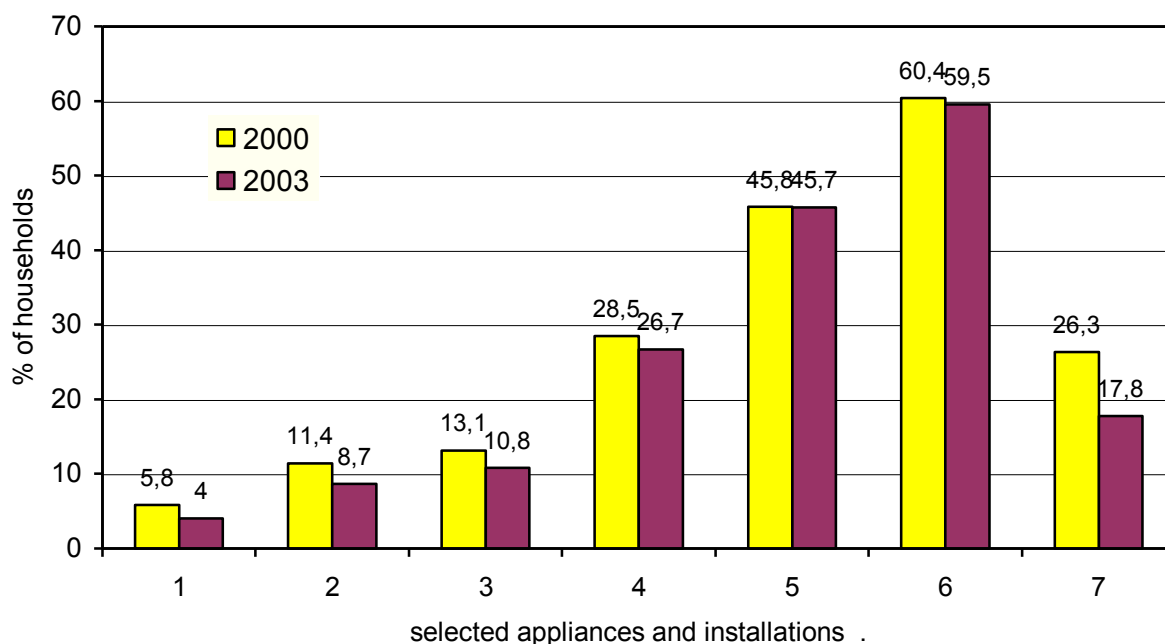
Among the appliances and installations taken into consideration during research, a water-supply system was most often found in dwellings of households examined in March 2003 – only 4% of dwellings were not equipped with it. During the last 3 years, we have observed a substantial increase in the percentage of households equipped with the appliances and installations examined during research (figure 4.13).

Most often, households did not have hot running water (more than 26%) and a stationary phone (about 18%). Hot running water was not available primarily in dwellings of households living on unearned sources (more than 40%) and farmers (more than 37%). On the other hand, a stationary phone was not present most often in households living on unearned sources (more than 43%) and pensioners (more than 28%).

A decrease in the percentage of dwellings equipped with some installations and appliances in the last 3 years has been observed only in the groups of households of the self-employed (by more than 1.2 percent points in the case of hot running water and by more than 0.6 percent points in the case of water-supply system) and households living on unearned sources (only with regard to a bathroom with a bath or shower by more than 0.3 percent points).

In the group of households with unemployed members, equipment of dwellings with appliances and installations was much less universal than in the group of households with no unemployed members. In these groups of households, almost 33% and almost 25% of dwellings respectively had no hot running water, and more than 26% and more than 19% of dwellings respectively had no stationary phone. The number of all of the examined appliances and installations in dwellings occupied both by households with unemployed members and with no unemployed members has increased in the last 3 years.

Dwellings with no hot running water were most often occupied by non-family households, both multi-person (almost 43%) and one-person (more than 3%). These types of households also most often occupied dwellings without a stationary phone (more than 33% and more than 29% respectively). Rural households most often occupied dwellings without hot running water and a stationary telephone (more than 36% and almost 27% respectively). In the last 3 years, only in the group of households living in towns of 100 to 200 thousand inhabitants, there was a decrease in the percentage of households equipped with appliances and installations, only with regard to a flushable toilet using running water (by more than 1.2 percent points) and a bathroom with a bath or a shower (only by more than 0.3 percent points).



- 1 – water-supply system
- 2 – flushable toilet using running water
- 3 – bathroom with bath or shower
- 4 – hot running water
- 5 – gas from gas supply system
- 6 – gas from cylinder
- 7 – telephone

Figure 4.13. Percentage of households not equipped with selected appliances and installations in the years 2000 and 2003 in the panel sample

Households with no hot running water in dwellings were mostly in the Zachodniopomorskie and Świętokrzyskie voivodships (more than 39% and almost 37% respectively), and those having no phone – in the Świętokrzyskie (almost 25%) and Łódzkie voivodships. In the last 3 years, only in the Zachodniopomorskie, Śląskie, Świętokrzyskie and Podkarpackie voivodships the percentage of dwellings not equipped with installations and appliances has increased, and it was a substantial increase only in the case of hot running water (by more than 9, 7, 6, 4 and 2 percent points respectively).

The most universal installation is collective (more than 43%) or individual (about 39%) central heating. However, in almost 17% of households, dwellings are still heated with fuel-fired furnaces. Such dwellings can be found primarily in the group of households living on unearned sources and households of farmers (about 30%), as well as non-family multi-person (almost 35%). Households occupying dwellings heated with fuel-fired furnaces are most often located in rural areas (almost 29%) and in the Lubelskie voivodship (more than 24%).

During the last 3 years, there has been a decrease (by more than 2 percent points) in the percentage of dwellings with fuel-fired furnaces, and they were replaced by individual central heating. Such changes can be most often observed in groups of households associated with agriculture, multi-family households, with no unemployed members, living in rural areas or the smallest towns and in the following voivodships: Podlaskie, Pomorskie and Świętokrzyskie.

More than 11% of households in March 2003 were in debt with regard to regular charges for the apartment (rent), and 5% — with regard to payments for gas and electricity. The percentage of households with overdue rent charges has not changed in the last 3 years. However, it is disturbing that the scale of these overdue charges has increased (figure 4.14). The percentage of households with overdue gas and electricity charges has decreased, as well as the scale of these overdue payments (figure 4.15).

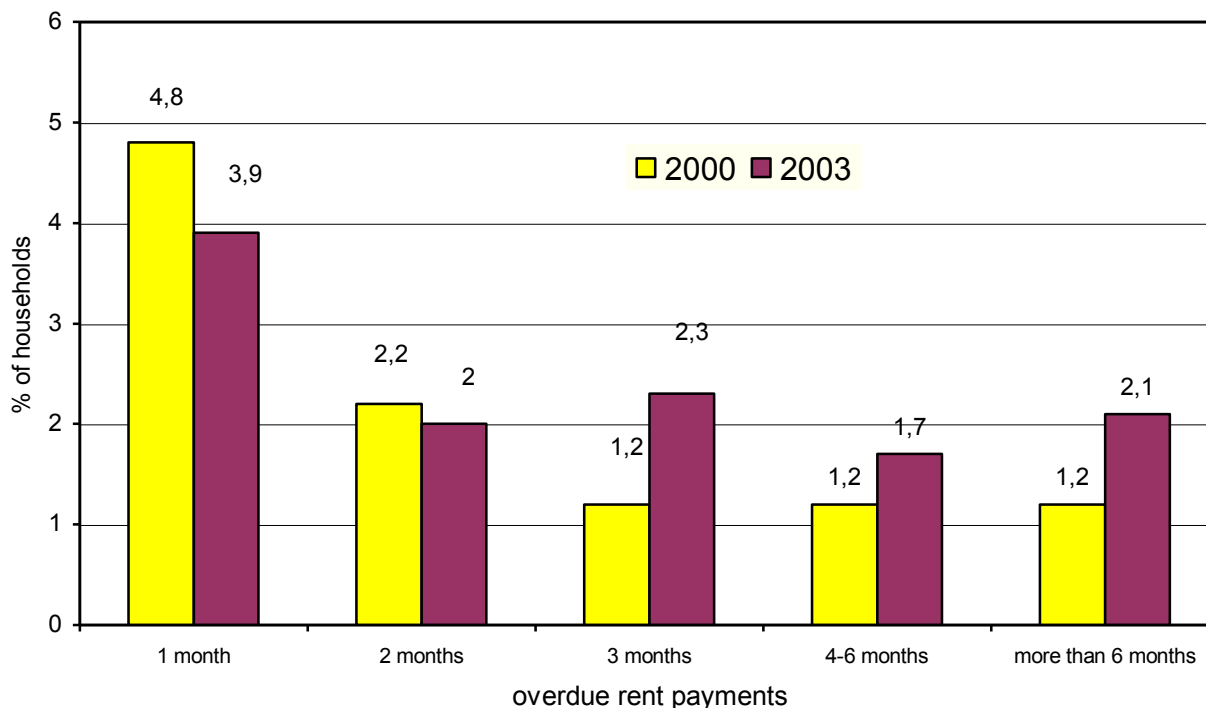


Figure 4.14. Overdue payments of households associated with rent in the years 2000 and 2003 in the panel sample

Households of this type were most often found among those living on unearned sources (almost 26% and 21% respectively) and in one-parent families (about 19% and 7% respectively) and in multi-family households (almost 18% and almost 8% respectively). It is worth noting that also in these groups we can observe the greatest frequency and increase in regular payments for the apartment being overdue for more than 12 months.

The number of households with overdue payments of this kind was almost three times greater among households with unemployed members than among those with no unemployed (almost 22% and more than 8% in the case of rent and almost 9% and less than 4% in the case of gas and electricity charges). Moreover, in the group of households with unemployed members, within the last 3 years there has been a significant increase in the percentage of households with payments overdue for more than 4 months.

Visibly the lowest percentage of households with overdue rent payments lived in rural areas (less than 8%). On the other hand, diversification of the group of households identified in accordance with the class of place of residence with regard to the scale of overdue gas and electricity charges was not significant. The highest percentages of households with overdue rent were found in the Śląskie voivodship (more than 16%, including almost 6% of households in which payments were overdue for more than 12 months) and in the Świętokrzyskie voivodship (about 16%), and those with overdue gas and electricity charges – in the following voivodships: Wielkopolskie, Podkarpackie, Śląskie and Dolnośląskie (more than 6% of households in each of these voivodships). In the last 3 years, the percentage of households with overdue apartment charges in medium-sized towns of 20 to 200 thousand inhabitants has increased. Unfavorable changes in this regard have been observed in half of all the voivodships. An increase in the percentage of households with payments overdue for more than 12 months was the highest in the Śląskie voivodship (by more than 3 percent points), Lubuskie and Dolnośląskie voivodships (by more than 2 percent points).

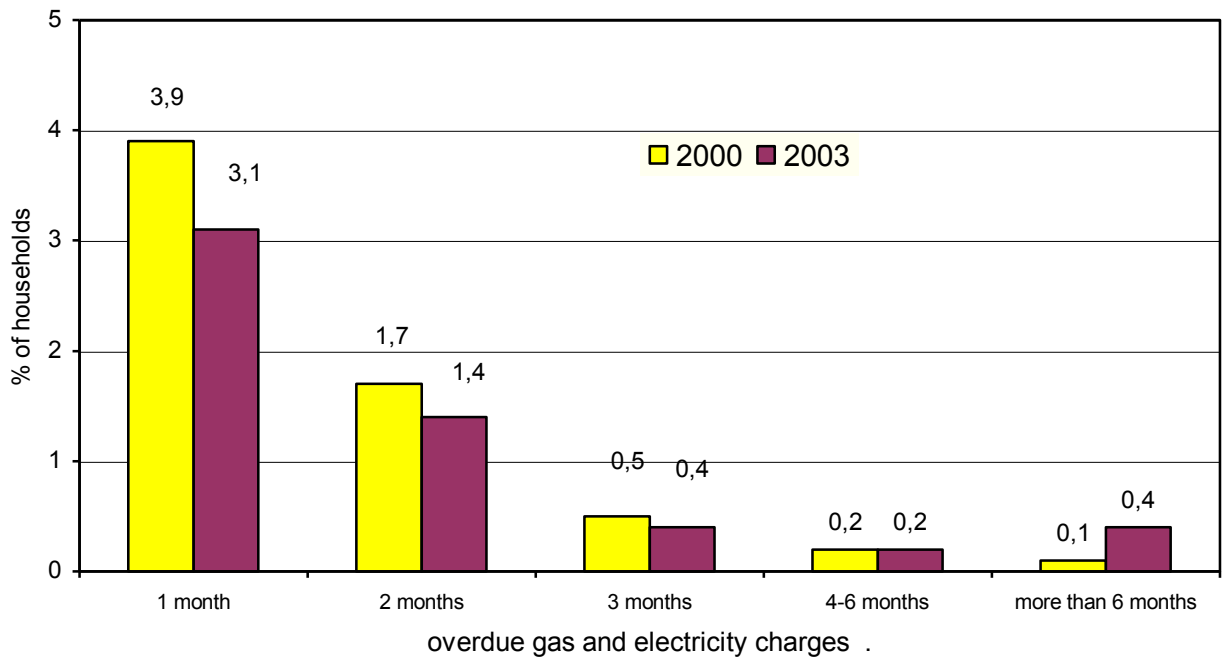


Figure 4.15. Overdue gas and electricity charges in households in the years 2000 and 2003 in the panel sample

More than 5% of the examined households did not pay their mortgage on time. Within the last 3 years, the percentage of households with overdue mortgage payments increased by more than 4 percent points, and the greatest increase was observed in the group of households failing to make overdue payments for longer periods of time (figure 4.16), by more than 2.6 percent points in the case of households failing to pay overdue charges for more than 12 months.

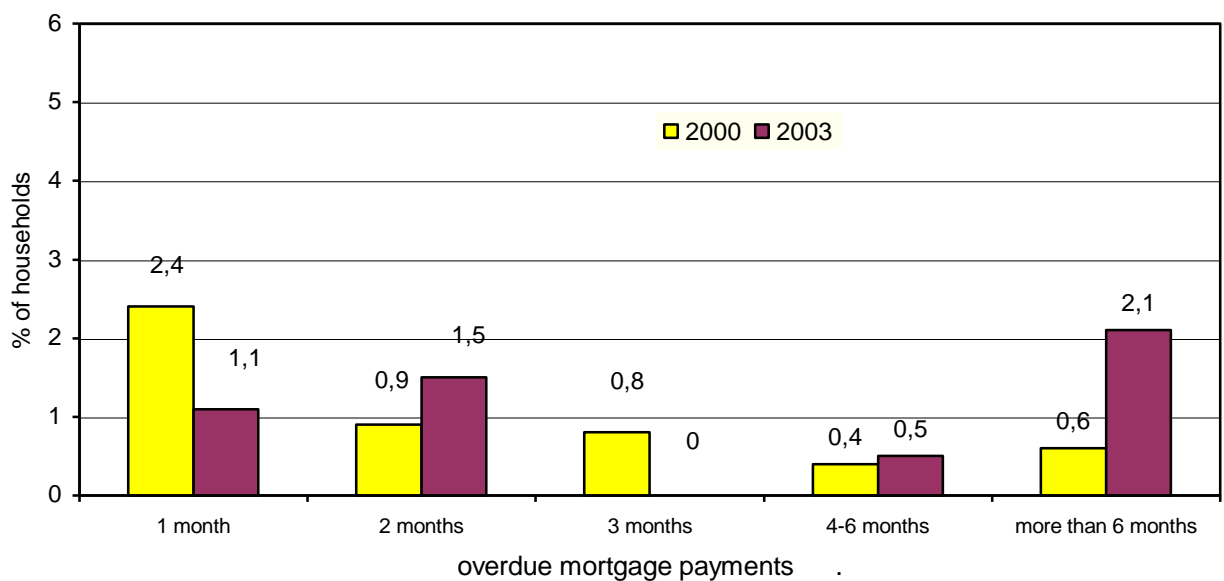


Figure 4.16. Overdue mortgage payments of households in the years 2000 and 2003 in the panel sample

Households with unemployed members more often had overdue mortgage payments than households with no unemployed members (more than 6% and less than 5% respectively). In comparison with March 2000, there was a substantial increase in both groups of the percentage of households with overdue charges of this type. In the group of households with unemployed members, these were mainly short-term overdue charges (for the period of one month), while in households with no unemployed members, they were long-term (more than 12 months).

The most overdue mortgage payments were found in the group of households of farm workers (in more than 5% of households, these rates were overdue for more than 12 months) and in one-parent families and families with many children (in almost 5% of households, they were overdue for more than 12 months). An increase in the last 3 years in the percentage of households in which payments have been overdue for more than 12 months was observed in the households of employees and retirees (by more than 4 and almost 3 percent points respectively) and in the households of families with many children, multi-family households, married couples with no children, one-parent families and married couples with 1 child (by more than 11, 10, 4, 3 and 2 percent points respectively).

Households with the most overdue mortgage payments most often lived in large towns of 200 to 500 thousand inhabitants (more than 5% of households which had overdue charges for a long time), as well as in the Śląskie, Kujawsko-pomorskie and Pomorskie voivodships (almost 5% each). In the last 3 years, a significant increase has been observed in the percentage of households with mortgage payments being overdue for more than 12 months in large towns of more than 100 thousand inhabitants (from more than 4 to 9 percent points, depending on the town) and in the Małopolskie, Pomorskie, Podlaskie and Lubuskie voivodships (from more than 19 to almost 7 percent points).

A significant majority of the examined households (more than 75%) believed that their housing conditions in March 2003 in comparison with March 2000 had not changed. About 11% of households declared that these conditions had worsened. Households declaring that their housing conditions had worsened most often belonged to the group of households living on unearned sources (almost 22%) and farmers (more than 18%), as well as non-family households (more than 17 percent points). The variability of households that declared that their housing conditions had worsened, according to class of place of residence, was not significant. Households, which had a pessimistic view of the changes in their housing conditions, most often lived in the Lubuskie (more than 18%), Mazowieckie and Lubelskie voivodships (more than 16% each).

4.5. Education

4.5.1. Education level and status of household members

Irena Elżbieta Kotowska

A comparison of the results of the last two population censuses pertaining to education structures indicates a substantial educational advancement of Polish society (table 4.8). However, differences between the education level of inhabitants of rural and urban areas indicate that an education gap still exists, and it is even deepening with regard to those with the highest education level. Differences between the education levels of men and women have also increased.

Table 4.8. Population aged 15 and over by the level of education, place of residence and gender (GNC, 1988; GNC, 2002)

Education level completed	Rural areas 1988*	Rural areas 2002**	Urban areas 1988*	Urban areas 2002**	Women 1988*	Women 2002**	Men 1988*	Men 2002**
Vocational and below	84,6	71,5	58,4	44,8	65,2	52,6	71,9	60,1
Secondary and post-secondary	13,1	22,4	31,8	38,6	28,4	35,1	20,6	27,6
University	1,8	4,3	9,4	13,7	5,9	10,4	7,2	9,3

*excluding people whose education level was not determined

** excluding people whose education level was not determined, and those who completed grammar school (gymnasium)

Source of data: Report on the results of the General National Census of Population and Households 2002, Central Statistical Office, Warsaw 2003, pp. 27, 29

The changes in the population structure according to education, observed during the last 3 years (2000-2003), confirm on the one hand, that education levels are continuing to increase, and on the other, that there are unfavorable differences between the education level of men and women, especially in rural areas (tables 4.8 and 4.9).

The percentage of inhabitants of rural areas with vocational or lower education level is 73%, compared to 48% in towns and cities, while in the year 2000, as many as three fourths of the inhabitants of rural areas and 60% of the inhabitants of towns and cities belonged to the lowest category of education. People with university/college education constitute less than 5% of the inhabitants of rural areas (4% in the year 2000), compared to almost 15% of the inhabitants of towns and cities (12% previously) (table 4.9). Such substantial differences in the level of education of the rural and urban populations indicate an education gap. Unfortunately, despite a substantial decrease in the percentage of people with the lowest education level and an increase in the percentage of those with the highest education level in both sub-populations, this gap did not decrease.

It is also necessary to note the differences in the education level of men and women, visible primarily in rural areas. As many as 78% of men living in rural areas have at most vocational education, while for women this indicator amounts to 68%. The percentage of men with university/college education inhabiting rural areas is low (3%) and it is more than one and a half times lower than the percentage of women, who have attained this education level. In towns and cities, the percentage of men and women with the highest education level is similar (14% - women, 15% - men), and there are substantially less women with vocational or lower education (43% of women and 51% of men).

Table 4.9. Population aged 15 and over by education level, gender and place of residence (GNC 2002, Diagnosis 2003)

Education level completed	Diagnosis 2003*			GNC 2002**
	Women	Men	Total	Total
	Urban			
Vocational and lower	42,7	51,1	48,4	44,8
Secondary and post-secondary	41,6	32,1	35,5	38,6
University	14,1	15,0	14,6	13,7
	Rural			
Vocational and lower	67,8	77,6	72,6	71,5
Secondary and post-secondary	24,6	17,5	20,9	22,4
University	6,2	2,9	4,6	4,3

*excluding people who completed grammar school

** excluding people whose education level was not determined, and those who completed grammar school

Another important characteristic of household members is their educational status, defined by the use of specific educational services in schools/colleges (education in day school, night school, part-time education, all types of postgraduate studies) and outside school. Comparison of adequate indicators, pertaining to the education level and educational status will allow us to assess the gap between the demand for educational services and the extent of use of such services.

Table 4.10 presents data for the years 2000 and 2003, and the data for 2003 include educational activity outside school, which is important for people in the older age groups.

On a national scale, less than 13% of children aged up to six attended a kindergarten or a day nursery, while in the year 2000, every fifth child at that age did. In towns and cities, children were under care of these institutions twice as frequently as in rural areas, where only 8% of children (13% in the year 2000) attended them (table 4.10). The great majority of children were placed in public day nurseries and kindergartens (95%).

No territorial differences in access to education among children aged 7 to 15 were observed; the vast majority of children attended public schools; the percentage of children using this type of educational services ranged between 78% and 81%. This is not directly related to young people's enrolment years earlier, because in the year 2000, these children were in primary schools and now they attend grammar schools. Insignificant territorial differences were observed in the case of young people aged 16 to 19. The percentage of young people of this age attending any type of school was visibly lower in rural areas than in towns: 88% (85% in the year 2000), compared to 89% - 94% depending on the place of residence. In this group of educational services, the number of non-public institutions was greater.

Territorial variability changes significantly, when we consider the use of educational services by people belonging to older age groups. The percentage of inhabitants of rural areas aged 20 to 24, studying in schools/colleges and outside school, is now equal to 39%, while in towns and cities the lowest percentage is 46%. Inclusion of services rendered outside school in educational activity greatly improved the percentage of inhabitants of rural areas in this type of activity. The cities and large towns, where about 60% of people use educational services, are still advantaged. At this level of education, the role of non-public institutions is greater.

The scope of educational activity decreases significantly in the next age group – the percentage of students in the population aged 25 to 29 was not higher than 18% in towns and cities throughout the whole period, while the lowest values of this index were observed in rural areas (7% and 8%). Territorial differences were maintained in the next age group (30 to 39), which used various educational services at least two times less frequently. Educational activity diminished among the population aged 39 and over.

The analysis of educational activity, conducted separately for adult women and men, examined in accordance with age and place of residence, indicates not only greater educational aspirations of women, but also territorial differences, which are particularly significant in the case of men.

More than half of all women aged 20-24 (almost 54%) are involved in educational activity, while the same pertains to less than half of all men (47%). Only in the age group between 25 and 29, the percentage of people using educational services in schools/colleges and outside school is the same for both genders (almost 13%). At the same time, the frequency of births in this age group is the highest, which may limit the activity of women. In the age group between 30 and 39, the percentage of women participating in various forms of educational activity decreases to 7%, but it is two times higher than the percentage of men.

The percentage of women aged 20 to 24 involved in educational activity, ranges between 51% and 62% in large cities and amounts to 46% in rural areas. In the next age group, the percentage of women in rural areas is two times lower than the highest percentage for towns and cities, which is almost 19%. This relation between towns/cities and rural areas has been maintained in the case of women aged 30-39 (5% compared to 11%). On the other hand, in the case of men, already in the age group between 20 and 24, the percentage of inhabitants of rural areas using educational services in schools/colleges and outside school is two times lower than

the highest percentage in towns and cities (44%-64%). In the next age group, this disproportion increases (6% in rural areas, compared to almost 20% in towns/cities except the smallest ones) and it is maintained for the age group between 30 and 39.

Table 4.10. Household population by educational status and the place of residence (the percentage of people in a given age, inhabiting a given type of place of residence, educationally active)

Educational status	Place of residence						Total
	Cities above 500k	Towns 200-500k	Towns 100-200k	Towns 20-100k	Towns below 20k	Rural areas	
Total percentage of people educationally active	25.43	23.78	26.73	23.97	25.76	22.22	23.91
	27.02*	26.41	24.01	27.17	27.39	24.64	25.94
Children aged 0-6 attending a day nursery or a kindergarten	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	76.74	77.07	81.36	78.27	79.88	80.14	79.23
	99.41	98.74	99.17	98.79	98.17	97.89	98.48
Youth aged 16-19 attending schools	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
People aged 20-24 using educational services in schools/colleges and outside school	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
People aged 25-29 using educational services in schools/colleges and outside school	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
People aged 30-39 using educational services in schools/colleges and outside school	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
People aged over 39 using educational services in schools/colleges and outside school	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

* the second row presents data from the year 2000

It is also worth noting that the differences in educational aspirations of women and men, mentioned above, are particularly visible in the case of inhabitants of rural areas: 47% of women aged 20 to 24, living in rural areas use educational services, and the same pertains to 32% of men of that age. The educational activity of people aged 25 to 29 decreases significantly, but women use these services more often (9% compared to 6%). Almost 6% of women inhabiting rural areas are involved in educational activity, while only one in one hundred men improves his qualifications.

Educational activity of people aged 18 and over was mostly in the form of studying in schools/colleges (90%), which is associated with the age structure of this population. More than three fourths of the respondents taking advantage of educational services were people aged 18 to 24, every tenth person was aged 25 to 29, only 7% were people aged 30 to 39. The importance of services rendered outside school increased with age, but still it was not a significant type of services – almost 14% of people aged 25 to 29 and 28% of people aged 30 to 39 took advantage

of this form of education. It is also characteristic that one half of the population using educational services outside school had university/college education and almost 43% - secondary and post-secondary education. These results confirm the high level of selectiveness of educational activity according to education level.

The analysis of people aged 18 and over, using educational services in schools/colleges and outside school, examined with regard to their status on the labor market, again indicates that these services are mainly rendered within the confines of the education system. As many as 93% of the unemployed, involved in educational activity, took advantage of these, as well as 80% of the employed. In the group of 481 people in the labor force, who used educational services, the unemployed constituted only 23%.

This seems to confirm once again the selectiveness of the process of adult learning – people whose skills are high already, tend to improve them. Both among the employed and the unemployed who are involved in educational activity, the percentage of the youngest people (aged 18 to 24) is the highest, but in the case of the unemployed, this percentage amounts to 85%, while in the case of the employed – to 38%. Moreover, 26% of the employed are people aged over 35.

The information obtained with regard to the scope of use of educational services indicates the following tendencies:

- The access of children aged 0 to 6 to institutional care decreased significantly,
- The introduction of grammar schools (gymnasium) led to a decrease in the percentage of young people aged 7 to 15 using educational services;
- Educational deprivation of the rural population is present already in the age group between 16 and 19 and it increases along with the education level,
- Diversification of willingness to use educational services among people aged 25 and over, particularly strong among men, is visibly unfavorable for rural areas and small towns,
- Educational activity of people aged between 30 and 39 is small,
- Educational aspirations of women are visibly higher, especially in the case of the rural population,
- People aged over 39 are not willing to use educational services,
- The process of improvement of skills is selective and its scope is small.

The results show that continuous education of adults, considered to be one of the fundamental conditions of improving the ability to get employment, is of marginal character in Poland. A comparison of the results regarding educational activity of the adult population in Poland with the population structure according to education and place of residence, allows us to talk about increasing disproportions with regard to the development opportunities of inhabitants of rural and urban areas, as well as, in general, people aged 30 and over. The discrepancy between the demand for educational services, resulting from the existing level of education of the population on one hand, and the technological changes on the other, and the presented model of educational activity of the selected population groups, indicates a strong need for an increase in the range of use of educational services by people aged 24 and over. Therefore, it is necessary to develop various forms of additional education for adults (night school, part-time education or correspondence school, postgraduate studies, courses and training programs) and activities aimed at increasing the range of use of educational services by people aged over 24. The analyses have confirmed the necessity of increasing human capital among people aged 30 and over, who are to be in the labor force for at least 25 years, and also the level of educational activity of the adult population of Poland, which so far has been low.

4.5.2. Education of children

Tomasz Panek

We evaluated the scale of failure to continue education by children after completion of primary and secondary school. At the same time, we examined the reasons for giving up further education by children. Then we measured the aspirations of households with regard to the education of children and the assessment of the chances of their realization. We asked about satisfaction with schools attended by children. We also examined the frequency of occurrence of a situation, in which extracurricular activities of children, private lessons, lunch at school and payments for school had to be limited due to financial reasons, as well as the cases when it was necessary to change schools to one requiring lower payments or to give up further education of children.

Within the last 3 years, in almost 6% of households, children failed to continue education after completion of primary school. The reason for failure to continue education after primary school, given most often by households in March 2003, was the lack of willingness of the child to continue education (almost 37% of households), financial reasons (almost 36% of households) and the fact of taking up of a job by the child (more than 21% of households). Reluctance of the child to continue education was mentioned relatively most often by households of employee-farmers (almost 59%), retirees (almost 45%) and employees (more than 41%), as well as married couples with one child (more than 46%). Households in which children discontinued education after primary school due to lack of willingness to stay in school, were located mostly in large towns of 100 to 200 thousand inhabitants (almost 59%) and the Mazowieckie (more than 53%) and Świętokrzyskie (more than 50%) voivodships.

Financial reasons for discontinuing education after completion of primary school by the child were declared most often by households living on unearned sources and households of farmers (more than 74% each), single-parent families (almost 53%) and couples with many children (almost 37%). Households, which most often indicated this reason for discontinuing education of children, lived primarily in the smallest towns (more than 63%) and in rural areas (almost 40%) and in the Zachodniopomorskie, Podlaskie and Podkarpackie voivodships (100%, more than 75% and more than 60% of households in these voivodships respectively).

Taking up a job as a reason for discontinuing the education of children after completion of primary school was indicated most often in households of employee-farmers (more than 45%) and of married couples with 2 children (more than 42%). Households indicating this reason relatively most often lived in the smallest towns and in the largest cities (more than 45% and 40% respectively) and the Kujawsko-pomorskie (almost 51%) and Małopolskie voivodships (almost 34%).

Due to the very small number of households, in which children discontinued education after completion of primary school, the results of our analysis in this regard according to household type have to be treated cautiously. For the same reason, it is not possible to conduct analyses of changes over time.

In the last 3 years, in almost 6% of the examined households, there were children, who, after completing secondary school, did not continue education. Most often, households declared that it was due to financial reasons (almost 49%), due to the fact that the child took up a job (more than 26%) and that the child was not willing to continue education (more than 17% of households). The reasons here are the same as in the case of discontinuing education of children after completion of primary school.

Relatively the greatest number of households which stated that children discontinued education due to financial reasons, was found in households living on unearned sources (almost 81%), households of retirees (almost 65%) and households of one-parent families (almost 63%), as well as families with many children (more than 59%). Households indicating this reason lived mostly in rural areas (more than 59%) and in the largest towns of more than 200 thousand

inhabitants (more than 50%), as well as in the Świętokrzyskie, Podkarpackie and Warmińsko-mazurskie voivodships (100%, more than 87% and more than 80% of households respectively).

Taking up a job by the child as the reason for discontinuing education after completion of secondary school, was declared most often by households of farm workers (more than 59%) and retirees (more than 41%), as well as households of couples with 2 children (more than 34%) and couples with 1 child (more than 30%). Households which indicated this reason relatively most often lived in the largest cities (almost 50%) and in the Małopolskie voivodship (more than 38%).

Lack of willingness to continue education was most often indicated as a reason for discontinuing education of children after completion of secondary school by households of farmers (more than 28%) and multi-family households (more than 30%). Households, which indicated this reason most often, lived in medium-sized towns of 100 to 200 thousand inhabitants (almost 41%) and in the Zachodniopomorskie, Kujawsko-pomorskie and Małopolskie voivodships (more than 49%, 40% and 37% respectively). It is worth noting that due to the small number of examined households in which children failed to continue education after completion of secondary school in the last 3 years, the results of the analysis conducted in the identified groups of households have to be treated cautiously.

Most often, households were forced in the school year 2002/2003 to give up private lessons for children (almost 23%) and extracurricular activities (about 22%). Another necessity pertained primarily to limitation or suspension of payment of school charges and giving up lunch at school for children (almost 8%). During the last 3 years, the percentage of households forced to limit or suspend payment of school charges and to give up private lessons increased (by almost 8% and almost 6% respectively).

Households living on unearned sources were most often forced to apply various financial limitations with regard to the education of children. Almost 42% of these households had to give up extracurricular activities or private lessons for children, and almost 41% — to limit or suspend payment of school charges. At the same time, the highest increase of the percentage of households forced to apply limitations of this type in comparison with the school year 1999/2000 was found in this group (by almost 18 percent points and almost 20 percent points respectively). Another group characterized by the highest increase of such limitations was households of the self-employed (by more than 7.5 percent points with regard to private lessons and extracurricular activities and by more than 6 percent points with regard to limitation or suspension of payment of school charges).

Among various household types, single-parent families most often experienced limitations with regard to education for children due to financial reasons. More than 33% of households of this kind had to give up private lessons, almost 33% - extracurricular activities, and more than 20% had to limit or suspend payment of school charges. Also in this group of households, the highest increase in limitations of this kind was observed in comparison with 3 years earlier. In the case of having to give up private lessons for children, an increase by more than 15 percent points was observed, and in the case of having to limit or suspend payment of school charges – by more than 14 percent points. During this period, a substantial increase in the percentage of households coping with financial difficulties with regard to the education of children was also observed in non-family households, consisting of more than one person (by almost 16 percent points with regard of limitation or suspension of payment of school charges) and in the households of married couples with 1 child (by almost 12 percent points in the case of giving up private lessons).

Households with unemployed members were much more often forced to impose limitations with regard to the education of children due to financial reasons, than households with no unemployed members. Most often, these limitations pertained to giving up private lessons for children (in more than 23% of households with unemployed members in comparison with more than 19% of households with no unemployed members), giving up extracurricular activities for children (in more than 28% of households with unemployed members in comparison with more than 25% of households with no unemployed members) and limitation or

suspension of payment of school charges (in more than 24% of households with unemployed members in comparison with more than 14% of households with no unemployed members). Also in this group of households, the highest increase in the percentage of households forced to give up these two types of activity within the last 3 years has been observed (by more than 10 and almost 14 percent points).

Households that gave up private lessons for children most often lived in large towns of 200 to 500 thousand inhabitants (more than 26%) and in the Podlaskie (almost 36%) and Świętokrzyskie (almost 31%) voivodships. An increase in limitations of this kind in the last 3 years was the highest in towns of 200-500 thousand inhabitants (by almost 13 and more than 10 percent points respectively) and in the Podlaskie and Świętokrzyskie voivodships (by almost 22 and almost 21 percent points respectively). Households living in the largest cities (almost 30%), as well as in the Dolnośląskie (29%) and Świętokrzyskie (almost 28%) voivodships most often gave up extracurricular activities for children due to financial reasons. An increase in the percentage of households forced to apply such limitations due to financial reasons in comparison with the school year 1999/2000 was the highest in the largest cities (by almost 7 percent points) and in the Pomorskie voivodship (by more than 17 percent points).

Limitation or suspension of payment of school charges were most often observed in households living in large towns of 200 to 500 thousand inhabitants (almost 13%) and living in the Podlaskie, Lubuskie and Warmińsko-mazurskie voivodships (more than 22% each). In towns of this size and in the Podlaskie voivodship, we observed the highest increase in the limitations of this type in the last 3 years (by almost 7 and almost 20 percent points respectively).

A great majority of households in March 2003 wanted their children to complete university education with a master's degree (more than 65% of households). On the other hand, almost 24% of households believed it would be sufficient for their children to complete vocational school or vocational secondary school, and almost 13% — vocational college (bachelors degree). On average, households believed the chances to complete the indicated education levels to be quite high. In comparison with 3 years earlier, the percentage of households wanting their children to complete university education and get a master's degree increased significantly (by almost 7 percent points), which was accompanied by the highest decrease in aspirations with regard to vocational college, vocational school or vocational secondary school and a profile-oriented secondary school (general education secondary school) (by 2.5, almost 2 and almost 1.5 percent points). Assessment of the chances of completing the education levels identified during research remained unchanged.

Most households, which mentioned completion of university education with a master's degree, belonged to the group of the self-employed (almost 83%) and married couples with 1 child or 2 children (more than 72% and almost 70% respectively). Households with such aspirations with regard to the education of their children most often lived in the largest towns and cities of more than 200 thousand inhabitants (more than 77%) and in the Lubelskie voivodship (almost 82%). The least often, this level of education was indicated by parents in households living on unearned sources (less than 51%) and non-family multi-person households (less than 40%). These households relatively most often lived in rural areas (about 52%) and in the smallest towns (less than 64%) and in the Warmińsko-mazurskie voivodship (less than 50%).

A significant increase in the aspirations of parents, indicated by their wish for their children to complete university education with a master's degree, has been observed in the last 3 years in the groups of the employee-farmers and of the self-employed (by almost 26 and almost 12 percent points respectively), of married couples with 1 child and one-parent households (by almost 10 percent points), those living in large towns (200 to 500 thousand) and in the smallest towns (by more than 14 and more than 13 percent points respectively) and in the Lubelskie and Kujawsko-pomorskie voivodships (by more than 14 percent points).

Households, which indicated completion of vocational school or vocational secondary school as the desirable level of education for their children, were most often those of farmers (almost 41%) and married couples with many children (almost 36%). Households with this level

of aspirations with regard to the education of their children most often lived in rural areas (more than 34%) and in the Warmińsko-mazurskie voivodship (more than 35%).

Most households were rather satisfied (almost 65%) or definitely satisfied (almost 32%) with the schools attended by their children. As little as less than 2% of households were definitely not satisfied. Relatively most often, those who were definitely not satisfied with the schools attended by their children were households of employee-farmers (more than 3%) and multi-family households and married couples with 1 child (almost 3% each). Households, which provided such negative opinions most often, lived in towns of 100 to 200 thousand inhabitants (almost 4%) and in the Zachodniopomorskie, Pomorskie and Opolskie voivodships (more than 8%, 6% and 4% respectively).

4.6. Culture and recreation

Tomasz Panek

We analyzed the scale of limitations forced upon household members with regard to participation in cultural events and recreation outside their place of residence due to financial difficulties. Also limitations in purchasing goods associated with culture and recreation due to financial reasons were analyzed with regard to their frequency. Moreover, subjective opinions of households with regard to changes in the level of satisfaction of needs associated with culture and recreation in comparison with 3 years earlier were examined.

In 2003, more than one third of the examined households were forced to withdraw from going to the movies, theatre, opera, operetta or a concert or from visiting a museum or an exhibition due to financial reasons (figure 4.17). Most often (in more than 40% of cases), households were forced to withdraw from going to the theatre, opera, operetta or a concert. The number of households, which had to withdraw from attending the above events due to financial reasons, decreased by 4% in comparison with the year 2000, which indicates a substantial improvement (figure 4.17).

Definitely the highest percentage of households (even more than 64% in the case of theatre, opera, operetta or a concert), forced to withdraw from taking advantage of the selected forms of participation in culture, was observed in the poorest households, living on unearned sources, and the lowest percentage (about 28% or less) was observed in households of the self-employed. However, at the same time, in these two groups, the number of withdrawals increased significantly in comparison with the year 2000 (by almost 17 percent points in each group). This confirms once again a substantial decrease in the affluence of the relatively most affluent group of the self-employed since the year 2000, due to mass bankruptcies of small family companies.

Among the groups identified according to the household type, one-parent families and families with many children were most often forced to withdraw from these forms of participation in culture, and the frequency of such limitations was in some cases even greater than 49%. In 2003, the percentage of households withdrawing from these forms of participation in culture increased with regard to families with many children (by almost 11%), non-family multi-person households (by more than 10 percent points) and households of married couples with 2 children (by almost 7 percent points).

Withdrawal from all of the analyzed forms of participation in culture due to financial reasons was higher by more than 20% in the group of households with unemployed members than in the group of households with no unemployed. In the group of households with unemployed members, the frequency of such withdrawals increased in 2003 by almost 11% in comparison with the year 2000.

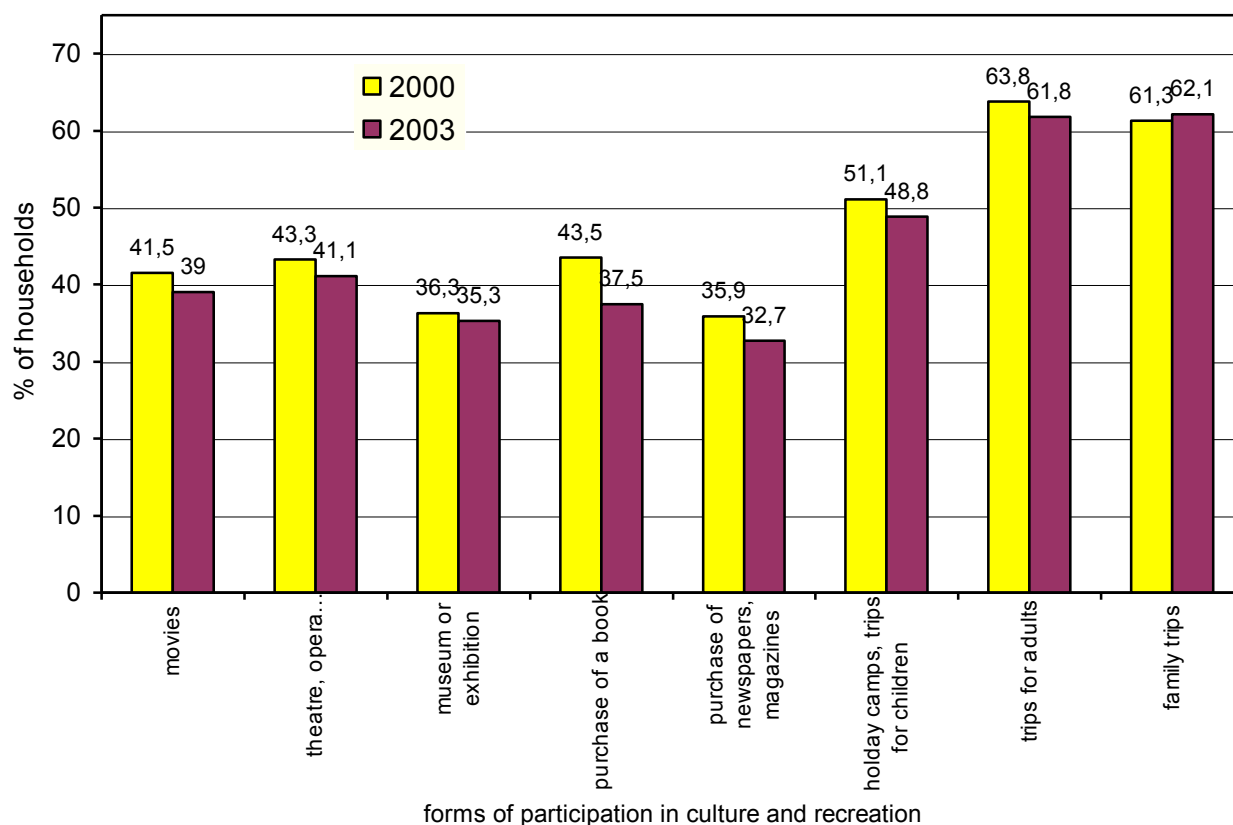


Figure 4.17. The scale of withdrawals of households from selected forms of participation in culture and recreation due to financial difficulties in the years 2000 and 2003 in the panel sample

Diversification among the groups of households living in various classes of place of residence and various voivodships with regard to having to withdraw from the selected forms of participation in culture due to financial reasons was not very high. Most often, such withdrawals were declared (except for museums and exhibitions) by households living in the largest cities and in the Warmińsko-mazurskie voivodship. Also only in the largest cities and in rural areas, the number of households forced to give up selected forms of participation in culture due to financial reasons increased in 2003 in comparison with the year 2000 (by about 2%). A decrease in the ability to participate in cultural events in this period was reported by households living in the Warmińsko-mazurskie and Zachodniopomorskie voivodships (an increase of almost 13%), Podlaskie (an increase of about 9%), Pomorskie (an increase of more than 8%), Wielkopolskie and Kujawsko-pomorskie (an increase of more than 6%).

More than 37% of the examined households were forced to withdraw from purchasing a book due to financial reasons in 2003. The number of withdrawals decreased in comparison with the year 2000 by 3 percent points (figure 4.17). Such withdrawals most often pertained to households living on unearned sources (almost 60%), one-parent and non-family multi-person households and couples with many children (more than 47, 46 and 45 percent points respectively) and households with unemployed members (more than 51 percent points). An insignificant decrease in the number of withdrawals from purchasing books due to financial reasons in comparison with the year 2000 was observed only in the group of households of the self-employed (by more than 1 percent points) and non-family multi-person households (by more than 3 percent points). Both in the group of households with no unemployed members and in the group of households with unemployed members, we observed a decrease in the percentage of households forced to withdraw from purchasing books due to financial reasons.

The necessity of withdrawing from purchasing books was reported equally often by rural and urban households. Variability with regard to voivodship, as well as with regard to household type according to class of place of residence, was also relatively insignificant. Most often, the necessity of withdrawal was reported by households located in the Małopolskie voivodship (more than 48%). In comparison with the year 2000, a decrease in the frequency of withdrawals from purchasing books due to financial reasons was observed in all classes of place of residence identified for research purposes. An increase in such withdrawals was observed only in the Zachodniopomorskie (by about 10 percent points), Lubuskie (by about 4 percent points), Podlaskie (by more than 3 percent points) and Małopolskie (by more than 1 percent points) voivodships.

The necessity of withdrawing from purchasing books was observed much more often in the group of households with unemployed members than in households with no unemployed members (in 49% and more than 27% of households respectively). Moreover, in the group of households with unemployed members, there was an increase in the number of such withdrawals by almost 8 percent points.

More than 32% of households were forced to withdraw from purchasing newspapers and magazines in 2003. In comparison with the year 2000, this indicates a decrease by more than 3 percent points (figure 4.17). The socio-economic group, which suffered most from these limitations, was households living on unearned sources (more than 55%). These limitations pertained the least often to the self-employed (less than 19%). The frequency of these withdrawals increased most visibly in 2003 in comparison with the year 2000 in households of the self-employed and in households living on unearned sources (by almost 12 and more than 10 percent points respectively).

Among the household types, lack of funds for purchasing newspapers and magazines was observed most frequently with regard to couples with many children and single-parent families (more than 45% and 42% respectively). The increase in the frequency of withdrawals from purchasing newspapers and magazines due to financial reasons was observed primarily in multi-family households (by almost 8 percent points), married couples with 1 child (by more than 4 percent points) and in non-family multi-person households (by more than 3 percent points).

Rural households were most often forced to withdraw from purchasing newspapers and magazines (more than 35%). Lack of funds for purchasing newspapers and magazines was most often reported by households living in the Podkarpackie (40%) and Dolnośląskie (almost 38%) voivodships. An increase in the frequency of withdrawals from purchasing newspapers and magazines in comparison with the year 2000 was observed in households living in large towns of more than 100 thousand inhabitants (from more than 5 to more than 12 percent points). A significant increase in withdrawals of this type has been observed in the Zachodniopomorskie (by more than 18 percent points), Małopolskie (by more than 10 percent points), Wielkopolskie and Lubuskie (by more than 9 percent points), as well as in the Pomorskie voivodship (by more than 8 percent points).

The percentage of households forced in 2003 to give up recreational trips due to financial reasons ranged between more than 48% with regard to group trips for children (holiday camps etc.) to more than 60% in the case of trips for adults and family trips (figure 4.17). However, we have observed a slight improvement in this regard since the year 2000.

In all the groups of households, there was a visible tendency to give up children's trips only as a last resort. Definitely more often, withdrawal from such trips was reported by households living on unearned sources (even in 80% of households in the case of vacations and trips for adults), and least often in households of the self-employed (less than 3% in the case of vacations and trips for adults). An increase in the number of withdrawals from children's trips and family trips was visible only in households of farmers and the self-employed (by almost 10 and almost 8 and more than 5 percent points respectively). A worsening of the situation with regard to trips for adults, on the other hand, apart from the two groups mentioned above (where an increase of more than 10 percent points was observed in each group), was observed in households living on unearned sources (by more than 7 percent points).

Most often, households of couples with many children were forced to withdraw from trips due to financial reasons (from more than 73% of households with regard to trips of adults to about 62% with regard to children's trips). During the examined period of three years, the frequency of withdrawals from trips due to financial reasons increased only in the group of families with many children (by more than 4, more than 6 and more than 5 percent points respectively for each type of trip mentioned).

Frequency of the necessity to withdraw from children's trips due to financial reasons was more than two times greater in households with unemployed members than in those with no unemployed (41% and almost 20% respectively). In both groups according to economic activity, the frequency of withdrawals from recreational trips decreased in the last 3 years.

The highest percentage of households forced to withdraw from selected forms of recreation due to financial reasons was observed in rural areas, although the differences between rural and urban households in this respect were not very significant. In the case of trips for adults, these withdrawals pertained to almost 63% in rural households, while in the case of trips for children – to about 28%. The worst situation according to voivodship was observed in the Warmińsko-mazurskie (withdrawal from trips for adults in more than 71% of households and withdrawal from trips for children in more than 24%). In all classes of place of residence the frequency of withdrawals from recreational trips decreased in comparison with the year 2000. Only in the Wielkopolskie voivodship, a substantial increase in the percentage of households forced to withdraw from these trips was observed (by more than 4, 12 and 14 percent points respectively for individual types of trips).

More than 52% of households believe that fulfillment of their needs with regard to culture and recreation in March 2003 in comparison with 3 years earlier has not changed, and more than 43% state that the situation is worse; only about 4% talk about an improvement. The changes are most often evaluated negatively by households living on unearned sources and by households of employees (almost 60% and almost 46% respectively). Among the various household types, the most negative opinions regarding fulfillment of needs associated with recreation and culture were provided by families with many children, one-parent families and multi-family households (almost 49%, more than 48% and more than 48% negative opinions). A negative assessment of changes with regard to fulfillment of needs in this regard was most often formulated by households living in medium-sized towns from 100 to 200 thousand inhabitants (more than 47% of households) and in the largest towns and cities of more than 200 thousand inhabitants (more than 46%). The highest percentage of households assessing changes in the level of fulfillment of these needs negatively was found in the Lubuskie (more than 51%) and Wielkopolskie (almost 50%) voivodships.

4.7. Health care

Katarzyna Tymowska

During research, we were interested in the behaviors of households in the case of health problems, as well as in the behaviors of individual adults. Therefore, some of the problems associated with health care have been discussed in the part pertaining to the living conditions of households, while others are treated as variables determining the quality of life of individual respondents (see chapter 5.6).

Health care was the most extensive part of our research, pertaining to households. We determined how often the household members took advantage of health care services, in what form and in which health care units, who pays for medical treatment, what are the reasons for selection of specific health care units, what health care needs are unfulfilled due to financial reasons, how much money (excluding the health insurance premium) was spent by households from their own budgets on various expenses associated with health care within the previous 3 months, how the households assess their access to health care and how well they are informed of the rules of functioning of the health care system.

4.7.1. Taking advantage of health care

The percentage of households, which took advantage of services rendered by a family doctor or a specialist in the last three months, is quite high: 87% visited doctors at public health care units during this time, while 27% attended doctor's appointments in private clinics. Three years earlier, a similar percentage of households took advantage of services rendered by private clinics, but the percentage of those visiting doctors in public health care units was much lower (71%). This fact should not be interpreted only as a symptom of an increase in the demand of the society for medical services, rendered by health care institutions.

It seems that the increase in the number of households which visited public health care units is partially a derivative of the rules of financing of health care. Financing of family doctors in accordance with capitation rates is conducive to the application of methods of contacting doctors, which lead to a weakening of the organizational and time barriers in access to these services. Accessibility of doctors rendering basic health care services has increased significantly. Thanks to the capitation techniques of financing, taking into consideration the cost of many diagnostic services, it is in the interest of the general doctors and family doctors to keep the patients with them as long as possible. It is easier to get the scale effects by taking care of patients who have been diagnosed with identified chronic health problems (Tymowska, Kowalska, 2002). Regular patients may contribute to better organization of the medical practice, and thus increased intensity of use of medical services, especially when there are no economic barriers that would limit access to family doctors (only in some social groups, the necessity to bear the expenses of travel to and from the doctor may be a barrier).

Financing of services in outpatient clinics in accordance with the rule of payment for services rendered motivates doctors to maximize the number of patients treated, particularly taking into consideration the low unit rates established for contracts with health care public funds and the high level of interest of patients in taking advantage of services rendered by specialists. The health care public funds were defending their finances against the results of maximization of appointments, setting quotas in contracts with medical institutions for services that could be paid for within the confines of such contracts. On the other hand, doctors and health care units applied the strategy of exceeding the quotas, awaiting additional means and thus protecting themselves against criticism of patients and the media, which condemned refusals to receive patients due to the exceeding of quotas.

Another factor which could have influenced an increase in the intensity of use of medical services covered by the health care fund, is the fact that in the year 2000, some households could

have delayed the decision regarding a doctor's appointment due to a large-scale failure to obtain sufficient information regarding the rules of application of the new health care system and due to very negative coverage, regarding the implemented reforms provided by the media.

The percentage of households in which any of the members took advantage of services rendered by doctors increased, as well as the percentage of households taking advantage of hospitalization (this pertains mainly to public hospitals). In the years 2000-2003, the number of hospitalized patients in Poland increased substantially, mainly due to motivations associated with the contracts. These are both motivation to maximize the number of patients received (hospitals were financed according to rates defined for various types of hospitalization) and to charge hospitals with the costs of treatment initiated and discontinued by outpatient clinics (Tymowska 2002, 2003). Low rates for many forms of hospitalization and concerns about negative opinions regarding hospitals which refuse to receive patients due to exceeding the quotas specified in the contracts, were conducive to the reception of a much greater number of patients than had been specified in the contracts with health care public funds. There is political acceptance for the realization of social functions by hospitals (one of them is receiving patients despite exceeding quotas, specified in the contracts, without indicating the source of financing for the treatment). The social functions performed by hospitals, are one of the reasons for the enormous debts of numerous units (Tymowska, Musiałowicz, 2003). Motivations hidden behind the contracts, political acceptance of loss of financial liquidity in exchange for further existence of a hospital in a given area, the fact that the public founding authorities want to avoid troubles associated with liquidation of hospitals in debt, and – additionally – lack of cost-sharing with regard to hospitals in order to limit the demand are the main factors conducive to an increase in the number of hospitalizations.

Like three years ago, the percentage of households in which a member was hospitalized was the highest among farmers, disability pensioners, in multi-family households, and, according to voivodship – in the Lubuskie, Lubelskie and Kujawsko-pomorskie voivodships. While the percentage of those taking advantage of services rendered by public hospitals was higher in the rural voivodships and households, the percentage of patients visiting private clinics was higher in large towns. This confirms information from other sources, according to which the intensity of use of health care, especially of services rendered by private clinics, is higher in large towns.

Although the number of private hospitals increased in the years 2000-2003, and many of them had contracts with the health care public funds, the percentage of households taking advantage of such hospitals still remains at a very low level.

The distribution of patients taking advantage of services rendered by dentists in units characterized by different forms of ownership was similar in both phases of research. One half of all households took advantage of dental services, and one half of this population did it in private clinics, and the other – in public health care units. However, the share in payments for dental services covered by households from their own budget, has decreased. It may mean that, as a result of an improvement in the quality of health care rendered on the basis of public means, many people "returned" to the public system (there are numerous private offices and health care units providing medical care on the basis of contracts with the health care public funds). Visiting private doctors' offices is still more frequent in highly urbanized regions and the lowest among rural households.

In the year 2000, we examined the variables which had the greatest influence upon the decisions made when selecting a family doctor. At present, we were interested in how many households changed their doctor during the last year and what were the reasons for change. Every 11th household changed their family doctor, but only every 8th among farmers and every 8th among disability pensioners. The scope of changes in urban areas and large cities was more significant. According to voivodship, the number of households that changed their doctor exceeded the average in the Mazowieckie, Opolskie and Pomorskie voivodships, and much fewer patients changed doctors in the Świętokrzyskie voivodship.

Among various reasons for such a change, the following were provided most frequently: the previous doctor had quit his/her job, easier access, better treatment of patients by the new

doctor, location near the place of residence. The results of our research indicate that the behaviors of patients in Poland are slightly different from those in Hungary, where the main reason for changing doctor was seeking better treatment, the new doctor devoting more time to patients and having better professional experience (Evaluation 1997). The Hungarian research was conducted 6 years after the introduction of the right to choose a doctor, ours – three years after. We can suppose that the importance of the reason for changing of doctors being the resignation of the previous doctor in Poland, is associated with the process of organizational changes in basic health care and the privatization of many units providing this care (which was associated with changes in the place of employment of doctors, more frequent in larger towns). In Hungary, the least number of changes took place in rural areas (almost 8%) and in Budapest, and the most changes occurred in medium-sized towns (20%). The Hungarian researchers explain that the difference is due to the fact that when the number of doctors is high and it is possible to make choices, the cost of obtaining information, which makes the choice easier, is high, which may discourage patients to initiate changes. This cost is low in rural areas, but, on the other hand, there are no real opportunities to make a choice. In the small towns, there is a sufficient number of doctors to allow choices, and it is easier to obtain information regarding doctors (the main sources are friends and family). It was noticed that in time, a change of the doctor due to lack of satisfaction with the previous one was becoming less frequent. We can predict that as the medical services market in Poland becomes more stable, such factors as the quality of relations with patients and professional experience will also become more significant for those changing doctors in our country. The differences between the organizational and geographical access to doctors will decrease, and changes of jobs by doctors will become less frequent.

We also checked which factors were the most significant ones when selecting a specialist doctor. The criteria taken into consideration when selecting a hospital will be described in the part pertaining to the quality of life (chapter 5.6). Upon selection of a specialist, patients most often indicated proximity to their place of residence and a good opinion of the doctor, ensuring regular care and suggestions of the doctor who referred the patient to the specialist. The last factor was less significant than the remaining three, but it was more significant than other reasons, from which the respondents could select their answers. On the basis of these results, it is possible to state that patients value those characteristics, which are important from the point of view of the subjective quality of health care (close to place of residence, good opinion, regular health care). It is thus a very important piece of information in relation to potential decisions of service providers associated with the creation of networks of co-operating suppliers of these services, as well as with changes in the techniques of financing specialist care. Patients may accept the use of the network of suppliers even at the expense of some minor limitations of their freedom to select a doctor (the choice would be made within the confines of the network). Another favorable factor may be the fact that the opinion of the doctor issuing a referral to a specialist, is perceived as important by many households. In the financing of such a network of suppliers, capitation rates could be applied for a wide range of services. This would be conducive to competitiveness between networks and it would provide motivation for doctors to apply the principle of substitution within the network when selecting the forms and places of treatment. In effect, the quality of services would increase.

Since the year 2000, in the so-called capitation rates, family doctors received funds for covering the costs of, for example, some diagnostic tests. Some tests, according to the contracts, are incorporated in the rates of specialists, and when recommending such a test, the doctors cover the costs as well. When there are no standards of procedure, and the supervision system is weak, the application of such solutions in financing techniques may threaten to lower the quality of health care by limiting diagnostic tests in order to obtain savings. We were interested, whether patients felt that these financing techniques led to a change in the behavior of doctors who are responsible for making diagnoses. Among those taking advantage of outpatient treatment, in more than half of households, patients received a referral for diagnostic tests. When the referral was expected, but not obtained, in 11% of cases the doctors informed patients that the diagnostic

test was not needed, and in 6% of cases they did not explain their decisions. A similar percentage of households reported being informed of lack of means for such a test. At the same time, in almost one fourth of households, there was no situation that would indicate any limitations with regard to referrals for diagnostic tests. Thus it can be supposed that even if there was a risk of lowering the quality of health care, indicated by the lack of a doctor's referral for diagnostic tests, the patients did not feel this problem to be a real threat. This can be partially explained by the asymmetry of information between the doctor and the patient and lack of awareness of patients, and partially it is an example of the doctor's behavior, which did not undermine the patient's sense of safety with regard to his/her health.

4.7.2. Sources of financing of health care, and financial barriers limiting access to it

Almost 40% of households that used health care services paid for these services from their own budget. These were mostly households that also used services paid from the budget of health care public funds (the percentage of households where the health care services were covered from public means, amounted to 91 in all groups of households using these services). The self-employed, employees and households located in big cities are groups that took advantage of private health care services more often than others. The economic barrier blocking access to such services is much less significant in the case of these households, and moreover, their approach is firmer, which may lead them to stop using public health care services (a higher level of criticism, higher expectations with regard to quality and the perception of medical services as consumer goods). Similar results were obtained during research conducted in the year 2000.

Almost 5% of households that took advantage of health care services, reported that it was financed by employees, who paid for a medical services plan. At the beginning of the year 2000, the percentage of such households was slightly lower. At present, especially in large agglomerations, the number of households taking advantage of health care services within the confines of a medical services plan is much higher (almost 11% of households in large cities take advantage of such plans). However, it is worth noting that among the benefits that they would like to obtain at work, the respondents indicate money more often than access to medical services within the confines of such plans.

In comparison with the year 2000, the percentage of households, which pay for hospital treatment has increased, but this group is still small (slightly higher than the average among the employees and the self-employed, in large urban areas, in the Mazowieckie and Małopolskie voivodships). The average expenses borne by households taking advantage of such care within the last three months amounted to PLN 394. Only 0.9% of households took advantage of paid medical services in hospitals.

The research results indicate a substantial change in the sources of financing of dental services. In the year 2000, only 14% of households taking advantage of these services in private offices reported that they were financed by the health care fund. At present, there are 54% of households like that. In the year 2000, almost all dental services in private offices were financed by patients. At present, only 66% of households, which attend private dental clinics, pay for the services from their own budgets (out-of-pocket). The research results indicate a substantial difference in the sources of financing of dental care. This data indicates a high level of incorporation of the private dental services into the public health insurance system and a decrease of importance of private means as a source of financing of dental services (such a decrease was not recorded only in large towns and cities).

In the years 2000-2003, the percentage of households reporting that they had to use privately paid health care did not increase; 40% of urban and almost 50% of rural households never used health care services for which they would have to pay, and 26% of households do it as often as previously. It can thus be assumed that despite dissatisfaction of the society with health care financed from public sources, we are not observing any intensified shift to the private health care sector. Expenses for private outpatient treatment borne by households, which took

advantage of such treatment in the last three months, were not much higher in 2003 than 3 years earlier (PLN 294 in 2003 and PLN 275 three years ago; table 4.11). Expenses for privately purchased outpatient treatment services were borne by 33.3% of households. On the other hand, there was a greater increase of expenses associated with purchasing medications (by 70%, and these were borne by 91.7% of households) and with private, officially paid treatment in hospitals (table 4.11). Three years ago, households that paid for such treatment spent PLN 553 per year on average, while at present, the amount of PLN 394 was spent in three months (in the research conducted in 2003, we did not ask about all expenses paid privately throughout the entire year). An increase in expenses for privately paid hospital services is a result of the development of private hospital services and of an increase in the sale of paid services by public hospitals.

The sense of safety in the case of an illness is seriously weakened when it is necessary to give up health care services for various reasons. We examined the scale of withdrawals from health care due to economic barriers and various administrative difficulties. In comparison with the year 2000, a significant improvement in this regard was observed. Three years ago, 19% of households gave up medical treatment, because they had no money; at present, it is less than 9%. Previously, 8% of households gave up treatment due to administrative difficulties, and now it is only 4%. There are significant differences between regions in this regard. Additional charges were most discouraging for households in the Kujawsko-pomorskie, Warmińsko-mazurskie and Podlaskie voivodships, and administrative difficulties – in the Dolnośląskie and Pomorskie voivodships.

Like in the year 2000, the scale of withdrawals due to economic reasons from various types of medical services and medications was analyzed (figure 4.18). With regard to most types of services, the scale of withdrawals has been lower than three years ago. The level of withdrawals from purchasing prescription drugs or drugs recommended by a doctor, for which a prescription was not required, is still high (although slightly lower than 3 years ago) – previously, 36% of households gave up these purchases, now it is 34%.

We asked about what was done, when there was not enough money for medications. 38% of households which did not have enough money, asked the doctor to prescribe less expensive drugs, 45% of households purchased less expensive drugs recommended by a pharmacist, 31% managed to get additional financial means. 61% of households that did not have enough money to purchase drugs prescribed or recommended by a doctor, decided not to purchase them. Disability pensioners and people living on unearned sources more often withdrew from purchasing medications. The average amount spent on medications by retirees is higher than that spent by other groups of households (PLN 322 in 3 months, while the average amount for households that purchased medications, was PLN 271). Despite substantial amounts spent on medications, retirees did not withdraw from purchasing medications due to lack of means more often than other respondents.

Worth noting is the information obtained during research, that about 6% of households having no means to purchase medications took advantage of hospital treatment, during which they received medications without the need to pay for them (this occurred more often in the groups of farmers and households living on unearned sources). On one hand, it is good information, because it indicates that the health care system provides such people with a sense of safety in the case of illness. On the other hand, it is known that hospital treatment is more expensive than outpatient treatment, and therefore ensuring this safety by hospitalization of some patients due to social reasons (lack of own financial means to purchase medications) indicates the lack of rationality of the entire system.

The research results show that the lack of means for purchasing medications at the moment of obtaining information regarding their price at the pharmacy does not always mean withdrawal from consumption of medications altogether. Households cope with such situations in various ways (many behaviors could be pointed out, and therefore the percentages do not add up to one hundred). This does not mean that the economic barrier blocking access to medications in many households should not be subject to particular concern in the state drug policy.

In cities of more than 500 thousand inhabitants and towns between 200 and 500 thousand inhabitants, expenses for medications borne by households are higher than in other cities/towns (table 4.20).

Worth noting is the increase in expenses for medications in the groups of farmers and disability pensioners, which is higher than in other groups (by 114% and 88% respectively, while the average increase is 74%), considering the fact that these two groups spent less than others for this purpose 3 years earlier.

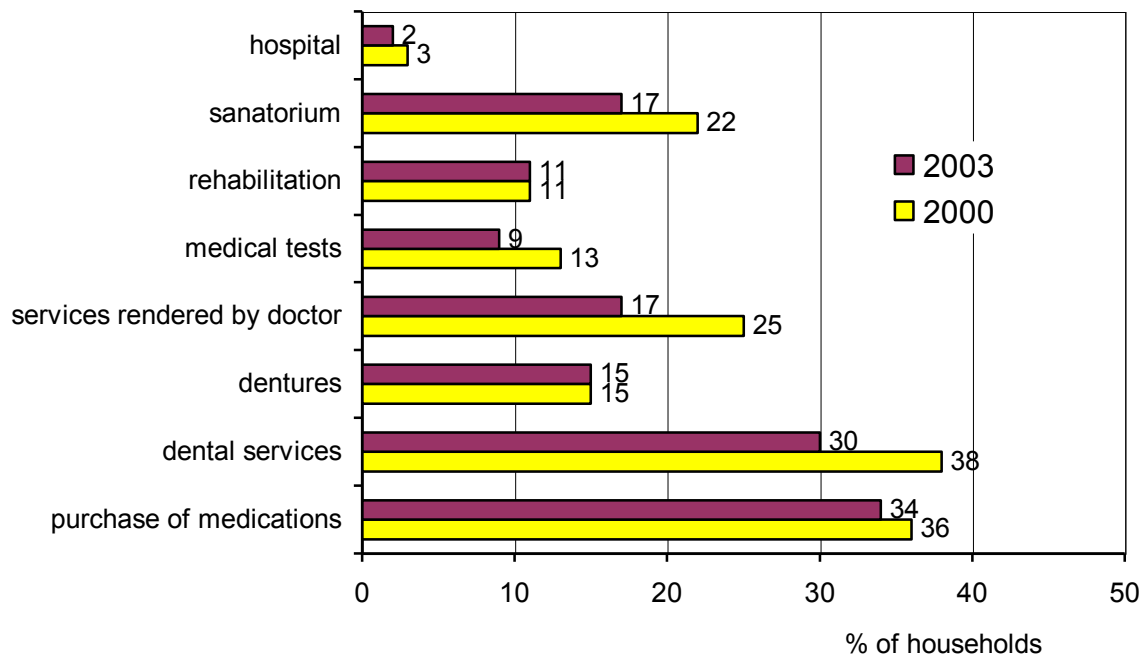


Figure 4.18. Scale of withdrawals of households from taking advantage of selected medical services due to financial difficulties in the years 2000 and 2003

As in the research conducted three years ago, we were interested in the scale and structure of expenses covered by households using their own income with regard to the formal and informal purchase of services. The expenses of households, which paid for such services within the last three months, were calculated per household using any health care services during this time (tables 4.12 and 4.13) and per household belonging to the group of households bearing such expenses (table 4.11). From these calculations, we cannot provide the total amount of expenses, but the comparison of absolute values according to types is interesting.

Expenses for privately paid outpatient treatment services were higher in the households of employees, of the self-employed and in large towns, like the expenses for the so-called gifts of gratitude and genuine gifts of gratitude. Amounts spent by households that admit providing informal payments are lower than the amounts paid by those who take advantage of privately paid services or privately paid hospitalization. The value of the culturally conditioned gifts, provided to express gratitude for health care, constitutes as much as 53% of the value of payments made in order to get better health care services. The research results indicate that in comparison with the previous results, the value of gifts provided by patients or their families has decreased by 10%, and the expenses for the so-called gifts of gratitude increased insignificantly, by only 4%.

Households in which the respondents reported that they had borne expenses for the so-called gifts of gratitude within the previous three months, amounted to 3.3%, and the expenses for genuine gifts of gratitude were borne by 4.2% (91.7% paid for medications, 2.8% covered

various costs associated with hospitalization and 33.3% purchased outpatient treatment services, paid from their own income). The research results show that the group of households, which bear the costs of the so-called gifts of gratitude and the genuine gifts of gratitude, is not big in Poland. Assuming that the intensity of payments made for the so-called gifts of gratitude throughout the last year was the same as within the last three months, and that the percentage of hospitalized people was similar among those paying for the entire year and within the last three months, the following result was obtained: among households taking advantage of hospitalization throughout the entire year, 6.6% of households made payments to get better health care.

Table 4.11. Household expenditure on services rendered by health care units according to socio-economic group in 2003, in the group of households bearing various types of expenses (expenses in the year 2000 are provided in brackets)

Socio-economic group	Expenses of households in the last 3 months in PLN for				
	purchase of outpatient treatment services	Treatment in a private hospital/ a public hospital, in which treatment was paid for	charges in a public hospital (e.g. contributions, payments for services rendered by nurses during night duty hours, purchase of medications for a patient treated at a hospital)	informal payments, that is, the so-called gifts of gratitude	gifts expressing genuine gratitude
Employees	312.47	476.32	164.21	326.01	100.18
Farmers	298.70	-	177.51	97.14	89.16
Employee-farmers	205.84	-	81.95	321.31	111.04
Pensioners	253.34	-	231.84	150.92	144.82
including:	269.88	-	280.30	222.28	156.03
retirees					
disability pensioners	209.95	-	119.70	73.92	116.39
Self-employed	358.92	-	-	263.12	192.67
Living on unearned sources	285.34	-	-	-	-
Total	293.85 (276)	394.21 (553 on annual scale)	181.11 (179)	238.19 (210)	126.07 (160)

- number of cases too small

Table 4.12. Average household expenditure for services of health care units and medications and other pharmaceutical products associated with illness by socio-economic group in 2003, in the group of all households taking advantage of any form of health care and which purchased medications in the last three months.

Socio-economic group	Expenses of households in the last 3 months in PLN for					
	purchase of outpatient treatment services	treatment in a hospital	charges in a public hospital	informal payments, that is, the so-called gifts of gratitude	gifts expressing genuine gratitude	medications and other pharmaceutical products, associated with illness
Employees	158.91	8,34	7.07	10.80	4.98	241.94
Farmers	95.45	1,76	11.44	4.71	5.76	257.54
Employee-farmers	102.58	0,00	6.63	28.61	10.99	272.66
Pensioners	78.21	0,42	10.35	10.28	8.74	314.36
including:	87.42	0,44	12.82	13.22	9.81	322.25
retirees						
disability pensioners	57.75	0,36	4.99	3.66	6.34	296.55
Self-employed	223.91	20,97	1.80	11.13	15.58	273.15
Living on unearned sources	61.47	2,07	4.85	3.35	1.25	193.00
Total	123.77	5,23	8.02	10.72	7.22	271.27

Table 4.13. Household expenditures for services of health care units and medications and other pharmaceutical products associated with illness by class of place of residence in 2003, in the group of all households taking advantage of any form of health care and which purchased medications in the last three months.

Class of place of residence	Expenses of households in the last 3 months in PLN for					
	purchase of outpatient treatment services	treatment in a hospital	charges in a public hospital	informal payments, that is, the so-called gifts of gratitude	gifts expressing genuine gratitude	medications and other pharmaceutical products, associated with illness
Cities over 500k	229.94	4,32	15.01	12.36	18.99	303.68
Towns 200-500k	111.44	3,22	3.98	7.94	5.03	296.45
Towns 100-200k	92.75	0,44	18.59	7.34	2.53	242.26
Towns 20-100k	114.68	6,36	9.27	11.56	5.71	264.02
Towns below 20k	146.12	21,46	3.88	21.65	3.73	272.98
Rural areas	93.58	1,20	4.94	8.05	8.28	259.30
Total	123.77	5,24	8.02	10.72	7.22	271.27

The phenomenon of the expenditure for the purchase of outpatient treatment services in an officially existing market pertains to a much greater number of households than the phenomenon of informal payments. The expenditure for medical treatment of households constitutes mainly expenses for medications and outpatient health care services, and not informal payments. It is also interesting that the number of households which provided culturally conditioned presents as gifts of genuine gratitude, is greater than the number of households, which paid the health care employees for special privileges in access to services or better quality of health care.

A comparison of expenses borne by households within the last three months in 2003 from their own income in PLN, according to type, calculated for households, which used any form of health care services, is presented in tables 4.12 and 4.13. The data constitute average values, characterized by a high level of aggregation, but it can be useful to analyze the structure of expenses borne per single household, which took advantage of health care services. The scale of expenses borne for the official purchase of services is much greater than the scale of expenses associated with gifts of gratitude. This is worth noting, because many believe that households bear health care expenses privately mainly due to the informal payments. The research does not confirm these opinions. The development of the private market of medical services, enabling quick access to health care services, discontinuance of use of the system financed from the public sources, seeking better quality of health care, as well as the opportunity to shift some of the costs of treatment initiated in the private sector to the public sector – these are factors, which cause the expenses for the official purchase of services to be such a significant part of the private expenses.

We might suppose that a society that spends so much money on privately paid health care services and medications, would be eager to secure itself against the risk of bearing these costs by purchasing a private medical insurance policy. We asked the respondents whether they were interested in purchasing such medical insurance to cover the treatment costs, and the amount that the households would be willing to spend for this insurance. In total, 38% of households are not interested in purchasing any kind of medical insurance policy, and 47% of households believe that they cannot afford such expenses. In the remaining group of households (17%), some would be interested in such insurance only if the price of the policy were not higher than PLN 100 per month – 12% would buy such an insurance policy (in the group of the self-employed – 21%, among employees – 16%, but among disability pensioners – only 7%). More households interested in policies worth up to PLN 100, as well as up to PLN 250, can be observed in the case of families with 1 and 2 children, living in large towns. The number of households, which

would be willing to purchase such a policy of a greater value, is minimal and not sufficient for the insurance companies to be able to distribute the risks among a sufficiently large population. It is rather unlikely that a policy worth PLN 100 per month would be able to cover the expenses of medical treatment for all the members of the household, even if all the households, which declared their willingness to purchase such a policy, really bought it. The research results show that the tendency of Polish society to get private insurance against illness is very low. Risks associated with medical treatment and paying for this treatment from public and private sources, despite relatively high expenses borne by households, are not high enough to allow us to expect the development of a private market of voluntary medical insurance. The health care system, although so strongly criticized, does not violate the sense of health care safety during illness or the sense of economic safety of households to the extent that it could persuade them to purchase private insurance policies. The reason is not only the level of affluence of the society, and, in general, the low level of willingness to buy insurance, but also the rules of functioning of the health care system, including the opportunity to shift costs between the private and the public sector, which allows us to maintain low prices on the market of privately paid services (Tymowska, 1999, 2003).

4.7.3. Opinions on health care

We have observed a favorable phenomenon of a significant increase in the percentage of households which had sufficient information regarding the rules of use of health care services. In the year 2000, 58% of households were well informed in this regard, and now – almost 79%. In particular, the share of well-informed households increased among farmers, retirees and disability pensioners. Access to information regarding these rules is a very important variable, which determines the sense of social safety in the case of an illness. Better information definitely increases this sense of safety; at present, it is much better than in the early part of the year 2000, but still insufficient. Knowledge of households with regard to the rules of provision of health care services depends not only on getting familiar with the easily accessible information in oral or paper form, but also on personal experience. Definitely we need time to learn how to operate in the new conditions and to change the behaviors of producers of services and patients in response to the new regulations, introduced in the health care system (Kornai, Eggleston 2001). However, in order to ensure efficiency of learning through experience, the rules cannot be changed too often.

The results obtained with regard to opinions on changes in the fulfillment of health care needs were very similar to those obtained in the year 2000. Almost 40% of households believe that their situation has worsened, and almost 60% - that nothing changed in comparison with the year 2000. Less than 4% believes that the level of fulfillment of their health care needs has improved. Among voivodships, such opinions were most often formulated in the Opolskie, Wielkopolskie and Mazowieckie voivodships.

In comparison with the year 2000, fewer households believe now that access to health care has been hindered (42%, previously 51% of households). Only 8% were unable to assess the situation (previously, the percentage was as high as 32%). Although in large urban areas the level of availability of health care services is high, the number of households believing that access to health care is now more difficult than it used to be is still higher. This can be explained by high expectations of people living in large towns and cities and greater intensity of the use of health care services, less restricted by the limiting of the number of services in contracts with health care funds.

As in the year 2000, the following reasons for the improvement of the situation were mentioned as the most important ones: the ability to book an appointment by phone, the ability to book an appointment in advance, the accessibility of appointments at a specific time, more convenient working hours of doctors. Households living in large towns more often mention a decrease in the time barriers, which suggests the type of preferences of these households and the price of time, which in big towns is higher than elsewhere.

5. INDIVIDUAL QUALITY OF LIFE

Janusz Czapiński

The quality of life is measured in various ways. In general, two types of indicators can be differentiated: objective and subjective. Objective indicators relate to the present life conditions of whole communities (e.g. suicide rate, level of environmental pollution, GDP dynamics, telephones per head and the like) or the life conditions of particular individuals (material, health and social aspects) compared to socially agreed criteria of evaluation: good-bad, better-worse, desirable-undesirable, positive-negative. In this perspective, taking poverty as a socially unacceptable condition and wealth as a desired state, one can make statements about the quality of life of individuals and households on the basis of their relative positions on income/prosperity scales. In the subjective sphere adopted in this research, the quality of life refers to measures such as individual criteria of evaluation. It encompasses assessment of the quality of life as a whole as well as particular domains of life and also life events and problems with psychological adjustment, value system and other personality features (e.g. self-esteem) conditioning life, life activity and the capacity to adapt to social change.

The research sought to encompass the widest possible spectrum of subjective quality of life. It was important not only to show its breakdown, but also a deeper analysis of the relationships with the various objective indicators of the quality of life, with a view to answering two questions: (1) Is the Polish “soul” still as “anchored” in objective life conditions as in the 1990s and 2000? (Czapiński, 1994, 1998, 2004), i.e. does the psychological well-being of Poles still depend to a much greater degree than in other societies on “hard” indicators of the quality of life? (2) To what objective indicators does it primarily relate, i.e. what objective features of a life situation explain substantive portion of the variance in subjective well-being (the classic question about the sources of happiness or the profile of a happy person).

We have found a lot of significant correlations between well-being measures and objective indicators of the respondents’ life situations. Such relationships alone are not a sufficient base to establish dependence between the objective indicators of life conditions and subjective quality of life. Some indicators of life conditions can be mutually correlated (e.g. age with income or education level). Thus, if we look at statistically significant differences in the scope of happiness between different age groups and also between groups of differing education levels, for example, then the question appears to be, what is the key factor differentiating happiness – age or education? To be able to say which of these factors is responsible in determining differences in the quality of life and which only appears to have a relationship due to its correlation with the key factor, we have to go further in our statistical analyses, applying more advanced multi-variable statistics, such as variance or regression analysis. How this type of analysis — sometimes quite spectacularly — can change the picture of relationships worked out on the basis of descriptive and two-variable statistics is presented in more detail later in this work.

Clearly, studies like this cannot pretend to be able reveal all the sources of psychological well-being. Nevertheless, we will try to identify those factors which *appear to* condition the quality of life of Poles and work out which of them can be termed *real*, or perhaps *more direct* and *meaningful* predictors.

To achieve this we carried out multiple regression analyses for particular measures of well-being, adopting 21 variables (predicators) as objective indicators of life condition: age, number of friends, marriage (whether a respondent is married), income per capita in a household, unemployment (whether the respondent is unemployed), gender, religious practices (how many times a month a respondent takes part in religious practices or other meetings of a religious character), overuse of alcohol, smoking cigarettes, use of drugs, level of education, children (whether the respondent has children to provide for), town/city size (including rural areas), living conditions, employment in the private sector, employment in the public sector, being a business

owner, being retired or a disability pensioner, being a farmer, having a status other than unemployed, student, retired person or non-working disability pensioner.

5.1. General psychological well-being

Janusz Czapiński

The measures used to assess psychological well-being largely depend on the definition of well-being. Usually (see Veenhoven, 1994), two basic dimensions of well-being are identified: affective (a balance of emotional experiences – current and over longer periods of time) and cognitive (evaluations of life – current, past and future). This project does not examine purely affective aspects. The indicator closest to it is the four-point scale of happiness (annex: question 40⁹). Also, the scale of depression (question 57) contains positions measuring the state of emotions, and more precisely mood and motivation. The cognitive dimension of well-being was gauged on two scales: the evaluation of life as a whole (question 3) and evaluation of the past year (question 68). Also, which stage of life in the respondent's opinion was the happiest time? To measure this, we used a timeline beginning in 1945 and ending at the date of the research – i.e. 2003). Moreover, following “the onion theory of happiness” (Czapiński, 1991, 2001; Czapiński, Peeters, 1991), we included two more indicators of the psychological of well-being that were deeper than those previously used – the will to live (suicidal tendencies – question 43 and the desire to live – question 56), conditioning over a longer time period one's resistance to a situation-dependent worsening of subjective well-being.

Most of the indicators of general well-being have the form of simple one-question scales. The depression scale is an exception, consisting of 7—different symptoms (question 57) borrowed from Beck's 21-question Depression Inventory (Beck and others, 1961), which is well-known and often used in psychological and epidemiological studies. Such a selection was driven by psychometric reasons: in previous studies they showed a stronger correlation with objective life conditions (especially in terms of age – see Czapiński, 1994, 1998, 2001a). The indicator of depression was the sum of answers to all 7 questions. This indicator can be treated as a measure of the degree of mental inadaptability, reflecting an inability to cope with problems or life stress. In all cases, one should not interpret indicators based on such a scale as a diagnosis of clinical affective disorders in general population¹⁰.

5.1.1. Data from the whole sample.

All the analyses of the quality of life presented below included people aged 18+. In terms of this criterion, therefore, this was a similar population to the previous studies. No significant difference was observed between 2000 and the current study in evaluation of current life, although the average indicated an upward trend, which has continued from 1997 (table 5.1).

Also two indicators of the will to live – the most important aspect of mental well-being – although not the highest in this decade, have remained on a good level for the past five years (tables 5.2 and 5.3).

The depression symptoms remain on a similar level to previous years. The same is true as we consider data on happiness – every year about 2/3 of respondents declared they were very or quite happy. (tables 5.4 and 5.5)

⁹ All the question numbers in chapter 5 refer to the individual questionnaire marked as part II in the appendix.

¹⁰ Detailed analysis of these indicators can be found in: Czapiński (2000b).

Table 5.1. Percentage distribution of answers over time to the question: "How do you feel about your life as a whole?"

Answers	1991 N=4187	1992 N=3402	1993 N=2306	1994 N=2302	1995 N=3020	1996 N=2333	1997 N=2094	2000 N=6403	2003 N=9254
1 delighted	1.1	1.2	0.9	1.2	1.4	1.8	1.5	2.7	3.0
2 pleased	22.4	19.5	18.9	22.9	24.1	24.5	24.3	30.0	31.3
3 mostly satisfied	34.6	34.7	33.3	34.7	35.5	31.9	35.8	35.9	34.7
4 mixed	30.9	32.0	33.5	30.2	29.8	31.1	27.6	24.6	22.2
5 mostly dissatisfied	9.6	10.3	10.9	8.3	7.4	8.6	9.0	7.1	6.7
6 unhappy	1.8	1.7	1.6	2.3	1.5	1.5	1.5	0.9	1.3
7 terrible	0.7	0.6	0.9	0.5	0.3	0.6	0.3	0.7	0.7
Average	3.35	3.38	3.43	3.30	3.23	3.27	3.24	3.09	3.05

Source of data: 1992-1997 — Czapiński, 1998; 2000 — Social Diagnosis 2000 (computer database)

Table 5.2. Percentage distribution of answers over time to the question: "How often in the past months have you felt so depressed that you thought about suicide?"

Answers	1991 N=4187	1992 N=3402	1993 N=2306	1994 N=2302	1995 N=3020	1996 N=2333	1997 N=2094	2000 N=6403	2003 N=9260
1. Very often	1.0	1.0	0.8	1.1	0.7	0.7	1.1	1.2	1.1
2. Quite often	3.6	4.4	3.1	3.0	2.9	2.8	2.5	3.0	3.2
3. Rarely	13.1	13.0	11.0	11.0	10.8	7.7	10.8	9.6	9.9
4. Never	82.2	81.6	85.1	84.9	85.6	88.8	85.5	86.3	85.8

Source of data: 1992-1997 — Czapiński, 1998; 2000 — Social Diagnosis 2000 (computer database)

Table 5.3. Percentage distribution of answers over time to the question: "How strong is your willingness to live these days?"

Answers	1991 N=4187	1992 N=3402	1993 N=2306	1994 N=2302	1995 N=3020	1996 N=2333	1997 N=2094	2000 N=6403	2003 N=9263
I don't want to live at all	0.5	0.9	0.9	0.6	0.2	0.1	0.1	1.0	1.0
1	0.8	1.1	0.7	0.7	0.5	0.6	0.7	0.8	0.7
2	1.7	2.7	2.0	1.6	1.4	1.1	1.0	1.4	1.6
3	4.7	4.7	4.5	4.1	2.7	2.1	2.3	2.5	2.2
4	7.6	8.2	7.3	7.5	4.6	3.8	4.5	5.1	6.9
5	14.1	12.3	12.4	13.2	10.9	9.0	11.2	9.2	6.4
6	14.9	11.7	10.7	11.1	10.3	9.6	10.3	8.8	9.1
7	17.4	15.5	13.9	16.7	16.2	16.4	17.0	11.7	14.4
8	12.5	13.1	14.1	13.6	17.2	17.0	16.0	15.1	13.3
I want to live very much	25.7	30.1	33.6	30.9	36.0	40.3	37.0	44.4	44.5
Average	6.62	6.68	6.86	6.82	7.21	7.41	7.25	7.34	7.32

Source of data: 1992-1997 — Czapiński, 1998; 2000 — Social Diagnosis 2000 (computer database)

Table 5.4. Average level of depression in consecutive studies (for 7 symptoms)

1992 N=3402	1993 N=2306	1994 N=2302	1995 N=3020	1996 N=2333	1997 N=2094	2000 N=6403	2003 N=9050
5.2	5.2	5.0	4.7	4.7	4.5	4.7	4.6

Source of data: 1992-1997 — Czapiński, 1998; 2000 — Social Diagnosis 2000 (computer database)

Table 5.5. Percentage distribution of answers over time to the question: "Taken all together, how would you say things are these days? Would you say that you are....?"

Answers	1991 N=4187	1992 N=3402	1993 N=2306	1994 N=2302	1995 N=3020	1996 N=2333	1997 N=2094	2000 N=6403	2003 N=9266
Very happy	3.7	3.6	4.5	4.4	5.1	6.4	6.3	5.2	5.2
Pretty happy	61.0	54.2	53.7	64.0	59.6	61.3	66.5	59.4	59.8
Not too happy	35.3	42.1	36.4	31.6	35.3	32.3	27.2	35.4	30.5
Unhappy			5.4						4.5

Source of data: 1992-1997 — Czapiński, 1998; 2000 — Social Diagnosis 2000 (computer database)

5.1.2. Data from the panel sample

The results show that in the second measurement, in 2003, people have generally lower well-being than in the first wave in 2000. For instance, the average of a life as-a-whole evaluation in 2000 for respondents who took part in the next wave in 2003 was 3.08, and for respondents who did not take part in the consecutive study, the average reached 3.14 (a statistically significant difference), on the depression scale: 4.63 and 4.74 respectively (an insignificant difference), on the suicidal tendencies scale: 3.80 and 3.79 (an insignificant difference) and on the desire-to-live scale: 7.39 and 7.27 (a statistically significant difference).

Due to this imbalance between the panel and the whole samples, which appeared as a result of the 2003 study, the indicator of well-being dynamics should be based on the panel survey sample. A statistically significant change emerged only in the depression symptoms: in 2003, depression has slightly increased. No significant difference was found for other comparable measures of well-being between two waves.

Table 5.6. A comparison of the variable values of general psychological well-being from two waves — in 2000 and 2003 on a panel sample (of the same respondents)

Variable	Wave	Mean	Standard deviation	Mean difference	t	Degrees of freedom	Significance	Correlation
Depression	2000	4.608	4.091	-0.196	3.78	4513	0.000	0.638*
	2003	4.804	4.087					
Desire to live	2000	7.380	2.008	0.635	1.87	4676	0.061	0.355*
	2003	7.318a	2.080					
Suicidal thoughts	2000	3.800	0.545	-0.020	1.562	4672	0.118	0.218*
	2003	3.820	0.518					
Evaluation of life as a whole	2000	3.080	1.056	0.000	0.89	4685	0.929	0.411*
	2003	3.080	1.054					

a variable recoded from a 1-10 into a 0-9 scale, such as in 2000

* $p < 0.000$

The only statistically significant change for the worse — within the scope of the depression indicator — resulted from the very strong linear relationship of this variable to age, and in the panel sample all the respondents who were subject to the comparison were 3 years older at the time of the second measurement. Thus, it is not possible to draw conclusions on this basis about a drop in Poles' well-being. It can only be said, that on the general level nothing has changed in the psychological well-being of Poles.

It has to be observed that despite the chronological increase in the age of respondents from the panel survey, the happiest time in life clearly moves closer to the present. In 2003 study the most frequently indicated times are 2000-2003, while in the middle of the 1990s those times were indicated by only 21.1%, clearly yielding in this respect to previous decades, especially the 1970's, Gierek's decade (table 5.7). Today, this "golden age" is losing its glamour, even in the eyes of people in their sixties who saw the 1970s as the happiest period of their lives in almost

the same proportion (53%) as later years (49%), whereas in the younger age group the 1980s win over against the 1970s (40:48 percent of indications). In general, people identify the happiest time of their lives with their youth regardless of historic events and the overall context prevailing in the country.

It should not, however, be overlooked that sentiments related to times past depend on the criterion of the evaluation of the quality of life. In contrast to evaluations of the happiest time of life, the distribution of answers to the question “when was it easier to live — under the socialist regime or now?” indicates a strong effect of the “golden age”: 50% of respondents pointed to the socialist regime and only 11.5% to the present. Thus, it seems, an easier life does not translate directly into a happier life.

Table 5.7. Percentage indications of particular decades as the happiest time in the respondents' lives in four consecutive studies on two panel samples (1995-1997 and 2000-2003)

Decade	1995 N=2088	1997 N=2088	2000 N=4516	2003 N=4516
1940s	0.9	1.0	0.8	0.7
1950s	3.5	4.9	3.2	3.1
1960s	13.2	16.8	12.7	8.9
1970s	35.5	37.1	35.2	26.8
1980s	32.2	35.1	36.4	29.8
1990s	21.1	30.2	33.1	30.7
years 2000/ 2000-2003			17.3	32.6

Source of data: 1995-1997 — Czapiński, 1998; 2000 — Social Diagnosis 2000 (computer database)

Note: for the 1940s in all the studies and for the 1990s in the studies in 1995 and in 1997 there was a requirement to indicate at least 2 years, in the 2003 study it sufficed to point to one year between 2000-2003, and for all other decades and the 1990s in the 2 most recent studies— at least 3 years.

Table 5.8. Comparison of the number of years indicated as the happiest in the respondents' lives in particular decades between the surveys in 2000 and 2003 on the panel sample (of the same respondents)

Variable	Wave	Mean	Standard deviation	Mean difference	t	Degrees of freedom	Significance	Correlation
1940s	2000	0.42	0.426	0.006	0.87	4516	0.383	0.184*
	2003	0.35	0.383					
1950s	2000	0.30	1.582	0.010	0.37	4516	0.714	0.275*
	2003	0.29	1.503					
1960s	2000	1.24	3.064	0.363	7.54	4516	0.000	0.341*
	2003	0.87	2.562					
1970s	2000	3.39	4.341	0.718	10.53	4516	0.000	0.395*
	2003	2.68	3.974					
1980s	2000	3.35	4.090	0.471	6.49	4516	0.000	0.252*
	2003	2.88	3.877					
1990s	2000	2.47	3.535	0.130	2.10	4516	0.035	0.276*
	2003	2.34	3.378					

* p < 0.000

5.2. Domain satisfactions

Janusz Czapiński

According to the onion theory of happiness (Czapiński, 1992, 2001a; Czapiński, Peeters, 1991), the most peripheral level of well-being in which one shows the highest rationality and the one which is most sensitive to changes in objective life conditions is the level of domain satisfactions i.e. satisfaction with specific areas and aspects of life. The scale of domain evaluations

encompassed 20 areas and aspects of life, exhausting almost the whole spectrum of interests and activities of the average person (annex, part II, quest. 60). They can be divided into:

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

5.2.1. Data from the whole sample

Satisfaction with most aspects of life is improving, except for the evaluation of the situation of the country and prospects for the future. The most spectacular improvement turned out to be satisfaction with security in the place of residence (table 5.9).

Table 5.9. Average level of satisfaction of particular areas and aspects of life on a 1-6 scale, where "1 = very satisfied....6 = very unsatisfied" over time in the sequence from the most positive to the least positive in 2003.

Satisfaction with:	1991 N=4187	1992 N=3402	1993 N=2306	1994 N=2302	1995 N=3020	1996 N=2333	1997 N=2094	2000 N=6403	2003 N=9200
Children	1.72	1.86	1.77	1.83	1.79	1.73	1.78	1.91	1.88
Marriage	2.13	2.12	2.03	2.11	2.04	1.96	2.01	2.09	2.10
Family	2.11	2.34	2.20	2.23	2.24	2.15	2.13	2.25	2.22
Friends	2.48	2.70	2.54	2.51	2.53	2.50	2.46	2.62	2.52
Place of residence	2.66	2.79	2.67	2.63	2.55	2.60	2.50	2.76	2.65
Sex life	2.50	2.83	2.67	2.69	2.70	2.69	2.66	2.84	2.76
Housing conditions	3.14	3.10	3.13	3.04	3.05	3.04	2.94	3.13	2.88
Work	3.04	3.03	2.96	2.97	2.91	2.88	2.82	3.07	2.99
Level of available goods and services	3.28	3.26	3.13	3.03	2.95	2.91	2.82	3.22	3.05
Level of security in the place of residence	no data	no data	no data	3.61	no data	no data	no data	3.46	3.09
Way of spending leisure	3.20	3.26	3.29	3.26	3.19	3.21	3.05	3.31	3.11
Health	3.18	3.41	3.38	3.28	3.20	3.19	3.15	3.21	3.15
Achievements	3.29	3.48	3.50	3.37	3.32	3.26	3.27	3.33	3.15
Education	3.14	3.28	3.34	3.30	3.29	3.35	3.30	3.41	3.18
Possibility of satisfying one's nutritional needs	no data	no data	no data	no data	no data	no data	no data	3.34	3.23
Moral standards in one's environment	3.56	3.73	3.62	no data	no data	no data	no data	3.56	3.44
Financial situation of the family	4.02	4.17	4.27	4.06	3.89	3.89	3.50	3.99	3.91
Present income of the family	no data	no data	no data	no data	no data	no data	no data	4.19	4.05
Prospects for the future	4.14	4.43	4.34	4.20	3.97	3.95	3.81	4.03	4.18
Situation of the country	4.85	5.05	5.01	4.83	4.64	4.51	4.32	4.62	4.79

Source of data: 1992-1997 — Czapiński, 1998; 2000 — Social Diagnosis 2000 (computer database)

Note: the average difference between two means higher than 0.1 is statistically significant on the level of $p < 0.01$; no data; size of the sample for particular satisfaction categories may change due to some aspects that did not concern all the respondents.

5.2.2. Data from the panel sample

The comparison of the domain satisfactions in 2000 and 2003 on the panel sample once again confirms the picture revealed by table 5.9: in half of the areas (ten) satisfaction increased significantly; in two it fell significantly, and in the other eight aspects it did not change (*see* table 5.10). The highest rise in satisfaction, by about 7% , was recorded in the area of security in the place of residence. Much less of an increase in comparison to 2000, from approx. 4% to 1%, but also to a statistically significant degree, was shown in respondents' satisfaction with housing conditions, way of spending leisure, availability of goods and services, one's own education, place of residence, moral standards in one's environment, one's own achievements in life, social contacts and relationships with the closest family. Satisfaction with the situation in the country and with prospects for the future suffered a drop of approx. 4% (table 5.10).

Table 5.10. Change of domain satisfactions between years 2000 and 2003.

Satisfaction with:	Mean difference	Level of significance
Level of security in the place of residence	0.340	0.000
Housing conditions	0.196	0.000
Way of spending leisure	0.155	0.000
Level of available goods and services	0.147	0.000
Education	0.138	0.000
Place of residence	0.129	0.000
Moral standards in one's environment	0.127	0.000
Achievements	0.106	0.000
Friends	0.063	0.001
Current income of the family	0.056	ns
Family	0.045	0.013
Possibility of satisfying one's nutritional needs	0.036	ns
Financial situation of the family	0.017	ns
Work	0.010	ns
Sex life	-0.004	ns
Children	-0.006	ns
Marriage	-0.027	ns
Health	-0.044	ns
Situation of the country	-0.192	0.000
Prospects for the future	-0.221	0.000

Note: positive value means the increase in satisfaction, while the negative – a drop; ns – means that the change is not statistically significant; on average about 4500 cases.

5.3. The importance of the selected objective indicators of life condition for the subjective quality of life

Janusz Czapiński

To answer the question which of the so-called objective predicators (objective factors differentiating the life situations of respondents) have a real impact on their psychological well-being, and which ones have just an apparent impact resulting from their relationship with a predictor, thus to differentiate real conditioning of differences in well-being, we conducted a multiple regression analysis taking in a much richer set of objective indicators of quality of life than those included in the tables presenting answer distribution (voivodships were omitted). The data below illustrate the results of the multiple regression analysis for particular measures of general psychological well-being and domain satisfactions (tables 5.11-5.16).

The most important factor explaining the overall well-being of Poles in this study turns out to be age. The older one is, the higher the possibility that one is in a bad psychological condition, especially where symptoms of depression are concerned. In the case of depression, age explains specifically (after controlling effects of all other factors) over 17% of variance, and without excluding other factors about 40% (an extraordinary value in social research). What is more, in contrast to western societies (e.g. USA, Canada), in Poland the relationship (several times stronger than it is in those countries) between age and depression is positive. In the United States, younger people more frequently suffer from depression than older people¹¹ and in Poland the situation is the reverse: the level of depression increases with just under every year of life¹².

The second most important factor of well-being is the number of friends, which can be treated as a factor of social support. The post-1989 transformations damaged some basic social bonds and it became even more important, especially when confronted with serious personal problems, to have the sense of unconditioned kindness and help from other people. Friends in need are friends indeed. This research proves just that. The role of friends is particularly important when the basic dimension of well-being — the will to live — is analyzed. It is mainly friends who help stave off suicidal thoughts and help maintain the will to live.

In all 30 measures of mental well-being (overall and partial satisfaction) the most important factor is the number of friends. The situation was similar in 2000, but at that time there was a sudden drop in the number of friends. Poles are again becoming a sociable society. The second most important factor is age, which in comparison with 2000 was ranked third. The third factor is income per capita (which fell from second position). Unemployment as a factor weakening well-being has stayed in fourth position, while religious practices and marriage, as factors underpinning mental health, were, respectively, ranked in 5th and 6th positions.

¹¹ In five studies from different parts of the world, encompassing 39,000 people, it has been established that young people have a much higher risk of experiencing at least one depressive episode than older generations (Nesse and Williams, 1994); this is explained by civilization processes (the risk of depression increases with the level of economic development of the country), which have much stronger impact on young people than on older generations growing up in the era of fear after World War II.

¹² We do not know to what to attribute this Polish phenomenon of the reversed dependency between age and depression in comparison with developed countries. It could be due to the generational differences in adaptation skills: people who practiced effective rules of living for a long time under the previous regime, have now greater difficulties with adapting to new rules of effective functioning in the new system; older people feel more lost and less desired (on the labor market) in the new realities. Why is the reverse relationship between age and depression so strong? People who are now 30 years old became adults in post-communist Poland, and similarly to 30-year olds in 1992 they are much more depressive than 20-year olds. This is the biggest mystery of Poles and the systemic transformation.

Table 5.11. Percentage of variance of particular indicators of general well-being explained specifically by particular predictors after excluding effects of other predictors, and the rank of particular predictors due to their average percentage of explained variance of all indicators of general well-being (data in brackets from 2000)¹.

Predictor	Evaluation of life as a whole	Feeling happy	Self-esteem ²	Suicidal thoughts	Desire to live	Evaluation of the past year	Depression	Predictor's average value	Rank of a predictor
Age	1.4 [1.4]	1.9 [1.8]	0.4 [1.1]	0 [0]	0.7 [1.3]	0.7 [1.0]	18.7 [17.4]	3.4 [3.4]	1 [1]
Number of friends	1.6 [1.7]	0.9 [1.0]	2.0 [1.3]	0.6 [1.2]	1.9 [2.5]	0.7 [1.5]	1.3 [1.8]	1.3 [1.6]	2 [2]
Income per capita	1.4 [1.5]	2.8 [1.9]	0.2 [2.6]	0.8 [0.4]	1.0 [1.2]	2.4 [1.2]	0.8 [1.0]	1.3 [1.4]	2 [4]
Marriage	4.0 [5.2]	1.4 [1.7]	0.1 [1.9]	0 [0.4]	0.6 [0.6]	0.7 [0.3]	0.2 [0.4]	1.0 [1.5]	3 [3]
Unemployment	1.1 [2.4]	1.2 [1.2]	1.2 [2.3]	0.1 [0.2]	0.1 [0.3]	1.4 [1.5]	0.1 [0]	0.7 [1.1]	4 [5]
Gender	0 [0]	0 [0]	0 [0]	0.3 [0.4]	0.1 [0.5]	0 [0]	3.8 [3.0]	0.6 [0.6]	5 [6]
Alcohol abuse	0.5 [0.5]	0.5 [0.3]	0.5 [0.3]	0.7 [0.7]	0.7 [0.9]	0.2 [0.4]	0.7 [0.4]	0.6 [0.5]	5 [7]
Being retired	0.7 [0.1]	0.6 [0.2]	0.3 [0]	0.1 [0.4]	0.1 [0]	0.5 [0.4]	0.5 [1.8]	0.4 [0.4]	6 [8]
Religious practices	0.4 [0.6]	0.8 [0.5]	0.3 [0.9]	0.1 [0.4]	0.3 [0.5]	0.2 [0.6]	0.2 [0.3]	0.3 [0.5]	7 [7]
Being other professionally inactive	0.6 [0.6]	0.5 [0.2]	0.6 [0.4]	0 [0]	0 [0]	0.6 [0]	0 [0]	0.3 [0.2]	7 [10]
Being a farmer	0.5 [0.1]	0.5 [0.3]	0.2 [0.2]	0 [0]	0 [0]	0.6 [0.4]	0 [0]	0.3 [0.1]	7 [11]
Employment in private sector	0.5 [0]	0.2 [0]	0.1 [0]	0 [0]	0 [0]	0.2 [0]	0.1 [0]	0.2 [0]	8 [13]
Being a business owner	0.4 [0]	0.3 [0.2]	0.2 [0.3]	0 [0]	0 [0]	0.3 [0]	0 [0]	0.2 [0.1]	8 [11]
Education	0.4 [0.4]	0.1 [0]	0 [0]	0 [0]	0.1 [0.5]	0 [0]	0.9 [0.7]	0.2 [0.2]	8 [10]
Smoking cigarettes	0.2 [0.4]	0.3 [0.5]	0.1 [0.3]	0 [0.4]	0.1 [0]	0.2 [0.5]	0 [0]	0.1 [0.3]	9 [9]
Being a disability pensioner	0.2 [0.4]	0.1 [0]	0 [0.2]	0 [0]	0 [0]	0.1 [0]	0 [0]	0.1 [0.1]	9 [11]
Employment in public sector	0.5 [0]	0.2 [0]	0.1 [0]	0 [0]	0 [0]	0.1 [0]	0.1 [0]	0.1 [0]	9 [13]
Housing conditions	0 [0]	0.2 [0]	0 [0]	0.1 [0]	0.1 [0]	0.1 [0]	0 [0.1]	0.1 [0]	9 [12]
Taking drugs	0 [0]	0 [0]	0 [0]	0.1 [0]	0.1 [0]	0 [0]	0.2 [0]	0.1 [0]	9 [13]
Class of place of residence	0 [0]	0 [0]	0.2 [0]	0.2 [0]	0 [0]	0.4 [0]	0 [0]	0.1 [0]	9 [13]
Children to provide for	0 [0]	0 [0.2]	0 [0]	0 [0]	0 [0]	0 [0]	0.1 [0]	0 [0]	10 [12]
Overall percentage of explained variance (adjusted R-square)	14.9 [18.2]	14.1 [12.8]	7.9 [13.9]	4.6 [5.3]	7.8 [11.2]	10.6 [11.4]	46.8 [41.9]		

¹ Percentage of variance was calculated as a square of the partial correlation multiplied by 100.

² In 2000 instead of self-esteem, the scale of satisfaction with life was used.

Table 5.12. Percent of variance of satisfactions with social aspects of life specifically explained by particular predictors after excluding effects of other predictors and the rank of predictors for particular aspects (data in brackets from 2000)¹.

Predictor	Satisfaction with relationships within the family	Rank	Satisfaction with relationships with friends	Rank	Satisfaction with marriage	Rank	Satisfaction with children	Rank	Satisfaction with sex life	Rank
Age	0 [0]		0.5 [0.4]	2 [2]	1.3 [0.9]	2 [4]	1.5 [1.3]	1 [1]	5.9 [5.2]	1 [1]
Number of friends	1.9 [2.2]	1 [1]	2.8 [2.4]	1 [1]	0.7 [1.2]	3 [3]	0.4 [0.5]	2 [2]	0.7 [0.6]	4 [3]
Marriage	0.3 [0]	4	0 [0]		2.7 [2.8]	1 [1]	0.3 [0.2]	3 [4]	2.7 [3.7]	2 [2]
Income per capita	0.1 [0.1]	5 [5]	0 [0]		0.2 [0.2]	6 [6]	0 [0.2]	[4]	0.1 [0.1]	[5]
Unemployment	0 [0]		0.2 [0.3]	3 [3]	0 [0]		0 [0]		0.1 [0]	6
Gender	0.1 [0]	5	0.1 [0]	4	0.5 [1.4]	5 [2]	0.4 [0]	2	0 [0.3]	[4]
Religious practices	0.4 [0.9]	3 [2]	0.1 [0.3]	4 [3]	0.5 [0.4]	5 [5]	0.2 [0.2]	4 [4]	0.1 [0.1]	6 [5]
Alcohol abuse	0.5 [0.7]	2 [3]	0 [0]		0.6 [1.2]	4 [3]	0.1 [0.3]	5 [3]	1.0 [0.6]	3 [3]
Being retired	0 [0]		0.1 [0]	4	0 [0]		0 [0]		0.2 [0.1]	5 [5]
Smoking cigarettes	0.1 [0.1]	5 [5]	0 [0]		0 [0.2]		0 [0]		0 [0]	
Education	0 [0]		0.1 [0.3]	4 [3]	0 [0]		0 [0.2]	[4]	0 [0]	
Being other professionally inactive	0.1 [0]	5	0.2 [0.2]	3 [4]	0 [0]		0 [0]		0.1 [0]	6
Being a disability pensioner	0 [0]		0.1 [0.1]	4 [5]	0 [0]		0 [0.1]	[5]	0 [0]	
Being a business owner	0 [0]		0.1 [0]	4	0 [0]		0 [0]		0 [0]	
Being a farmer	0 [0]		0.2 [0]	3	0 [0.2]	[6]	0 [0]		0.1 [0]	6
Children to provide for	0 [0]		0.1 [0]	4	0 [0]		0 [0]		0 [0.3]	[4]
Housing conditions	0 [0]		0 [0]		0 [0.2]	[6]	0,3 [0,1]	3 [5]	0 [0]	
Taking drugs	0 [0.2]	[4]	0 [0.2]	[4]	0 [0.1]	[7]	0 [0.2]	[4]	0 [0]	
Class of place of residence	0.1 [0]	5	0.1 [0]	4	0 [0]		0 [0.1]	[5]	0 [0]	
Employment in private sector	0 [0]		0.2 [0]	3	0 [0]		0 [0]		0 [0]	
Employment in public sector	0 [0]		0.1 [0]	4	0 [0.1]	[7]	0 [0]		0,1 [0]	6
Overall percentage of explained variance (adjusted R-square)	4.4 [5.8]		5.7 [5.1]		6.7 [7.7]		3.8 [4.2]		12,0 [12,7]	

¹ Percentage of variance was calculated as a square of the partial correlation multiplied by 100.

Table 5.13. Percentage of variance of satisfactions with material aspects of life explained specifically by particular predictors after excluding effects of other predictors and the rank of predictors for particular aspects (data in brackets from 2000¹).

Predictor	Satisfaction with family financial situation	Rank	Satisfaction with current family income	Rank	Satisfaction with providing for one's nutritional needs	Rank	Satisfaction with one's housing conditions	Rank	Satisfaction with the level of available goods and services	Rank
Age	0.5 [0.3]	3 [4]	0.8 [0.4]	2 [3]	0.9 [1.0]	2 [3]	0 [0]		0 [0]	
Number of friends	0.5 [0.8]	3 [3]	0.4 [0.4]	4 [3]	0.4 [0.2]	4 [6]	0.2 [0.2]	5 [4]	0.1 [0.1]	4 [3]
Marriage	0.3 [0.2]	5 [5]	0.3 [0.2]	5 [4]	0.1 [0]	7	0.6 [0.5]	2 [2]	0 [0]	
Income per capita	9.4 [6.7]	1 [1]	9.9 [8.1]	1 [1]	6.7 [5.7]	1 [1]	0.2 [0]	5	0.6 [0.8]	2 [1]
Unemployment	0.7 [1.0]	2 [2]	0.6 [1.2]	3 [2]	0.9 [1.3]	2 [2]	0.6 [0.5]	2 [2]	0.1 [0.2]	4 [2]
Gender	0 [0.1]	[6]	0 [0]		0.1 [0]	7	0 [0]		0 [0]	
Religious practices	0.2 [0]	6	0.2 [0]	6	0.1 [0]	7	0.3 [0.5]	4 [2]	0.1 [0.2]	4 [2]
Alcohol abuse	0 [0]		0 [0]		0 [0]		0.1 [0]	6	0 [0]	
Being retired	0.4 [0.1]	4 [6]	0.3 [0]	5	0.5 [0]	3	0.3 [0.1]	4 [5]	0 [0]	
Smoking cigarettes	0.3 [0.1]	5 [6]	0.4 [0.1]	4 [5]	0.5 [0.3]	3 [5]	0.1 [0.3]	6 [3]	0 [0]	
Education	0 [0]		0 [0]		0.1 [0.2]	7 [6]	0.1 [0.2]	6 [4]	0 [0]	
Being other professionally inactive	0.2 [0.1]	6 [6]	0.3 [0.2]	5 [4]	0.5 [0.2]	3 [6]	0.5 [0.3]	3 [3]	0.1 [0]	4
Being a disability pensioner	0 [0.1]	[6]	0 [0.2]	[4]	0.2 [0.1]	6 [7]	0.3 [0.1]	4 [5]	0 [0]	
Being a business owner	0.1 [0.3]	[4]	0 [0.2]	[4]	0.1 [0.4]	7 [4]	0.5 [0.1]	3 [5]	0 [0]	
Being a farmer	0.3 [0.1]	5 [6]	0.3 [0]	5	0.3 [0]	5	0.6 [0]	2	0.2 [0.1]	3 [3]
Children to provide for	0.1 [0.1]	7 [6]	0.1 [0]	7	0.3 [0.3]	5 [5]	0 [0.1]	[5]	0.1 [0]	4
Housing conditions	0.1 [0]	7	0.3 [0]	5	0.1 [0]	7	4.3 [5.6]	1 [1]	0 [0]	
Taking drugs	0 [0]		0 [0.1]	[5]	0.1 [0]	7	0 [0]		0 [0]	
Class of place of residence	0.1 [0.3]	7 [4]	0.3 [0.1]	5 [5]	0.3 [0.2]	5 [6]	0.3 [0]	4	1.1 [0.8]	1 [1]
Employment in private sector	0.3 [0]	5	0.2 [0]	6	0.4 [0]	4	0.6 [0]	2	0.1 [0]	4
Employment in public sector	0.2 [0]	6	0.1 [0]	7	0.3 [0]	5	0.5 [0]	3	0 [0]	
Overall percentage of explained variance (adjusted R-square)	18.0 [14.8]		17.7 [15.7]		15.5 [15.6]		10.0 [10.8]		4.5 [3.9]	

¹ Percent of variance calculated as a square of partial correlation multiplied by 100.

Table 5.14. Percentage of variance of satisfactions with life conditions and health accounted for specifically by particular predictors after excluding effects of other predictors and the rank of particular predictors for particular indicators (data in brackets from 2000)¹.

Predictor	Satisfaction with the situation in the country	Rank	Satisfaction with the town one lives in	Rank	Satisfaction with the moral standards of the people around	Rank	Satisfaction the state of security	Rank	Satisfaction with one's health	Rank
Age	0.2 [0.4]	3 [2]	0.4 [0.3]	2 [4]	0.2 [0.2]	3 [2]	0.3 [0.3]	2 [3]	7.0 [3.8]	1 [1]
Number of friends	0.3 [0.1]	2 [4]	0.3 [0.3]	3 [4]	0.6 [0.6]	1 [1]	0.1 [0.1]	4 [4]	0.8 [0.4]	3 [4]
Marriage	0 [0.1]	[4]	0 [0]		0 [0]		0.2 [0]	3	0.1 [0.2]	5 [5]
Income per capita	0.5 [1.1]	1 [1]	0 [0]		0 [0]		0 [0]		0.2 [0.4]	4 [4]
Unemployment	0.1 [0.1]	4 [4]	0 [0.1]	[5]	0 [0]		0 [0]		0 [0]	
Gender	0 [0]		0 [0]		0 [0]		0.1 [0]	4	0.8 [0.5]	3 [3]
Religious practices	0 [0]		0.2 [0.5]	4 [2]	0 [0]		0 [0]		0.2 [0.1]	4 [6]
Alcohol abuse	0 [0]		0 [0]		0 [0]		0 [0]		0.1 [0.1]	5 [6]
Being retired	0 [0]		0 [0]		0 [0]		0 [0]		1.5 [2.1]	2 [2]
Smoking cigarettes	0 [0]		0 [0]		0 [0]		0 [0]		0.1 [0]	5
Education	0 [0]		0.3 [0]	3	0.1 [0]	4	0.2 [0.4]	3 [2]	0.2 [0]	4
Being other professionally inactive	0.1 [0]	4	0 [0]		0.1 [0]	4	0 [0]		0.1 [0]	5
Being a disability pensioner	0 [0]		0 [0]		0 [0]		0 [0]		0 [0.4]	[4]
Being a business owner	0 [0]		0 [0]		0 [0]		0 [0]		0.1 [0]	5
Being a farmer	0 [0]		0 [0]		0 [0]		0.1 [0]	4	0.1 [0]	5
Children to provide for	0 [0]		0 [0]		0 [0]		0 [0]		0.1 [0]	5
Housing conditions	0.1 [0.2]	4 [3]	0.2 [0.4]	4 [3]	0 [0]		0 [0.1]	[4]	0 [0]	
Taking drugs	0 [0]		0 [0]		0 [0]		0.2 [0]	3	0 [0]	
Class of place of residence	0 [0]		0.5 [0.6]	1 [1]	0.5 [0.1]	2 [3]	5.0 [3.4]	1 [1]	0 [0.2]	[5]
Employment in private sector	0 [0]		0 [0]		0 [0]		0 [0]		0 [0]	
Employment in public sector	0 [0]		0 [0]		0.1 [0]	4	0 [0]		0 [0]	
Overall percentage of explained variance (adjusted R-square)	1.6 [3.0]		4.2 [4.2]		2.0 [1.2]		7.9 [5.7]		24.3 [23.3]	

¹ Percentage of variance calculated as a square of partial correlation multiplied by 100.

Table 5.15. Percentage of variance of satisfactions with one's own achievements, prospects in life, and lifestyle accounted for specifically by particular predictors after excluding the effect of other predictors, and the rank of predictors for particular aspects (data in brackets from 2000)¹.

Predictor	Satisfaction with one's own achievements	Rank	Satisfaction with prospects for the future	Rank	Satisfaction with one's own education	Rank	Satisfaction with work	Rank	Satisfaction with one's way of spending leisure time	Rank
Age	0.3 [0.5]	10 [4]	0.9 [0.7]	2 [4]	0 [0.1]	[6]	0 [0]		0.5 [0.2]	2 [4]
Number of friends	2.3 [1.2]	2 [2]	0.8 [0.8]	3 [3]	1.1 [1.0]	4 [3]	0.2 [0.2]	4 [4]	1.6 [0.8]	1 [1]
Marriage	0.2 [0.1]	11 [8]	0.3 [0.1]	5 [8]	0 [0]		0 [0.1]	[5]	0 [0]	
Income per capita	0.8 [0.8]	4 [3]	1.8 [2.1]	1 [1]	0 [0]		0.8 [0.3]	1 [3]	0.2 [0.3]	4 [3]
Unemployment	2.6 [2.7]	1 [1]	0.5 [1.2]	4 [2]	2.1 [1.9]	2 [2]	0.6 [0.5]	2 [2]	0.2 [0.4]	4 [2]
Gender	0 [0]		0 [0]		0.2 [0.3]	9 [5]	0.3 [0]	3	0 [0]	
Religious practices	0.1 [0.2]	12 [7]	0.1 [0]	7	0.3 [0.1]	8 [6]	0.1 [0.2]	[4]	0.2 [0.1]	4 [5]
Alcohol abuse	0.2 [0.1]	11 [8]	0 [0]		0.1 [0]	10	0 [0]		0.1 [0]	5
Being retired	0.7 [0]	6	0.1 [0.1]	7 [8]	0.8 [0]	6	0 [0]		0.1 [0]	5
Smoking cigarettes	0.2 [0.3]	11 [6]	0.1 [0.2]	7 [7]	0 [0]		0 [0]		0.1 [0]	5
Education	0.4 [0.3]	9 [6]	0 [0]		11.0 [10.2]	1 [1]	0 [0]		0 [0]	
Being other professionally inactive	1.5 [1.2]	3 [2]	0.2 [0.4]	6 [4]	1.4 [1.0]	3 [3]	0.3 [0]	3	0.2 [0.1]	[5]
Being a disability pensioner	0.1 [0.4]	[5]	0 [0.5]	[5]	0.5 [0.7]	7 [4]	0 [0]		0 [0.1]	[5]
Being a business owner	0.6 [0.3]	7 [6]	0 [0]		1.1 [0]	4	0 [0.6]	[1]	0.1 [0.1]	5 [5]
Being a farmer	0.8 [0]	5	0.1 [0]	7	1.1 [0.1]	4 [6]	0.2 [0]	4	0.4 [0.2]	3 [4]
Children to provide for	0 [0]		0.2 [0.1]	6 [8]	0.2 [0]	9	0 [0.2]	[4]	0.1 [0.1]	[5]
Housing conditions	0 [0.2]	[7]	0 [0]		0 [0.1]	[6]	0 [0]		0 [0]	
Taking drugs	0.1 [0]	12	0 [0]		0.1 [0]	10	0 [0]		0 [0]	
Class of place of residence	0.1 [0.1]	12 [8]	0 [0]		0 [0]		0 [0]		0 [0]	
Employment in private sector	0.7 [0]	6	0 [0]		1.4 [0]	3	0 [0.3]	[3]	0.1 [0.1]	5 [5]
Employment in public sector	0.5 [0.2]	8 [7]	0 [0]		0.9 [0]	5	0 [0.5]	[2]	0.1 [0]	5
Overall percentage of explained variance (adjusted R-square)	11.6 [10.8]		6.9 [9.0]		19.0 [18.7]		7.4 [6.2]		4.7 [3.8]	

¹ Percentage of variance calculated as a square of a partial correlation multiplied by 100.

Table 5.16. Ranking of predictors by their specific importance in explaining 30 overall and detailed aspects of well-being.

Overall rank ¹	Predictor	Ranks which each predictor gained in accounting for variance of different indicators of well-being ²	Predictor's value (sum of points of the reverse of the ranks: 10 minus rank)	Remarks about the direction of relationship
1 [1]	Number of friends	111111222223333333334444444455	192	The more friends, the better the sense of well-being
2 [3]	Age	1111112222222222333335	174	The younger the age, the better the sense of well-being
3 [2]	Income per capita	111111111222344455567	152	The higher the income, the better the sense of well-being
4 [4]	Unemployment	12222223344444445669	135	The unemployed have a poor sense of well-being
5 [5]	Religious practices	344444445666666777888	108	The more religious, the better the sense of well-being
6 [6]	Marriage	11223333345555788	102	Being married gives a better sense of well-being, especially in comparison with the divorced
6 [7]	Being other professionally inactive	333333444455566678	102	Negative relationship
7 [15]	Being a farmer	2333444455556778	93	Negative relationship
8 [14]	Being retired	23444555556666777	92	Negative relationship
9 [8]	Class of place of residence	1112445555779	79	The smaller the town, the better the indicators, apart from satisfaction with the place of residence, availability of goods and services and relationships with people /friends
9 [9]	Alcohol abuse	222344555566778	79	People who abuse alcohol have a low sense of well-being
10 [13]	Gender	223444555579	65	Women have lower indicators of well-being
11 [11]	Education	1334444567889	64	Basically a positive relationship, especially with indicators of general well-being; however, the more educated are less satisfied with the state of their security and with the moral standards of the people around them
12 [19]	Employment in private sector	2334455667889	60	Negative relationship except for depression (lower in this group)
13 [10]	Smoking cigarettes	3455556778999	53	Negative relationship
14 [18]	Employment in public sector	34455667788899	51	Negative relationship, except for depression (lower in this group)
15 [12]	Housing conditions	1344567789	46	The better the housing conditions, the better the well-being
16 [10]	Being a business owner	34456777889	42	Negative relationship
17 [17]	Children to provide for	445567799	34	Negative relationship except for depression (lower among parents)
18 [16]	Taking drugs	556789	20	Negative relationship except for the satisfaction with the state of security in the place of residence
19 [8]	Being a disability pensioner	4467899	19	Negative relationship

¹ The rank of the factor in 2000 shown in brackets.² Ranks higher than 9 were omitted.

5.4. Personal finances

Tadeusz Szumlicz

The idea of personal finances is not new, but in Poland it is hardly ever used and in general is understood in a narrow sense as the financial means a respondent currently owns (a type of “pocket money”). Which necessitates an explanation of the understanding we have adopted in this study. The first explanation concerns the “environment” of personal finances. It needs to be understood as finances related to the household the respondent is a member of. There are few situations when one’s personal finances are independent of the resources of the household to which one belongs (a family household creates a specific financial environment). Personal finances also denote contact with financial institutions which one can or sometimes has to use and which one has – greater or lesser – trust in (expressed in the fact e.g. that one has a bank account, individual personal life insurance with an insurance company). A second explanation concerns the “balance” of personal finances. Personal finances are made up of money (savings) at one’s disposal. Current money means real means of consumption, thus satisfying specific individual needs and those of groups within a household. It is important to note here that monetary income is not only made up of income from one’s own work, but also income from different social security entitlements, benefits from owned resources and investments made. One should also note that loans and credit can be used to satisfy consumption needs. On the consumption side of the balance sheet we definitely need to include costs related to a household’s material assets, for example: rent, homeowner and motor insurance. The third explanation concerns managing personal finances. It is further worth noting that personal finances contain in themselves elements of economic behavior: making choices and decisions in specific – more or less complicated – situations in relation to acquiring income, investing, and individual and/or group consumption now and in the future.

5.4.1. Current income and that expected in two years

Janusz Czapiński

Current personal income is the most colloquial understanding of personal finances. This is what we start with. Average declared personal monthly net income for the last quartile amounted to 858 PLN. In relation to official statistics from the CSO (GUS) calculated for gross income, this is approximately 15% lower. The distribution of average income across social groups is varied. For instance, people with higher and post-secondary education declare 2.7 times higher income than people with primary education. The smallish difference between self-employed (1428 PLN) and public and private sector employees (1134 PLN) is striking. The unemployed (i.e. those registered at labor offices, those not working and not earning more than 850 PLN a month and looking for work) have an average income not exceeding 200 PLN. In terms of voivodships, the highest incomes are earned by inhabitants of Pomorskie, Mazowieckie and Śląskie voivodships, and the lowest in Podkarpackie, Warmińsko-mazurskie, Lubelskie and Kujawsko-pomorskie voivodships. The bigger the place of residence, the higher the average incomes: inhabitants of cities of over 500,000 people have incomes 1.7 times higher than inhabitants of rural areas.

A similar picture is presented by the distribution of indicators of people earning the highest incomes and therefore paying the highest taxes. The percentage of people with higher and post-secondary education exceeding the second tax threshold is over 11 times higher than the percentage of potential 30% and 40% band tax payers in the group of people with primary education. This time, the percentage of self-employed with incomes placing them in the 30% and 40% tax brackets is twice as high as the percentage of such people among employees (30.4 compared to 15.5).

We also asked about expected personal net incomes over the next two years (i.e. at the end of the first year of Poland's membership of the EU). We wanted to check in this way who expects greater financial gains in the first period of Poland's membership of the EU.

Respondents expect their personal incomes to grow after EU accession by about 527 PLN, on average by 59.4%. Such expectations are strongly differentiated, both in terms of amount and percentage change in comparison to current income. The amount of expected income is determined mainly by the level of current income and factors which are closely correlated with incomes: the higher the income, the higher the expected incomes. But the volume of change, and especially the percentage indicator, are down to slightly different socio-demographic factors, and in relation to the current financial situation the relationship is partly reversed: the lower the income, the higher percentage of expected growth increase. The greatest financial improvements after Poland joins the EU are expected by the unemployed, (176% increase), the youngest people (under 24 years old — an expected growth of about 143%), and especially students (an increase of 235%) and farmers (126%). Self-employed are less optimistic, expecting a doubling of their current incomes. Retired and generally older people (over 60 years old) expect the least from this structural change. For the first group it is 22%. Moderate optimism is shown by disability pensioners (45%) and public sector employees (43%). Slightly greater optimism is evidenced by private sector employees (an expected increase of 66%).

Table 5.17. Percentage difference between the period in two years' time and current net income

Level of education	Average	Standard deviation
PhD degree and higher	10.8142	35.04444
Master's degree	51.8193	91.30501
Bachelor's degree	62.9998	113.26465
Grammar school	63.7114	100.27178
Vocational secondary	58.7349	106.86015
Comprehensive secondary	78.6477	144.28147
Vocational primary	66.2676	115.38281
Junior high education	46.2419	95.00681
Primary	52.0505	112.25619
No education	22.6810	39.10303

It may appear strange that there is no connection between hope of financial advancement and the level of respondents' education: the highest optimism is shown by graduates of vocational schools, and least by people with primary education, just followed by university graduates. This realism of the better educated is even clearer when we look at the group of higher education graduates. People with PhDs and higher degrees (table 5.17) have the lowest financial expectations in connection with Poland's accession to the EU (on average only 11% would expect higher incomes). This would appear not to reflect fear of competition from other scientists and academics in the EU, but is more connected with precise predictions as to what will happen in the first year of Poland's membership in the EU. Other groups are simply less aware, which is the main reason for their belief that the rich will help them get richer quickly.

Men expect a higher percentage increase of income than do women, while the inhabitants of larger towns and cities and inhabitants of rural areas have greater optimism in comparison to inhabitants of medium-sized and small towns.

Overall, as results from statistical analysis (of variance and multiple regression) indicate, the factors significantly differentiating the degree of pay expectations at the end of the first year of Poland's membership of the EU are:

- age (a negative linear relationship: the older the respondent, the more modest hopes with regard to average difference and percentage change of income);
- education (a curve dependence: the lowest expectations in the best and worst educated groups; only within the percentage difference); among people with higher education, only graduates with an economics-based education differ significantly from graduates of other faculties; economists expect almost a two-fold increase in salaries in comparison to graduates of other faculties; this testifies to the lower realism of economists rather than of the unrealistic pessimism of graduates in other subjects;
- socio-professional status: self-employed expect significantly higher financial results after Poland joins the EU in comparison with other groups, except the unemployed and farmers whose hopes — certainly for different reasons — are even higher than those of self-employed; farmers are counting on direct subsidies, while the unemployed expect new jobs; public sector employers have less optimism than others;
- married people are less optimistic than single people, though this is not because of the higher number of children that this first group have;
- alcoholics expect lower financial advancement than non-alcoholics.

In general, almost all Poles, except for those with higher education, tend to show unrealistic optimism for a radical improvement in their own material situation in the first years of Poland's EU membership. Even if we take into consideration the trend towards falling current incomes by 15%, the expected increase would be 30%, and in some social groups (e.g. farmers and unemployed) it is nearly 100%. If those expectations are not fulfilled on a broad scale, as everything indicates that they cannot, we can quickly expect a decline in optimism and an increase in anti-EU attitudes as well as dislike or even hostility towards the political elites which solicited social support in the accession referendum. This situation resembles that at the beginning of the systemic transformation, when citizens' frustrations due to disillusioned hopes for rapid changes started to turn against the main architects of the new socio-economic system. The "social ingratitude" (Czapiński, 2000a) that was set off at this time towards the reformers has lasted until today, which is also evident not only in the low evaluation of the political class, but also greater falls in support for the reforms. In *Social Diagnosis 2003*, the percentage of people who considered the reforms initiated in 1989 as "generally successful" decreased by a further 2% in comparison to 2000, and is the lowest in the history of Poland's Third Republic at only 6%.

Voivodship differentiation in terms of hope of improvements in citizens' financial situations is also statistically significant. The question is therefore whether differentiation goes hand in hand with the territorial distribution of the results of the EU membership referendum — whether those who were in favor of Poland's EU membership tended to come from voivodships with the highest expectations of improvement in their financial situation. Correlations between referendum results and an expected increase of income do not fully confirm this hypothesis. Only the referendum turn-out appears to be closely correlated with the criterion of statistical significance ($r=0.464$, $p = 0.07$) with the amount of expected income, but not with income difference or percentage change. Because expected income is a simple function of current income, and is strongly correlated with turn-out, we can therefore see that turn-out in the EU referendum in terms of voivodships depended not on financial hopes, but on levels of prosperity: in the more affluent voivodships, turn-out and the percentage of votes in favor were both higher.

5.4.2. Potential tax groups

Julian Auleytner

5.4.2.1. Overall characteristics of tax groups

The scale of personal income is a continuous one, but from the point of view of both state finances and the situation of individual citizens, it is highly important to be able to categorize amounts into three tax thresholds.

This survey of particular tax groups is connected with the hypothesis that they represent different strategies of behavior related to personal finances. The analysis of tax groups was also important in identifying the middle class, i.e. the group that is indispensable for the social construction of the market economy (art.20 of the *Polish Constitution*).

The majority of respondents are ranked in the first tax group (table 5.18). This group encompasses almost 90% of all adult respondents; only 9% are included in the second tax threshold, and only 1% find themselves in the third tax group. After excluding farmers as an income specific sample under Polish conditions, the proportions are slightly improved: 83.5%, 14% and 2.5%. In both cases (including and not including farmers), the distribution of tax groups in the last decade has been exceptionally asymmetric. This asymmetry is confirmed by the existing social differences accounting for the wide scope of poverty and relative wealth of the few. The cost of the transformation was paid for by the poorest, while the rich remain a relatively small percentage group. Although we do not have comparative data from the socialist regime, one can propose the somewhat risky hypothesis that the ratio of people in the highest tax bracket today has not changed significantly and has remained socially "marginal" in a statistical sense. This "marginal group" is negatively perceived. It is often accused of unethical behavior, in particular an inclination towards political and civic corruption. There is a strong tendency for the less affluent to perceive the more affluent as having come by their money dishonestly. The new system has yet to see the creation of an established middle class able to bridge the gap between the rich minority and poor majority, a group that would produce an opportunity for greater mobility, moving between groups without conflict.

Many socio-economic problems have developed as a result of the tax system that has evolved since 1989. The most numerous group of tax payers, from the first tax group, tend to have a demanding attitude towards the state, while the richer group is too small to be a significant source of state income.

There are striking differences in incomes related to gender. Men paying higher taxes are a nearly twice as large a group as women paying taxes. This suggests the weaker economic strength of women. On the other hand, the fact that 11.4% of women pay their taxes in the 30% and 40% bands is evidence both of the effectiveness of this part of the research as well as women's willingness to advance economically. This is also a proof of the effectiveness of those surveyed and their interest in economic advancement.

Big cities tend to be the places where the highest incomes are earned. The smaller the town the lower the incomes and the smaller the group with higher tax threshold. Large cities offer jobs and opportunities, better relationships and chances for promotion than those in the provinces. This conclusion results from the distribution of respondents' answers and at the same time indicates the weakness of the regional local-government which the constitution has designated as the territory on which local power is held and exercised.

Table 5.18. Personal income tax thresholds of the fully employed, excluding farmers*

Group	Potential tax threshold (%)			
	First (19%)	Second (30%)	Third (40%)	Second + third
Overall	83.5	14.0	2.5	16.6
Gender				
Men	78.8	18.0	3.3	21.2
Women	88.7	9.7	1.6	11.4
Age				
Under 24 years old	95.4	4.6		4.6
25-34 years old	84.8	13.7	1.5	15.2
35-44 years old	81.2	14.8	4.0	18.8
45-59 years old	80.6	16.5	2.9	19.3
60-64 years old	80.6	17.9	1.5	19.4
65 and older	91.7	6.9	1.4	8.3
Place of residence				
Cities over 500k	72.1	20.8	7.1	27.8
Towns 200- 500k	73.3	24.3	2.4	26.5
Towns 100- 200k	77.6	19.0	3.4	22.4
Towns 20-100k	86.2	11.5	2.3	13.8
Under 20k	84.5	13.5	2.0	15.7
Rural areas	91.9	7.4	.6	8.1
Voivodship				
Dolnośląskie	80.4	17.1	2.4	19.6
Kujawsko-pomorskie	84.8	13.2	2.0	15.2
Lubelskie	82.6	15.8	1.6	17.4
Lubuskie	84.9	11.8	3.2	15.1
Łódzkie	87.2	11.5	1.3	12.8
Małopolskie	87.3	10.8	2.0	12.7
Mazowieckie	76.7	17.6	5.7	23.3
Opolskie	85.0	14.0	1.0	15.0
Podkarpackie	89.1	10.3	.6	10.9
Podlaskie	88.2	10.8	1.0	11.8
Pomorskie	76.2	21.1	2.6	23.8
Śląskie	84.6	13.7	1.8	15.4
Świętokrzyskie	88.2	10.8	1.0	11.8
Warmińsko-mazurskie	86.2	13.1	.8	14.5
Wielkopolskie	86.1	11.2	2.7	13.9
Zachodniopomorskie	84.0	11.8	4.2	15.4
Education				
Primary and below	95.8	3.5	.6	4.2
Vocational	91.1	8.1	.9	9.0
Secondary	84.1	14.1	1.9	15.9
University and post-secondary	65.2	27.4	7.3	34.8

* To estimate tax thresholds, i.e. in which tax threshold are respondents' incomes (19%, 30% or 40%), we used the following equation: $p107 * 12 * 1.1 * 1.54$, where is p107 — monthly net income, 12 — the number of months in a year, 1.1 — factor of lowering declarations in the survey, 1.54 an average factor of grossing net incomes. Gross annual income calculation received in this way is the same for full-time employment excluding farmers as the distribution of incomes of people employed in 2002 presented in GUS data. Using as a criterion of categorization threshold amounts of income existing at present, we get an indicator of a potential tax group which cannot however be treated as a indicator of a real income target group for the reasons of different tax exemptions as well as taxes themselves.

Analysis of tax groups according to voivodships indicates that the highest percentage of potential tax payers paying the highest tax lives in the Mazowieckie voivodship (5.7%, mainly thanks to Warsaw) and Zachodniopomorskie (4.2%). The other extreme is voivodships in the eastern part of Poland – Podkarpackie and Podlaskie, where taxpayers paying the lowest taxes make up almost 88% of all inhabitants. One clear conclusion for politicians is the following: the population near to Poland's eastern border require significant investments from EU structural funds, to bridge both economic and social inequalities (the European Fund for Regional Development and the European Social Fund). The migration of the brightest and best towards the center and the west, as well as an increase in social disorder, could be the result of failure to tackle this problem.

There is a strong relationship between education and tax groups: the higher the education the higher the tax threshold. This indicates that the system of education has a significant impact on income (*see* chapter 5.4.3).

Access to modern communication technologies is also very important in determining an individual's place in the social hierarchy. This appears also to confirm the principle that the richer the taxpayer the better he or she is equipped in technology and the more often uses it (table 5.19; *see* also chap. 7).

Table 5.19. Using modern communication technologies among people belonging to different tax potential groups

Group	(% in columns)			Test of difference significance
	19%	30%	40%	
Have a mobile phone	25.7	61.6	81.3	$\chi^2 = 493.98$ $p < 0.000$
Use a computer	30.9	61.5	78.1	$\chi^2 = 333.31$ $p < 0.000$
Use on-line banking				
At some time, but not in the last week	7.1	6.4	12.7	$\chi^2 = 30.04$
In the last week	7.0	15.4	18.2	$p < 0.000$

To recapitulate: rich individual tax payers live mostly in Warsaw and its environs; the characteristic profile of such a tax payer is aged up to 44 with a higher education. The poor are more frequently people with primary and lower education, inhabitants of the eastern voivodships and above all inhabitants of rural areas, mainly aged under 24 (unemployment among graduates). Women are also predominant in this group.

5.4.2.2. Taxpayers using help

Nearly 13% of households in the group of taxpayers from the first segment received some assistance (table 5.20). The main sources of outside financing were: family in the country – 54.5%, social welfare offices – 51.4%; and friends – 15.3%. Other sources (such as family abroad, religious and secular charity organizations, labor unions, companies, family assistance centers in poviats) had an insignificant share, although we cannot rule out the possibility that some of them may bring in a significant increase of the quality of life for individual households.

Not surprisingly, the first group of taxpayers is helped to more or less the same extent by families and social welfare offices (the state's social function), though surprisingly there is a very low involvement of religious charities addressed to such households.

Table 5. 20. Help used by households included in different tax potential groups

(% in columns)			
Group	19%	30%+40% ^a	Test of difference significance
Households receiving help	12.7	5.9	$\chi^2 = 18.13$ p < 0.000
Form of help received by a household			
Financial	65.6	54.8	$\chi^2 = 1.53$. ns
Material	55.5	66.7	$\chi^2 = 1.53$. ns
In the form of services	14.3	23.3	$\chi^2 = 1.53$. ns
Sources of obtained help			
Welfare support offices	51.4	22.6	$\chi^2 = 10.02$. p < 0.000
Family in the country	54.5	67.7	$\chi^2 = 2.12$. ns
Family abroad	4.1	9.7	$\chi^2 = 2.34$. ns
Friends	15.3	9.7	$\chi^2 = 0.75$. ns
Secular charities	0.9	0.0	$\chi^2 = 0.28$. ns
Parishes and religious charities	2.8	0.0	$\chi^2 = 0.91$. ns
Labor unions and companies	4.2	6.5	$\chi^2 = 0.36$. ns
Family help centers in poviats	2.2	0.0	$\chi^2 = 0.70$. ns
Other sources of help	6.4	9.4	$\chi^2 = 0.47$. ns

^a Due to the low number of members of the third tax group, for some data sets the second and third groups were treated together.

5.4.2.3. Entrepreneurship in different tax groups

The opposite of relying on outside help is entrepreneurship. The criteria for measuring entrepreneurship in our study were: investing money, financial operations on accounts, undertaking entrepreneurships and gaining new qualifications and skills. These increase as household income increases. The most outstanding tax groups are raising qualifications, adjusting their qualifications to market needs (table 5.21). This is what is done by over 10% of respondents from the first tax group: 20.5% from the second tax group and over 28% from the highest tax group. This confirms a change in the attitudes of many citizens towards education. It has become a basic indicator of activity, life strategy, offering more opportunities for better work and higher quality of life. The educational revolution that has been seen in recent years put Poland in the 1990s in the top rank of countries in the world on the UNDP's *Human Development Index*.

The next place was taken by investments in production, commerce and services. It is done by only 4% of respondents from the lowest group, close to 13% from the second tax group and one person in four in the third group.

Table 5.21. Entrepreneurship in tax potential groups

(% in columns)

Last year	19%	30%	40%	Test of relationship significance
Invested money in production, commerce and services	4.0	12.8	24.7	$\chi^2 = 178.58$ $p < 0.000$
Earned money on shares, bonds or bank transactions	1.9	7.3	14.7	$\chi^2 = 131.98$ $p < 0.000$
Opened their own business, company	1.6	4.3	7.3	$\chi^2 = 38.13$ $p < 0.000$
Gained new qualifications or skills with the view to better incomes	10.2	20.5	28.4	$\chi^2 = 92.42$ $p < 0.474$

5.4.2.4. Civic activity of various tax groups

Is entrepreneurship accompanied by civic activity? This study concludes a positive relationship in this regard. The group of taxpayers from the lowest tax groups is clearly less active than the other groups. The respondents from potential tax groups of 30% and 40% get involved twice as often in local community affairs than people in the group paying 19% taxes. However, differences decrease in terms of participation in local government elections. The rich are 9.4% more likely to do so. However, participation in elections clearly increases in terms of actual attendance, and it may be that this increased data is equal across all tax groups; it may be much higher in the first tax group than in all the others.

Table 5.22. Attitude and civic behavior of people belonging to different tax potential groups

(% in columns)

Group	19%	30%	40%	Test of difference significance
They get involved in the activities of local communities	11.9	22.0	26.8	$\chi^2 = 70.68$ $p < 0.000$
They took part in the last local government elections	60.4	69.9	69.8	$\chi^2 = 25.65$ $p < 0.000$
They are members of at least one organization (association, party, committee, council, or religious group)	11.5	23.2	17.7	$\chi^2 = 105.97$ $p < 0.000$
They had some functions in those groups	43.3	52.8	58.8	$\chi^2 = 105.97$ $p < 0.000$
Last year they attended a public meeting outside their workplace	17.8	26.3	26.9	$\chi^2 = 33.11$ $p < 0.000$
They expressed their opinion in a public meeting outside their workplace	56.5	66.5	80.0	$\chi^2 = 11.16$ $p < 0.004$
Attitude to democracy				
Democracy is the best form of government	25.5	42.7	55.0	$\chi^2 = 10.02$ $p < 0.000$
It does not matter whether the government is democratic	40.7	23.7	11.3	
Democracy is a bad form of government	11.2	4.9	5.0	

Less affluent tax payers were twice less likely to belong to various types of organizations than the more affluent tax payers (table 5.22). This difference is ever more clearly marked in the frequency of having a function in an organization. A similarly differentiated distribution of results was obtained in responses to questions about taking part in and taking the floor in meetings. In meetings outside the workplace, this ranged from 18% to 27% last year (with the more affluent at the upper end of the scale). Between 56.5% and 80% took the floor at such meetings (with the more affluent at the upper end of the scale).

The richest tax payers assess democracy as the best form of government. In the group paying 19% tax, the views on democracy are divided, with most people (over 40%) answering no to the question: “*does it matter whether the government is democratic?*” The taxpayers from the second group were twice less likely to say yes to the same question, while the taxpayers from the highest tax group were almost four times less likely to agree. The lowest tax group most often expressed the view that “*democracy is a bad form of government*”.

It is disturbing that over half of the most numerous tax group is willing to tolerate an undemocratic form of government. If this is combined with the lowest civic activity (e.g. at the elections), one can see quite clearly that poverty tends to reinforce government by the elites.

Another conclusion on the basis of attitudes and civic behavior concerns the lack of engagement in social life. A large part of the respondents do not take any part in any activity outside the family and the workplace. To illustrate this, nearly 90% of people from the lowest tax group, 78% from the second tax group and approx. 73% of the richest tax group declared lack of involvement in local community affairs.

5.4.2.5. Educational aspirations of parents in various tax groups

Studies show that in each tax potential group the majority of respondents are in favor of a higher education for their children, though in the higher tax groups such aspirations are expressed far more often (from the lowest to the highest tax group respectively: 52%, 71.4% and 74.6% — table 5.23). Twice as many people from the lowest tax group than in the other two groups would like their children to get an education lower than secondary level. People from the third tax group assess the chances of their children getting a desired level of education as the highest and first group of tax payers as the lowest.

Table 5.23. *Desired level of education of children, assessment of chances of obtaining a desired education level and satisfaction with the school children attend, in terms of tax potential group*

Group	(% in the columns)			Test of relationship significance
	19%	30%	40%	
Desired level of education				$\chi^2 = 35.65$
from vocational secondary	23.6	12.3	13.6	p < 0.000
post-secondary or bachelor's degree	24.4	16.3	11.9	
Master's degree	52.0	71.4	74.6	
Self-perception of the chances of obtaining desired education				$\chi^2 = 58.72$
Good chance	40.9	63.5	71.2	p < 0.000
Some chance	46.1	33.0	28.8	
Little chance	13.0	3.4	0.0	
Satisfaction with the school				$\chi^2 = 5.58$
Definitely satisfied	31.9	27.6	26.8	p < 0.233
Quite satisfied	63.4	67.3	62.5	
Rather and definitely unsatisfied	4.7	51.1	10.7	

This differentiation of assessments seems fully justified. In fact, realistic chances for a good education for children from poorer families are radically lower today than those for children from more affluent homes. This is due not only to economic differences, but also differences in “cultural capital” between rich and poor families. Poorer parents are less critical (also likely to be less demanding) towards the school which children attend.

The above data indicate that poorer families have much less awareness about the profitability of investing in their children’s education, or — and even less probable — attach far less significance to the life success of their children. Education is in fact the best investment, even from a financial point of view. So, how profitable is investing in education on a higher level, to which children from poorer families have much lower access.

5.4.3. Return rate from the investment in higher level education

Janusz Czapiński

One of the main factors differentiating personal income, if not the most important, is education. The education boom, which started in Poland in the first years of the transformation, indicates that Poles have rapidly taken this relationship on board. It is worthwhile looking closely at the question of how a higher education, to which about 80% of young people and 70% of their parents aspire (compare chap. 4.5.2), is a financially profitable investment. The indicator of profitability of each investment is the rate of return. For investments in education this is quite simple to calculate. We have to establish the difference in incomes between the people completing a certain level of education and their counterparts of the same gender who finishing education at one level lower, and then subtract the costs of further education (fees and years of studying lost for earning an income) divided by the whole period of professional activity. We then divide this result by the amount of income of the one with the lower education and multiply the sum by 100 (to express it as a percentage of the net advantage of the better educated over the worse educated). We have done this in reference to graduates of universities, accepting people with the ‘Matura’ (maturity, or finishing) exam as subjects for comparison. We divided this group of university graduates into graduates with master’s and bachelor’s degrees and into different faculties of completed studies.

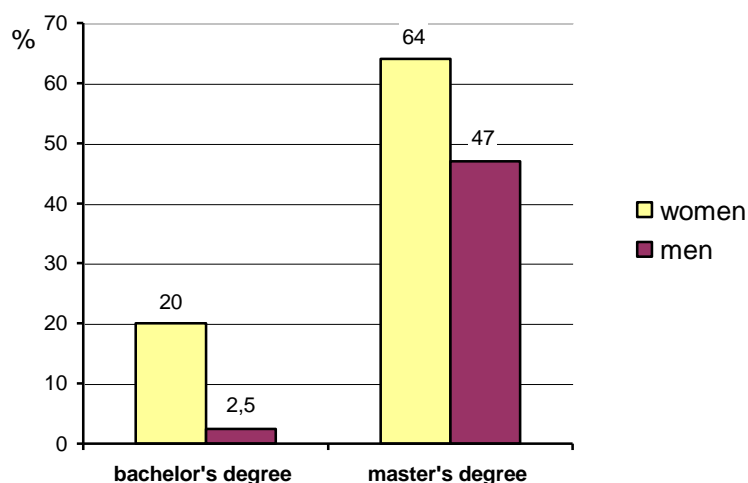


Figure 5.1. Private return rate from investing in education on a higher level (bachelor’s and master’s studies) for women and for men aged 24-39 in 2003

The results are striking. A bachelor’s degree in comparison with a master’s degree gives quite a low rate of return, especially for men, and the high popularity of these types of studies in

the Third Republic is remarkable. Poles have understood that higher education is a good investment, but they do not appear to yet understand that what really counts is a master's degree. Bachelor's degrees are too modest in most cases (figure 5.1).

In breakdowns by gender and age, women gain more financially from a higher education than men, and in the group of men those who gain more are older people rather than younger (figure 5.2), which may mean that the financial effects of studies increase with age and seniority at work.

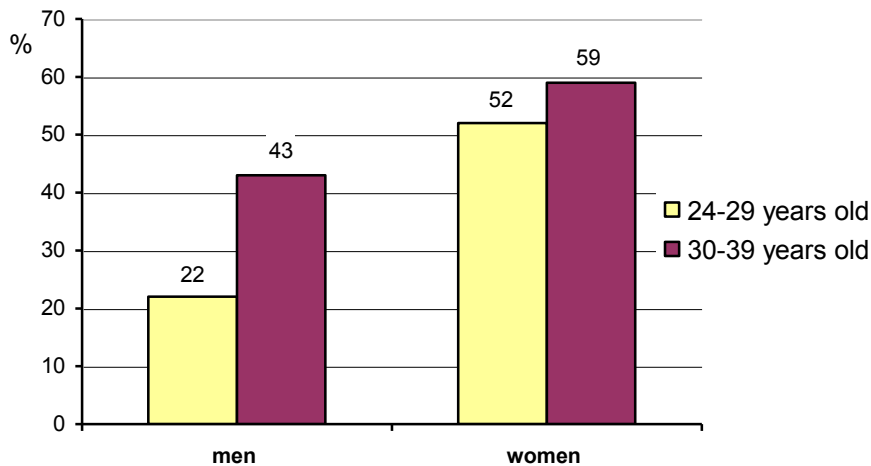


Figure 5.2. Private return rate of the investment in education on a higher level for women and men aged 24-29 and 30-39 in 2003

Which — private or public sector — better financially rewards employees' education? The private sector by far, but only in reference to a master's degree. A bachelor's degree is slightly less valued by the state as an employer, but in general also lower by a private employer (figure 5.3).

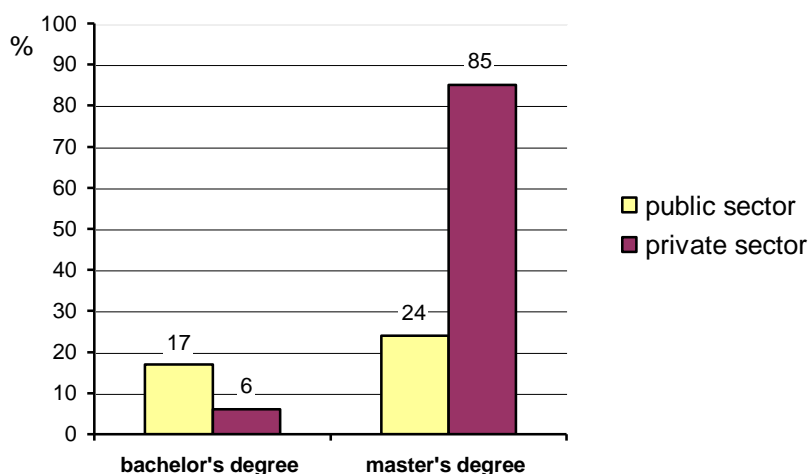


Figure 5.3. A private rate of return on investments in education on bachelor's and master's levels for employees of the public and private sectors in 2003

Because similar analyses of rates of return from educational investments have been performed twice in the past, it is worth comparing what has changed in this respect over the past 10 years. Figure 5.4. shows that in reference to the years 1993/1995, the profitability of higher studies increased both for men and women. But the best times are — as figure 5.5 shows — behind us. Rates of return from higher education are in general, both for bachelor's and master's

education, significantly lower today than in 1999. The question arises as to whether this is due to a transitional contraction of the labor market for university graduates (growing unemployment), or is caused by the growing saturation of the labor market with educated employees. The answer to this question is not simple and certainly differs by degree. Figure 5.6 suggests that the demand for graduates, very popular in the past decade, is falling, mainly on the private bachelor studies in economics faculties (marketing, finances, banking etc.), there is growing demand for doctors and the high demand for lawyers has remained on a high level; demand for engineers and graduates of science faculties is still low by comparison.

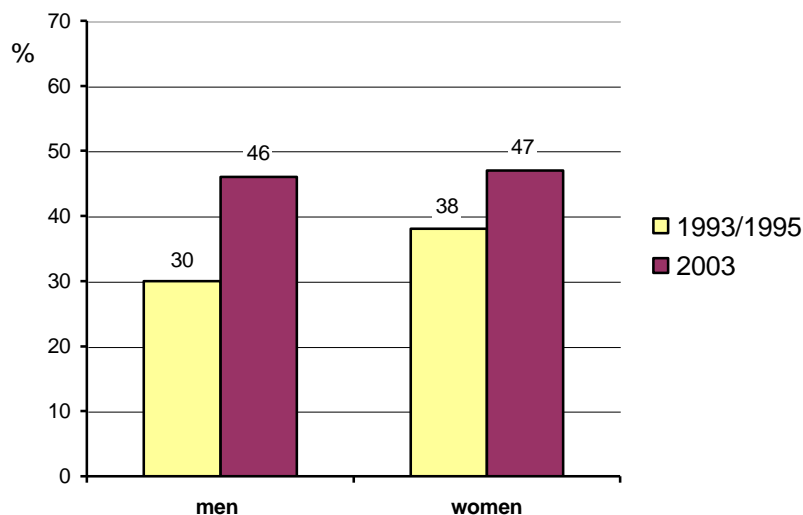


Figure 5.4. Private rates of return from higher education investment for women and men in 1993/1995 and 2003.

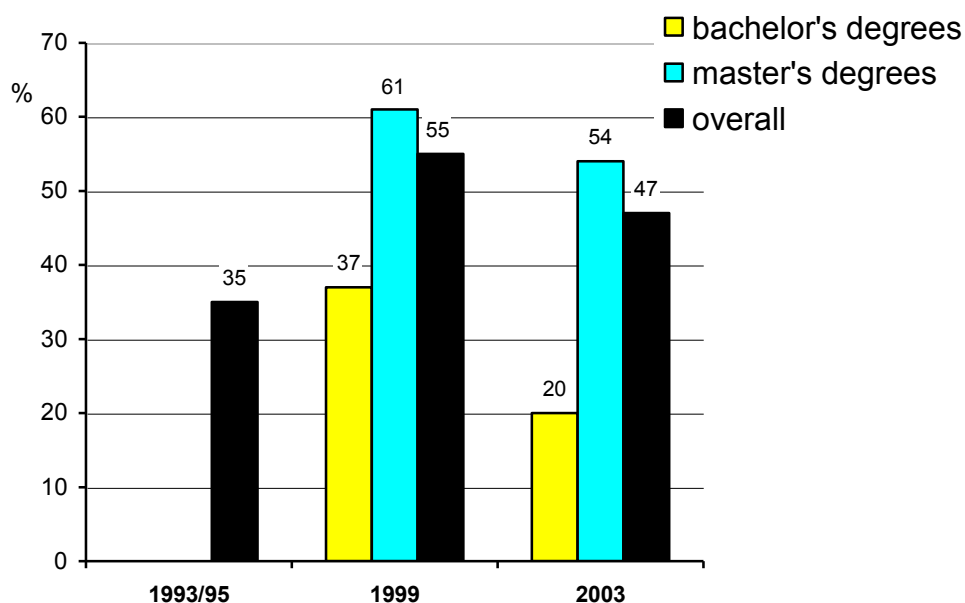
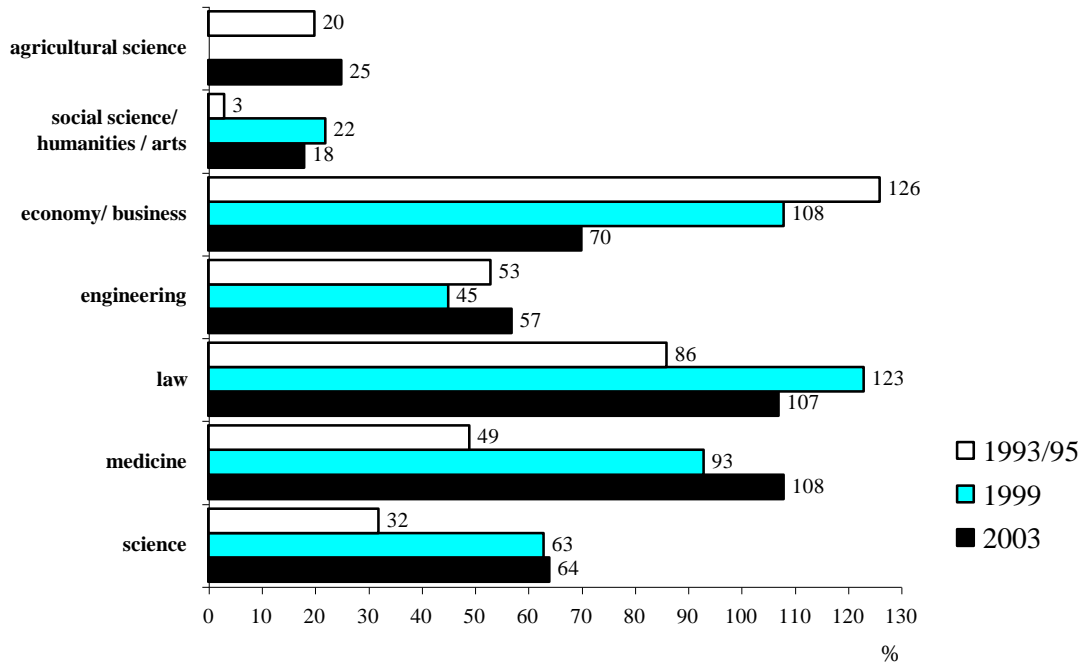


Figure 5.5. Private rates of return from higher education investment in 1993/1995, 1999 and 2003.



Note: In 1999 the number of respondents with higher agricultural education was too low to calculate the rate of the return for this faculty

Figure 5.6. Private rates of return from higher education investment in different faculties in 1993/95, 1999 and 2003.

Rates of return by gender differ according to degree subject. At present, the most profitable education for women is a legal education and for men, medical (figure 5,7).

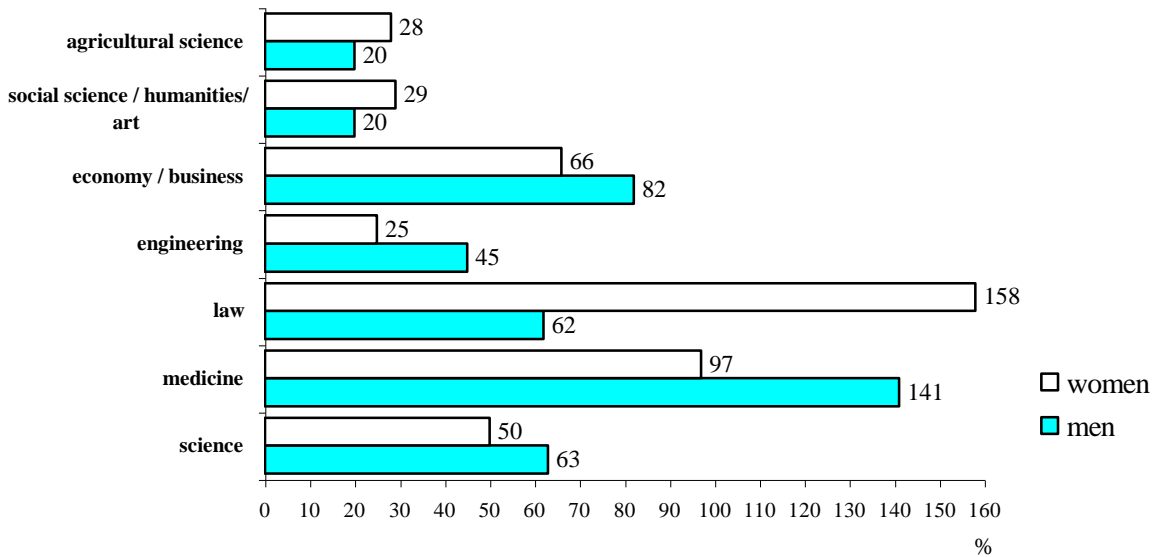


Figure 5.7. Private rates of return from higher education investment in different subjects for men and for women of professional activity age in 2003 .

5.4.4. Desired and actual additional forms of work remuneration

Tadeusz Szumlicz

As is widely known, employers remunerate their employees via various additional forms. It may be a mobile phone, fuel allowance, subscription for health services, personal insurance, additional retirement provision, health insurance or a monetary equivalent.

Table 5.24. Do you use any additional form of remuneration; if so, what? (only for the professionally active)

							(%)
Group	Health services	Additional retirement provision	Life insurance	Fuel allowance	Mobile telephone	Monetary equivalent	
Overall	2.8	5.3	13.8	3.2	7.2	5.4	
Gender							
Men	2.9	5.1	14.7	3.6	9.4	5.8	
Women	2.6	5.4	12.7	2.6	4.8	4.9	
Age							
Under 24 years old	1.6	3.8	10.6	2.5	4.7	7.2	
25-34 years old	3.6	5.4	14.3	3.8	10.3	7.5	
35-44 years old	2.6	7.3	13.7	2.5	6.2	4.7	
45-59 years old	2.7	3.8	14.5	3.6	6.4	3.7	
60-64 years old	2.2	4.4	11.1		2.2	4.4	
65 and older							
Place of living							
Towns over 500k	5.1	3.7	11.3	5.4	13.8	3.1	
Towns 200- 500k	4.0	8.4	12.8	4.5	11.0	8.4	
Towns 100- 200k	1.7	2.7	9.4	3.7	6.4	5.4	
Towns 20-100k	2.6	5.7	17.5	2.5	6.7	6.3	
Towns < 20k	0.9	5.5	16.6	2.4	4.2	5.5	
Rural areas	2.4	5.1	13.0	2.2	4.3	4.7	
Education							
Primary and below	0.8	2.3	10.0	0.8	2.3	4.2	
Vocational	3.0	5.5	13.3	0.8	4.2	4.1	
Secondary	2.1	5.9	14.7	3.4	7.1	6.3	
University and post-secondary	4.6	4.5	14.1	7.0	13.4	6.0	
Income per capita							
First quartile	1.0	4.1	13.3	1.0	4.1	3.7	
Middle 50 %	2.4	5.9	12.6	2.0	4.5	5.3	
Forth quartile	4.8	5.5	16.6	5.9	13.5	6.6	
Socio-professional status							
Public sector	2.4	6.1	14.7	2.7	5.3	4.6	
Private sector	3.6	5.4	14.5	4.0	9.6	7.1	

The survey shows that this is not a common phenomenon (table 5.24). 7% of respondents use a mobile phone. 3% of employees receive fuel allowances. Health subscriptions are used by only 3% of respondents. The most common bonus (in the sense of benefits), life insurance, is held by 14% of employees. Additional pension provision is held by 5% of employees. Remuneration in the money equivalent similarly concerns only 5% of employees. One should also note the clear coincidence of differentiation in various forms of additional remuneration.

From the employees' point of view, the following forms of additional remuneration enjoy the highest popularity (table 5.25) (two forms can be chosen): monetary equivalent (up to 66% of responses), additional retirement provision (31%), life insurance (17%), health insurance (14%), health services (12%), fuel allowance (7%) and mobile phone allowance (only 3% of indications).

It is worth underlining that these preferences do not fundamentally differ by gender (although women attach greater importance than men to health insurance, lower importance to fuel allowance) or by age (although younger respondents pay relatively greater significance to mobile phones than additional retirement provision). Moreover, as in the case of using different forms of additional remuneration, a clear differentiation of preferences for additional forms of remuneration can be distinguished.

Table 5.25. *If an employer offered an additional form of remuneration, would you be most happy with: (up to two possibilities could have been chosen; only for professionally active)*

Group	Health services						
	Health services	Additional retirement provision	Health insurance	Life insurance	Fuel allowance	Mobile phone	Money equivalent
Overall	12.2	31.4	13.6	16.6	6.5	2.6	65.7
Gender							
Men	9.6	29.0	12.9	16.4	9.2	2.7	67.3
Women	15.2	34.0	14.5	16.7	3.6	2.6	63.9
Age							
Under 24 years old	8.2	19.9	12.6	16.4	8.5	8.5	73.6
25-34 years old	12.5	32.6	9.3	17.5	9.3	3.4	70.4
35-44 years old	12.3	33.2	14.0	17.1	6.3	1.1	65.4
45-59 years old	12.6	32.1	17.3	15.8	3.5	1.7	60.3
60-64 years old	21.7	20.0	24.4	8.9	4.4		48.9
65 and older							
Place of living							
Cities over 500k	15.1	38.5	13.5	14.8	6.5	3.9	63.5
Towns 200- 500k	12.8	32.3	11.4	18.4	5.1	2.6	65.8
Towns 100- 200k	13.6	31.0	14.6	14.2	4.8	3.1	66.0
Towns 20-100k	13.1	33.8	13.7	18.1	5.1	2.9	66.3
Towns < 20k	12.2	30.2	14.6	16.7	7.5	1.6	68.1
Rural areas	9.8	26.9	13.9	16.3	7.9	2.2	65.2
Education							
Primary and below	7.4	20.2	15.1	17.4	3.1	1.6	65.5
Vocational	10.8	27.6	15.7	17.7	6.6	2.4	65.4
Secondary	13.6	33.1	11.7	16.9	6.3	2.9	66.3
University and post-secondary	13.9	38.2	14.0	13.9	7.9	2.8	64.8
Income per capita							
First quartile	9.1	24.0	13.4	19.1	5.6	2.2	69.0
Middle 50 %	12.5	32.8	13.8	16.0	6.0	3.0	65.1
Fourth quartile	14.3	33.6	13.2	15.7	7.9	2.7	64.4
Socio-professional status							
Public sector	15.3	35.8	12.7	16.4	6.2	1.9	68.5
Private sector	10.9	29.9	15.4	18.3	7.0	3.3	68.8

5.4.5. Attitudes to financial institutions

Tadeusz Szumlicz

The economic transformation brought about an undeniable increase in the importance of financial institutions. They became very important not only for the self-employed, but also for households that use them increasingly frequently. This is the reason why the question we asked, “Do you trust financial institutions?” – is particularly important.

It is worth noting that among the financial institutions in Poland are foreign entities (with dominant foreign capital), to which there may be negative attitudes. This is why the question about trust of financial institutions was divided in such a way that we could evaluate separately opinions about Polish and foreign financial institutions.

It appears that Polish financial institutions enjoy the trust of 47% of respondents who had an opinion on it (lack of trust — 51%) (table 5.26). At the same time, the ratio between trust and lack of trust is similar across groups of respondents differentiated due to different features. Some respondent groups have more or less definite opinions on it (having an explicit opinion is characteristic for older respondents, better educated, with a better financial situation).

Table 5.26. Do you trust Polish financial institutions?

(%)

Group	Yes	No	No opinion
Overall	23.1	25.7	51.2
Gender			
Men	24.1	30.2	45.6
Women	22.2	21.8	56.0
Age			
Under 24 years old	16.4	19.2	64.4
25-34 years old	24.0	27.5	48.5
35-44 years old	26.6	29.1	44.3
45-59 years old	25.2	28.6	46.2
60-64 years old	22.3	28.7	49.0
65 and older	21.1	19.8	59.1
Place of living			
Cities over 500k	24.8	26.9	48.2
Towns 200- 500k	18.9	30.7	50.4
Towns 100- 200k	24.9	28.3	46.8
Towns 20-100k	24.3	25.9	49.9
Towns < 20k	25.7	26.5	47.8
Rural areas	21.9	22.9	55.1
Education			
Primary and below	19.2	21.0	59.8
Vocational	21.7	27.7	50.5
Secondary	25.0	27.1	47.8
University and post-secondary	33.8	29.9	36.3
Income per capita			
First quartile	18.3	24.7	57.0
Middle 50 %	21.5	26.1	52.4
Forth quartile	30.6	27.0	42.5
Socio-professional status			
Public sector	29.9	27.8	42.3
Private sector	27.1	29.8	43.0
Self-employed	22.2	34.4	43.4
Farmers	25.4	25.9	48.8
Pensioners	20.8	21.8	57.4
Retirees	22.5	22.2	55.4
Students	14.0	18.2	67.8
Unemployed	14.7	26.4	58.9
Other professionally inactive	18.7	25.4	55.9

Only 31% of respondents who had an opinion on it said they trust foreign financial institutions (no opinion — 69%) (table 5.27). In this case, the clear differentiation in trust depending on the socio-demographic profile of respondents has to be strongly highlighted. Men have greater trust than women, younger people more than older people, inhabitants of big towns and cities more than rural inhabitants, people with higher education more than people with primary education, people in a better material situation more than poorer people, representatives of the private sector more than the pensioners.

Table 5.27. Do you trust foreign financial institutions?

	(%)		
	Yes	No	No opinion
Overall	9.7	21.7	68.6
Gender			
Men	11.6	25.5	62.9
Women	8.0	18.3	73.7
Age			
Under 24 years old	11.8	14.1	74.2
25-34 years old	14.4	22.1	63.5
35-44 years old	11.5	24.6	63.9
45-59 years old	8.5	25.0	66.4
60-64 years old	7.5	24.0	68.5
65 and older	3.9	18.5	77.7
Place of living			
Cities over 500k	13.3	21.3	65.4
Towns 200- 500k	9.3	24.5	66.2
Towns 100- 200k	13.0	24.1	62.8
Towns 20-100k	11.1	20.9	68.1
Towns < 20k	10.5	20.9	68.6
Rural areas	6.9	21.2	71.9
Education			
Primary and below	5.6	18.7	75.6
Vocational	7.6	25.1	67.3
Secondary	10.6	22.1	67.2
University and post-secondary	18.4	24.2	57.4
Income per capita			
First quartile	6.3	21.1	72.6
Middle 50 %	8.8	21.8	69.4
Forth quartile	13.5	24.0	62.5
Socio-professional status			
Public sector	12.4	24.4	63.2
Private sector	14.5	24.7	60.9
Self-employed	13.3	22.6	64.1
Farmers	10.1	25.8	64.2
Pensioners	4.9	19.7	75.4
Retirees	5.4	20.3	74.3
Students	11.7	12.4	75.9
Unemployed	6.3	21.3	72.4
Other professionally inactive	8.5	19.5	72.0

The most detailed questions concerned particular financial institutions. There were the following answers to the question “do you trust banks?”: “yes” – 44%; “no” – 21%; “no opinion” – 35% (among those who had an opinion, the level of trust was higher, at 68%). To the question “do you trust life insurance companies?” the percentage of answers was the following: 20%, 31%, 49% (among those who had an opinion, the level of trust was higher, at 39%). To the question “do you trust property insurance companies?” the percentage of answers was as follows: 11%, 30%, 59% (among those who had an opinion, the degree of trust was higher, at

27%). To the question “do you trust investment funds (mutual funds)?” the answers were: 6%, 27%, 67% (and again among those having an opinion the level of trust turned out to be higher — 18%). To the question “do you trust open pension funds?” – the answers were: 13%; 30%; 57% (among those who had an opinion, the level of trust was again higher — 30%). Finally, to the question “do you trust the stock-exchange?” the answers showed the lowest level of trust; respectively: 5%, 28%, 67% (among those who had an opinion, the level of trust was slightly higher: 15% of “yes” answers). The level of social trust in financial institutions, even those which we commonly use, is very low. In connection with the pension system change, the lack of trust (up to 70% of negative answers among those who have an opinion) in open pension funds is particularly worrying.

5.4.6. Insurance

Tadeusz Szumlicz

The scope of the social security system organized by the state is defined in the catalogue of social risk. A promising methodological procedure, especially from the point of view of the private insurance packages discussed here, seems to be to adopt a broader interpretation of the concept of social risk. It should be defined as a threat that could cause loss of household resources. The concept of resources has to be understood in a wider perspective, also, taking current and future income, as well as money and material assets, into account.

The classic catalogue of social risk remains in principle still valid, although – it is important to note – insurance against negative results of particular kinds of risk can be given greater or lesser importance because the social dimension of various risks changes. A modified catalogue should encompass the following list of social risks¹³:

- sickness
- maternity
- invalidity (disability)
- employment injuries
- unemployment
- death of a breadwinner
- old age
- frail older people
- emergency expenses
- emergency lack of means
- poverty

The system of social security compensates for losses caused by the occurrence of social risks according to supply, insurance and care principles that are commonly known and have already been analyzed in this study.¹⁴ However, for the people for whom the system is constructed, the most important is the scope of damages caused as a result of impairment, because above all a real settlement of costs shows the existing standard of social security.

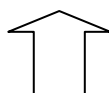
Increasingly, the argument is being made that the responsibility for a higher level of provision – independent of the norms accepted in a given country — should be assumed by households. It can, in contrast, be said that “engineering” by social policy of “righteous” goals so

¹³ I have enlarged the classic catalogue with the risk of frail older people, (risk due to extending longevity after reaching an agreed old age) and the risk of poverty (the possibility of not being able to satisfy one’s needs on the minimum level), see Szumlicz (1994, p. 62).

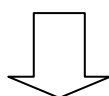
¹⁴ In the model perspective, particular principles of social security are based on different funds and sources of financing - respectively: (1) taxes– budget funds; (2) contributions – insurance funds; (3) donations – charities funds. (Szumlicz, 1994; also compare Szumlicz, 2002, p. 124 and further).

criticized up until recently, has been replaced by “engineering” by social policy of “righteous” limitations.

Desired social security standard



Current social security standard



Changed social security standard

Figure 5.8. Creating scope for additional insurance protection

One should note the current continuous decline, at least in relative terms, of the standards of social security offered in the process of changes to the social security reform, and at the same time, the demand for a level of social security prevalent in wealthier societies. An illustration of this situation is presented in figure 5.8, which shows the mechanisms underlying the creation of the gap between changed and desired standards for additional social security that it is already possible to obtain on market principles.

We can therefore formulate a very important thesis, that managing the aforementioned social risks on the initiative of households threatened with risks usually appears within the existing social security system which ensures specific – lower or higher – standards of social security. In principle, the lower the standard, the higher the need for commercial insurance. We have to remember that demand depends on: (1) household perceptions of the necessity of ensuring additional insurance protection; (2) insurance awareness of a household allowing for the rational use of available insurance offers; (3) households showing foresight in insurances matters which testifies of an inclination to pro-insurance behavior; (4) the actual financial situation of households enabling the possible purchase of insurance.

The perception of the need to provide one’s own insurance protection consists in being aware what protection is provided to a given (family) household via social security in the event that a specific risk appears. The actual coverage is in fact determined by the general principle of damages weighting, assuming partial and not proportional coverage of damages. The scope of compensation is expressed by coverage indexes (replacement), defining the relationship of paying damages. What is highly important is possible differentiation of the degree of compensation depending on the scope of the suffered loss caused using relatively higher or lower protection. There are also types of risks, such as a sickness, or maternity (both types of risk appear in the sense of temporary inability to work¹⁵) whose results, i.e. temporary loss of income, are compensated to a large extent and the compensation is in principle directly proportional to the suffered loss. Nevertheless, there are types of risk, such as death of the breadwinner and disability, which incur results, such as a loss of income or drop in income, that are compensated to a far lesser extent, and the amount of damages depends on the suffered loss: damages are relatively higher when a lesser loss occurs (lower lost income from work) and relatively less when a greater loss has taken place (higher lost income from work).

¹⁵ The risk of an sickness (as well as pregnancy) refers here to the threat of a temporary inability to work. The risk of an sickness in the sense of damage to health and the risk of maternity in the sense of increased medical care over the mother and the child are included in the medical system which was analysed before.

The above reasoning indicates that managing social risk on the initiative of a household itself threatened with given risks should differ depending on the material situation of the household. It can be said that the state social security system in general ensures a higher social security standard to families (family households) with lower material status. This means that commercial (private) insurance packages are aimed primarily at households of greater (average) affluence, since the occurrence of some risk types is particularly distressing for their material situation, and also because the social security system provides them with a much lower level of social security, and thus relatively lower damages for suffered losses. Moreover, the average prosperity of those households allows for additional spending on insurance protection. There is still the issue of the wealthiest households as a target group for insurance. It can be said that these households have something to insure (larger resources) and, in the case of potential losses, social security is very low, which in fact would show how strong the demand for insurance is. It has to be taken into consideration that the wealthiest households have significant reserves in various forms of savings that can be used to cover the incurred losses. The statement “the lower the standard (of social security), the higher the demand for commercial insurance” proves generally true, but it has to be borne in mind that the scope of damages (obtained real protection) in reference to particular households can be significantly different. Objectively, the target group for additional insurance policies are undoubtedly households of average affluence.

We do not need to explain the importance of adequate insurance awareness. One cannot overestimate the importance of the fact of knowledge and skills allowing households to take up an insurance offer. Nevertheless, this awareness is still on average very low among Poles, despite a growing awareness of the new socio-economic system of which insurance awareness is definitely a derivative. As a consequence, insurance foresight shown by households proving pro-insurance behavior is much harder to evaluate. The answers to two questions from the *Diagnosis* – inspired by the above outlined theory of perspective – show that Poles behave in a quite untypical way and in general they show an aversion to risk¹⁶, which may indeed prove to be pro-insurance behavior. Still, the importance of the actual financial situation of a household with regard to its potential purchase of insurance cannot be overestimated, given its expensiveness, but we need to underline once again that a final target of insurance protection are households of a rather higher material status which allows them to bear the costs of additional protection.

In the context of the above considerations, the question arises: which of the above-mentioned types of social risk can be included in private insurance? The most important of those listed in the catalogue are the following: (1) disability (threat of a loss or decrease in future income), (2) death of a breadwinner (a threat of decrease in household income) and (3) old age (threat of not having a source of income in post-production age) — all covered by personal insurance, and (4) unemployment (a threat of losing current income), (5) emergency lack of means (threat of loss of a part of property) and (6) emergency expenses (threat of bearing unexpected costs), covered by property insurance.

According to the legal classification of insurance, there are two types of business insurance, each divided into groups (branch I – life insurance – 5 groups; branch II – other personal insurance and property insurance – 18 groups). Personal insurance, covering the following risks: disability, death of a breadwinner and old age, is section I divided into groups:

- 1 – life insurance,
- 2 – dowry insurance, endowment for children,
- 3 – 1 unit-linked life insurance,
- 4 – annuity assurance,
- 5 – accident and sickness insurance (in this branch options for groups 1-4) and two groups from section II:
 - 1 – accident insurance,
 - 2 – sickness insurance.

¹⁶ Among various socio-professional groups only Self-employed show a slightly higher inclination to risk.

Property insurance in branch II includes the following types of risk: unemployment, emergency loss of means and emergency expenditure. From this branch we will consider only groups relating to households:

- motor hull insurance (groups 3)
- property insurance (groups 8 and 9)
- liability insurance (groups 10 and 13)
- financial insurance (groups 14 and 16)
- legal protection insurance (group 17)
- insurance of traveling expenses incurred for a cancelled trip (group 18).

On this basis, particular types of risk can have specific types of insurance created: risk of disability — life insurance with an option of protection against accident, and dowry insurance; the risk of death of a breadwinner — life insurance and dowry insurance; risk of old age – unit-linked life insurance and annuity assurance; risk of unemployment – financial insurance; risk of an emergency loss — motor hull insurance, property insurance, financial insurance, insurance of traveling expenses incurred for a cancelled trip; risk of an emergency expenses – liability insurance, legal protection insurance.

One of the most interesting insurance problems is the reason for using a specific type of insurance protection, and thus at least a partial answer to the question: what influences the demand for insurance products? We can differentiate:

- the obligation to have insurance
- fears concerning the household's future
- unhappy events in family or friends' lives,
- friends' suggestions (advice)
- persuasion of an insurance agent
- advertisements

so both decisions, either taken under compulsion or on one's own initiative, and resulting from one's own experience, and also other people's decisions, and those taken "inside" a household, connected with foresight, as well as those taken "outside" a household, under some persuasion.

It appears that it is the obligation to buy insurance that predominates among reasons to get such protection. This is the opinion of 81% of respondents. It is not surprising if we take into consideration the growing practice of applying insurance obligations.

The obligation to insure was introduced by the Insurance Law ¹⁷. This law in article 4 stipulates that obligatory insurance is:

- 1) motor third-party insurance,
- 2) insurance of buildings being part of a farm,
- 3) farmers third-party liability insurance,
- 4) other types of insurance stipulated by legal provisions in force, or international agreements ratified by Poland.

Awareness of the obligation to have the insurances listed in points 1-3 above seems quite widespread. However, the obligation defined in point 4 as "stipulated by legal provisions in force" is becoming increasingly important.

Using insurance classification according to the type of insured object we can state that in terms of personal insurance, only one insurance is compulsory – insurance against sports injuries, which in general does not concern households. Within property, insurance is obligatory only for items listed by the law (insurance of building being part of a farm), which is addressed directly to agricultural households, because the owner of the building is often an individual managing a farm.

The most complex obligation concerns liability insurance. Besides the two most common ones which are directly listed in the law on insurance — motor third-party liability insurance and farmers third-party liability — particularly important are those packages indicated indirectly by

¹⁷ Law of 28 July 1990 on insurance business (Dz. U. of 2 February 1996 r. Nr 11, position 62, with later changes).

article 4 point 4, stemming from other laws in force. A significant part of the obligation applies to households, if their members – defined most generally – work in specific domains or professions (perform specific actions)¹⁸. The obligation of liability insurance concerns those groups of people whose work involves a high risk of accidents causing damage to third parties. Among “health” insurance packages which are growing in Poland each year, we have to mention liability insurance for doctors, certified accountants, insurance brokers, tax counselors, tax collectors, organizers of tourism, mass events organizers, real estate brokers, lawyers, legal counselors, architects.

On the basis of the obligation to have insurance, the fact that 81% of households purchase insurance because it is required (table 5.28) should not – we would like to stress this once again – be surprising, because the obligation concerns all households which have some consumer goods, such as a car, and practically all agricultural households (according to the survey the obligation is given as the reason in 100% of cases).

Concern for the future of a household (family) is the second reason Poles take out insurance (45.9% of indications, table 5.28). It can be said that this is the most insurance oriented of all the reasons, because it contains the element of one’s own foresight to protect households (families) should a particular type of risk appear. The differentiation of reasons for using insurance by socio-demographic features is presented in table 5.28. Very surprisingly, it appears that concern for the future of the household is the most important factor (probably quite accidentally) for households with savings which could last for over 6 months (62.3%), and secondly households working on their own account (58.8%), which is not so surprising. Threat to the future of a household as the reason behind a decision concerning the choice of insurance is relatively less important, understandably, for single person households (29.1%), and second placed, not surprisingly, for those under 24 (32.2%).

Table 5.28 is constructed in such a way as to provide contrast for the household and individual respondents who display the most or least frequent need to buy insurance for the security of their families. The highest sector of variance (53.2%-29.1%) is connected with the size of household. It is clear that the most common reason to buy insurance to secure the future of one’s family appears in households of up to 5 people rather than those with one person. With regard to the extent of the variance, second place is taken by differentiation between households of those working on their own account and those of retirees and disability pensioners (58.8-40.1). The smallest extent of variance (46.6-43.9) is connected with level of income. It is quite surprising that households from upper and lower income quartiles differ so little in terms of decisions to protect the future of their families. With regard to a small extent of variance, the size of the town respondents live in takes second place (49.6-46.0).

Unfortunate events in the life of a family or friends are ranked third on the list of reasons why Poles buy insurance (29.9% of indications). It can be said that this reason is unusual, because, if the insurance concerns one’s own household, then this is a delayed reaction (delayed foresight). However, if the conviction about the necessity of the insurance is based on friends’ experience, it may be treated as foresight similar to that which contains an element of foresight about the economic situation of a household (family) in the case of the reappearance of a similar risk being a part of friends’ experience. The variety of behavior depending on household features is small in the case of buying insurance for this reason.

Table 5.28. Reasons for using insurance by selected socio-demographic features with differentiation on perceived threats to the household’s future

¹⁸ A liability denotes the responsibility of one entity to make material compensation for damage done to a different entity as a result of specific events. A victim of an accident becomes as a result, the creditor of the person who is responsible for the damage suffered. At the same time, this person becomes the debtor of the victim (Kufel, 1997, pp. 9-10). Awareness that such a responsibility could seriously threaten household resources is very low in Poland, and this is the reason for the tendency to increase the insurance duty in this respect, as if “relieving” people and households from their own foresight.

(%)

Features of household and the head of household	Reasons for using insurance						
	Insurance obligation	Fears for the future of a the household (family)	Unhappy events in the life of family and friends	Suggestion/ advice of friends	Suggestion of an insurance agent	Advertisements	Other reasons
Overall	80.7	45.9	29.9	8.5	7.3	1.7	12.0
Men	84.6	47.7	31.1	8.0	7.8	1.7	11.2
Women	71.3	41.7	27.2	9.6	6.1	1.6	13.7
35-44 years old	89.5	50.3	30.8	8.8	8.3	2.1	9.6
Under 24 years old	76.7	32.2	30.0	7.5	2.3	3.2	11.1
Higher education	83.6	51.8	28.4	10.7	11.7	2.1	17.9
Primary and lower education	72.8	39.2	31.4	7.3	3.2	0.9	10.0
5 people in a household	89.4	53.2	32.5	8.9	9.0	1.2	7.8
1 person in a household	57.8	29.1	28.7	12.6	4.3	1.4	14.5
Towns 20-100k	77.2	49.6	29.5	9.7	8.3	2.0	11.5
Towns 200-500k	75.7	46.0	27.8	11.3	9.1	2.6	16.4
Working on one's own account	91.3	58.8	24.7	11.8	10.8	1.9	16.1
Disability pensioners and retired people	69.7	40.1	31.0	8.2	5.2	1.2	12.7
Forth quartile of income	77.6	46.6	28.2	12.3	10.6	2.2	15.8
First quartile of income	84.6	43.9	27.7	5.2	4.4	1.1	7.3
Have savings	82.1	52.6	32.0	11.5	9.8	2.8	14.9
Haven't got savings	80.3	43.8	29.2	7.5	6.5	1.4	11.1
Savings for over 6 moths	85.5	62.3	31.0	11.3	13.6	5.5	11.1
Savings for over a month	79.0	50.9	33.8	11.2	8.7	1.6	12.5
Paying back loan/ credit	84.7	48.1	29.1	8.1	9.1	1.5	12.4
Not paying back loan / credit	77.6	44.2	30.6	8.7	5.8	1.9	11.7
Income situation improved	83.5	51.3	32.4	12.2	12.1	1.8	12.3
Income situation deteriorated	81.1	44.1	28.8	7.2	5.8	1.4	11.0

Suggestions (advice) of friends are ranked fourth in the list of reasons for buying insurance, but the impact of this factor on decisions related to using protection insurance is clearly less significant (8.5% of indications).

It comes as a surprise that the suggestions of insurance agent are only fifth place in the list of reasons for signing insurance agreements (7.3% of indications). This would mean that the role played by agents in the buying of inappropriate insurance products is not as big as one might think. It is interesting to see who is more prone to insurance agents' suggestions (table 5.28). Men display greater susceptibility to insurance agent's suggestions than women, and the group of people aged 35-44 is clearly higher than the under 24s. People with higher education are more susceptible to agents' suggestions than people with primary education, larger households than smaller, households working on their own account than the retired and disability pensioners, those in the upper income brackets than poorer people, those with savings than those without, those with savings for more than 6 months than those with only one month's savings, those repaying loans or credit, than those not repaying anything, those whose financial situation has improved than those whose income situation has deteriorated. Susceptibility is generally not affected by place of residence.

Advertisements come in last place on the list of reasons for buying insurance (1.7% of indicators). We can obviously ask the question, which is difficult to answer for understandable reasons: to what extent do ads impact on your subconscious “choice”? Insurance ads have a similar impact on men and women. But who is more susceptible to ads even if the difference is slight? It turns out that insurance ads (in terms of impact) tend to affect people under 24, with higher education, working on their own account, from households in upper income brackets, with savings for more than 6 months, not paying back loans or credit in situations where income has improved, inhabiting larger as well as smaller towns.

In fact, households in Poland use various forms of insurance and to various extents. The problem is that the sums we spend on life, health and property insurance are in general quite low (sums spent on insurance *per capita* in Poland amount to only 600 PLN per year, which is less than 140 euro a year, against an average in Europe of about 1,000 euro, and in the European Union of over 1,600 euro); unfortunately it is difficult to estimate the annual sums a household spends on particular kinds of insurance. It is worth mentioning the facts presented in *Diagnosis* that “justify” such a low interest of Polish households in insurance.

In responding to the question “*how do you evaluate the material level of your current life?*” up to 35% of Poles answered “not too good”, “bad” or “tragic”. On a 1 to 7 scale, the evaluation of current lifestyle is graded 4. No more than 40% are satisfied with the financial situation of their families, and those content with the current incomes of their family are no more than 35%. The feeling that their source of income is not too secure is expressed by 67% of Poles. Financial problems have often worried and made life more difficult for 34% of respondents, and are experienced by over 50% of respondents. The material level of current life does not satisfy (absolutely does not satisfy, minimally satisfies them or satisfies them to a low extent) the aspirations of 62% of Poles. A comparison of one’s own lifestyle with that of an average person of the same gender and the same age, only slightly “soothes” unfulfilled aspirations, because the answers “much worse than average”, “worse” and “slightly worse” make up over 45% of all answers. And finally, the negative impact of the changes that have occurred in Poland since 1989 on the personal life (answers: “very unfavorable” 20.3%, “quite unfavorable” 47.7%) is declared by 68% of respondents.

The various types of insurance possessed by households are presented in tables 5.29 – 5.32, which separately feature compulsory insurance (table 5.29), personal insurance (table 5.30), the most common voluntary property insurance (table 5.31) and the least common voluntary property insurance (table 5.32).

In compulsory insurance, motor third-party liability insurance predominates. On the basis of insurance data, 54% of households have a car, but clearly more often households, which own a car, are run by men.

Table 5.29. Compulsory insurance owned by households

(%)

Gender of the head of household	Insurance		
	Motor third-party liability insurance	Farmers third-party liability insurance	Insurance of buildings of an agricultural household
Men	64.0	10.2	16.7
Women	31.9	3.7	7.1
Overall	53.8	8.2	13.7

Table 5.30. Personal insurance owned by households

(%)

Gender of the head of household	Insurance			
	Life insurance	Unit-linked life insurance	Dowry insurance, endowment for children	Accident insurance
Men	62.7	10.3	3.9	54.0
Women	57.0	6.4	2.3	39.3
Overall	60.9	9.1	3.4	49.3

Dowry insurance is owned only by 3% of households, even if its importance in protecting the family in the case of the death of the breadwinner cannot be overestimated.

In other personal insurance (accident insurance and sickness insurance) offered by insurance companies in branch II (other types of personal insurance and property insurance), thus short-term insurance, accident insurance (against consequences of unfortunate accidents) has the highest importance. Every other household has such insurance. This insurance often also appears in group form. Group insurance against consequences of unfortunate accidents is most often paid by the employee him or herself (in 59% of cases).

Data concerning illness insurance turns out to have little credibility (probably because they are associated with "Public Health Insurance" (the National Health Fund)).

Table 5.31. Voluntary property insurance most often owned by households

(%)

Gender of the head of household	Insurance	
	Motor hull insurance	Homeowners insurance
Men	27.1	44.7
Women	15.9	35.7
Overall	23.6	41.8

As we know, most commonly held voluntary insurance packages are motor hull insurance (comprehensive) and homeowner insurance. Despite the relatively high use of insurance we still have to note that only 42% of respondents have home contents insurance and only one in four respondents has comprehensive car insurance (against damage and theft).

Table 5.32. Property insurance which households use the least often

(%)

Gender of household's head	Insurance				
	Credit insurance	Liability in private life	Liability in professional activity	Liability in business activity	Agricultural insurance
Men	3.8	3.8	8.8	3.1	3.5
Women	1.9	1.5	6.4	1.6	1.4
Overall	3.2	3.1	8.0	2.6	2.8

Of the types of property insurance, households least often use the following: credit insurance, liability insurance in private life, liability insurance in their jobs, insurance against civil liability in business, and agricultural insurance (most often concerning crops). It is worth pointing out that some of these types of insurance can be compulsory in connection with a loan taken out or the business activity of a member of a household. At present in Poland – which is not common knowledge – there are about 30 different compulsory types of insurance. Thus the

scope of the insurance listed above used only by about 3% of households (more, 8%, have liability for their professional activity) is still increasing, but it is still marginal in terms of overall property insurance arranged at the initiative of a households themselves. It is worthwhile underlining the existence of group liability insurance for professional activity, when the premium is usually paid by the employer (57% of cases).

From the information included in tables 5.29-5.32 it is clear that insurance is definitely more often used by households where the head of the family is male.

The impact of the age of the household head on the use of insurance is not varied, but it could be generally said that insurance is most often used by households whose head is between 25-59 years old.

The impact of the household head having higher education is clearly visible. This is true for all analyzed types of insurance, apart from agricultural insurance (lower education level of people working in agriculture).

The place of residence of a household (status and size of town or village) does not have a clear influence on insurance (only agricultural insurance, which is understandable, is much more often encountered in rural areas).

The impact of a household head in various socio-professional groups is evidently differentiated in terms of the use of insurance protection. It is difficult to pinpoint any real patterns in this respect, although people working on their own account tend more often to have the following types of insurance: motor hull insurance, unit-linked life insurance, dowry insurance, credit insurance, liability insurance of professional activity, and liability insurance of business activity.

There is a strong relationship between having an insurance product and the amount of income per capita in a household, but there is a clearly weaker relationship between savings and having insurance products. It is worth remarking that using insurance should encompass above all households with an average standard of living (they have something to insure and cannot afford to not have insurance), but such affluence in Poland concerns more often households in the upper quartile rather than the middle of income distribution.

Paying back loans and/or credit has a positive impact on having insurance products. Having insurance products imposed by a bank concerns only 1.4% of households; in the case of life insurance, it is 5.2%; motor hull insurance 3.9% and homeowners insurance it is 3.7%.

However, there is a distinct influence of a change in income situation on having insurance products. The research shows that a drop in income within the past 3 months tends to decrease insurance value.

5.4.7. Retirement plans

Tadeusz Szumlicz

The pension reform conducted in Poland was very closely — although not correctly — associated with creating capital funds within pension plans. At the very beginning of the reform this was perceived as an undeniable marketing success indicated by the fact that more than 8.5 million people joined open pension funds. In the first phase of functioning of the new system, the most significant was the participation of people aged between 31-50 who, by choice, could but did not have to, trust the capital principles of financing the pension system¹⁹.

¹⁹ It is worth mentioning that the earlier estimates of the Office for Pension Reform in the Government mentioned that among people who have a choice, the participation in open pension funds is declared by 90% of people aged 31-35, 60% by those aged 36-40, 30% by those aged 41-45 and 20% by those aged 46-50. According to later information, the demographic breakdown of people aged 31-50 accessing open pension funds (OFE) did not entirely overlap with the forecasts: 75% of people aged 31-35, 60% of people aged 36-40, 40% of those aged 41-45 and 13% of those aged 46-50. A similar decision about the division of the contribution was taken by about 2 million people more than was previously expected (*compare* Szumlicz, 1999).

One of the most important decisions of a future pensioner in the new system is the choice and possible change of an open pension fund. Among the working population aged below 50, 41% said that they had not chosen a fund; 53% confirmed that they had chosen a fund and had not changed it; and less than 6% said they had chosen a fund, but had also changed it. It is interesting to analyze these decisions in terms of age (table 5.33).

Various factors determined decisions on the choice of an open pension fund (one could choose more than one answer). The largest group, although only 17%, of future pensioners were guided by the funds' financial results. Advertising was particularly important for 14% of those choosing a fund. Information provided by an insurance broker had almost the same importance (13%). Advice of family and friends was also an important factor (11%). However, the trust of a given fund (3%), low fees (3%) and other unidentified reasons (5%) were decidedly less important in the choice of an open pension fund.

Table 5.33. Choice of open pension funds by respondents' age and gender

Group	(%)		
	Did not choose	I chose and I didn't change	I chose and I changed
Overall	40.9	53.6	5.5
Gender			
Men	41.9	53.2	4.9
Women	39.7	54.2	6.1
Age			
Under 24 years old	34.9	59.3	5.7
25-34 years old	25.4	67.9	6.7
35-44 years old	40.3	54.0	5.7
45-59 years old	66.4	30.2	3.4

It worth recalling one common misunderstanding related to the reconstruction of pension provision²⁰. Some advertising campaigns of open pension funds did some harm in this respect, persistently launching the image of rich pensioners, provided that potential lucky ones will enter their pension fund.

Misunderstandings concerning the new pension system were to a large extent connected with presenting the system in such a way as to make it understandable. This is mainly about making unclear the image of future pension income, because it is still hardly accepted that two singled out pillars of the pension systems, the so-called 'first' and 'second' pillars would together provide a standard pension, i.e. a pension relatively close to the current salary.

In other words, it was common to present solutions proposed in the second pillar as a particular way of buying additional insurance, i.e. increasing the value of the pension standard. Such promotion of open pension funds clearly decreased the actual role of pension plan initiatives included in the so-called 'third pillar'.

After soothing advertising campaigns of open pension funds, there was a clear change in interpretations of incomes that were possible in this part of the system (the first and second pillars jointly).

The old pension system continues to yield a replacement rate (the relationship of an average pension to an average salary) on quite a high level — 68%. At the same time, it has to be noted that the replacement rate by people earning less is clearly higher (about 90%) than the rates of replacement achieved by people earning more (about 50%). The scope of redistribution of pension incomes within the system can, therefore, be most generally explained in this way. In the new pension system, the rate of an average pension from the base level will reach 50% of a given salary. Thus, we will receive relatively lower pensions from the first and second pillars. Nevertheless, one should underline that the purchasing strength of future pensions should be

²⁰ More – see Szumlicz, 1999.

higher.

Firstly, rates reached regardless of salaries will be the same. For people with low salaries, future replacement rates — according to the adopted insurance equivalence principle — will be far less favorable than to date.

In descriptions of the new systems, two basic income changes are most often omitted. The issue of fuller dependency of future pensions on earlier paid contribution is widely discussed, but the far-reaching social consequences of applying the insurance equivalence principle are not raised. The public is not informed that limiting redistribution of pension system will have serious consequences on the future material status of a pensioner.

Apart from compulsory insurance, concerning the first and second pillars, the currently realized pension foresees (or should foresee) the emergence of a broader scope for group, individual and voluntary plans for old age. It is designed to rely on employee pension systems created by companies and also on individual participation in pensions plans organized by life insurance companies, investment funds and banks.

Participation in supplementing voluntary pension plans widens the possibilities of investing money for old age. Additional parts of the system are addressed to more aware future pensioners with a better sense of foresight who see the need to take care of their future pension income now without being pushed or reminded. Some future pensioners may think differently about their provision for old age in another form by, for instance, buying shares, shares in investment funds or investing in real estate. These forms may be considered by people with far higher incomes than the average.

High pensions in the new system should be associated with taking part in additional pension schemes, thus obtaining income from several sources, because this will in fact determine life after retirement. It also has to be stressed here that for a successful pension plan, savings have to be made regularly for old age. However obvious it might appear, this fact is often neglected.

Previous research from 2000 sought to establish the extent to which people understood the rules of creating future pension income. It focused mainly on opinions concerning facts related to: awareness of income results of the reform and assessment of the status of future pensioners. It also sought to discover the extent of awareness of the necessity of participating in such additional pension funds in order to obtain higher incomes in the future.

Answering the question of whether the new pensions system provided a sense of security for the future caused several problems. One can recall that the underlying principle of the reforms is “security through diversity”. Up to 53% of respondents did not have opinion on this, 25% answered “yes”, and 22% said “no”. The situation most likely has not changed much since then.

A relatively large number of people, 47%, said they participated in additional enterprises, while 27% of respondents said that they had already entered such plans, 10% wanted to buy an additional pension insurance package, 5% thought about saving for pensions in investment funds and another 5% planned other forms of saving. Declarations of participation in additional pension systems were most visibly correlated with the level of education and financial situation of those interested in such an option. One could observe the strong influence of socio-professional status.

More detailed data appeared when an analysis was made on the basis of age criterion. Firstly, there was a very low level of declarations from participation in additional pension enterprises among people aged over 50 for whom this would be the only chance of taking part in new pension solutions.

We have to underline that a declaration of participation in additional pension enterprises is clearly correlated with education and current income situation. It is worth mentioning also that the youngest people are most willing to participate in various pension plans, which can be treated as a particularly important sign of pension foresight. For employers, this is again a signal that in choosing future employment highly qualified young people will value participation in company pension plans highly.

The third pillar of the pension reform, because of its logic, requires at least minimal preferential support.

It is worth observing that from the very beginning of establishing the principles of free access to voluntary pension enterprises (III pillar), the most basic forms of encouraging people into it through tax incentives have been abandoned.

We can talk about minimal preferences in the case of four employee pension programmes. Such preferences are connected with the possibility of including expenses for the proper functioning of the program into the cost of procuring income and exempting such contribution from "paying contribution " on social insurance (disability and pension contribution).

At present, amending the law on employee pension programs (PPE) is perceived as a chance of making this a form of collecting money (III pillar) for the future, which for the moment has not gained great success. It has to be borne in mind that using the full privileges of PPE (a contribution of 7%) will in the future mean pensions higher by about 50%. This is quite a shocking statement — but probably not widely known.

The principles of incentives also provide interesting material for analysis, and concern the conditions for additional savings for old age within the III pillar of pension reform²¹.

It is assumed that the III pillar is an additional, supplementary, source of income for old age. This supplementary character of the III pillar means we cannot think of "equality" of pillars. For the majority of Poles, the main source of income for old age will be pensions paid from the I and II pillars of the pension system. For some respondents there will be equality between the pillars and for very few people the III pillar will be the main source of income (e.g. for people with high incomes or those running their own business and declaring minimal pension contribution).

These statements seem quite obvious, but are formulated as if from "above" the system change. As has been previously illustrated, a change in the system will cause greater harm to the income of future pensioners who only have only just begun their working lives and those with the lowest incomes. The III pillar would be seen as in part making the consequences of the reform less severe.

The document states that an explosion of employee pension plans was never expected when pension reform was introduced. It was assumed that it would be a continual process, developing slowly in stages, year on year. For some categories of employers (e.g. those employing people with low skills, in regions with high unemployment), the employee pension program will never be an attractive form of managing human resources. It is thus forgotten that the first version of those programs assumes paying contribution for employees, and this changes the way of thinking quite fundamentally.

It is also important to underline in the document that in 1997 (the concept of a pension reform *Security through diversity*) we were promised the introduction of employee pension programs, as the first stage of development of additional enterprises, while only later on, if the condition of state finances allowed, the system of individual pension reforms supported by tax incentives would be introduced. Currently the concept of *Individual Pension Accounts* (IKE), the introduction of such tax motivations is not now foreseen before 2004.

It seems that fewer and fewer people need persuading about the fundamental impact of the III pillar on future pension incomes. In analyzing participation, some of the most important criteria are: age, income and forms of pension enterprise, as well as conditions of possible participation.

²¹ Unpublished materials, prepared by the Ministry of Economy, Labor and Social Policy.

Table 5.34. Participation in additional pension plan

(%)

Group	Yes
Overall	25.2
Age	
Under 24 years old	20.6
25-34 years old	31.0
35-44 years old	30.1
45-59 years old	17.2
60-64 years old	11.1
Income per capita	
First quartile	14.9
Middle 50 %	24.6
Forth quartile	35.6

Table 5.35. Intention to participate in additional pension plan

(%)

Group	Yes
Overall	15.1
Age	
Under 24 years old	35.1
25-34 years old	27.7
35-44 years old	11.0
45-59 years old	4.8
Income per capita	
First quartile	10.4
Middle 50 %	14.6
Forth quartile	21.4

Table 5.36. Intention to participate in additional pension plan by the pension enterprise

(%)

Group	Unit-linked life insurance	Investment fund	Other forms	DK yet
Overall	20.1	7.9	6.3	65.7
Age				
Under 24 years old	7.7	6.6	8.8	76.9
25-34 years old	24.3	7.9	4.0	63.9
35-44 years old	27.0	12.4	5.6	55.1
45-59 years old	13.7	3.9	9.8	72.5
Income per capita				
First quartile	21.5	3.1	4.6	70.8
Middle 50 %	17.0	9.5	6.0	67.5
Forth quartile	25.6	8.8	7.2	58.4

Table 5.37. Intention to participate in additional pension plan provided that contributions are paid by the employer

(%)

Group	Yes	No	No opinion
Overall	38.4	29.8	31.8
Age			
Under 24 years old	38.4	24.4	37.2
25-34 years old	32.3	34.9	32.8
35-44 years old	45.8	21.7	32.5
45-59 years old	48.9	31.9	19.1
Income per capita			
First quartile	42.4	15.2	42.4
Middle 50 %	45.3	24.5	30.2
Forth quartile	27.4	45.1	27.4

Table 5.38. Intention to participate in additional pension plan provided that contributions will be exempt from tax

(%)

Group	Yes	No	No opinion
Overall	36.7	25.1	38.2
Age			
Under 24 years old	32.9	23.5	43.5
25-34 years old	31.1	29.5	39.5
35-44 years old	47.4	20.5	32.1
45-59 years old	46.7	17.8	35.6
Income per capita			
First quartile	39.1	17.2	43.8
Middle 50 %	37.8	19.5	42.7
Forth quartile	33.9	37.5	28.6

Table 5.39. Intention to participate in additional pension plan provided savings are exempt from tax

(%)

Group	Yes	No	No opinion
Overall	34.5	23.8	41.8
Age			
Under 24 years old	27.4	25.0	47.6
25-34 years old	34.0	26.2	39.8
35-44 years old	38.0	20.3	41.8
45-59 years old	45.7	15.2	39.1
Income per capita			
First quartile	35.9	15.6	48.4
Middle 50 %	32.6	18.7	48.7
Forth quartile	35.4	34.5	30.1

Table 5.40. Intention to participate in additional pension plan regardless of exemptions and tax relieves

Group	(%)		
	Yes	No	No opinion
Overall	34.3	19.1	46.6
Age			
Under 24 years old	34.5	18.4	47.1
25-34 years old	33.7	18.4	48.0
35-44 years old	39.2	19.0	41.8
45-59 years old	27.7	25.5	46.8
Income per capita			
First quartile	15.4	24.6	60.0
Middle 50 %	33.0	17.8	49.2
Forth quartile	44.4	17.9	37.6

A key factor is that there is no need to persuade young people (under 40) to be covered in the new pension system. To the question “*do you belong to any additional pension fund?*” – 25% answered ‘yes’ (table 5.34). Clearly above average are people aged 25-34 (31%), inhabitants of towns of 200-500 thousand (37%), people with higher education (36%), people from households in the highest income brackets (36%), and self-employed (32%).

Among those who do not participate in additional pension plans, those who plan to participate stand at 15% (table 5.35). The highest participation, 35%, among those wanting to access pension funds – which is encouraging – is the youngest group (up to 24) and people with higher education – 25%.

Of the forms of additional pension protection chosen by those who intend to join a pension fund, the most common is unit-linked life insurance – 20%. Investment funds, as such, would be chosen by far fewer people, only 8%. Other forms of retirement plans would be chosen by 6%, but 66% did not have an opinion on this (table 5.36).

The intention of participating in an additional retirement provision was declared by 38% of respondents if an employer paid the contribution. 30% did not impose such a condition and 32% of respondents said they had no opinion on it (table 5.37).

Making participation in the additional pension plan dependent on tax exemption was expressed by 37% of respondents. 25% did not support such a condition, while 38% did not have an opinion on it (table 5.38).

Similar data (respectively: 35%, 24% and 42%) concerned participation in other forms of retirement plans provided that savings are exempt from tax (not putting tax on expected investment profits) (table 5.39).

Declarations about a possible change in an additional pension plan, regardless of tax exemptions, were declared by 34%, and refused by 19%, while 47% had no opinion (table 5.40).

5.5. Subjective evaluation of material living standards

Janusz Czapiński

According to Michalos (1980), and others, the most important criterion of subjective well-being is the result one gets from a comparison of one’s current life situation with various standards, for example: aspirations and perception of position and situation of other people of the same gender and similar age. Scales of such comparisons (annex, part II, quest. 39, 41) have been used in this project to explain the sources of subjective assessment of standards of living (quest. 38).

Material living conditions are perceived as a one of the most important determinants of well-being. Evaluation of living standards obviously depends on an objective level of income and affluence of a household, but other criteria are no less – and usually more – significant, e.g. aspirations (people having greater material aspirations will be less content with their current

life), signs of other people's wealth and poverty to which one can compare oneself (the same age and gender).

5.5.1. Data from the whole sample

An average evaluation of a material living standard, as well as a comparison of one's own material living standards with other people's of the same age and gender, have been increasing since 1994 (tables 5.41 and 5.43). The degree of aspiration fulfillment with regard to the material standard of living has not changed (table 5.42).

Table 5.41. Percentage distribution and average scale values of answers to the question "How would you evaluate your current material situation at present?" over time.

Answer	1992 N=3402	1993 N=2306	1994 N=2302	1995 N=3020	1996 N=2333	1997 N=2094	2000 N=6403	2003 N=9408
Great	0.3	0.1	0.0	0.4	0.3	0.3	0.6	0.4
Good	6.2	6.3	6.9	8.4	8.4	10.7	11.0	12.5
Quite good	15.1	12.7	16.2	18.8	14.8	15.3	18.6	19.1
Neither good nor bad	33.0	32.6	35.2	35.4	39.0	39.8	31.7	33.2
Not too good	29.0	27.0	25.8	24.7	22.3	20.7	22.8	20.6
Bad	13.1	17.6	12.8	10.5	13.1	10.9	11.6	10.5
Terrible	3.4	3.8	3.0	1.8	2.0	2.3	3.7	3.6
Averaged scale value	4.37	4.48	4.30	4.14	4.22	4.12	4.16	4.07

Source of data: 1992-1997— Czapiński, 1998; 2000 — Social Diagnosis 2000 (computer database).

Table 5.42. Percentage distribution and average scale values of answers to the question "To what extent does your present material situation meet your aspirations, what you would like to have?" over a period of time.

Answer	1992 N=3402	1993 N=2306	1994 N=2302	1995 N=3020	1996 N=2333	1997 N=2094	2000 N=6403	2003 N=9400
Not at all	22.8	28.8	26.5	23.2	20.3	18.9	19.8	20.2
To a minimum extent	19.1	19.6	18.8	18.8	18.8	16.6	19.6	19.1
To some extent	27.3	24.5	23.7	25.2	26.7	26.3	25.6	22.7
It is half as good as I would like it to be	20.7	18.5	20.9	21.3	22.4	23.5	22.8	23.7
It largely does	8.0	6.6	8.0	9.2	9.3	11.9	9.5	11.0
It almost completely does	1.8	1.9	1.6	2.1	2.0	2.5	2.4	2.9
It does fully or it is even better than I would like to be	0.4	0.0	0.4	0.3	0.5	0.2	0.5	0.4
Average scale value	2.79	2.61	2.72	2.82	2.90	3.01	2.92	2.96

Source of data: 1992-1997 — Czapiński, 1998; 2000 — Social Diagnosis 2000 (computer database).

Table 5.43. Percentage distribution and average scale value of answers to the question about the evaluation of the current material standard of living in the respondent's life in comparison to what most people of the same gender and similar age have – over a period of time.

Answer	1992 N=3402	1993 N=2306	1994 N=2302	1995 N=3020	1996 N=2333	1997 N=2094	2000 N=6403	2003 N=9393
Much worse than average	9.7	11.6	9.5	9.6	8.4	7.7	9.8	8.1
Worse	20.0	20.3	19.9	17.7	16.4	16.7	16.0	14.2
A little worse	20.2	17.0	17.7	18.6	19.3	19.6	20.6	19.3
The same as that of an average men (women) at my age	36.5	35.8	37.9	39.6	40.1	42.0	37.7	41.6
Slightly better than average	10.5	11.9	11.7	10.3	11.6	9.6	11.0	12.3

Better	2.7	2.5	2.7	3.5	3.6	3.9	3.8	3.7
Much better than average	0.4	1.0	0.6	0.6	0.5	0.5	1.1	0.9
Average scale value	3.28	3.27	3.33	3.36	3.43	3.43	3.40	3.50

Source of data: 1992-1997 — Czapiński, 1998; 2000 — Social Diagnosis 2000 (computer database).

5.5.2. Data from the panel sample

Data from the panel sample indicates that, despite the changes for entire samples, the only significant change in relation to 2000 is a negative one: respondents perceive their material situation as worse in comparison to the situation of other people of the same age and of the same gender (table 5.44).

Table 5.44. Comparison of variable values of economic well-being from two studies — in 2000 and in 2003 on the panel sample (of the same respondents)

Variable	Wave	Mean	Standard deviation	Mean difference	t	Degrees of freedom	Significance	Correlation
Evaluation of material life standard	2000	4.15	1.290	0.01	0.420	4696	0.674	0.419*
	2003	4.14	1.185					
In comparison with aspirations	2000	2.93	1.369	-0.01	0.381	4691	0.703	0.354*
	2003	2.94	1.398					
In comparison with other people	2000	3.42	1.309	0.13	6.589	5927	0.000	0.337*
	2003	3.29	1.292					

* p < 0.000

5.6. Health and treatment

Katarzyna Tymowska

Research indicates a high intensity of using medical services provided both by doctors and hospitals (hospital stays for giving birth were not included). Overall, 73% of adults had used services of general practitioners, family doctors or specialists in the past three months. Among people aged 60 – 64, this percentage amounted to 82%, and in the group of people of 65 and over the percentage is 87% (among the retired this is 89% and for farmers only 60%). Inhabitants of big cities took advantage of medical assistance more often than people from rural areas and small towns. We obtained similar results three years ago, which suggests these are permanent trends and definitely impact on the work intensity of doctors with similar population catchments areas, but living in different parts of the country. Another criterion that significantly differentiated people with regard to the use of medical services was income (the higher the income, the higher the use), while education factors showed that only people with primary and no education use them slightly more often. Thus views on the uneven redistribution of health care contribution from high to low earners cannot be supported by this body of work, as the latter use health care more often both from the public budget and own private resources.

Studies conducted in Belgium showed that people with lower education more often than other groups use the services of general practitioners and nurses at home and are more often checked in hospitals. Those with higher education more often than others used the services of specialists, psychotherapists and dentists. A similar, although slightly smaller, number was in dependency when socio-economic status was established by level of income. Similar results were confirmed in studies into intensity of use of various health care forms and dependency on social and economic status in such countries as Holland, the UK, Ireland, Spain, Italy (Van der Hayden, 2003). Factors such as knowledge about availability of specialist health care, necessary

to care for one's health, and no organizational and spatial barriers in access to doctors were strong motives for patient behavior patterns, as opposed to the characteristics of the health care system. Differences in using health care, both those observed in Poland and those in the cited studies, do not give grounds to conclude that some social groups use them more and some less; nevertheless, they serve as the basis for saying that with an increase of education level in a given society, an increase in demand for specialized medical and dental services can be expected, and in less educated groups there will be stronger pressure on using general practitioners' services (family doctors) and hospitals.

Frequency of use of medical services can be an indicator of both health condition (susceptibility to illnesses), and also care for health. A subjective evaluation of one's health condition is decidedly more positive than the above data would suggest: only 34% of respondents were not happy with their health, with 13% moderately unhappy and only 7.6% very dissatisfied (no change in relation to the previous study). At least some of the visits to the doctors were not absolutely necessary, but of a preventive character. Most Poles appear to care for their health, even if they do not complain about anything specific.

In the three months before the study was undertaken, hospital care was used by 22% of adult respondents, but in the group over 65, it was up to 38%. In 2000, people from rural areas used hospital care more often than urban dwellers; this difference has subsequently disappeared. People with higher education used hospitals in fewer cases than people with primary or lower education. This can be partly explained by the differences in the education of the elderly and the young. Older people have generally lower education, but more often suffer from chronic illnesses and sudden deterioration in their health is an indication for hospitalization. The highest percentage among those using hospitals is among the retired (38%, similar to the case of the elderly). One may think the system of admitting retirement status in Poland is imperfect and various people abuse it. It remains true that there are many people with health problems, having the need for hospitalization. It is also possible that because of the difficult situation of the retired, there is a stronger inclination among doctors to send them to hospitals in order to protect them from private expenditure on medicines, or to provide them with better access to diagnostic tests and therefore better access to treatment itself, which in the case of other social groups is more often obtained via private health services in private health centers. The survey on household expenditures showed that among the retired private spending on health care is much lower than in other groups, and giving up many services for the reasons of costs is much higher.

Among people using health care, up to 71% was made up of those whose treatment was paid from the public health fund. This is a significant increase in relation to the situation three years ago (57%). It also confirms a growing intensity of health care use within state paid services, particularly visible in e.g. the increase of visits received and the number of people hospitalized. This is partly due to incentives hidden in the financing techniques of health care units within the state budget, but it also points to a change in attitudes (increased commerciality of medical care and increase of health care). A further rise in health care use with a simultaneous limit on public financing would foster frustration and discontent, and in some groups encourage a switch to the privately financed sector.

28% paid for medical care out of their own pockets (in 2000 – 25%), and employers through subscription financing techniques covered 3% (similar to 3 years ago, although there are differences between the groups). Because many people using health care financed from various sources, data on the use of various financing forms does not add up to 100%.

People aged between 23-34 more often than other age groups use medical health services financed from their own incomes. This group also said that subscription to medical services paid by an employer is a more frequent form of financing.

Adult urban-dwellers use health care more often – both paid by the state or privately financed medical care within subscriptions paid by employers (additional work benefits for employers, reflecting rivalry on the labor market, and by calculating costs of subscriptions in revenue costs — employers can pay lower taxes, Tymowska, 1999). In the biggest cities, up to 7.5% of people among those who have ever used some form of medical care, at present use it

within subscriptions for medical services (in the Mazowieckie voivodship this is a higher percentage). The right to such paid medical care is more widespread, but this study focused only on actual use.

People with higher education and those whose income was ranked in the upper quartile, more often than others said they paid for their medical care from their own money (53% now and 48% three years ago). They also more often used health care within the paid subscription. Such people do not belong to a group with higher health risks, but their behavior patterns are the result of higher (than in other groups) care for their health, as well as the consumer-like perception of this type of service, as well as easier availability (they have better information on treatment and lower economic barriers).

Since 1999, patients have had the right to choose hospitals (we do not consider here actual limitations in taking up this right for reasons of e.g. administrative hindrances, such as referrals or so-called. "promises" from patients' health funds in the case of services outside the region of a health public fund). We wanted to find out what criteria are taken into consideration in determining hospital choice by adult Poles. Respondents most often said they followed the suggestions of a doctor (48%). This appears to indicate the paucity of information helping patients make their own decisions about hospitals. It also shows a high level of trust towards doctors. It is crucial to make every possible effort not to undermine trust between out-patient medical centers and hospitals because of such financial solutions and connections. In the future, there could arise suspicions about doctors' bias towards given hospitals, with the suspicion of financial benefit involved. It is mainly aimed at preventing the development of "smart money" paid by hospitals for referring a patient to their institution. This can be stopped by adopting in the code of medical ethics stipulations that a referral connected with benefits is unethical, as well as support for networks of service suppliers co-operating between themselves officially.

The second criterion among factors determining the choice of hospital is proximity (nearly 1/3 of people gave this reason), indicating the importance of closely located hospitals. Decisions about hospital choice taken by paramedics and patients' own information about hospitals were less important. In highly developed countries, information about hospitals and opinions from neighbors and friends are much more important factors in choosing a hospital than in Poland (Getzen, 2000, Hospitals, 2002). Our studies show that young people and those over 65 more often than other groups point to the emergency ambulance as a decision-maker about which hospital to choose. This can be explained by the lesser importance attached to so-called 'planned hospitalizations', and greater in the case of hospitalizations caused by more sudden bouts of diseases, and among young people this is a higher accident rate, which produces a higher default rate in indicating a hospital.

Ambulance emergency employees' decisions were also an important criterion in hospital choice for people from rural areas, which may also indicate a higher rate of sudden diseases and frequent cases of sudden health deterioration and accidents as the reason for hospitalization for this social group. Hospital directors ensuring medical care for rural populations often note that a significant percentage of patients brought into hospitals in emergency ambulances are people who cannot be refused immediate assistance, even if the hospital has exhausted its limit of services described in their agreement with national health service. For inhabitants of small towns and rural areas, the proximity of a hospital was a more important criterion of hospital choice than for people living in big towns. One's own information about a hospital was weighty for people with higher education and higher incomes. For the latter, the proximity of hospitals did not have much importance when hospitalization was necessary, and in contrast to people from the lower incomes brackets. Suggestions of a doctor referring people to a hospital were an important issue for self-employed, retired people and other professionally passive people, as well as for people with low income and low education. Such results of studies could be an important indication for investors interested in hospital services market and an important premise for decisions in creating formal and informal networks of connections between outpatient clinics and hospitals.

We also wanted to find out more about the scale of giving up health care for the reasons of availability difficulties and the requirement to pay from one's own income. The results gained

were the same as three years ago. 4% of adult respondents made the decision to give up 'often', and in general this occurred in up to 29% of cases. At the same time, giving up health care did not concern nearly one third of adults (who did not have health care needs) and one third had never had such a situation. We can assume that in the group where cancellations happened (often or sometimes), there was a lower sense of health security in the case of illness. It is interesting that cancellations happened more often among middle-aged people, with better education and living in big cities, and relatively rarely in the cases of disability pensioners and the retired. This may suggest that economic barriers and administrative obstacles will be included in one group of cancellation reasons (jointly there would be different obstacles considered), then the nuisance factor is more weighty and this gives reasons for cancellations among people with higher education expecting easy access, and having greater demands and a higher possibility of making decisions about treating diseases themselves. If such economic and administrative barriers did not exist, then we could expect that one third of adult Poles who gave up treatment in public health institutions, would not do so in the new conditions. This would have significant impact on the increase in service demand. The high value placed on time among the better educated groups prompted them to use private medical care. Improvement in access to public financing units would cause an increase in the use of this form of health care by better educated groups, the middle aged and those from big cities.

We were curious how numerous would be the groups of people who did not discontinue earning money, in spite of their doctor advising them to and giving them sick leave. In general, in such situations 11% of all respondents did so, and among the professionally active this was 23%²², among people with higher education 21% and among those with incomes in the upper bracket, 14%. Such behavior can be explained by the situation on the labor market (fear of losing work), obtaining medical leaves for possible benefits e.g. to obtain social benefits, but they can result from the lack of acceptance of the doctors' advice.

The sense of social security indicator in the event of disease is the percentage of adults who did not know where to ask for medical help for themselves or for others. On the basis of the research conducted, we could say that in comparison with the situation of three years ago this indicator has improved. Fewer people did not know where to turn for help when someone gets sick and more people said that it has never happened to them. Such data points to the necessity of a better information system on the possibilities of obtaining medical help, which is confirmed by answers in the survey of households about the information people have on the principles of health care use. They are the only social group currently knowing more than three years ago. Others are better guided in the system when sick, by their doctors and thanks to that, they have a higher sense of security in the situation when an illness occurs and there is a need to use the doctor's help. But this does not prove that the situation is satisfactory. One respondent in five still said they did not know where to go to obtain medical help when there was such a need.

In comparison to the situation three years ago, trust in health care personnel has risen. In 2003, 5% of respondents often did not trust medical care (against 6% earlier), but it happened to almost 32% of respondents (previously 33%). The positive change is minor, but worth attention. People with higher education and higher incomes more often experienced lack of trust towards medical health services. This is probably the result of higher expectations towards health care personnel and higher criticism of their services.

Sense of security in a situation of illness is determined by respondents' subjective evaluation of current treatment conditions in comparison with previous results. 10% of adult respondents think that treatment conditions have improved, 42% that they have not changed, and 31% that they have deteriorated. Opinions about the deterioration of treatment conditions were more often pronounced by inhabitants of big cities from the Dolnośląskie voivodship (there are serious problems with hospital functioning in this region) and self-employed. Inhabitants from Kujawsko-pomorskie and Wielkopolskie voivodships more often than other regions said medical

²² Research conducted in Hungary shows that one in five respondents continued working, despite the suggestion of a doctor to stop working and take sick leave (Evaluation, 1997).

health care had improved. It is distressing that almost one third of respondents think that treatment conditions have deteriorated. At the same time one person in ten notices an improvement, and for many people the conditions of treatment have not changed.

Data from the study do not indicate that the image of health care is perceived exclusively negatively. It should be borne in mind that in Poland for many years we have had a two-tier health care system — many people get better treatment conditions provided by private institutions from private means. Moreover, recent years have seen an increase in private institutions created as a result of privatization of public health centers contracted into the national health system. Opinions about conditions of health care, trust in medical personnel, familiarity with the place where one can get medical health care, and concerning the overall system of health care do not only concern that financed from public funds. The latter factor has been the subject of severe criticism for many years, but many social groups use health care provided by differently financed institutions, and the opinions of adults documented in this study concern the entire health care system. In view of these opinions on the image of the health care system in Poland, it appears not to be so catastrophic as might be thought on the basis of negative press reports on medical care and the unwillingness of the media to feature situations perceived positively by patients. Studies undertaken in Estonia indicate that people who choose their doctors express greater satisfaction with the system of health care than those who did not make a conscious choice (Kalda, 2003). It is possible that some improvement of factors indicating better subjective evaluation of levels of health care than three years ago can be attributed to the fact that respondents, also in Poland, have used their right to chose their own doctor and this is what has raised the level of satisfaction with health care. But this is just an assumption. According to the theory of cognitive dissonance, patients who make the choice to switch doctor may express greater satisfaction because this is how they justify their decisions (Evaluation, 1997).

5.7. Life stress and psychosomatic symptoms

Janusz Czapiński

Several categories of life stress have been identified: marital stress (annex, part II, quest.5-7), parental stress related to problems with children (quest.8-12), stress of caring for elderly people (quest.13-16), financial stress (quest.17-18, 82), work stress (quest. 19-21, 76-78, 80), environmental stress connected with housing conditions, neighbors and the neighborhood (quest. 22-24, 92-94), stress concerning health (quest. 25-26, 46, 49, 64, 71-73), clerks' stress (Kafka's) (quest. 28-30), legal stress related to contacts with police and the justice system (quest. 87-90), stress of victims (quest.84-86, 91) and stress connected with the death of someone close (quest.74-75).

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

The overall level of stress turned out significantly lower in 2003 than three years ago in the previous study (table 5.45).

Table 5.45. Comparison of intensity of overall life stress^a from two measurements — in 2000 and in 2003 on the panel sample (of the same respondents)

Variable	Wave	Mean	Standard deviation	Mean difference	t	Degrees of freedom	Significance	Correlation
Intensity of life stress	2000	3.608	2.986	0.298	6.184	4704	0.000	0.386*
	2003	3.309	2.985					

a Indicator of an overall life stress for 2000 and 2003 was the sum of answers FREQUENTLY to questions 5 to 33 (without quest.27) and YES to questions 71 to 74 and 76 to 94 (see annex, part II).

* p < 0.000

In 2003, the questionnaire was extended by an additional scale of distress, measuring the intensity of 15 psychosomatic symptoms, also used in other studies in Poland. A comparison of this year's results with those from the previous study proves a statistically significant increase in symptoms, especially concerning those connected with digestion (see tables 5.46-5.47 and figure 5.9) and overall tiredness not connected with work. In comparison with indicator improvement for well-being (see above), this may mean an increase in the somatic symptoms of affective disorder. Colloquially speaking: life stress, although weaker than in the past, begins more often to attack bodies rather than minds. In this respect Poland begins to resemble eastern and southern societies (Japanese and some African tribes where depression e.g. shows mainly somatic symptoms, and only up to some degree reveals itself in emotional or existential categories concerning sense of life).

Table 5.46. Percentage of respondents aged 18+ experiencing psychosomatic symptoms for at least 15 days a month shown in three studies...

Symptoms	1996 N=2193	1997 N=1943	2003 N=8977
Splitting headaches	8.1	9.3	8.1
Stomach-ache and bloating	4.9	4.5	5.9
Shoulder or neck muscle pain or tension	8.3	9.8	9.9
Pain in the chest or heartache	7.1	7.1	6.8
Dryness in the mouth or in the throat	5.0	4.0	5.3
Fits of sweating	5.6	6.0	5.9
Feeling of stuffiness	6.0	5.8	5.5
Pain in the whole body	9.1	8.9	9.2
Sudden palpitations	5.3	4.9	5.2
Shivers or quivers	0.8	1.0	1.2
Feeling of pushing on bladder and more frequent urinating	4.0	3.3	6.4
Feeling of tiredness not connected with work	7.9	7.2	8.8
Constipation	2.7	2.4	4.4
Nose bleeding	0.3	0.4	0.9
Sudden blood pressure changes	no data	no data	7.8

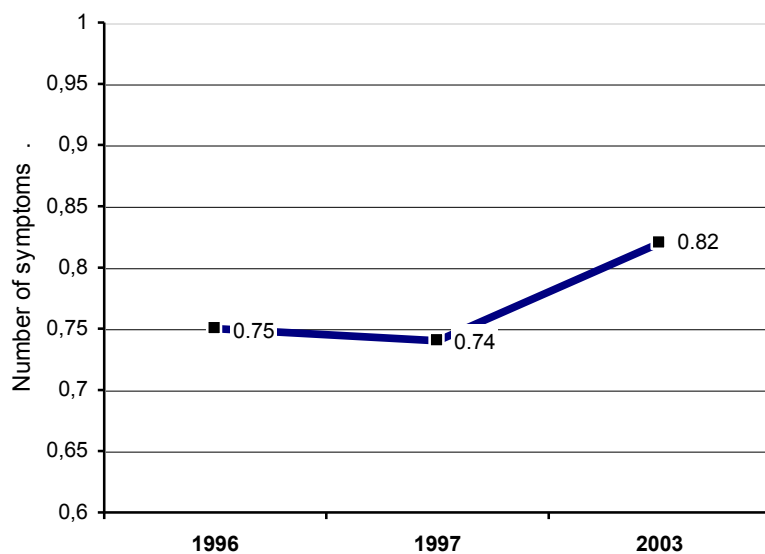
Source of data: 1996-1997 — Czapiński, 1998; 2000 — Social Diagnosis 2000 (computer database).

Table 5.47. Percentage of respondents aged 18+ experiencing different number of psychosomatic symptoms for at least 15 days a month displayed in three studies.

Number of psychosomatic symptoms	1996 N=2193	1997 N=1943	2003 N=8219
0	70.5	70.7	69.8
1	12.6	12.6	12.0
2	6.3	5.9	6.5
3	3.5	3.6	3.8
4	2.7	3.0	2.6
5	1.5	1.7	1.7
6	1.3	0.8	1.4
7	0.7	0.7	0.7
8	0.3	0.4	0.4
9	0.2	0.2	0.3
10 and more	0.3	0.3	0.6
Mean	0.7481	0.7406	0.8219
SD	1.59258	1.57303	1.74245

Source of data: 1996-1997 — Czapiński, 1998; 2000 — Social Diagnosis 2000 (computer database).

Note.: Difference in average number of symptoms between 2003 and two previous studies is statistically significant on level $p < 0.000$.



Source of data: 1996-1997 — Czapiński, 1998.

Figure 5.9. Average number of symptoms experienced for at least 15 days in a previous month in three studies.

To assess the life stress in general and its different categories as predictors of well-being, we performed multiple regression analyses. This method also confirmed which factors may be held responsible for the intensity of stress.

Stress is most closely connected (whether it is the cause or the effect is under discussion) with satisfaction with one's health, depression and — slightly weaker — with satisfaction with family finances, happiness, satisfaction with security in one's own place, evaluation of the past year, satisfaction with work, satisfaction with prospects and achievements in life. The highest impact on well-being is had by health and financial stress, the lowest related to work and care for older people (table 5.48).

General intensity of life stress is largely dependent on education and is increased by unemployment or being professionally passive, as well as by the employment in public or private sectors, or running one's own business, being a farmer, retired, living in a town/city, divorced, and, especially, bringing up children (factor number one), alcohol abuse and cigarette smoking. Stress is lessened by two factors: wealth and friends (table 5.49).

Generally, all factors included in the regression analysis jointly explain large proportions of variance in stress measure (23%), as well as in psychosomatic symptoms scale (24%).

Although life stress positively correlates with the intensity of psychosomatic symptoms ($r=0,171$, $p < 0,000$), those are not always the same factors, which are connected with distress and stress.

Women, older people and people with lower education, as well as the retired, alcoholics and the divorced experience more psychosomatic symptoms; those who report fewer psychosomatic symptoms tend to be the well-off, the unemployed and people bringing up children

Table 5.48. Ranking of particular life stress categories in explaining various aspects of the quality of life (lack of value ranking means that a given category of stress does not explain statistically significant portion of variance of a given indicator of subjective quality of life after excluding other categories of stress).

Type of stress	Evaluation of life as a whole	Happiness	Self-esteem	Suicidal tendencies	Desire to live	Evaluation of the past year	Satisfaction with the family	Satisfaction with finances	Satisfaction with leisure	Satisfaction with health	Satisfaction with morals	Satisfaction with achievements	Satisfaction with situation in the country	Satisfaction with place of residence	Satisfaction with prospects for the future	Satisfaction with sex life	Satisfaction with education	Satisfaction with work	Satisfaction with children	Satisfaction with marriage	Satisfaction with security	Depression	Evaluation of all reforms so far	Sum of reverse ranks with ¹
Health stress	2	2	2	1	1	2	2	2	2	1	2	2	2	-4	2	1	2		2	2	2	1	1	168
Financial stress	1	1	1	1	1	1	3	1	1	4	3	1	1	2	1	3	1	1	-4	4			2	160
Marriage stress	6	4	4	-4	3		4		3	3	3	3			1	3			3	1		4		89
Parental stress			4				4		4		4	4			4		5		1	2			3	65
Ecological stress				-2			4				1		3	1			-6				1			28
Legal stress	5	5	5	-3	3	4	1		-4	-4		4							4	5	-4	-5	-3	14
Death of a close person						3		-4					-4		-6									-9
Stress of a victim		-6	-6	-2			5	-4			4		-4		-5						2			-14
Kafka stress	-5	-6			-3			-3		-3	3	-4		3		-3	-5			-4	3	-4	3	-32
Stress at work	-3	-3	-3	-3	-2			-2	5	-2		-3	-4	3	-3	-3	-3	2	3	-5		-3	3	-64
Custodian stress	-4	-3			-2	4		-4		-2			-4		-4	-2	-4		-2	-3	-3	-2	-3	-90
Overall percentage of explained variance (adjusted R²)	9	14	8	7	5	13	5	18	7	27	6	10	3	4	10	4	5	11	8	9	12	27	3	

Note.: minus at the rank means dependence reverse to the expected, i.e. that a given type of stress correlates positively with a well being indicator

¹ Sum of values of 10 minus rank with a sign; this indicator shows importance and direction of relationship of a given stress type and well being; the higher the positive value, the stronger the negative impact of a stress on well being, the higher the negative value, the higher the positive impact.

Table 5.49. Ranking of particular socio-demographic factors in explaining different categories of life stress and distress (psychosomatic symptoms) (no rank value means that a given factor does not account for significant portion of variance of a given category of stress and distress. when other factors are controlled).

Predictor	Marriage stress	Parental stress	Custodian stress	Financial stress	Stress at work	Ecological stress	Health stress	Kafka's stress	Legal stress	Stress of a victim	General stress	Distress
Gender (1- man , 2-woman)		6	4		-4	2	3	-2	-3	-3		2
Age	2	5	-1		-3	-5	3	-2	-2	-2		1
Education	4	4	1	7	4	3		1		2	4	3
Income per capita		-3		-1						2	-6	-5
Religious practices				-8						-3		
Number of friends	-3	-5	-4	-6		-4	-6				-8	-4
Housing conditions	-3	-3				-2						
Unemployment	5			2	4		-6	2	3	-3	7	-6
Employment in public sector	4	6	5	5	1				5	-2	7	
Employment in private sector	5	5		3	1			3	5	-2	5	
Being an individual business owner	4			2	2			1	5		6	
Being a farmer	4		3	2	2	-3		3	4	-3	5	
Being retired				5	5		4		4		8	3
Being a disability pensioner		-4	-3		4				4			
Being unemployed	4			4	5				4	-3	8	
Living in rural areas	-4	-5	-5	-7	-4	-1	-4	-3	-4	-1	-3	
Smoking cigarettes	4	5	3	4	5	4	1	4	4		2	
Abusing alcohol	3	5		7	4	4	2	4	1	1	3	4
Marriage	A	1				4	5					
Being widowed	A	2	3				6	4				
Divorce	A	2		7		5	6	2		3	8	6
Children to support	1	A	2	5		4	6	3	-5		1	-6
Overall percentage of explained variance (adjusted R-square)	14	19	19	26	33	8	24	8	5	2	23	24

Note.: sign "+" indicates the direction of relationship between a given predictor and a variable being explained; "A" means that this factor was not included as a predictor in the regression equation; marital stress analysis covered only people at present living in a marriage, the analysis of parental and educational stress concerned only people having children, and the analysis of work stress was performed on working population.

5.8. Coping strategies

Janusz Czapiński

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

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

In the scale used (annex, part II, quest.54), two ways of task-oriented coping with difficult life situations were singled out: *I turn for help and advice to other people* and *I get my act together and I act*. The emotional strategy is more varied and can be divided into 5 various ways: *I reach for alcohol; I console myself with the thought that it could have been worse, or that other people are in a much worse situation; I take sedatives; I pray to God for help; I get busy with other things which take my attention away from the problem and improve my mood*. Respondents could also answer that in the face of problems one does nothing, and gives up, which can also be treated as a specific way of coping with difficulties; helplessness can be an escape from responsibility and the effort which solving those problems requires, although it can also be a failure of all other ways one has to alleviate the stress.

In contrast to the predominating passive strategy of coping with a difficult financial situation which households find themselves in (limiting needs, compare table 4.6), the overwhelming majority of respondents said over many years that they choose an active, problem-focused strategy of coping with life stress. Getting one's act together and acting, combined with a strategy to turn for help and information to other people, are chosen by nearly half of the population. There are also frequent attempts – as table 5.50 shows – of psychological adaptation to difficulties that come about, consoling oneself with the thought that it could be worse, or resorting to supernatural forces in trying to change the situation (praying to God). The need to escape into alcohol as a panacea for various problems appears rarely – as for the estimated amount of alcohol consumed in Poland and the number of alcohol-addicted people. Escape into alcoholism when confronted with problems is given by one percent fewer respondents who admit to alcohol abuse, although the percentage of those admitting to alcohol abuse has clearly fallen in the past years (compare chap. 5.10.5.2), it is similar to the drop in the percentage of people trying to drown their problems in alcohol.

Table 5.50. Percentage of respondents indicating particular ways of reacting to trouble or difficult life situations in the years 1995, 1996, 1997, 2000 and 2003.

Strategies of coping with stress	1995 N=3020	1996 N=2333	1997 N=2094	2000 N=6403	2003 N=9188
I turn for advice and help to other people	35.6	36.2	36.7	38.2	37.6
I get my act together and I become active	48.4	49.1	55.1	49.4	47.2
I drink more alcohol	4.3	3.9	3.9	4.0	3.5
I try to console myself that it could have been or will be worse another time	39.9	40.8	39.1	39.3	41.9
I give up and don't know what to do	3.1	3.0	2.6	2.9	3.4
I take sedatives	5.5	5.5	4.8	4.1	4.4
I pray to God	27.4	30.9	30.4	31.8	32.5
I do other things which divert my attention and improve my mood	20.6	24.1	19.9	17.9	21.8

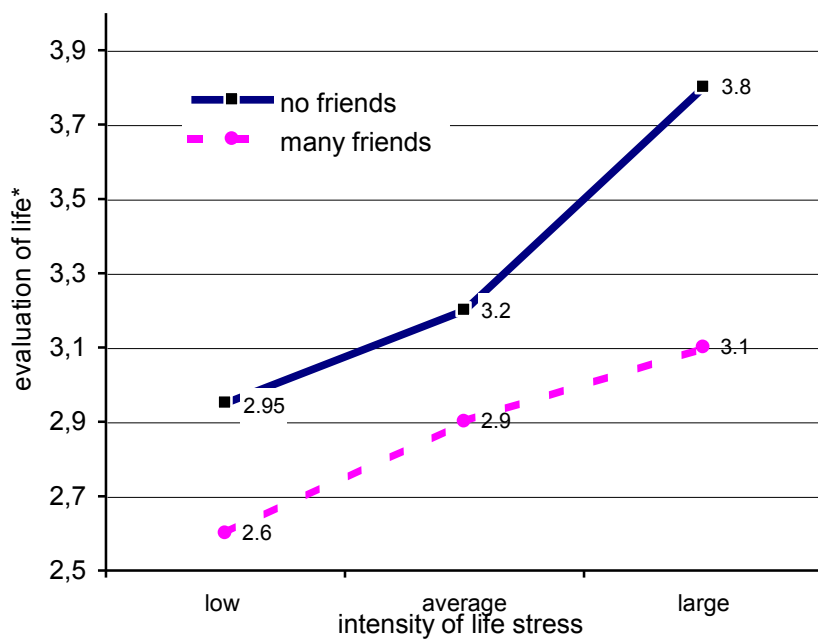
Source of data: 1995-1997 — Czapiński, 1998; 2000 — Social Diagnosis 2000 (computer database).

The question arises, which of these coping strategies is more effective in the face of a life crisis, i.e. allows a sound mental condition to be maintained and stops its deterioration when trouble accumulates. To be able to answer this question we checked whether particular strategies of coping with stress weaken (and to what degree) the impact of stress on well-being indicators. It appeared that coping strategy had a significant effect on well-being independently of life stress intensity: people maintaining active task-oriented strategy (in the face of problems they get their “act together and start acting”) receive better results in terms of well-being than people using emotional strategies when confronted with difficulties — regardless of life stress intensity. This suggests that preferred strategies are not determined by situational factors, but present the relatively steady individual disposition, which is connected with features conditioning higher or lower levels of well-being, or they can also depend on well-being.

5.9. Social support and trust in people

Janusz Czapiński

Social support is an important category in the psychology of stress and coping. The majority of theoreticians are inclined to support what is known as the “buffer” hypothesis which assumes that social support acts as a buffer weakening and preventing the negative effects of stress (friends are particularly important at bad times). The hypothesis of “the main effect” is also popular. It suggests that support always affects well-being positively, and not only in conditions of intensified life stress. Although these hypotheses are not mutually exclusive, we tested the extent to which each adequately describes Poles: whether respondents who feel loved and trusted, do not feel lonely and have more friends (annex, part II, quest.51-53) – they cope with life stress better, or whether regardless of life events, people enjoying greater support are in a better mental condition. It appears that social support measured by the number of friends has both the main and buffer effects (figures 5.10 and 5.11 and table 5.51). The number of friends is the most important factor explaining well-being (*see* table 5.16), more important than money, age and all other 20 indicators of life situation. Therefore, it is better to have rather than not have friends both in good times and — especially — in bad times. The key factor for well-being, it seems, is how many friends one has. After a short drop of this trend, Poland is coming back to a good form – to the times when we were considered a sociable society. (*see* table 5.53-5.54).



* scale of evaluation of life is negatively directed: the lower the scale value, the higher the evaluation

Figure 5.10. Evaluation of life as a whole by life stress intensity and number of friends

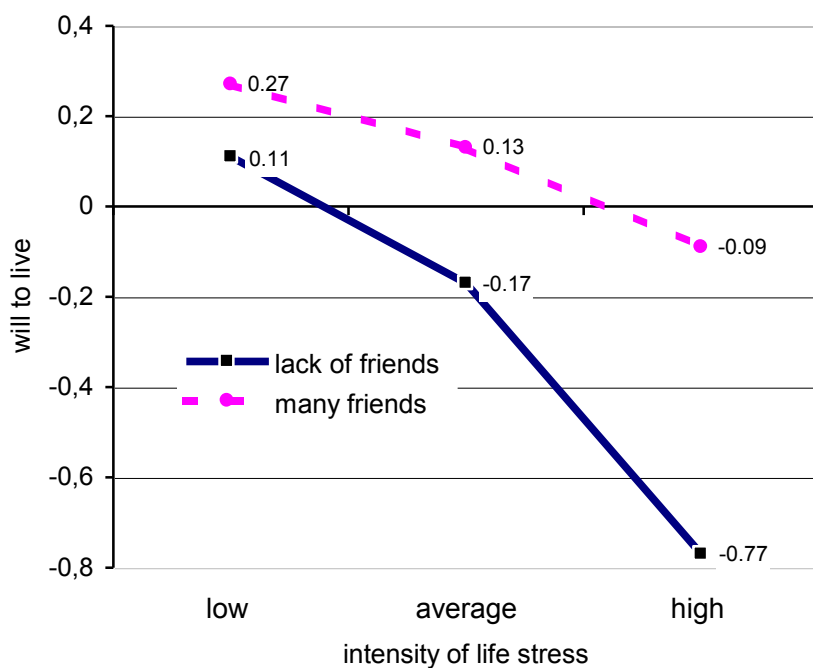


Figure 5.11. Value of standardized indicator of will to live by life stress intensity and the number of friends

Table 5.51. Main effect of number of friends and interaction effect of number of friends x life stress intensity on well-being indicators (controlling for age)

Dependent Variable	Main effect					Interaction effect				
	Sum of squares	df*	Average square	F	Level of significance	Sum of squares	df*	Average square	F	Level of significance
Will to live**	136.70	3 (9705)	45.57	71.88	0.000	39.25	6	6.54	10.32	0.000
Evaluation of life as a whole	192.02	3 (9719)	64.01	60.38	0.000	14.60	6	2.43	2.30	0.032
Happiness	46.65	3 (9734)	15.55	41.50	0.000	6.35	6	1.06	2.82	0.010
Suicidal thoughts	27.10	3 (9727)	9.03	33.66	0.000	23.08	6	3.85	14.33	0.000
Desire to live	829.44	3 (9727)	276.48	69.02	0.000	62.99	6	10.50	2.62	0.015
Depression	854.70	3 (9486)	284.90	29.28	0.000	135.51	6	22.58	2.32	0.031
General subjective well-being ***	90.89	3 (9357)	30.30	74.52	0.000	8.90	6	1.48	3.65	0.001

* degrees of freedom; in the brackets the figure of degrees of freedom for error variance

** sum of standardized scale values of suicidal tendencies and will to live

*** sum of standardized scale values of depression, evaluation of entire life, being happy and the evaluation of the past year

Declared social support of close to 90% has not changed since the beginning of the transformation. Only 22% of respondents feel lonely against their will (see table 5.32).

Table 5.52. Percentage of respondents declaring various forms of social support in the years 1991/1992 and 2000

Forms of social support	1991/1992 N=4187/3402	2000 N=6403	2003 N=9037
Respondent feels loved and trusted	90	90	91
Respondent feels lonely, against his/ her will	21	22	19

Source of data: 1991/1992 — Czapiński, 1998; 2000 — Social diagnosis 2000 (computer database).

Table 5.53. Average number of friends over the years

1991 N=4187	1992 N=3402	1993 N=2306	1994 N=2302	1995 N=3020	1996 N=2333	1997 N=2094	2000 N=6403	2003 N=9037
7	7	7	8	8	7	7	5	6

Source of data: 1991-1997 — Czapiński, 1998; 2000 — Social Diagnosis 2000 (computer database).

Table 5.54. Percentage of respondents declaring no friends and more than 5 friends over years

Number of friends	1991 N=4187	1992 N=3402	1993 N=2306	1994 N=2302	1995 N=3020	1996 N=2333	1997 N=2094	2000 N=6403	2003 N=9037
No friends	3.0	3.6	4.0	2.9	3.2	2.5	3.3	6.2	4.1
Over 5 friends	45.0	41.0	49.0	52.0	50.0	45.0	47.0	27.0	40.1

Source of data: 1991-1997 — Czapiński, 1998; 2000 — Social Diagnosis 2000 (computer database).

5.10. Personality and lifestyle

Janusz Czapiński

5.10.1. Values, self-esteem and attributional styles

Assessing the system of personal values is one of the most difficult tasks in the psychology of the quality of life. There are several scales better or worse standardized and verified with regard to their reliability (e.g. Rokeach's or Schwartz's scales), but none of them found interest in large surveys which focus on brevity, simplicity of questions and ease of answering them. Taking those criteria into consideration we used the *Sense of Happiness Scale* (annex 1, part II, quest. 2), which listed 13 specific values and one undefined. Because all of those 13 values are commonly accepted, we limited respondents' choice to three, which in a respondent's opinion are the most important.

Table 5.55 proves that the Poles' system of values is very stable. Slight changes consist in the decrease of significance of money or family (a successful marriage and children) and the increase of work importance.

Table 5.55. Percentage of respondents listing particular values as the most important conditions of happiness in the following years.

Value	1992 N=3402	1993 N=2306	1994 N=2302	1995 N=3020	1997 N=2094	2000 N=6403	2003 N=9239
Money	37.2	39.8	32.1	36.1	39.3	40.6	33.1
Children	52.3	50.0	55.0	51.0	50.3	45.5	43.8
Successful marriage	56.3	57.6	56.5	55.9	58.8	59.8	53.9
Work	26.6	30.1	29.2	29.6	28.9	32.7	35.3
Friends	4.7	4.8	4.2	5.6	5.0	4.8	5.7
Providence, God	16.7	13.2	13.1	16.4	15.6	16.1	14.4
Cheerfulness, optimism	8.5	7.8	8.2	9.0	7.9	7.6	8.3
Honesty	12.3	10.6	10.0	10.0	9.0	9.2	9.0
Respect from other people	9.0	7.5	9.3	7.4	6.0	7.9	5.9
Freedom	3.6	3.3	3.6	3.8	1.9	3.1	3.4
Health	59.6	62.9	65.8	59.6	60.2	64.0	64.0
Education	1.9	2.4	1.3	3.7	4.2	4.9	4.8
Strong character	4.0	3.5	4.5	4.1	5.5	3.4	4.5
Other	0.5	0.4	1.3	0.7	0.4	0.4	0.7

Data source: 1992-1997 — Czapiński, 1998; 2000 — Social Diagnosis 2003 (computer database).

The system of personal values depends on the surroundings and culture in which an individual is raised. This conditioning is clearly seen in the division into administrative voivodships. The highest regionally differentiating value is God, the most often mentioned by the inhabitants of south-eastern Poland, the least often by the population relocated in the western part of Poland.

Apart from environmental and cultural conditioning, the individual's features and experience are also very important. In our research, however, socio-demographic variables explain the considerably small variance in values; the highest in the case of children, marriage and God (table 5.56). It is worth noting that religious practices are the best predictor also for money (negative), and for God (positive). Health, which is the most universal value, is loosely connected to the 23 factors we listed. It is undeniably most difficult to explain the choice of honesty, respect from others and good character as the conditions for a good life, apart from health; this is probably due to two different reasons. First of all, those values are mentioned by a relatively low percentage of respondents; secondly, they have — especially honesty and respect — strong and unambiguous positive connotations, which has the result that people mention them

because in many cases they are chosen not so much out of real importance for respondents, but because people want to appear better than they are.

Table 5.56. Ranks of socio-demographic predictors for particular values

Predictor	Money	Children	Marriage	Work	Friends	God	Optimism	Honesty	Respect	Freedom	Health	Education	Character
Gender	3	2	7	5	9	3				5			
Age			2		5	2		1	2		3		
Income per capita	5		4					3					
Class of place of residence				8	4		2		1				
Education	2	6	3				1					5	
Housing conditions	11												
Number of friends	9	8	6		6								
Children to provide for		4										8	
Marriage	4	1	1	2		5		5		1		4	1
Widowhood	10	3	5	7	7			2		3		6	2
Divorce		5		6									
Unemployment	8			1	1							2	
Being a retired person				3		4					2		
Being a disability pensioner					3					6		3	
Other unemployed		7		4	2		5					1	
Work in public sector													
Work in private sector	6				8								
Being an independent business person				11			3						3
Being a farmer				9							1		
Abusing alcohol							4						
Smoking cigarettes	7					6							
Using narcotics				12	10					2			
Religious practices	1			10		1		4		4		7	4
Overall percent of explained variance, adjusted R-square	6	15	15	8	9	12	3	1	1	3	2	7	1

Note: if under a given value for a predictor there is no rank value, it means that a predictor does not have a specific importance for the choice of this value

Poles have a quite high self-esteem (table 5.57). Only slightly over 2% of the population is very dissatisfied with themselves, and another 19% are rather unsatisfied. The unemployed have the lowest self-esteem (40% of negative evaluations), the most satisfied with themselves are pupils and students (only 11% dissatisfied with themselves and up to 20% very satisfied).

Table 5.57. Are you generally satisfied or dissatisfied with yourself?

	(%)			
group	Very satisfied	Quite satisfied	Quite dissatisfied	Very dissatisfied
Overall	11.0	67.0	19.3	2.4
Gender				
Men	10.7	66.2	20.4	2.7
Women	11.2	68.2	18.4	2.1
Age				
Under 24 years old	17.7	66.0	14.6	1.7
25-34 years old	11.5	66.8	19.6	2.1
35- 44 years old	9.0	66.7	22.0	2.3
45-59 years old	8.8	65.6	22.3	3.4
60-64 years old	7.9	71.4	19.2	1.4
65 and over	11.6	71.0	15.2	2.2
Place of residence				
Cities over 500k	10.8	63.1	23.1	3.1
Towns 200-500k	9.0	68.2	20.4	2.4
Towns 100-200k	9.5	70.4	18.6	1.4
Towns 20-100k	12.2	66.3	18.9	2.7
Towns under 20k	10.5	69.0	18.7	1.9
Rural areas	11.5	67.7	18.4	2.4
Education				
Primary and below	10.6	64.7	21.2	3.6
Vocational	10.7	64.7	22.1	2.5
Secondary	10.0	69.1	18.7	2.2
University and post-secondary	11.2	72.6	15.1	1.2
Income per capita				
First quartile	10.9	59.9	25.7	3.5
Mid 50 %	10.6	67.8	19.1	2.4
Forth quartile	11.4	72.8	14.5	1.3
Socio-professional status				
Public sector	10.9	72.5	15.9	0.7
Private sector	12.1	70.2	16.3	1.4
Self-employed	10.1	63.2	23.5	3.2
Farmers	8.9	66.9	22.5	1.8
Pensioners	8.6	63.1	25.4	2.9
Retirees	11.0	72.5	14.7	1.9
Students	20.1	68.8	10.0	1.1
Unemployed	8.9	50.4	33.8	6.9
Other professionally inactive	7.9	61.4	24.8	5.9

A style of attribution is a tendency to look for causal explanation of behaviors, outcomes, traits and events in specific factors. Here we were interested in the attributions for what it was like for a respondent in the past year. The scale of attribution used in the study (annex, part II, quest. 68-69) was expected to provide answers to the question who (what) Poles see as responsible for the quality of their lives: themselves, authorities, other people or fate/providence. The question is connected with the self-serving bias hypothesis (what's good is me, what's not good — not me) and the theory of social ungratefulness (Czapiński, 2000a) which says that social reception of system reforms is not symmetric: those who gain on reform from the beginning show little gratefulness to the reform creators, seeing the source of reasons for the improvement of their lives in themselves, and such a change for the better is felt quite weakly; those who feel victims in the realizations of reforms devolve guilt for deterioration of their lives' conditions onto the creator of the reforms, and the change for the worse is experienced much more strongly.

In general, frequency of responsibility attribution to the authorities has decreased only for the past year, but the drop was dramatic (table 5.58). It suggests that Poles perceive the relationship between the action of state institutions and their own success in life as weaker and weaker.

Table 5.58. Percentage of indications in three studies, who or what did it depend on that the past year was successful or unsuccessful for the respondent

Who does it depend on	1997 N=2094	2000 N=6403	2003 N=9111
On me	69.0	67.3	62.5
On other people	17.2	24.3	23.8
On authorities	19.6	24.0	15.7
On destiny (providence)	33.0	44.3	42.8

Data source: year 1997 — Czapiński, 1998; 2000 — Social Diagnosis 2003 (computer database).

Similarly to the previous years, there is a clear self-serving bias and the effect of social ungratefulness (compare frequency of attribution to “me” and to “authorities” depending on whether the past year was evaluated as successful or unsuccessful — figure 5.12). The respondents attribute a prosperous year to themselves (76.5%), and to a small degree to authorities (5.4%), but the responsibility for the failures in the past year are more often credited to the authorities (39%) than themselves (24.4%).

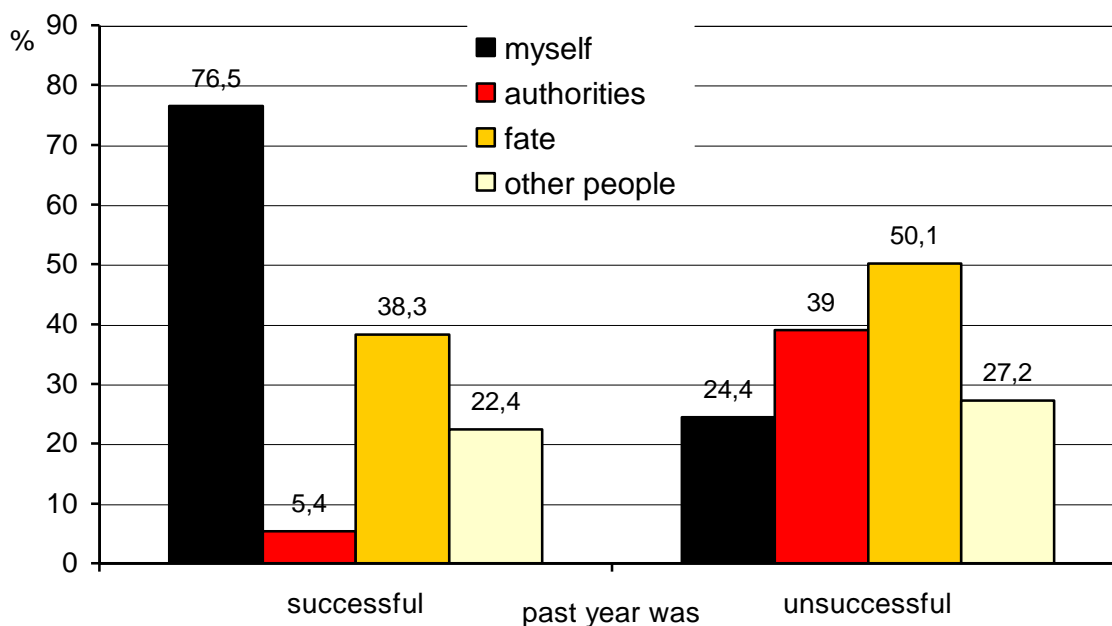


Figure 5.12. Who did it depend on that the past year was in a respondent's life successful or unsuccessful? (percentage of indications for oneself, for authorities, destiny and other people among people evaluating the past year as successful or unsuccessful)

5.10.2. Optimism

A common and permanent tendency that respondents display is the expectation of a better life which is different from the others' and it was confirmed in many studies. The strongest evidence was submitted by Norman Weinstein's research (1980, 1987) conducted in the USA. The method used by the researcher consisted in subjective evaluation of relative probability of one's own failures and successes compared to other people at the same age and of the same gender consistently showed that the majority sees its fate as better than others' one. Because logically *the majority* cannot be more intelligent, happy, healthy etc. than the *majority*, this phenomenon was called unrealistic optimism. It is entirely compatible with "oignon" theory of happiness, which assumes that optimism is the basic source of motivation. Realism could demotivate a person and drive one into depression (compare a critical overview of empirical data about it: Lewicka, 1993).

Weinstein's scales were also used many times in surveys in Poland (Czapiński, 1998). Results were similar to American and Belgium research (Peeters, Cammaert, Czapiński, 1997). They prove people's universal inclination to positive thinking about their future. What's more, this inclination is not even destroyed by mental depression.

A common opinion about Poles makes us doubt this optimism. In this case — are those opinions false, or do the research results lack credibility? To be able to answer this question, we have to distinguish two dimensions or two categories of optimism. One is the hope of success (expansive optimism), and the other is the hope of avoiding failure (defensive optimism). For the survival of an individual it is most important to avoid threats and miseries rather than to pursue the improvement of one's own situation and to search for pleasant experiences. This is why people attach greater significance to bad things than to good ones (the negativity effect — see Czapiński, 1988; Peeters, Czapiński, 1990). Weinstein systematically gained results of stronger inclination towards unrealistic optimism for negative events rather than for positive, although in the case of the latter it was self-evident that the majority of American respondents overestimated their success over that of other people. In Poland this difference is much bigger. Since the first application of the Weinstein's scale in Poland, the surveys have consistently confirmed unrealistic defensive optimism and even unrealistic expansive pessimism (Czapiński, 1998).

Also the present study, which uses this scale of unrealistic optimism encompassing 10 negative events and 5 positive (annex, quest. 110), confirms this pattern (table 5.59). In reference to all negative events there is a clear advantage of positive answers ("*less and much less probable that this is going to happen to me*") in comparison to people of the same age and gender) over pessimistic ("*more and much more probable that this is going to happen to me*").

For all but one positive event pessimistic evaluations outweigh optimistic. Only 7 % ascribed themselves greater chances of winning big money in lotto, 10.6% — making a great professional career, 17.1% — living to old age in good health, and 19.4% — realizing most of life plans. There is only one aspect of moral achievements — *going through life without losing face, in a dignified and honest way* — where the optimism predominates (39.2%) over pessimism (15.6%). We can see that only in the ethical self-evaluation Poles are optimistic; they do not believe in their own abilities and they do not expect a present from life.

This is why in matters where Americans are only slightly less optimistic Poles are down right pessimistic. This is Polish lack of belief in success in life which is not favorable for success and makes us a nation of malcontents and pessimists, but it does not endanger our deepest level of well being — the will to live. People do not commit suicides just because they stop believing in success in life, but they can lose it when they do not see the chance of avoiding a terminal illness and other irreversible miseries. The will to live, as the previous research has shown, weakens unrealistic pessimism concerning avoiding threats and failures (Peeters, Czapiński, Hoorens, 2001). The present study will in turn prove that two measures of the will to live (scales of suicidal tendencies and the will to live) create one common factor but with the indicator of defensive optimism (table 5.60). An indicator of expansive optimism creates quite a separate

factor, not related to or less related to the will to live. In order to enjoy life, it is just enough not to fear hell; the belief in heaven is not so indispensable.

Table 5.59. Percentage distribution of answers in the scale of optimism (answers "It has already happened to me" were omitted)

Type of Event	answer				
	much more probable	more probable	just as probable	Less probable	Much less probable
Being a victim of a burglary	3.6	4.6	63.1	13.5	15.1
Becoming alcoholic	1.6	2.0	16.8	17.9	61.7
Being imprisoned	1.5	0.8	12.5	14.4	70.8
Making a successful career in one's profession	3.1	7.5	25.5	19.3	44.6
Living in good health to an old age	5.6	11.5	55.0	13.5	14.4
Attempting suicide	1.7	1.5	12.5	12.0	72.2
Getting cancer	2.7	4.4	65.6	9.7	17.6
Winning more than 100k PLN in lotto	3.3	3.7	32.5	14.2	46.3
Going through life without losing face	15.3	23.9	45.2	6.5	9.1
Becoming poor	3.7	7.8	51.6	18.2	18.8
Loneliness	3.6	7.9	45.2	17.9	25.4
Nervous breakdown	3.7	6.3	43.9	18.1	28.0
Realizing most of life plans	4.7	14.7	45.1	15.8	19.7
Getting AIDS	1.2	0.8	26.1	11.6	60.2
Getting a heart attack	4.3	7.7	63.5	9.0	15.5

Table 5.60. Results of factor analysis of will to live and optimism variables with Varimax rotation

Indicators	Factors	
	1	2
Optimism – positive events		0.88
Optimism – negative events	0.68	
Suicidal thoughts	0.73	
Desire to live	0.68	
% of explained variance	38.42	25.98

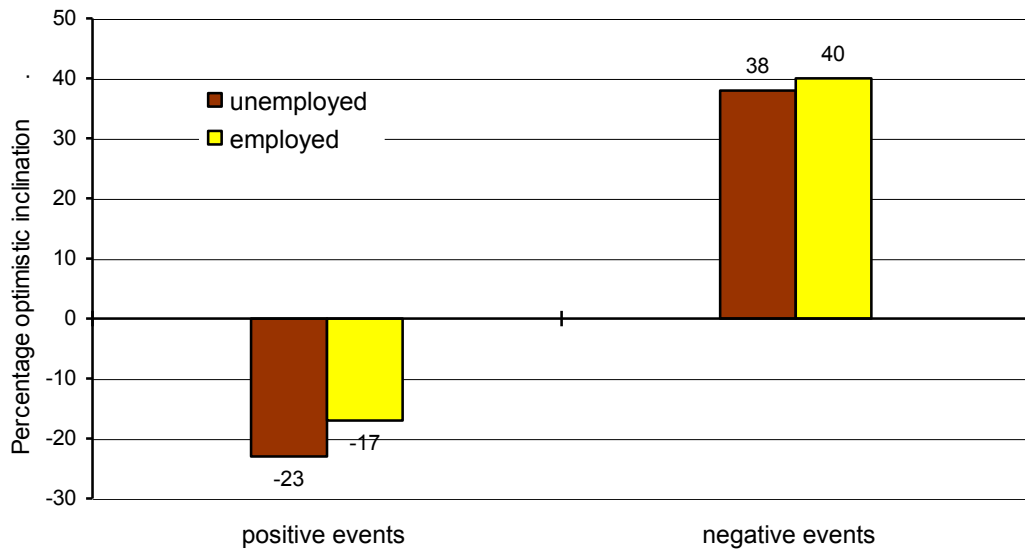
Note: shown factor loadings of the value above 0.4

And if in fact expansive optimism is not as important as defensive, then it should be in a higher degree subject to greater changes of fate and conditions in which one finds oneself than the other. And this is what is proven in the light of our study. For instance the unemployed show the same level of defensive optimism as the employed, but they differ from their working counterparts with respects to expansive optimism (figure 5.13). There are similar results in a comparison of those with higher and lower incomes (figure 5.14) and those who have better and worse education (figure 5.15).

Affective disorders have little relation to defensive optimism; they go hand in hand with the level of expansive optimism. Depression, for example, correlates only with expansive optimism (figure 5.16).

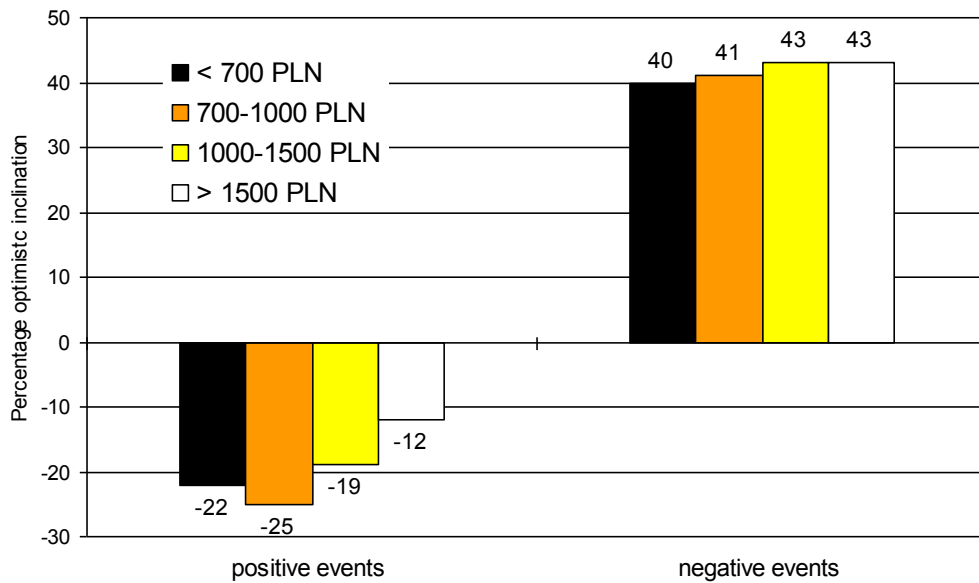
It does not however mean that defensive optimism is entirely resistant to all other actions. Its decrease depends mainly on such factors that weaken the will to live through disturbing the biology of the mind. This is most frequently caused by the abuse of alcohol and drugs. Indeed,

an addiction to either of those two modifiers of brain work is connected with a significant decrease of defensive and not expansive optimism (figure 5.17).



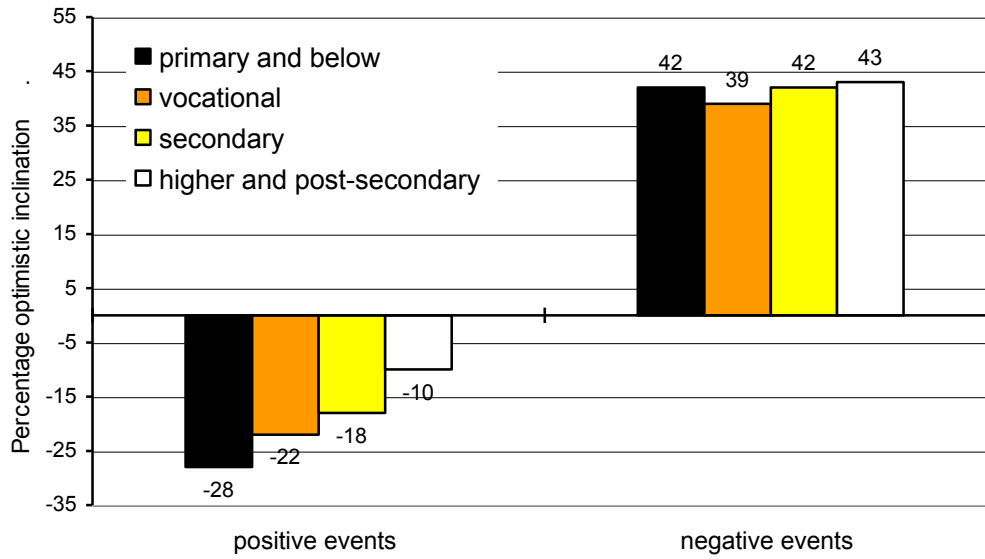
Note: main effects of unemployment— for positive events $F(1,5223)=17.6$ ($p<0.000$); for negative events $F(1,4848)=1.7$ (ns).

Figure 5.13. Percentage inclination of the unrealistic trend in optimism (positive value) and in pessimism (negative value) for positive and negative events in the group of the unemployed and the employed



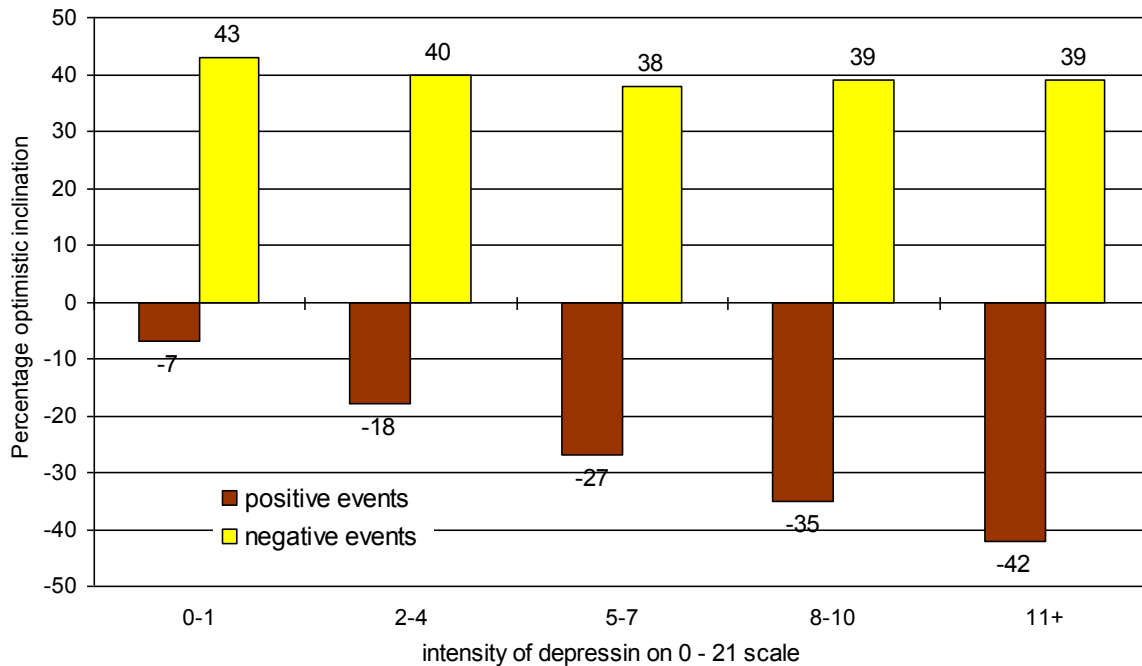
Note: main effects of income— for positive events $F(3,7288)=39.2$ ($p<0.000$); for negative events $F(3,7187)=5.6$ ($p=0.001$).

Figure 5.14. Percentage inclination of the unrealistic trend in optimism (positive value) and in pessimism (negative value) for positive and negative events related to the amount of personal income



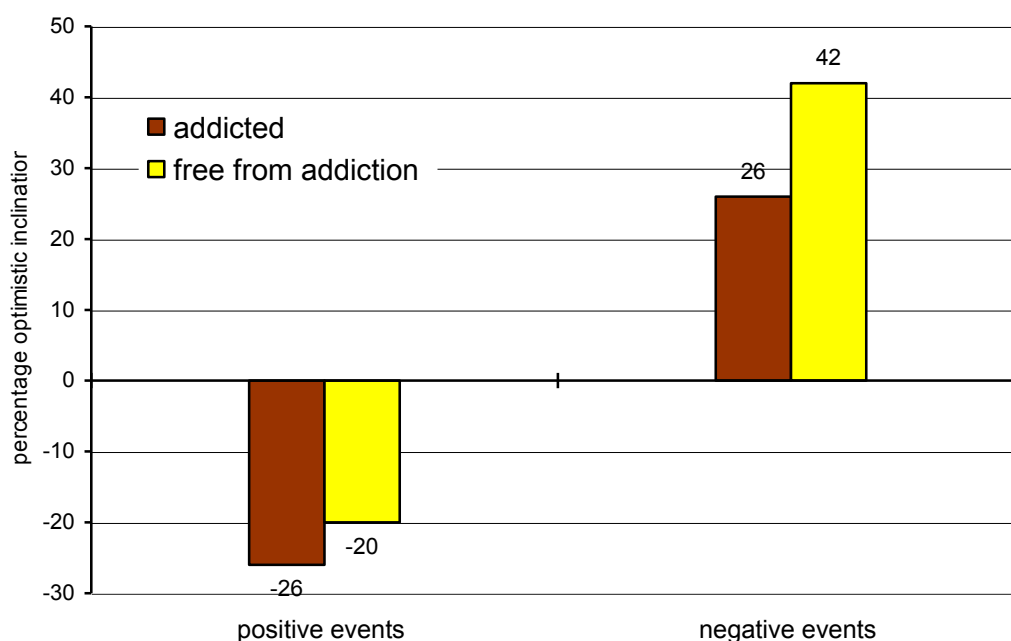
Note: main effects of education — for positive events $F(3,8112)=81.7$ ($p<0.000$); for negative events $F(3,7975)=9.1$ ($p=0.000$).

Figure 5.15. Percentage inclination of the unrealistic trend in optimism (positive value) and in pessimism (negative value) for positive and negative events by level of education



Note: Indicator of depression based on abridged scale (7 symptoms); each group encompasses approximately 1/5 of the whole sample.

Figure 5.16. Percentage inclination of the unrealistic trend in optimism (positive value) and in pessimism (negative value) for positive and negative events in the group of respondents with various level of depression



Note: main effects of addiction — for positive events $F(1,8165)=14.5$ ($p<0.000$); for negative events $F(1,8033)=105.7$ (0.000).

Figure 5.17. Percentage inclination of the unrealistic trend in optimism (positive value) and in pessimism (negative value) for positive and negative events in the group abusing alcohol and using narcotics (drug addicts) and people free of addictions

As opposed to the American population, in Poland there is no consistent syndrome of unrealistic optimism. This is proven by correlation of two kinds of optimism (table 5.61). They have been close to zero for years, but towards a negative trend (greater defensive optimism goes hand in hand with lower expansive optimism). This negative correlation increases with age.

Table 5.61. Correlation between defensive and expansive optimism in three studies

	1996	1997	2000
Pearson's factor of correlation	-0.05	-0.08	-0.03
The number of people surveyed	1185	2102	7152
Level of significance	0.095	0.000	0.009

Data source: 1996-1997 — Czapiński, 1998

5.10.3. Risk-avoidance and risk-seeking

Two questions inspired by the prospect theory (Kahneman, Tversky, 1979; Tversky, Kahneman, 1992) were used to measure the inclination to risk (annex, part II, quest. 98 and 101). The prospect theory assumes that people make different decisions in conditions of gains and losses. In the first case (gains) they show aversion to risk, and in the other (losses) quite the contrary — they take a risk. As the studies conducted in the western societies show in fact, the majority of people faced with the choice between certain benefit of 200 PLN and 50% chance of winning 400 PLN and 50% probability of not winning anything, chooses the first option of the certain benefit; when the choice is between certain loss of e.g. 200 PLN and 50% probability of 400 PLN loss and 50% chance to avoid any loss, the majority chooses the second possibility.

The results of *Diagnosis* show that Poles maintain quite uncommonly to the prospect theory (for which Daniel Kahneman received the Nobel award for economics): they avoid risk in both cases, most frequently choosing (in approx. 80 %) not only certain benefit, but also certain

loss. In general they display a risk aversion — not only to gains, like Americans, but also to losses.

In various socio-demographic groups only self-employed show greater inclination to risk than others, especially in the situation of gains. Men decidedly more often than women prefer risk, similarly to young and better educated people in comparison with older and less educated people.

Gambling, and more precisely — readiness to take bets, can also be an average measure of inclination to risk. In the study we ask the question: “Do you make bets (*e.g. in number games of the LOTTO type, in horse races, in sports games etc.*)?” Distributions of answers in the basic social divisions are shown in table 5.62. Less than one Pole in ten systematically (at least once a month) plays a game with fate. A large majority (60%) shows aversion to any risk, even as minimal as in numeral games with very little payments and very high gains (but it is also true that there is little probability of winning). Similarly as in Kahneman and Tversky’s test, the highest inclination of gambling is shown by self-employed, the lowest by inhabitants of rural areas and those with the lowest education. Men and more well off people more willingly challenge their fate than women and poor people. It is not out of the question that the rich are rich just because they display a higher inclination to risk than the poor (Czapiński, 2004). Also more often, as one could expect, people showing unrealistic optimism in Weinstein’s scale make bets (*see chapter 5.10.2*), especially those (which is understandable) who are convinced that they have higher chances of winning over 100,000 PLN in lotto ($r = 0.29$, $p < 0.000$).

The inclination to take risks is greater among inhabitants of towns and cities than in rural areas (the difference in systematic betting between rural areas and towns/cities is over twice as much), twice as high among men in comparison to women, also almost twice as high among rich people (upper quartile of household incomes per head) than among the poor (lower quartile of household incomes per head). The greatest gamblers are self-employed.

In the regional division of people making bets, gambling is the most popular in western Poland, and the least in the Warmińsko-mazurskie and Lubelskie voivodships.

Despite some socio-demographic factors, the profile of a gambler resembles the profile of a “risk taker” in Kahneman and Tversky’s tasks, the measures, although statistically significantly, correlate weakly with each other ($r \approx 0.1$). Thus openness towards challenges of life has to be considered as a not too internally consistent syndrome of predisposition and inclinations which motivate different people to risky behaviors depending on the type of challenge and consequences.

Table 5.62. Do you gamble?

	(%)		
Group	YES, at least once a month	YES, rarely	NO
Overall	9.2	30.1	60.6
Gender			
Men	12.9	34.0	53.1
Women	6.1	26.7	67.2
Age			
Under 24 years old	9.2	32.4	58.4
25-34 years old	10.8	39.4	49.8
35- 44 years old	9.3	37.5	53.2
45-59 years old	10.7	28.8	60.5
60-64 years old	8.5	22.3	69.2
65 and over	5.5	14.8	79.7
Place of residence			
Cities over 500k	13.9	32.5	53.6
Towns 200-500k	14.7	37.5	47.8
Towns 100-200k	9.6	36.8	53.6
Towns 20-100k	11.2	32.3	56.6
Towns under 20k	8.3	31.1	60.6
Rural areas	5.3	24.3	70.4
Voivodship			
Dolnośląskie	10.6	31.9	57.5
Kujawsko-pomorskie	12.6	24.8	62.5
Lubelskie	6.6	23.8	69.6
Lubuskie	12.7	31.9	55.4
Łódzkie	9.9	27.0	63.2
Małopolskie	7.9	25.8	66.2
Mazowieckie	8.4	29.1	62.4
Opolskie	8.3	31.9	59.8
Podkarpackie	9.2	27.1	63.8
Podlaskie	8.5	27.1	64.4
Pomorskie	9.5	39.3	51.2
Śląskie	9.7	35.8	54.5
Świętokrzyskie	8.0	33.8	58.2
Warmińsko-mazurskie	4.9	29.4	65.6
Wielkopolskie	9.0	29.7	61.3
Zachodniopomorskie	12.9	32.1	55.0
Education			
Primary and below	4.0	17.1	78.9
Vocational	11.0	30.5	58.5
Secondary	11.0	35.0	54.0
University and post- secondary	11.1	37.9	51.0
Income per capita			
First quartile	7.4	27.7	64.9
Mid 50 %	8.9	30.7	60.4
Forth quartile	12.1	31.7	56.2
Socio-professional status			
Public sector	10.6	36.4	53.0
Private sector	12.2	36.5	51.3
Self-employed	15.1	36.7	48.2
Farmers	5.0	25.3	69.6
Pensioners	7.9	22.3	69.7
Retirees	7.0	19.2	73.8
Students	7.3	32.5	60.2
Unemployed	9.6	35.7	54.7
Other professionally inactive	7.2	28.8	63.9

5.10.4. Religious practices

In 2003 46% of adults said that they regularly took part in religious practices and celebrations (table 5.63). This is a significantly lower value than in 2000 when systematically practicing adults amounted to slightly over 50%. There was an increase in the number of the generally non-practicing from 26% to 30%. An average frequency of participation in religious practices a month decreased by 11% (table 5.64). However, this is not synonymous with the process of atheisation, as the percentage of people who in difficult life situations resort to praying has not changed in this period — and on the contrary a growing trend can be observed (31% in 2000 and 32.5% in 2003; $p=0.058$; table 5.65). In other words, Poles go to church less often than before, but they pray to God slightly more often. It suggests desinstitutionalisation (privatization) of faith and it fits into the process of individualization of religious behaviors i.e. the drop in importance of institutional churches in creating the relation between God and people observed in western countries. It does not obviously mean that the two measures of religiosity are independent from one another; correlation between them is significant ($r=0.40$ in 2003).

Decrease in institutional religious practices, when divided into educational groups is the highest among people with secondary and vocational education (table 5.64).

Neither gender, age, town/city size nor the level of income explained significantly a mean difference in frequency of taking part in religious practices and other solemn holidays between 2000 and 2003.

In the administrative division there are several regions where there is not a significant drop (Łódzkie and Zachodniopomorskie voivodships), or there was a significant increase of frequency of religious practices (Śląskie voivodship) (table 5.64).

In the socio-professional division, the highest drop was observed among farmers and students as well as public sector employees, and a slight increase among the retired who for this reason differ significantly from other groups (table 5.64).

The most religious group in the population according to both criteria (institutional practices and prayers) are: women, older people (aged 65 and over), inhabitants of rural areas (not necessarily farmers), the retired and disability pensioners as well as people with primary education, and the lowest behavioral indicators of religiosity are characteristic of men, people aged up to 34, inhabitants of the biggest cities, people with the highest education and self-employed.

In the administrative divisions, the most religious is the population of: Podkarpackie, Lubelskie and Małopolskie voivodships where right wing politicians and candidates in parliamentary and presidential elections gain the highest support; the least religious are people from: Lubuskie, Zachodniopomorskie and Dolnośląskie voivodships, i.e. the northern-western belt of so-called “recovered” lands where there is a clear advantage of relocated population and where left wing candidates gain the highest support in parliamentary and presidential elections. Podkarpackie voivodship is the most different from the country average value where only nearly 12% of adults do not go to church at all, and over 43% pray to God in difficult life situations; on the opposite extreme we have Zachodniopomorskie voivodship where over half of the population (56.6%) do not go to church, and only one in five inhabitants (22%) resort to divine help in difficult situations.

Table 5.63. Frequency of participation in religious practices or other solemn religious events in the year 2003.

	(%)			
Group	0 times a month	1-3 times a month	4 times a month	> 4 times a month
Overall	29.7	23.9	32.6	13.9
Gender				
Men	35.6	25.6	29.0	9.8
Women	24.5	22.4	35.7	17.4
Age				
Under 24 years old	35.2	26.5	27.6	10.7
25-34 years old	35.4	29.0	26.7	9.0
35- 44 years old	29.3	26.6	32.9	11.3
45-59 years old	29.6	22.4	33.5	14.4
60-64 years old	21.0	18.7	37.3	23.0
65 and over	22.3	17.4	39.7	20.6
Place of residence				
Cities over 500k	45.5	18.7	25.0	10.8
Towns 200-500k	39.3	22.4	25.8	12.5
Towns 100-200k	38.8	19.0	29.2	13.1
Towns 20-100k	32.8	24.1	29.6	13.5
Towns under 20k	29.0	21.5	33.4	16.2
Rural areas	18.2	27.8	39.2	14.8
Voivodship				
Dolnośląskie	37.9	22.4	30.0	9.7
Kujawsko-pomorskie	31.7	27.4	28.6	12.2
Lubelskie	25.5	31.8	30.7	12.0
Lubuskie	41.6	20.8	26.8	10.8
Łódzkie	34.8	29.3	29.6	6.3
Małopolskie	17.6	1.3	45.0	26.1
Mazowieckie	34.1	27.9	29.9	8.1
Opolskie	24.8	14.4	37.2	23.6
Podkarpackie	11.6	13.9	48.3	26.3
Podlaskie	25.4	34.0	31.3	9.3
Pomorskie	26.4	22.4	32.1	19.1
Śląskie	30.3	21.5	29.9	18.3
Świętokrzyskie	19.6	34.4	36.1	9.8
Warmińsko-mazurskie	33.0	31.8	31.2	4.0
Wielkopolskie	30.1	23.7	33.6	12.5
Zachodniopomorskie	46.6	21.8	21.1	10.5
Education				
Primary and below	23.3	24.8	36.2	15.6
Vocational	29.9	27.3	31.6	11.2
Secondary	30.8	22.4	32.0	14.8
University and post-sec.	35.7	19.2	30.5	14.6
Income per capita				
First quartile	27.5	29.3	31.7	11.6
Mid 50 %	28.3	23.9	34.1	13.7
Forth quartile	34.5	18.5	30.9	16.1
Socio-professional status				
Public sector	30.6	23.3	32.8	13.4
Private sector	32.5	25.4	31.3	10.8
Self-employed	42.3	25.6	22.2	9.9
Farmers	20.0	30.9	38.4	10.6
Pensioners	27.4	22.7	34.6	15.3
Retirees	22.1	17.7	38.5	21.7
Students	33.4	25.2	28.7	12.7
Unemployed	36.3	28.1	27.1	8.5
Other professionally inactive	31.2	24.9	29.7	14.2

Table 5.64. Difference in average participation in religious practices or other religious events between 2000 and 2003

group	average 2003 – average 2000
Overall	-0.34
Gender	
Men	-0.33
Women	-0.34
Age	
Under 24 years old	-0.61
25-34 years old	-0.46
35- 44 years old	-0.35
45-59 years old	-0.21
60-64 years old	-0.20
65 and over	-0.29
Place of residence	
Cities over 500k	-0.36
Towns 200-500k	-0.07
Towns 100-200k	-0.60
Towns 20-100k	-0.30
Towns under 20k.	-0.27
Rural areas	-0.38
Voivodship	
Dolnośląskie	-0.58
Kujawsko-pomorskie	-0.70
Lubelskie	-0.32
Lubuskie	-0.28
Łódzkie	0.11
Małopolskie	-0.45
Mazowieckie	-0.57
Opolskie	-0.35
Podkarpackie	-0.05
Podlaskie	-0.26
Pomorskie	-1.04
Śląskie	0.29
Świętokrzyskie	-0.60
Warmińsko-mazurskie	-0.65
Wielkopolskie	-0.34
Zachodniopomorskie	0.06
Education	
Primary and below	-0.12
Vocational	-0.35
Secondary	-0.57
University and post-secondary	-0.22
Income per capita	
First quartile	-0.49
Mid 50 %	-0.33
Forth quartile	-0.10
Socio-professional status	
Public sector	-0.59
Private sector	-0.16
Self-employed	-0.05
Farmers	-0.62
Pensioners	0.10
Retirees	-0.31
Students	-0.76
Unemployed	-0.31
Other professionally inactive	-0.59

Table 5.65. Percentage of people who pray to God in difficult life situations

(%)	
group	I pray to God for help
Overall	32.3
Gender	
Men	19.1
Women	43.7
Age	
Under 24 years old	22.1
25-34 years old	23.5
35- 44 years old	27.4
45-59 years old	33.0
60-64 years old	37.1
65 and over	52.8
Place of residence	
Cities over 500k	28.5
Towns 200-500k	30.4
Towns 100-200k	28.3
Towns 20-100k	30.0
Towns under 20k	30.7
Rural areas	36.5
Voivodship	
Dolnośląskie	26.3
Kujawsko-pomorskie	33.2
Lubelskie	38.0
Lubuskie	27.8
Łódzkie	30.5
Małopolskie	38.2
Mazowieckie	31.5
Opolskie	31.5
Podkarpackie	43.1
Podlaskie	33.9
Pomorskie	35.7
Śląskie	30.3
Świętokrzyskie	31.3
Warmińsko-mazurskie	30.7
Wielkopolskie	30.7
Zachodniopomorskie	22.0
Education	
Primary and below	46.1
Vocational	25.8
Secondary	30.1
University and post-secondary	31.0
Income per capita	
First quartile	31.8
Mid 50 %	32.9
Forth quartile	33.2
Socio-professional status	
Public sector	27.3
Private sector	25.5
Self-employed	18.4
Farmers	28.1
Pensioners	45.0
Retirees	46.7
Students	24.1
Unemployed	26.8
Other professionally inactive	34.2

The analysis of behavioral indicators of religiosity in a longer period of time (table 5.66) confirms the thesis of a drop in institutional religious practices with a simultaneous increase of frequency in turning to God for help in difficult life situations.

Table 5.66. Percentage of respondents participating in religious and solemn practices at least 4 times a month and praying to God in difficult situations in 1992-2003

Behavior	(%)						
	1992 N=3384	1993 N=2304	1995 N=3018	1996 N=2339	1997 N=2097	2000 N=6800	2003 N=9600
Participating in religious services more than 4 times a month	55.7	51.8	50.3	53.5	51.4	50.2	46.5
Looking for consolation in prayers	no data	no data	27.4	30.9	30.4	31.0	32.3

Data source: 1992- 1997 — Czapiński, 1998; 2000 — Social Diagnosis 2003 (computer database).

American and European studies prove consistently that people believing in and practicing religious behaviors say they have a greater sense of happiness, satisfaction with life and they show lower risk of having mental depression than non-believers (Beckman and Houser, 1982; Czapiński, 1992; Myers, 1993). Faith weakens the psychological effects of traumatic experiences — the buffer effect (Ellison, 1991).

Table 5.16 shows religious practices — both in the year 2000, as in 2003— they belong to the best predictors of subjective well-being. They explain the only slightly smaller variance of indicators of well being than the status of the unemployed, higher than education or marriage. They are most strongly negatively related to depression and suicidal inclinations.

Besides, not only the main effect turns out to be important, but also the buffer effect is significant. Religious practices significantly alleviate negative effects of life stress in at least some aspects of well being (table 5.67 and figures 5.18-5.19).

Table 5.67. Interaction effects of religious practice frequency and life stress intensity on indicators of well-being with age as a covariate

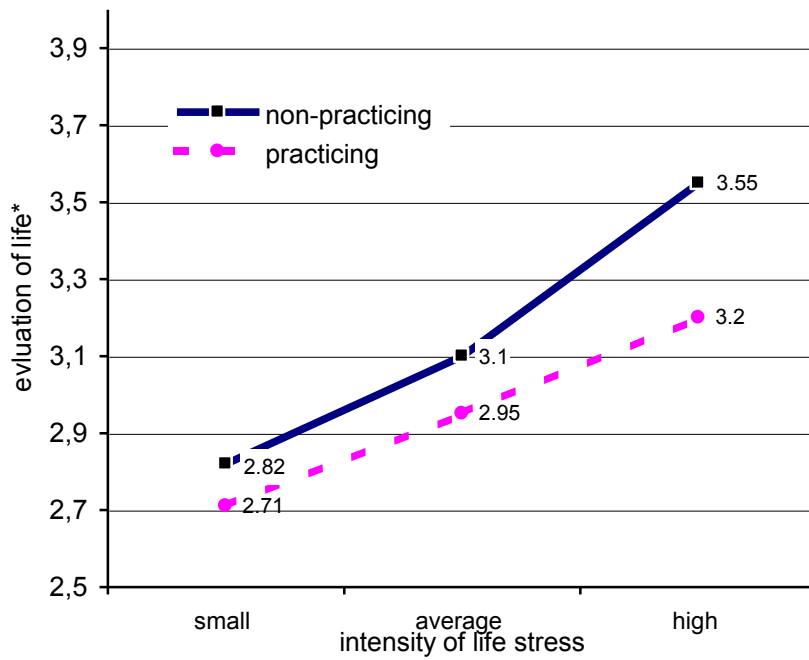
Variable	Sum of squares	Degrees of freedom *	Average square	F	Level of significance
Will to live **	6.99	4 (9484)	1.75	2.686	0.030
Evaluation of whole life	18.00	4 (9495)	4.50	4.185	0.002
General subjective well-being ***	3.71	4 (9232)	0.927	2.234	0.063

* the figure in the brackets shows degrees of freedom for variance of error

** sum of standardized values of suicidal tendencies and desire to live

*** sum of standardized values of depression, evaluation of life as a whole, feeling happy and evaluation of the past year

In the most often practicing people (at least once a week) an intensive life stress causes a smaller drop in the will to live and general subjective well being as compared to the non-practising (the tendency is close to statistical significance) and the evaluation of the whole life so far. No analogical effect of interaction was established (although a statistical main effect of religiousness was proven) in depression. We can then say that in the conditions of low life stress intensity, belief has little importance: the practicing and non-practicing do not differ or they differ only with regard to subjective quality of life. Religion begins to play an important psychological role in difficult situations when a serious life stress occurs.



* life evaluation scale is reversed: the lower the scale value the more positive evaluation

Figure 5.18. Evaluation of life as a whole by level of life stress and frequency of religious practices

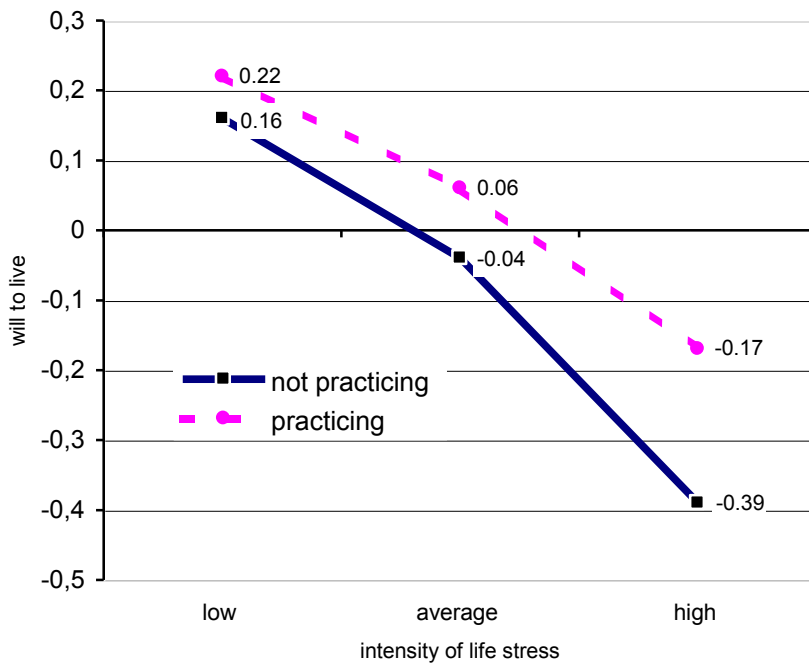


Figure 5.19. Value of a standardized indicator of will to live by level of life stress and frequency of religious practices

5.10.5. Self-destructive behaviours

5.10.5.1. Smoking cigarettes

Nearly one adult Pole in three smokes cigarettes (tables 5.68 and 5.69). On average people smoke over 16 cigarettes a day (table 5.70). A systematic falls in the number of smokers and well as the number of smoked cigarettes can be encouraging (table 5.68). In relation to 1995 the percentage of smokers decreased by almost 8 percent points, and in relation to the beginning of the 1990s — approx. 11 percent points. There is a clear acceleration in the drop of the numbers of smokers during the past 8 years. In relation to 1996 the number of smoked cigarettes decreased by 1 cigarette. Those positive changes are accompanied by Poles increasing concern for health (see chapter 4.7) and it undoubtedly favors a longer average lifespan, especially of men among whom there is almost twice as high a percentage of those quitting smoking as compared to statistics among women (51% vs. 27%).

Men continue to predominate among smokers, right after are middle-aged people, and those with primary vocational education. A definitely higher percentage of smokers is among unemployed and self-employed (about 50% in each group), and the lowest among the older people (aged 65 and over — 13%), disability pensioners (16,3%), students (18,4%), people with higher education (22,2%) and women (22,9%).

In the voivodship division the hardest hit with nicotine addiction are Kujawsko-pomorskie (41% of smokers) and Zachodniopomorskie (36%), and the least affected are rural areas (Małopolskie, Podkarpackie and Świętokrzyskie — 24-25% of smokers). The degree of proliferation of nicotine addiction is generally not correlated with the strength of addiction (the number of smoked cigarettes), although we have to underline here that men clearly outnumber women in the percentage of smokers and the number of cigarettes smoked, and students who represent a relatively small percentage of smokers, also smoke fewer cigarettes than other social groups.

Light smokers (up to 10 cigarettes smoked a day) are more among women than men (49% to 26%), young people (under 24 years old) and in the older age group (aged 65 and over) than middle-aged people, people with higher education in comparison with the graduates of vocational schools and among students — especially — in comparison with farmers. Among farmers who do not head statistics of smokers, the highest number of heavy smokers is among those smoking 20 or more cigarettes a day (62% vs. 48% in the overall quota).

Table 5.68. Percentage of cigarette smokers, former smokers among the non-smoking and average number of cigarettes smoked a day in 1995-2003

Variable	1995 N= 3042	1996 N=2350	2000 N=6800	2003 N=9620
Percentage of people smoking cigarettes	37.9	35.9	32.7	30.4
Percentage of people who quit smoking among non-smokers	32.2	no data	34.7	36.7
Average number of cigarettes smoked a day	no data	17.27	16.58	16.38

Data source: 1995-1996 — Czapiński, 1998; 2000 — Social Diagnosis 2003 (computer database).

Table 5.69. Do you smoke cigarettes?

(%)	
group	Yes
Overall	31.4
Gender	
Men	41.3
Women	22.9
Age	
Under 24 years old	27.1
25-34 years old	35.5
35- 44 years old	41.5
45-59 years old	37.8
60-64 years old	21.3
65 and over	12.6
Place of residence	
Cities over 500k	33.7
Towns 200-500k	34.2
Towns 100-200k	32.2
Towns 20-100k	33.0
Towns under 20k	33.7
Rural areas	28.1
Voivodship	
Dolnośląskie	34.5
Kujawsko-pomorskie	40.6
Lubelskie	31.0
Lubuskie	32.5
Łódzkie	30.3
Małopolskie	25.2
Mazowieckie	30.4
Opolskie	30.6
Podkarpackie	24.5
Podlaskie	32.3
Pomorskie	32.7
Śląskie	33.6
Świętokrzyskie	24.4
Warmińsko-mazurskie	33.8
Wielkopolskie	31.9
Zachodniopomorskie	35.7
Education	
Primary and below	26.9
Vocational	43.8
Secondary	29.9
University and post-secondary	22.2
Income per capita	
First quartile	38.7
Mid 50 %	29.9
Forth quartile	28.2
Socio-professional status	
Public sector	30.6
Private sector	37.6
Self-employed	45.7
Farmers	38.3
Pensioners	28.6
Retirees	16.3
Students	18.4
Unemployed	46.3
Other professionally inactive	39.2

Table 5.70. If you smoke cigarettes, how many a day do you smoke?

group	Average number of cigarettes smoked a day
Overall	16.38
Gender	
Men	18.16
Women	13.59
Age	
Under 24 years old	12.30
25-34 years old	15.53
35- 44 years old	18.23
45-59 years old	17.60
60-64 years old	16.93
65 and over	13.44
Place of residence	
Cities over 500k	16.20
Towns 200-500k	16.02
Towns 100-200k	15.61
Towns 20-100k	16.27
Towns under 20k	16.13
Rural areas	16.85
Voivodship	
Dolnośląskie	14.84
Kujawsko-pomorskie	17.31
Lubelskie	16.04
Lubuskie	16.15
Łódzkie	16.34
Małopolskie	17.59
Mazowieckie	16.50
Opolskie	15.75
Podkarpackie	15.97
Podlaskie	17.47
Pomorskie	15.13
Śląskie	16.88
Świętokrzyskie	17.28
Warmińsko-mazurskie	15.91
Wielkopolskie	16.42
Zachodniopomorskie	16.09
Education	
Primary and below	16.14
Vocational	17.41
Secondary	15.55
University and post-secondary	14.84
Income per capita	
First quartile	16.46
Mid 50 %	16.33
Forth quartile	16.47
Socio-professional status	
Public sector	17.08
Private sector	16.68
Self-employed	18.01
Farmers	18.15
Pensioners	16.37
Retirees	15.15
Pupils and students	11.00
Unemployed	15.98
Other professionally inactive	15.87

5.10.5.2. Alcohol abuse

The individual questionnaire included two questions (annex, part II, questions 54 and 72), which aimed at singling out people prone to alcohol abuse. One concerned a respondent's typical reaction to trouble and difficult life situations and in the choice of answers there was the statement "*I reach for alcohol*". The second question asked about alcohol abuse directly: "*in the past year I drank too much alcohol*". The percentage of people whose reaction to trouble is reaching for alcohol is lower (3.4%) than the percentage of people who admit to abusing alcohol (4.4%).

In difficult life situations it is the unemployed who reach for alcohol most often (6%), they are followed by self-employed (6.3%), men (6.5%), the poor (4.5%), middle aged people (4.5%) and graduates of vocational schools (4.5). The alcohol-based strategy of coping is the least often used by women (only 1%), elderly people (aged 65 and over — 1%), disability pensioners (1.5%) and students (1.7%).

The social pattern of alcohol abuse is similar (table 5.71). Men admit that in the past year they drank too much alcohol, over eight times more often than women; those were decidedly more often inhabitants of big cities and not small towns or countryside, middle-aged people rather than the elderly and the young; much more often the poor than the rich; self-employed nearly twice as often than employees, and the unemployed almost 1.5 times more often than their working counterparts.

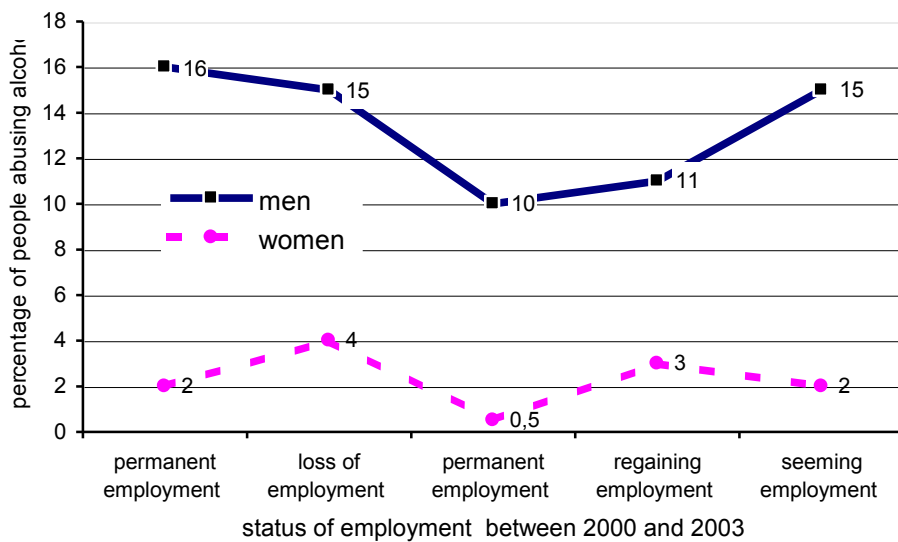
It is not settled in the light of empirical data available in existing literature whether alcohol abuse by the unemployed results from the stress connected with losing job, or the reverse — people abusing alcohol are more likely than those free from addiction to be threatened with job loss. Our study tends to confirm the second hypothesis, but only in relation to men. Men who lost work between the first and the second wave, even before being dismissed, in the year 2000 more often admitted to alcohol abuse (15%) than their counterparts who were employed at the time of both measurements (10%), and the latter were not different from the steady unemployed in this respect (those jobless in both waves) (figure 5.20); but men who regained their work between the first and the second measurement, indicated nearly equal (8%) addiction to alcohol before recovering their work in the year 2000 — as those with steady employment. The pattern for women is similar with the exception of the permanently unemployed and falsely unemployed²³.

If the first thesis is true — the loss of a job increases life stress and in this way induces drinking — then we should expect the highest possible change in alcohol use between the first and the second measurement in the group of men who lost their jobs in the meantime. However, they do not differ from the permanently jobless in this respect or those who found employment in the meantime, although in contrast to permanently employed they started drinking more after they lost their work (figure 5.21). Because both dependencies are statistically significant, it seems justified to say that alcohol encourages losing a job, but also the loss of a job can increase the alcohol addiction. Because (omitting the falsely unemployed) in the group of permanently unemployed there appeared both the highest degree of alcohol addiction in the first measurement, and also the highest increase in alcohol abuse after three years, therefore it seems justified to assert that alcohol abuse is a significant factor in job loss risk, and the inability of quit the addiction or its increase is a significant factor in the threat of permanent unemployment. We will come back to this problem in the chapter on psychological aspects and effects of job loss (chap. 8.4.4).

²³ By 'falsely unemployed' we understand people registered in the employment office as unemployed, but not expressing their will to start working, nor looking for work or those who had worked full time in the previous week and who declare personal monthly net income of not less than 850 PLN.

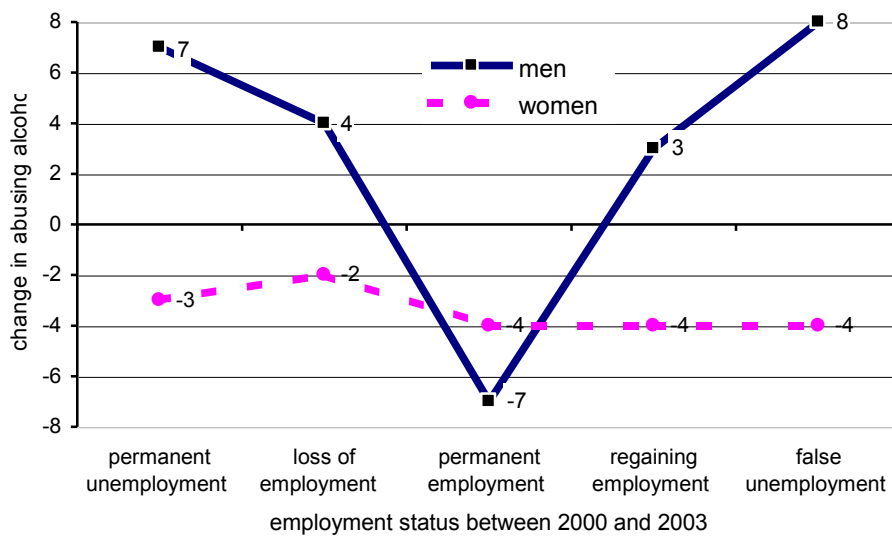
Table 5.71. Did you drink too much alcohol in the past year?

(%)	
group	Yes
Overall	4.36
Gender	
Men	8.28
Women	0.97
Age	
Under 24 years old	3.95
25-34 years old	4.49
35- 44 years old	5.59
45-59 years old	5.65
60-64 years old	3.62
65 and over	1.57
Place of residence	
Cities over 500k	5.46
Towns 200-500k	6.67
Towns 100-200k	2.98
Towns 20-100k	3.92
Towns under 20k	3.81
Rural areas	3.98
Voivodship	
Dolnośląskie	5.58
Kujawsko-pomorskie	3.07
Lubelskie	5.80
Lubuskie	4.89
Łódzkie	4.84
Małopolskie	2.67
Mazowieckie	4.03
Opolskie	3.82
Podkarpackie	3.97
Podlaskie	5.89
Pomorskie	5.22
Śląskie	4.80
Świętokrzyskie	4.82
Warmińsko-mazurskie	5.16
Wielkopolskie	3.00
Zachodniopomorskie	3.72
Education	
Primary and below	3.80
Vocational	5.90
Secondary	3.79
University and post-secondary	3.92
Income per capita	
First quartile	5.78
Mid 50 %	3.89
Forth quartile	3.97
Socio-professional status	
Public sector	4.69
Private sector	4.80
Self-employed	8.18
Farmers	4.40
Pensioners	3.17
Retirees	2.35
Students	3.35
Unemployed	6.88
Other professionally inactive	4.41



Note: the covariate in the variance analysis was respondents' age; effects: of gender $F(1,2568)=63.60$ $p<0.000$; of employment status $F(4,2568)=2.47$ $p<0.05$; of gender x employment status interaction $F(4,2568)=<1$ ns.

Figure 5.20. Percentage of respondents admitting to alcohol abuse in 2003 among women and men differing in employment status between the years 2000 and 2003



Note: the covariate in the variance analysis was respondents' age; effects: of gender $F(1,2562)=40.45$ $p<0.000$; of employment status $F(4,2562)=4.13$ $p<0.01$; of gender x employment status interaction $F(4,2562)=2.32$ $p<0.06$.

Figure 5.21. Percentage change of the number of people admitting to alcohol abuse in 2003 in reference to the year 2000 among men and women differing in employment status in 2000 and 2003

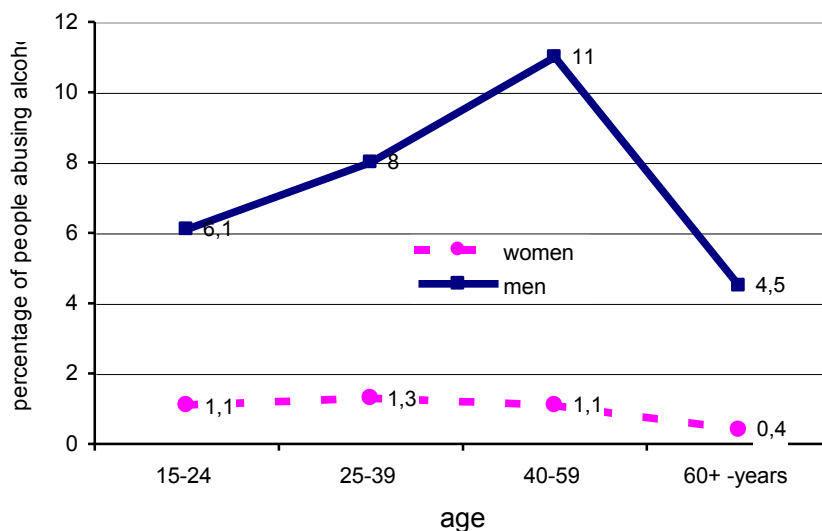
The percentage of respondents abusing alcohol has fallen in the panel sample in comparison with the year 2000 by about 1% and it is the lowest in the whole period of study of the quality of life (table 5.66). In relation to 1991 the number of people who can be called alcohol addicts fell by 1/3 (table 5.66). Alongside cutting down on smoking this is one of the most important factors of physical improvement in the condition of Polish society.

Table 5.72. Percentage of respondents admitting to using narcotics in the years 1991-2003 in the adult population of Poles.

1991 N=4187	1993 N=2306	1995 N=3020	1997 N=2094	2000 N=6403	2003 N=9587
6.6	6.4	6.3	5.4	5.3	4.4

Data source: 1991-1997 — Czapiński, 1998; 2000 — Social Diagnosis 2003 (computer database).

The effect of gender x age interaction is statistically significant: frequency of alcohol abuse does not depend on age among women, it is a determinant in the case of men — men most threatened with alcohol abuse are aged between 40-59, and the oldest and the youngest – are the least so (figure 5.16). It has to be borne in mind that the elderly have already passed the risk of alcohol abuse, and the young have it ahead of them. Therefore the fact that, among men aged between 15-24 those drinking excessive quantities of alcohol amount to 6%, is not a good forecast for this generation in the future from the perspective of the next 20-25 years before they reach the age of the highest risk of alcoholism.



Note: effects: of gender $F(1,9974)=242.755$ $p<0.000$; of age $F(3,9574)=15.22$ $p<0.000$; of age x gender interaction $F(3,9574)=11.49$ $p<0.000$.

Figure 5.22. Percentage of men and women of different ages, admitting to alcohol abuse in 2003

5.10.5.3. Using drugs

Contrary to alcohol abuse, using drugs has been systematically popularized in recent years. The population of people who admit to having taken drugs is three times bigger than in the beginning of the 1990s (table 5.74). The social and territorial extent of drug-addiction has also grown. It is still men and inhabitants of large urban areas who head the statistics, but more and more often those who start using drugs are women, small town inhabitants and people from rural areas. Currently, alongside the listed groups, the most threatened with drug use are pupils and students (generally young people), the unemployed, private sector employees, and territorially, the inhabitants of Dolnośląskie, Kujawsko-pomorskie, Lubuskie and Pomorskie voivodships (table 5.73).

Like three years ago, the most threatened with drug-addiction are young men aged 18-24. After the age of 35, among both men and women, the use of drugs falls to zero (figure 5.23).

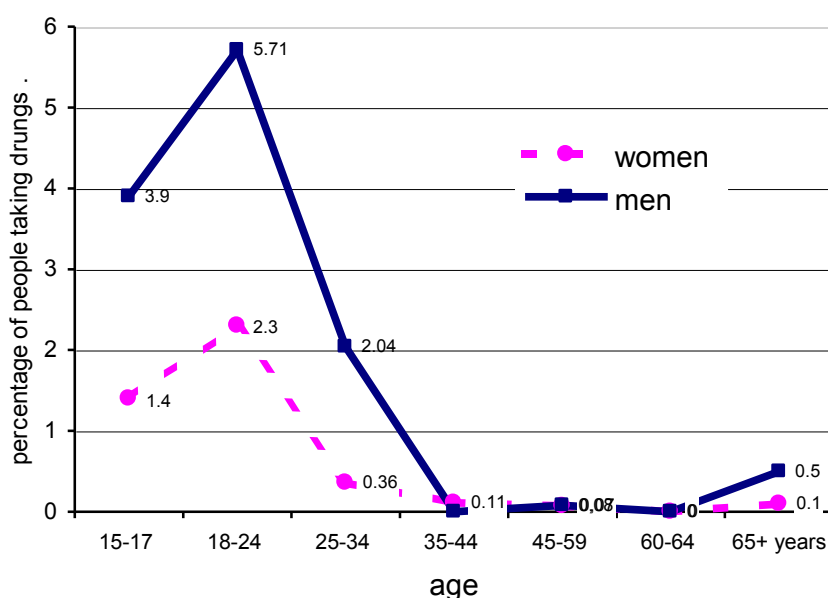
Table 5.73. Did you take drugs last year?

(%)	
group	Yes
Overall	0.87
Gender	
Men	1.36
Women	0.45
Age	
Under 24 years old	3.96
25-34 years old	1.29
35- 44 years old	0.10
45-59 years old	0.08
60-64 years old	
65 and over	
Place of residence	
Cities over 500k	1.98
Towns 200-500k	1.80
Towns 100-200k	0.63
Towns 20-100k	0.64
Towns under 20k	0.65
Rural areas	0.46
Voivodship	
Dolnośląskie	1.68
Kujawsko-pomorskie	1.67
Lubelskie	0.54
Lubuskie	1.24
Łódzkie	0.63
Małopolskie	0.29
Mazowieckie	0.88
Opolskie	0.78
Podkarpackie	0.99
Podlaskie	0.67
Pomorskie	1.35
Śląskie	1.07
Świętokrzyskie	0.69
Warmińsko-mazurskie	0.62
Wielkopolskie	0.42
Zachodniopomorskie	0.66
Education	
Primary and below	0.52
Vocational	0.60
Secondary	0.81
University and post-secondary	0.72
Income per capita	
First quartile	0.70
Mid 50 %	1.17
Forth quartile	0.94
Socio-professional status	
Public sector	0.31
Private sector	1.31
Self-employed	0.23
Farmers	0.22
Pensioners	0.36
Retirees	0.18
Students	4.34
Unemployed	1.45
Other professionally inactive	0.79

Table 5.74. Percentage of respondents admitting to drugs use in the years 1991-2003 in the adult population of Poles.

1991 N=4187	1993 N=2306	1995 N=3020	1997 N=2094	2000 N=6403	2003 N=9587
0.4	0.3	0.3	0.7	0.9	0.9

Data source: 1991-1997 — Czapiński, 1998; 2000 — Social Diagnosis 2003 (computer database).



Note: effects: of gender $F(1,9974)=34.21$ $p<0,000$; of age $F(3,9574)=64.29$ $p<0,000$; of gender x age interaction $F(3,9574)=12.87$ $p<0,000$.

Figure 5.23. Percentage of men and women of different ages admitting using drugs in 2003

5.10.6. Crime perpetrators and victims

For the past 14 years Poland has seen a significant increase in the crime rate. From 1990-2001 on average approx. 1 million crimes a year were reported, twice as many as in the 1980s. Since 1996 a systematic increase in the numbers of crime has taken place of about 10% a year (KGP, 2001; Siemaszko, Gruszczyńska, Marczewski, 2003). It means that an average citizen is threatened two and a half times more frequently with the risk of being a victim of a crime, the risk of becoming a criminal is also higher. Those changes are not so visible in the surveys. As table 5.75 shows in the 1990s the number of house break-ins was on the increase, but the number of victims of mugging and battery has fallen; in turn surveys showed that until 2000 there was a growing number of people accused in both criminal and civil cases.

A comparison of frequency of crime-related experience in the panel sample between 2000 and 2003 shows a statistically significant drop in the number of theft victims and the simultaneous increase of people accused of this crime (which can prove the increase of police and justice effectiveness). Other categories of experience are either not different in their frequency to the statistically significant events, or are incomparable due to differently phrased questions. For instance, a sudden drop in the rate of break-ins is certainly the result of the fact that in 2000 the question was only concerned with house break-ins, while in 2003 respondents were asked about both house and car break-ins.

It is interesting to see a steady tendency of the majority of such events over a period of time with particular people. Someone who was a victim of a theft or a house break-in in the year 2000, also had a significantly higher risk of being a victim of those crimes after three years. Only

mugging and battery appear to be purely random events in the sense that their victims are not more endangered than others with the repetition of the same experience. The repetition in the experience of criminals is not surprising at all: being accused and arrested by the police increases in a statistically significant way the probability repeating this experience after three years (all correlations of the test-retest are statistically significant on the level of 0.000). We can then say not only about permanent predispositions to breach the law, but also about the recurring profile of a victim — in reference to certain categories of experience — which confirms the thesis of victimologists: certain people are more endangered than others with reliving the experience of being a victim of someone's aggression.

Table 5.75. Percentage of respondents admitting to having had an experience of breaching the law in the years 1993-2003

Experience	1993 N=2306	1995 N=3020	2000 N=6403	2003 N=9587
Victim of a theft	5.1	5.4	6.8	5.5
Victim of a mugging and battery	1.6	1.7	1.6	1.3
Victim of a house break-in	1.2	1.2	2.1	4.0*
Accused in a criminal case	0.5	0.4	1.0	1.1
Accused in a civil case	0.4	0.6	0.8	0.8

* in 2003 we asked about a break-in in a car or house

Data source: 1993-1995 — Czapiński, 1998; 2000 — Social Diagnosis 2003 (computer database).

It is worth mentioning that among those accused of criminal acts or those arrested by the police there is a much higher percentage of victims of mugging and battery than in the general population. It means that many crimes are committed within criminal circles. Those who break the law are threatened more than other lawful citizens with being victims themselves of other crime perpetrators. Those could be the internal account settling between criminals which make a growing proportion of all crimes, and this in turn has the effect that, despite the lack of significant improvement in criminal statistics, there is an increase in the security of society in general (see chap. 5.2 — satisfaction with safety in the place of residence has increased the most in relation to the year 2000 among all the other domain satisfactions).

Both the percentage of victims and criminals is decidedly higher among men than women (table 5.76); it is also much higher in the younger age groups as opposed to older people. In the biggest cities the frequency of breaking the law is on average twice or three times as high as in rural areas and in small towns.

The dependency between frequency of being victims or criminals and the level of education is particularly interesting. House or car break-in victims are more often people with higher or post-secondary education (which probably is an indicator of the level of affluence of this group, which is also confirmed by a high indicator of those types of crimes among people with higher incomes — especially — self-employed of whom one in ten was a victim of theft in the past year, and one in thirteen experienced a house or car break-in). The criminals are much more often people with lower education. In the socio-professional status group division, the highest rate of criminals accused or arrested by the police was reported among the unemployed. It is still difficult to answer the question whether unemployment demoralized or the other way around — the demoralized do not stick to the job. Generally the safest and the least demoralized group were the disability pensioners (table 5.76).

Table 5.76. Percentage of respondents admitting to having had experience of breaching the law

Group	Victim of a theft	Mug-ging and battery victim	Victim of a car/ house break-in	Accused in a criminal case	Arrested by the police	Accused in a civil case
Overall	5.5	1.3	4.0	1.1	2.2	0.8
Gender						
Men	5.8	2.0	5.0	2.0	4.1	1.4
Women	5.4	0.8	3.1	0.4	0.6	0.4
Age						
Under 24 years old	7.3	2.5	3.1	2.3	5.7	1.2
25-34 years old	6.9	1.7	7.7	2.0	3.6	1.3
35- 44 years old	5.0	1.2	3.5	1.0	2.1	0.8
45-59 years old	4.7	0.9	3.8	0.8	1.0	0.9
60-64 years old	3.7	0.6	1.0	0.2	0.8	0.2
65 and over	5.0	1.0	2.4	0.3	0.3	0.3
Place of residence						
Cities over 500k	9.6	2.8	8.2	1.7	3.3	1.9
Towns 200-500k	10.1	2.7	6.0	1.1	2.5	0.3
Towns 100-200k	6.1	1.0	4.5	1.2	2.9	0.9
Towns 20-100k	5.7	0.9	4.1	1.2	2.1	0.8
Towns under 20k	4.6	0.9	3.4	1.3	2.1	0.6
Rural areas	2.9	0.9	2.0	0.9	1.7	0.7
Voivodship						
Dolnośląskie	5.6	1.0	5.6	1.6	2.9	1.3
Kujawsko-pomorskie	5.9	1.4	1.9	1.0	1.4	0.2
Lubelskie	7.8	1.6	3.4	2.5	3.2	1.3
Lubuskie	6.4	2.4	2.4	1.2	2.8	1.2
Łódzkie	4.7	1.7	3.4	0.2	1.3	0.5
Małopolskie	5.4	1.1	4.6	1.1	1.5	1.1
Mazowieckie	6.7	1.7	5.4	0.8	2.0	0.8
Opolskie	5.2	1.6	6.7	2.4	2.8	2.0
Podkarpackie	2.7	0.6	1.3	0.6	1.5	0.4
Podlaskie	3.7	2.0	2.7	0.3	3.4	1.7
Pomorskie	8.1	0.9	5.6	1.5	2.4	0.6
Śląskie	5.8	1.5	4.4	0.8	2.5	0.4
Świętokrzyskie	4.0	1.0	2.4	0.7	2.4	0.3
Warmińsko-mazurskie	4.7	2.8	2.5	1.2	3.7	1.5
Wielkopolskie	4.2	0.6	2.4	1.4	1.6	1.0
Zachodniopomorskie	5.0	0.5	4.0	1.5	1.5	0.3
Education						
Primary and below	3.5	1.6	1.7	1.2	1.5	1.2
Vocational	4.3	1.0	3.3	1.1	2.8	0.6
Secondary	6.0	1.0	4.6	1.3	2.1	0.7
University and post-secondary	8.2	1.2	8.0	0.7	1.8	0.9
Income per capita						
First quartile	4.8	1.9	3.4	1.9	2.7	1.2
Mid 50 %	5.3	1.2	3.4	1.0	2.3	0.8
Forth quartile	7.2	1.5	5.5	0.8	1.8	0.6
Socio-professional status						
Public sector	5.1	0.8	5.3	0.9	1.7	0.6
Private sector	5.5	1.2	5.5	0.8	2.9	0.8
Self-employed	9.7	1.3	7.6	1.7	3.2	1.1
Farmers	3.1	0.8	2.0	1.8	2.9	1.6
Pensioners	5.4	1.5	3.6	0.6	1.6	0.6
Retirees	4.9	1.0	2.5	0.4	0.4	0.4
Students	9.3	3.5	3.2	0.8	3.1	0.6
Unemployed	4.8	2.5	3.0	3.5	5.1	1.8
Other professionally inactive	4.9	1.1	2.5	1.6	1.6	1.3

5.10.7. An overall indicator of social pathology

The overall indicator of social pathology encompasses the sum of all six above partial indicators (alcohol abuse, taking drugs, breaking the law and being the victim of a crime) and also consulting a psychologist or psychiatrist, arrest or breaking the law by someone close and experience of discrimination due to one's nationality, looks or convictions or for any other reasons. This indicator cannot be used to characterize particular people— but it allows us to identify circles considered undesirable (anti-social) from the point of view of social order (laws and norms).

Table 5.77 shows the distribution of the social pathology indicator in various socio-demographic stratifications. Men are nearly twice as much as threatened with pathology than women, people aged 18-29 are almost three times more prone to commit crime than people aged 60 and above. Despite a statistically significant main effect²⁴ age also gives a significant effect of interaction with gender (figure 5.24).

The highest contrast of the degree of susceptibility to anti-social behavior appears between big towns and cities (above 200,000 of inhabitants) and rural areas. The threat of anti-social behavior in big towns and cities is twice as high as in rural areas and is nearly twice as high as in smaller towns.

In the voivodships, ranking is headed by Lubelskie, and is followed by Dolnośląskie, Pomorskie, Lubuskie, Mazowieckie and Opolskie voivodships — all of them with the indicator higher than 30. The other ends of the scale, the least threatened with crime with the indicator below 20 are Podkarpackie and Świętokrzyskie voivodships.

In the group not practicing religion the indicator of social pathology is twice as high as among people regularly practising religion and the difference is also maintained after controlling for age (among those regularly practising religion there is a higher percentage of older people than among the non-practising). Religious practices, besides gender, are the single most strongly differentiating anti-social behavior factor.²⁵ The interaction effect of religious practices and age is also statistically significant (figure 5.25). Among the non-practising the threat of anti-social behavior is nearly twice as high for men as for women, and among regularly practising the difference related to gender decreases to one third.

In the socio-demographic division the most threatened with anti-social behavior are groups of self-employed, and the least — that of disability pensioners (according to the distribution of age indicator) and farmers (according to the distribution of the size of the town/city indicator). Anti-social behavior has a different character among self-employed and the unemployed. The first group belongs mainly to the victims of crimes, and the second is made up of the criminals (see table 5.77).

The group of the unemployed is not homogenous. We can differentiate truly unemployed and falsely unemployed (registered in job centers, but not looking for work or working full time and reaching personal incomes of over 850 PLN a month), permanently unemployed (unemployed in both waves: in the year 2000 and in 2003) and those who quite recently were unemployed, but found work, and those who in the first survey had work, and at present are jobless. The most threatened with anti-social behavior are permanently unemployed and those who lost their jobs between the first and the second surveys. But there is statistical significance only in the difference between those two groups and the permanently employed, among whom the threat of anti-social behavior is twice as low. (figure. 5.26).

²⁴ Main effect of age $F_{(7,9669)} = 19.92$ ($p < 0.000$).

²⁵ Main effects: of gender $F_{(1,9669)} = 75.39$ ($p < 0.000$); of religious practices $F_{(2,9603)} = 83.00$ ($p < 0.000$).

Table 5.77a. An overall indicator of social pathology

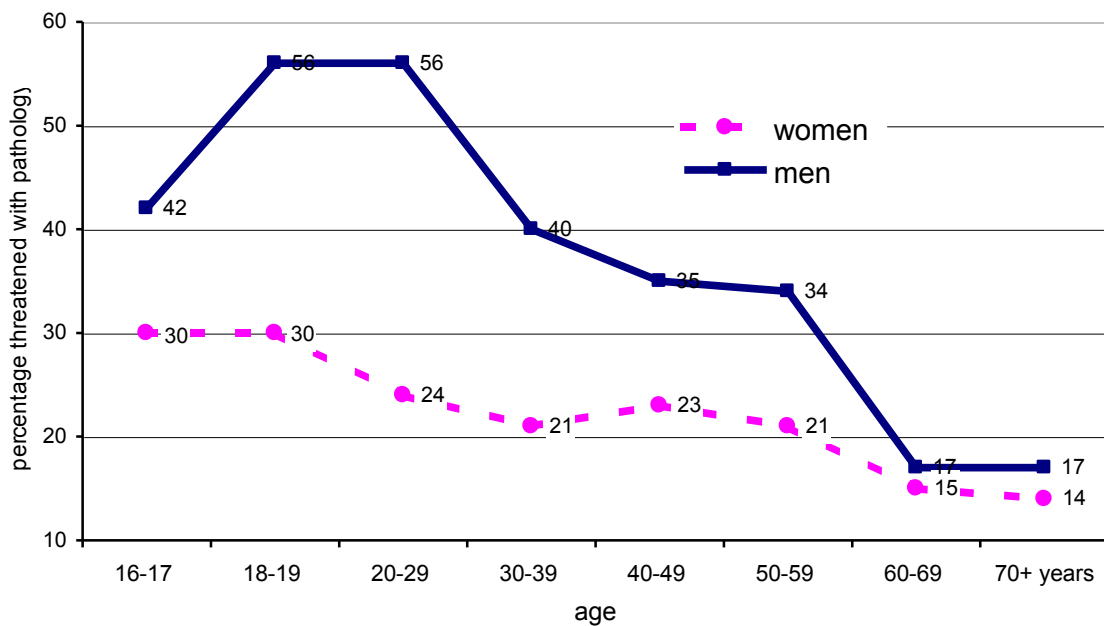
Group	Number of anti-social events for 100 respondents
Overall	29
Gender	
Men	37
Women	21
Age	
16-17 years old	34
18-19 years old	42
20-29 years old	41
30-39 years old	30
40-49 years old	28
50-59 years old	28
60-69 years old	15
70 and over	14
Place of residence	
Cities over 500k	47
Towns 200-500k	41
Towns 100-200k	29
Towns 20-100k	29
Towns under 20k	26
Rural areas	20
Voivodship *	
Lubelskie	38
Dolnośląskie	36
Pomorskie	35
Lubuskie	33
Mazowieckie	32
Opolskie	31
Warmińsko-mazurskie	30
Podlaskie	29
Zachodniopomorskie	29
Śląskie	28
Kujawsko-pomorskie	26
Małopolskie	26
Łódzkie	25
Wielkopolskie	22
Podkarpackie	19
Świętokrzyskie	19
Religious practices	
0 time a month	45
1-3 times a month	25
4 or more times a month	20
Socio-professional status	
Public sector	26
Private sector	30
Self-employed	41
Farmers	22
Pensioners	32
Retirees	16
Students	37
Unemployed	41
Other professionally inactive	32

* ranked from the most to the least threatened with social pathology

Table 5.77b. An overall indicator of social pathology (continued)

Group	Number of anti-social phenomenon for 100 respondents
Status of employment	
Permanently unemployed	36
Permanently employed	23
The new unemployed	36
The former unemployed	30
Falsely unemployed	28
Education *	
Primary and below	25 (30)
Vocational	27 (24)
Secondary	31 (29)
University and post-secondary	33 (32)

* in the brackets - the value adjusted for age



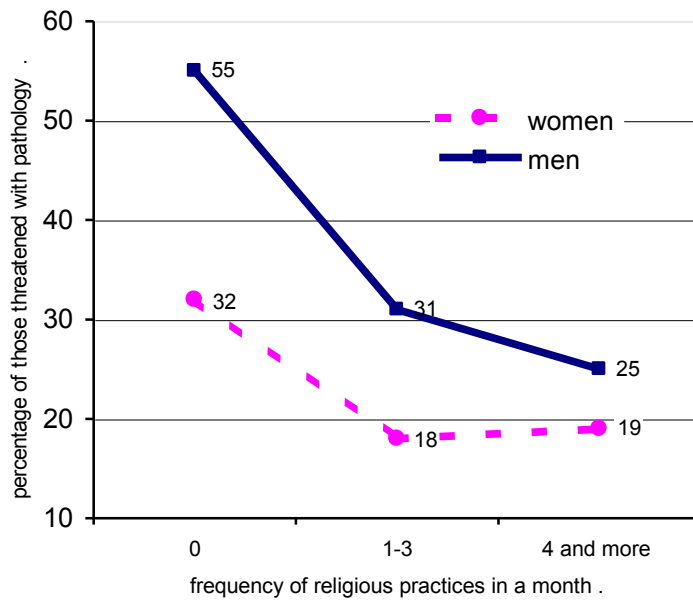
Note: the effect of age x gender interaction $F(7,9569) = 6.73; p < 0.000$

Figure 5.24. An indicator of the threat of social pathology by age and gender

The above distribution of results suggests that the loss of work is not a random occurrence, completely independent on employees. Perhaps besides the people who lose their work for reasons not depending on them (e.g. as a result of the bankruptcy of a company), there are also those who lose employment because of their particular features and behaviors. Features increasing the risk of job loss can be different: concerning motivation, competence and also moral issues (we will come back to this problem in chapter 8.4.4). We have asserted before that alcohol abuse is the predicator for job loss. . We will now check if the overall threat of anti-social behavior is not such a predicator.

Once we consider the overall indicator of social pathology for the year 2000, consisting of 11 variables, there are no statistically significant differences between those who were permanently employed and lost work after the year 2000, and those who regained it after 2000.

Only the permanently unemployed and falsely unemployed had higher indicators than the permanently employed. If the indicator is narrowed to 5 categories indicating the responsibility for such a situation, and not being a victim (alcohol abuse, taking drugs and breaking the law), it then turns out that men who lost their jobs only after the first wave had already displayed a higher level of anti-social behavior in 2000 (before they were made redundant or dismissed) in comparison to their counterparts who maintained their work between the two surveys (figure 5.26).



Note: age was the covariate in the variance analysis; the effect of interaction of religious practices with gender $F(2,9803) = 12.21; p < 0.000$

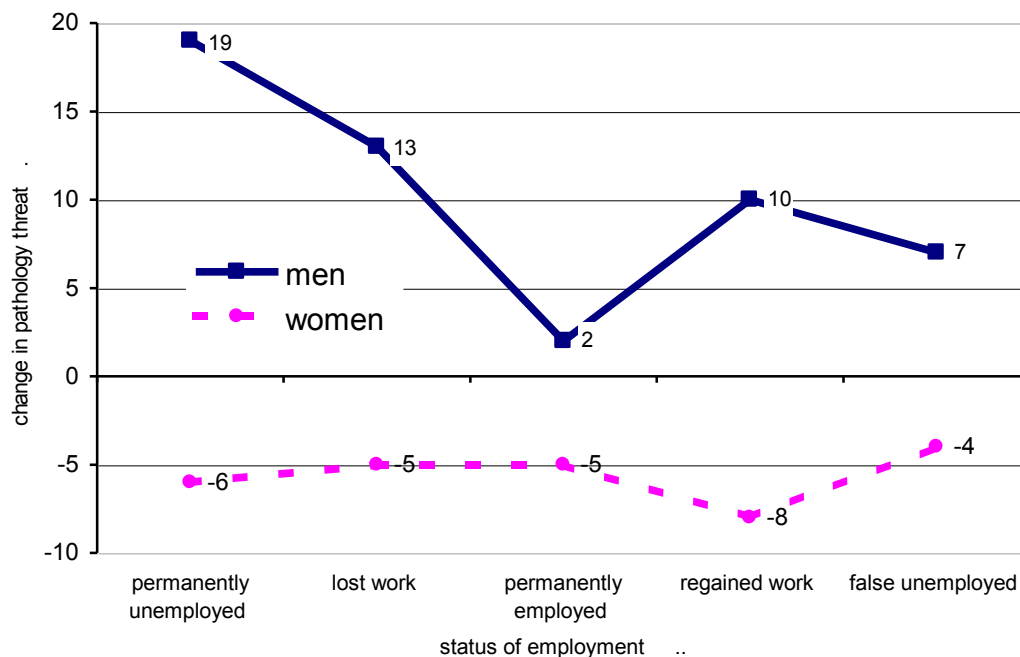
Figure 5.25. An indicator of the threat of anti-social behavior with regard to religious practices among men and women



Note: age was the covariate in the variance analysis; the main effect – employment status: $F(4,2578) = 4.00 p < 0.005$; effect of interaction of employment status and gender $F(4,2578) = < 2$ ns.

Figure 5.26. An indicator of anti-social behavior in 2000 by status of employment and gender

It proves that at least some men who make up the group of the unemployed lose their jobs because of their self-destructive behaviors (alcohol and drugs), and also because of crimes they commit. We will develop this topic in chapter 8.4.4. On this occasion a basic difference between falsely unemployed women and men appeared. Falsely unemployed women are almost entirely free of anti-social behavior, which contrasts with the falsely unemployed men who have an anti-social behavior indicator as high as their actually unemployed counterparts. This is probably due to the fact that housewives predominated in the group of falsely unemployed women and the group of falsely unemployed men is made up by “footloose, carefree”, vagabonds, employed on the black market or for odd jobs or those drawing profit from illicit activities.



Note: age was a covariate in the variance analysis; the main effect the employment status: $F(4,2586) = 2.53$ $p < 0.05$; interaction effect of the employment status and gender $F(4,2586) = 3.85$ $p < 0.01$.

Figure 5.27. Percentage change of anti-social behavior by employment status and gender

Figure 5.27. shows in turn that the threat of self-destructive and criminal behavior among men who have just lost their jobs has increased even more after the loss of a job. It proves that, consistently with the hypothesis on the relationship between unemployment and alcohol abuse (and also dynamic model of unemployment — see chapter 8.4.4) that anti-social behavior proceeds the loss of a job and continues to increase after the job loss probably mainly because this group includes some unemployed who will soon turn out to be permanently unemployed. In other words, in the group losing their jobs there are two categories of people. One is made up of those who lost their work for reasons completely independent of them (company’s bankruptcy, planned downsizing, redundancies). These are usually ‘decent people’ in the colloquial sense, and they have high chances of finding a new job soon. The second group, before they lose their work, already has a psychological profile of permanently unemployed: they abuse alcohol, break the law, thus increasing the chances of losing their jobs, especially in difficult times on the labor market. On losing their jobs this group follows in the footsteps of the permanently unemployed — criminal behavior increases, thus lowering the chance of finding new employment. With women this pattern of relationships is much weaker (alcohol), or slightly different (anti-social behavior): in principle in the entire group of women singled out according to employment status, the threat of anti-social behavior fell between 2000 and 2003, but this decrease was the biggest among those who regained work.

The group of so-called “falsely” unemployed presents still quite another case. If we talk about men, they are, colloquially speaking, carefree and footloose: they drink a lot and in time they drink more (like permanently unemployed) and they get into no good; they are different from the permanently unemployed only in that they are not interested in any work. Society does not have any use for them (on the contrary — it only suffers damage), but they overuse the existing law and register as unemployed and thanks to that they get basic social rights. This is largely the group, which is supported by the community, without any chance of being independent, or paying back the support they get from society.

5.11. Evaluation of systemic transformation and its impact on respondents’ lives

Antoni Sulek and Janusz Czapiński

Systemic reforms conducted in Poland after 1989 brought about great changes in society. Those changes in various degree encompassed particular social groups, and some of them found themselves in the center of interest, and other on the outside or even on the margins of the transformation. Additionally, not all the groups and not everybody benefited and lost on the transformations to an equal degree; there are winners and losers in the system changes. The impact of the system changes on people’s lives has a dynamic character — its scope and intensity changes in time.

To evaluate the entire period of changes after 1989 we used a simple question: “*Were reforms conducted in Poland after 1989 successful in general or rather unsuccessful?*” (annex, part II, quest. 61). The perception of impact of those reforms on respondents’ lives was measured on the basis of two other questions: “*Did the changes that took place in Poland after year 1989 have any influence upon your life?*” and “*in general, was that influence positive or negative?*” (quest. 62-63). An indirect assessment of the whole period of transformation was measured by the question about when it was easier for the respondent to live – before 1989 or now (quest. 4), and the question about the happy time in the respondent’s life (quest. 97)²⁶.

Overall evaluation of the reforms in Poland after 1989 is for most respondents a difficult task— 36.8% could not decide to do it. It is easy to understand if we consider that the media do not impose one universally accepted evaluation of the reforms and there are many public discussions about it, so working out one’s own evaluation requires a lot of knowledge and analytic skills on the part of respondents. It is rare to hear someone say that the reforms were successful (6.1%) – a common opinion is that the reforms were not successful (57.1%). The commonness of such a negative conviction is proven by the fact that a similar proportion of answers appears in every social category; there is no category in which the percentage of people convinced that reforms were successful was higher than 10%, and only among young people (under 24 years old) and in a different division, among pupils and students, the percentage of those convinced that reforms were not successful fell and oscillates between 32-34%, but this is also in great extent because in those groups the percentage of “hard to say” answers has soared to 58%.

The opinion that the reforms after 1989 were successful, most often appears in big towns (7.9%) and in the biggest cities (9.3%); in rural areas this view is held only by 4.7% of respondents. This opinion is more popular in the more educated groups (in the category of people with primary education there are 5.2% who share this view, and 9.3% of respondents upholding this view have higher education) and income (5.0% in the lower quartile, and 8.9% in the upper quartile). In the territorial division, the least critical of the reforms are inhabitants of various voivodships all over the country (Opolskie, Wielkopolskie, Mazowieckie, Warmińsko-

²⁶ See chap. 5.1.2.

mazurskie), and the most critical are those living in eastern and central voivodships (Podlaskie, Świętokrzyskie, Lubelskie and Łódzkie).

The reforms were undertaken in 1989 and they had both an economic and a political character – they aimed at democratic and free market transformations. Their evaluation is not only influenced by one's living standard and opinions predominating in the media, but also political views and values held by respondents. *Diagnosis 2003* also surveyed the attitude towards democracy and its influence on the reform evaluation (annex, quest. 99).²⁷

People with higher education and high income, as well as young people, and those living in big towns and cities particularly appreciate acceptance of a democratic form of government. It suffices to show the differences in the selection of the answers: “*democracy is better than any other form of government*” between extreme groups in those divisions. This is the opinion of 22.9% of respondents aged under 24, and 10.7% of respondents aged 65 and above; 27.2% of inhabitants of cities of over 500,000, and 11.2% of inhabitants of rural areas; 7.6% of respondents with primary education, and 35.5% with higher and post-secondary; 9.5% of respondents from the lower quartile of income, and 29.7% from the upper quartile; in the case of each variable, the dependency between acceptance of democracy and another variable are of a proportional character. Consistently, there are reverse relationships between those variables and an opinion that “for people like me it doesn't really matter whether the government is democratic or undemocratic”.

The comparison of these relationships with those presented above indicates that the social categories, which highly value democracy, evaluate better the reforms commenced after 1989. This is an indirect proof of the impact of democratic values on reform evaluations. Direct evidence of this impact is a significant correlation between the attitude towards democracy and the evaluation of the reforms ($r = 0.163$, $p < 0.000$).

Democracy as a political system is appreciated more by people who live better now than in the former regime (in the People's Republic of Poland) ($r = 0.169$, $p < 0.000$). Polish democracy is real and generally does not enjoy a good opinion, which has an impact on the negative attitude Poles have towards democracy as the principle of the state. People usually assess principles according to their own balance of losses and benefits, Those who are in a subjectively perceived better position than they were in socialism, have more favorable attitudes towards real democracy — and further, towards democracy as a principle of a political system. There are few admirers of democracy, because – we will discuss this below — the majority's evaluation of this personal balance of the effects of the system change is negative.

And this is negative, not only because now in Poland there are more victims of the changes (in a worse material, health, social, psychological situation) than beneficiaries of the system change. The most important here can be the universal mechanism of attributing responsibility – it engendered the phenomenon of “social ungratefulness” (compare chapter 5.10.1). The reforms and their creators are for the majority of Poles an outstandingly clear point of reference, as psychologists say, they are easily cognitively accessible when we have to answer the question “why?” Such a question is asked by people who usually do not do well. Because one tries to escape from responsibility for one's personal failures, one is willing to devolve the guilt to other factors within easy cognitive reach. Since the reforms and their creators are well defined, they easily become culprits. People who succeed, are usually not bothered with such questions, and if it occurs to them, then the answer is: “me, myself – I am the author of my success” (Czapiński, 2000a).

²⁷ This is a classic question also asked in Poland e.g. in CBOS surveys (Zagórski, Strzeszewski, 2000), in Polish General Social Survey (PGSS, 1999) and in the Institute of Sociology UW survey (Grabowska, Szawiel, 2001). An unfortunate mistake distorted the meaning of one of the questionnaire answers and instead of; “sometimes undemocratic governments can be better than democratic” we had “sometimes democratic governments can be better than undemocratic”. The error makes it impossible to compare the answers to this question with others, but it does not rule out the possibility of analysis of the declared views.

A dynamic comparison shows that with the proceeding changes (or also with the increase of the distance from changes already conducted), there is a growing proportion of people who can make a general evaluation of the transformation, and the number of those who cannot assess it decreases. At the same time, the scissors of the transformation evaluation “open up”: there are fewer and fewer people who assess those changes positively as successful, and there is a growing number of those who see them in a negative light, as failures. The proportion of positive evaluations to negative ones in 1997 amounted to 1:3, and in 2000 — 1:6, while in 2003 it reached 1:9 (table 5.78).

Table 5.78. Percentage distribution of answers to the question “Were reforms conducted in Poland after 1989 successful in general or rather unsuccessful?” in the years 1997, 2000 and 2003.

Answers	1997 N=2094	2000 N=6403	2003 N=9380
Were successful	10.4	7.7	6.1
Were not successful	29.8	47.4	57.4
Hard to say	59.8	45.0	36.5

Data source: year 1997 — Czapiński, 1998; 2000 — Social Diagnosis 2003 (computer database).

The comparison of distribution of answers from the years 2000 and 2003 according to various social divisions shows that differences in transformation evaluation have increased the most in the group of young people (in the group of young people under 24 years old the difference between positive and negative evaluations has increased over time by about 16.8%, but in the group of 25-34-year olds, by 21.9%), and also in big towns and cities: by about 20.9% in towns of 100-200,000 inhabitants, and by 14.2% in 200-500,000 towns and by about 18.2% in cities over half-million population. The differences in evaluation opened even wider in the upper education groups. Among people with primary and lower education the difference of opinions increased by 10%, and among people with primary and secondary education – by 11.5%, while in the group with secondary education – by 18.5, and the higher education group - 17.8%. If we add that the category of socio-professional status where the differences of opinions were the highest (by 28.7%) was among self-employed, then the observation becomes valid that in the years 2000-2003 the evaluation of reforms has deteriorated most in the groups which had been very favorable towards reforms before. In more informal language we can call it disenchantment.

A widespread view that reforms conducted in Poland after 1989 were not successful is not equivalent to the opinion that they should not have been undertaken. A direct question “*If from today’s perspective we can say that it was worthwhile changing the system in Poland or it wasn’t?*”, was asked by CBOS in 1994, 1995, 1997, 1999 and 2002. Those who answered that it was worth it, were always at least twice as numerous than those who thought it wasn’t the case (Zagórski, Strzeszewski, 2000). The most recent of those surveys, from March 2002 showed that 56% of respondents answered positively to this question and 27% gave a negative answer. Also in the survey carried out by PBS polling organization in August 2000, for the question “What should we have done in 1989 in Poland: leave the previous system, or begin to change the system into a new one?”, 63% of respondents chose to change the system, and only 21% supported the idea of the previous system²⁸. There are two convictions that coexist in Polish society: (1) the previous system had to be changed (2) the reforms after 1989 were not successful. Those opinions do not have to be at odds. Probably a significant part of society thinks that it was necessary to change the previous system, but the new should have been constructed “differently”. This is easy to verify in the next research.

The view that changes in Poland after 1989 had impact on respondents’ lives (table 5.79) is as common as the opinion that reforms were not successful. This influence is felt by nearly two thirds of the population (64.3%) and only in a few categories this percentage falls below

²⁸ The Ballast of Unfinished Reforms – Rzeczpospolita Newspaper 22 IX 2003.

60%. Those changes are then quite widespread, and a clear majority of each social group feels them, and they certainly experience them differently.

The impact of those changes on one's life was reported more often by men than women (67.6 and 61.5%). It was most often felt among middle-aged people (35-59 years old), at their prime time of activity in life. The changes after 1989 most often had impact on the lives of inhabitants of the biggest towns and cities (75.0% in cities over 500,000). The higher the education category, the more often respondents feel the impact of changes (54.1% in the category of primary education, 72.2% – higher education). Different socio-demographic groups are subject to those changes to a different degree: most often self-employed (79.4%), unemployed (71.1%), farmers (70.9%), and the least often disability pensioners, retired and other professionally inactive groups (less than 65%) and students.

In reference to the year 2000, the socially felt scope of changes in people's lives which happened in Poland after 1989 has neither increased nor decreased; its scope leveled at 2/3 of the population. However, in comparison with previous periods there are more people experiencing the system changes (table 5.79).

Table 5.79. Percentage distribution of answers to the question "Did the changes that took place in Poland after year 1989 have any influence upon your life?" in the years 1996, 1997, 2000 and 2003.

Answers	1996 N=2333	1997 N=2094	2000 N=6403	2003 N=9082
Yes	43	50	66	64
No	57	50	34	36

Data source: 1996-1997 — Czapiński, 1998; 2000 — Social Diagnosis 2003 (computer database).

The negative dominance of the general tendency of changes after 1989 was accompanied by the same evaluation of impact on one's own life: 68% of respondents assess it as unfavorable, and several times less, 19.4% as favorable. Much as people have a problem with a general evaluation of the changes (36.8% of answers "hard to say"), they do not find it difficult to evaluate their impact on their own lives (only 12.6% do not know what to say) (table 5.80).

People over 45 years old feel that the impact of changes on their lives was negative. There are very marked differences in the evolution of this impact caused by the place of residence and education. In rural areas, this difference between the percentage of population feeling the negative and those experiences positive results of such changes amounts to 62.8%, and in big cities (over 500,000 of inhabitants) it reaches only 27.9%. Together with the increase of the education level this difference is falling from 63.8% in the group with primary education to only 10.1% in the group with higher education. Although all the social groups in a similar degree felt the impact of system changes, which occurred after 1989, not all of them experienced benefits and disadvantages of those changes in the same degree. The winners most often come from big cities, and they are well-educated, and the losers most often are from rural areas and smaller towns, among people with primary and vocational education and also among elderly people.

A dynamic comparison shows that as much as in the years 1997-2000 there was a clear increase in the number of Poles convinced about the negative impact on transformation on their lives (about 11%) then between 2000-2003 this increase was stalled and only 2.6% of respondents evaluated this impact as negative (table 5.81).

Table 5.80. If the changes which were conducted in Poland since 1989 had any influence upon you life, then would you say that this influence was positive or negative?

(%)					
Group	Very negative	Rather negative	Rather positive	Very positive	Hard to say
Overall	20.4	47.6	17.3	2.1	12.7
Gender					
Men	21.1	46.4	18.9	2.4	11.2
Women	19.6	48.7	15.7	1.8	14.1
Age					
Under 24 years old	13.1	34.3	26.8	4.2	21.6
25-34 years old	15.9	44.3	20.3	3.4	16.1
35- 44 years old	19.4	47.5	18.4	2.7	12.1
45-59 years old	25.4	51.5	13.6	1.0	8.5
60-64 years old	20.3	54.7	14.2	0.9	9.8
65 and over	21.0	49.8	14.6	1.1	13.5
Place of residence					
Cities over 500k	17.9	38.5	24.8	4.3	14.5
Towns 200-500k	18.1	43.0	23.3	2.8	12.8
Towns 100-200k	15.9	49.5	20.8	3.3	10.5
Towns 20-100k .	20.7	46.0	17.5	1.6	14.2
Towns under 20k	21.1	49.4	17.8	1.9	9.8
Rural areas	22.6	52.6	11.2	1.0	12.5
Voivodship					
Dolnośląskie	23.3	46.6	17.4	1.5	11.2
Kujawsko-pomorskie	23.0	49.0	13.2	1.9	12.8
Lubelskie	22.4	45.9	17.6	2.2	11.8
Lubuskie	21.0	51.9	15.4	1.9	9.9
Łódzkie	18.4	50.6	13.6	1.7	15.7
Małopolskie	20.8	41.5	20.8	3.8	13.1
Mazowieckie	18.1	46.7	17.9	2.2	15.0
Opolskie	17.4	43.7	19.8	1.8	17.4
Podkarpackie	17.0	54.1	13.9	0.8	14.3
Podlaskie	24.6	45.9	15.8	1.1	12.6
Pomorskie	12.6	43.7	25.4	4.0	14,3
Śląskie	20.3	49.3	17.5	1.5	11.3
Świętokrzyskie	18.8	52.3	13.1	2.3	13.6
Warmińsko-mazurskie	19.9	52.4	18.8	1.0	7.9
Wielkopolskie	21.8	49.6	16.1	2.9	9.6
Zachodniopomorskie	30.5	42.9	16.2	0.8	9.7
Education					
Primary and below	27.4	50.6	9.2	1.2	11.6
Vocational	26.0	53.1	9.9	0.7	10.2
Secondary	17.2	49.4	18.6	1.9	12.8
University and post-secondary	8.8	33,3	36.3	5.5	16.1
Income per capita					
First quartile	29.6	49.9	8.2	0.9	11.5
Mid 50 %	19.9	50.7	15.5	1.3	12.7
Forth quartile	12.2	40.2	29.5	4.5	13.6
Socio-professional status					
Public sector	13.1	46.5	22.7	2.7	15.0
Private sector	18.6	46.3	18.2	2.7	14.2
Self-employed	15.2	39.1	30.6	2.4	12,8
Farmers	29.1	54.1	8.7	2.1	6.0
Pensioners	27.7	47.9	11.4	1.7	11.3
Retirees	18.5	52.6	15.8	1.0	12.2
Students	8.1	29.9	33.2	5.9	22.9
Unemployed	32.0	49.9	7.4	0.8	9.9
Other professionally inactive	25.6	51.9	11.7	1.2	9.7

The analysis shows that between 2000-2003 the view that reforms in Poland after 1989 were not successful became popular much quicker (the increase of about 10%) than the feeling of a negative impact on citizens' own lives! It suggests that Poles' opinions about the consequences of system reforms, their success or failure, are not just generalizations of one's own experience with the transformation. To a great extent those opinions are also shaped by social contacts and other people experience, as well as the media — information and opinions which politicians, commentators and other public figures make public. A problem arises of how to shape the opinion about reforms and reconcile it with the evaluation of their impact on one's own life? We can only speculate about that. Poles make an undoubtedly less clear distinction between the public sphere, the state, the country and themselves and their closest milieu. It is proven by the fact that a statistically significant decrease of satisfaction in most aspects of one's life is coupled with a sudden decrease of evaluation of a general situation in the country and prospects for the future (compare chap. 5.2.2). There is also a decrease in the awareness of the relationship between the actions of the authorities and one's own life (compare chap. 5.10.1, figure 5.12). Perhaps many Poles think that: *“reforms — as they say — were not successful, but I am a success and I am better and better prepared for the failure of the reforms”*.

Table 5.81. Percentage distribution of people who admitted that reforms carried out in Poland from 1989 had had impact on their lives, and to the question what this impact was – in the years 1996, 1997, 2000 and 2003.

Answers	1996 N=1001	1997 N=1040	2000 N=4220	2003 N=5837
Very unfavorable	13.5	12.2	19.2	20.4
Quite unfavorable	38.3	42.0	46.2	47.6
Quite favorable	21.9	27.4	20.0	17.3
Very favorable	5.2	5.4	2.4	2.1
Hard to say	21.1	13.1	12.2	12.7

Data source: 1996-1997 — Czapiński, 1998; 2000 — Social Diagnosis 2003 (computer database).

6. CIVIL SOCIETY

Antoni Sulek

Civil society, a network of voluntary organizations, associations and contacts, which fills the space between the individual and society, the citizen and the state, is one of the pillars of democracy. Civic associations are the places for expressing, negotiating and realizing the interests of various social groups; here people learn mutual trust and civic skills: participation in democracy and joint action; they also protect individuals against excessive power of the state (Grabowska, Szawiel, 2001, ch. 3).

The condition of the civic society is reflected, most of all, in the universality of forming associations by citizens, in the fact that citizens establish or join voluntary organizations, associations, parties, committees, councils and other social groups.

Members of "organizations, associations, parties, committees, councils, unions or religious groups" constitute 12.3% of respondents; 10.3% are members of only one association, 1.6% of two, and 0.4% of three or more; 87.7% are not members of any organization and are outside the sphere of the civil society (annex 3, table C2.102). Surely, more Poles are formal members of organizations than is indicated by the research results. If they were to answer detailed questions about various categories of associations, we would definitely obtain a higher general percentage of members of organizations, like, for instance, in the research project conducted by Grabowska and Szawiel (2001), where the index reached 35%. In our research, the 12.3% of association members are only those who not only belong to an organization, but also this organization is important enough for them to mention it without additional hints, when they are asked about membership.

The forming of associations is not equally universal in all social categories; the differences result from varying organizational "offers" for individual social categories and unequal willingness to join organizations.

Men are members of organizations slightly more often than women (14.0% and 10.9% respectively). Most often, members of organizations are people in the age group characterized by the highest level of activity (35-59) and in the group over 56 years of age – they presumably belong to different types of organizations.

Inhabitants of cities and towns are more often members of organizations than inhabitants of rural areas; the percentage of organization members is higher in larger towns (200 thousand and more inhabitants) than in the smaller ones. The analysis has shown that the differences between towns and cities and rural areas are almost entirely a result of the percentage of people with secondary and university/college education in the urban population being twice as high; only in the group of respondents with secondary education, the difference between cities/towns and rural areas is maintained, while in other groups it goes down to a maximum of 1%.

The percentage of organization members increases visibly along with the education level: in the group of people with university/college and post-secondary education, it is three times higher than in the group with primary and lower education (25.0% to 7.5%)

It increases equally strongly with income: in the lower quartile, there are 7.6% of organization members, and in the upper quartile – 18.4%.

The best organized status groups are the public sector employees (22.9%) and retirees (15.0%), and the least organized are the unemployed (4.9%) and other professionally inactive groups (6.0%).

There is strong territorial diversification in forming associations according to voivodship: the least organized are the Zachodniopomorskie (8.2%), Warmińsko-mazurskie (10.1%), Mazowieckie (10.7%) and Łódzkie (11.0%) voivodships, and the best organized are the Opolskie (15.7%), Podkarpackie (14.0%) and Wielkopolskie (14.1%) voivodships. There is no single factor in the historical tradition or characteristics of inhabitants, which would explain all of the similarities and differences between voivodships. Nevertheless, it is noticeable that the highest

indexes of organization have been observed in the Podkarpackie voivodship, that is, in the historical Galicia, in the Wielkopolskie voivodship, the former Grand Duchy of Poznan and in the Śląsk Opolski, that is, in the regions with a stable population, strong local bonds and rich traditions of citizenship. Voivodships with the lowest indexes of organization are located either in the Western Lands, which are less socially integrated, or in Central Poland, in the area of the former Russian sector of partitioned Poland, where the forming of general associations was forbidden until the revolution of 1905 (Bartkowski, 2003, ch. 2.4).

A higher level of participation in civic society is associated with the performance of functions in organizations. As many as 45.3% of the respondents who declared present membership in an organization, stated that they had “*at some time performed some function in such an organization*”, not necessarily now and not necessarily in the same organization. It means that about 5% of the entire examined population has democratic experiences of this kind – they voluntarily performed specific functions.

Functions are more often assigned to men (50.1% of association members) than women (39.0%). Members of organizations belonging to higher categories of education have performed or perform functions in organizations much more often than members belonging to lower education categories; the percentages of those performing specific functions according to education level amount to the following:

primary or lower	28,3%
vocational and grammar school	41,9%
secondary	47,9%
university	52,0%

Functions in organizations are also more often performed by members from the upper quartile of income (48.1% in comparison with 38.9% in the lower quartile).

To sum up, it is necessary to state that: (1) the level of civic organization of Poles is low; (2) people belonging to higher social categories with regard to education and income, as well as inhabitants of larger towns and cities, are more often members of organizations; (3) members with better education and income also more often perform specific functions in organizations. The social patterns of forming associations overlap with the existing patterns of social stratification. The higher social categories are better organized and, in addition, their representatives are leaders of organizations more often, and thus participate more actively in civic society.

The most common civic experience is participation in a public meeting; it can be a rural meeting, a meeting of tenants of an apartment building or members of a housing association, a meeting with a candidate for the town council, a meeting in the parish, a meeting of a recreational club etc. (but not a meeting at work). The cost of such participation for those involved is not high – usually it only costs them time, but the attendance level is not high either. Participation in a political meeting allows the members to become familiar with issues which go beyond family life, to become familiar with various arguments, to express their own opinions, influence decisions, participate in a vote, and select leaders of the organization.

The research results show that almost every fifth respondent (18.7%) attended some kind of political meeting in the previous year (some respondents could have forgotten about these events, which is not particularly important, while some could have included meetings, which took place earlier, in the “last year”). Inhabitants of rural areas (24.7%), or, according to a different classification – farmers (34.0%), declared such participation definitely more frequently than inhabitants of urban areas; in rural areas, the form of social activity such as a meeting organized to discuss local issues and farming matters is still popular.

Civic activity reflected by participation in public meetings is increasing along with the education level; starting from primary education, in the next four groups the level of participation is: 14.4%, 18.5%, 20.9% and 24.9% respectively. People with university and secondary education participate in public meetings as often as inhabitants of rural areas, who are the most active group in this regard. In rural areas, people participate in meetings because they

are part of the local social system, while people with university education do it more often, because they are better organized and more interested in public issues than others.

A higher level of involvement in civic society than attendance of a public meeting is participation in a discussion during the meeting, giving an opinion in a given matter. Those who speak during public meetings express and create the views of the public, even if they talk about minor matters, which are important for their environment. People who participate actively in meetings become socially recognizable and in time may become leaders of the local community or even representatives of this community within the local authorities.

More than one half (57.7%) of the 18.7% respondents, who attended a public meeting last year, participated in a discussion on certain matters. The higher the education level, the greater the level of participation in active discussions; the difference between the highest and the lowest education level amounts to as much as 10.5%.

This correlation may be due to the character of public meetings, attended only by people with university education – perhaps these “encourage” more participation in conversations. However, it is possible that people with university education more often participate in discussions, represent and formulate opinions much more often than the others, due to a higher level of familiarity with the discussed matters and better communication skills. The direction of this diversification overlaps with the former, and if we compare attendance of a meeting and participation in discussions, a rarely noticed and poorly documented phenomenon can be observed: the views of well-educated people are over-represented and those of people lacking good education are under-represented already at the lowest level of organized collective life, where the elementary public opinion is expressed and created (table 6.1).

Table 6.1. The percentage distribution of answers to the question with regard to attending public meetings and participation in discussion by education categories.

Education level	Present during a public meeting; in relation to all respondents	Participated in discussion; in relation to those present at the meeting	Present at the meeting and participated in discussion; in relation to all respondents
Primary and below	14.4	47.3	6.8
Vocational/grammar	18.5	53.6	9.9
Secondary	20.9	62.1	13.0
University and post-secondary	24.9	58.2	14.5

Collective action within the local community is a higher form of civic activity, more demanding than participation in a public meeting. During the last three years, 13.1% of respondents were involved in activity on behalf of the local community (commune, housing estate, town); perhaps in reality this number was slightly higher, because some of the respondents forgot about some activities, or, perhaps, slightly lower, because some respondents wrongly remembered the dates of earlier activities.

Such activities were also visibly more often undertaken by men (16.1%) than women (10.4%) and middle-aged people; most often in rural areas (14.1%) and in small towns (15.3%), as well as in the largest cities of more than 500 thousand inhabitants (14.0%). Involvement in such activities is strongly correlated with the education level: among the respondents with primary education, only 6.0% were involved in activities on behalf of the general public, with vocational and grammar education – 11.3%, with secondary education – 15.0% and with university and post-secondary education – as many as 26.7%. Also more affluent people more often got involved in activities on behalf of the community (lower quartile 10.9%, upper quartile – 16.9%).

Table 6.2. When people do something for the public good in your local community, who usually comes up with the idea or organizes such activities?

Group	(%)									
	A member of the authorities	Priest	Teachers	Businessmen	Myself	Social organizations	Journalists	Other people	Don't know	No-body
Total	22.16	18.20	12.10	2.75	4.13	11.44	2.17	7.69	33.07	19.46
Gender										
Men	22.95	16.21	9.86	2.93	5.26	11.43	2.05	7.84	31.20	20.18
Women	21.45	19.99	14.12	2.57	3.09	11.45	2.27	7.56	34.77	18.81
Age										
up to 24	20.51	15.94	11.99	3.05	2.47	12.34	2.40	8.23	34.47	20.69
25-34	23.95	19.26	16.43	3.14	5.20	12.41	1.87	8.48	31.49	17.94
35-44	24.19	20.01	12.50	2.58	5.70	13.02	2.42	8.38	30.36	20.21
45-59	22.25	19.84	9.45	2.82	5.12	12.62	2.46	5.84	30.30	19.73
60-64	20.75	19.80	7.94	1.55	3.31	7.82	1.67	5.36	35.46	19.53
65 and over	22.15	18.19	12.08	2.75	4.12	11.43	2.17	7.68	33.07	19.47
Place of residence										
Cities above 500k.	13.20	16.37	9.47	2.24	4.69	14.29	4.89	10.32	37.25	19.80
Towns 200-500k	12.47	17.09	10.85	1.94	4.04	13.68	4.26	8.27	34.67	21.52
Towns 100-200k	15.31	14.97	9.76	2.58	4.84	14.37	2.95	6.49	37.32	16.48
Towns 20-100k	19.42	15.56	10.65	2.75	3.74	14.06	2.70	7.67	37.04	18.82
Towns < 20k	24.50	18.25	14.89	3.44	5.01	13.03	1.20	6.89	33.41	18.61
Rural areas	30.27	21.14	13.67	2.96	3.71	7.27	0.46	7.12	28.10	20.00
Voivodship										
Dolnośląskie	19.96	14.18	10.09	2.35	5.21	9.64	2.71	8.74	33.99	21.29
Kujawsko-pomorskie	17.59	12.36	13.02	4.98	4.72	9.22	2.69	7.01	36.17	16.25
Lubelskie	23.54	18.60	9.76	1.00	4.36	9.85	2.44	9.91	32.92	23.32
Lubuskie	17.96	18.34	17.59	2.41	4.32	14.43	1.53	5.78	36.35	20.65
Łódzkie	19.46	14.73	9.72	3.50	5.21	12.23	3.60	9.69	32.90	22.21
Małopolskie	30.01	25.65	14.90	3.16	4.83	12.08	1.57	8.73	32.15	11.86
Mazowieckie	17.99	15.01	8.87	2.94	3.23	9.73	2.10	8.57	36.03	21.05
Opolskie	21.01	24.45	14.74	1.94	3.87	11.97	2.43	7.76	31.01	16.37
Podkarpackie	33.73	35.97	13.17	2.01	4.04	10.49	1.16	7.45	25.50	10.44
Podlaskie	24.26	20.76	14.57	2.75	4.84	13.89	3.38	4.67	25.98	27.20
Pomorskie	27.71	22.58	18.73	2.69	4.74	13.82	2.09	9.82	30.29	16.07
Śląskie	16.72	18.70	11.07	2.12	3.73	11.71	1.25	6.46	33.21	21.14
Świętokrzyskie	22.23	12.49	10.60	1.87	3.41	9.37	1.67	7.04	25.15	27.70
Warmińsko-mazurskie	25.21	12.25	10.19	5.88	4.47	10.50	2.01	4.10	30.41	24.52
Wielkopolskie	24.97	16.14	13.83	3.28	2.59	13.33	2.68	6.81	36.18	17.73
Zachodniopomorskie	19.52	11.68	11.47	1.16	4.28	13.98	1.92	5.23	39.41	19.41
Education										
Primary & lower	21.47	17.41	9.10	1.73	2.14	6.64	0.85	5.80	36.78	19.95
Vocational/grammar	22.22	17.13	10.37	2.17	3.59	10.16	1.29	7.00	33.01	21.78
Secondary	22.10	18.56	13.11	3.45	4.89	13.85	2.78	8.64	32.68	18.60
University & post-secondary	23.44	20.79	18.05	4.09	6.70	16.89	4.48	10.38	26.85	16.69
Income per capita										
First quartile	22.87	17.83	11.40	1.90	3.76	9.10	1.13	6.75	33.06	22.27
Medium 50 %	22.33	18.36	12.12	3.02	3.51	11.10	2.01	7.81	33.61	19.09
Fourth quartile	20.78	18.17	12.40	3.44	6.67	16.28	4.14	9.11	32.85	17.38
Social-professional status										
Public sector	26.94	20.42	18.24	3.62	5.98	15.47	3.20	9.79	29.83	17.32
Private sector	19.67	17.02	11.50	3.56	2.91	12.26	2.63	8.89	33.23	18.92
Self-employed	19.38	12.13	8.83	3.26	6.24	9.26	1.77	8.06	37.12	20.13
Farmers	36.10	18.11	12.06	2.35	4.10	9.86	0.48	7.52	26.79	21.89
Disability pensioners	20.36	20.53	9.96	1.75	3.97	10.72	1.68	5.27	35.14	19.18
Retirees	21.67	20.57	9.55	2.10	4.65	10.21	1.89	6.05	32.42	19.48
School/university students	23.03	15.76	17.02	3.41	3.43	12.42	2.66	9.50	33.11	16.24
Unemployed	19.20	15.59	9.34	2.09	2.42	9.02	1.38	7.36	35.58	25.38
Other professionally inactive	15.51	16.97	9.99	1.89	3.66	9.25	2.16	5.86	37.44	19.04

Collective action has to be initiated. We attempted to identify the initiators by asking the question: When people do something for the public good in your local community, who usually comes up with the idea or organizes such activities? The answers obtained (table 6.2) allow us, first of all, to characterize the society in which the respondents live – they reveal the initiators of collective actions in various types of cities/towns and in various regions. Since it was possible to answer “myself”, we can also verify which categories of the respondents most often initiate and organize collective activities and have a chance to become local leaders. Most often, the idea for collective action is given or the action is organized by “a member of the authorities” (indicated by 22.2% of respondents) or by the priest or the parish (18,2%). Teachers and school were indicated by 12.1% of respondents, while social organizations and associations – by 11.4%; the local businessmen and journalists are mentioned by 2-3% of the respondents. According to 19.5% respondents, in their local community “nobody does anything for the public good.”

It is worth noting the differences between individual types of local communities. The smaller the city/town, the more often the role of initiator is played by the local authority; the difference between rural areas and larger towns of more than 100 thousand inhabitants is more than double. In rural areas and small towns, more often than in large towns and cities, the role of the initiator is also played by the traditional authorities – priests, teachers, the parish and the school. In towns and cities, these roles are played twice as often by social organizations and associations, as well as journalists, and in the largest cities – also other people, but not businessmen (here there are no differences between types of city/town).

There are also visible regional differences. The most important is diversification of local activity, measured as a percentage of respondents, stating that in their community, “nobody does anything for the general public.” These answers occurred the least often in the following voivodships: Podkarpackie (10.4%), Małopolskie (11.9%), Pomorskie (16.1%) and Kujawsko-pomorskie (16.3%), and the most often – in Świętokrzyskie (27.7%), Podlaskie (27.2%), Warmińsko-mazurskie (24.5%) and Lubelskie (23.3%). A pattern, observed earlier during analysis of the regional diversification with regard to the forming of associations, is repeated here. The least active and pro-social are the territories of the former (Russian) Congress Kingdom and the Western Lands. The most active regions, on the other hand, are the historical region of the former (Austrian) Galicia and the former (Prussian) Grand Duchy of Poznan and “Western Prussia”. The partition treaties (1772-1795) and decisions made during the Congress of Vienna still influence the social life in Poland.

It is worth noting the regional diversification of the relative importance of the activity of individual initiators of activity to the general public. The role of the local authorities is the most significant in the Podkarpackie, Małopolskie and Warmińsko-mazurskie voivodships, the role of the priest and the parish – also in the Podkarpackie and Małopolskie, as well as in Opolskie voivodships. In the voivodships characterized by the greatest level of activity, the role of local authorities and the church as initiators and organizers of civic life visibly go hand in hand. The joint influence of these factors determines the position of each voivodship on the scale of activity. The role of social organizations is diversified and ranges between 9.2% and 14.0%, and it does not significantly influence the position of the voivodship, although it does adjust the level of influence of the key initiators – the local authorities and the parish.

Several percent (4.1%) of the respondents mentioned themselves as initiators and organizers of local activity on behalf of the general public. Thanks to this fact, we were able to become familiar with the demographic and social characteristics of the local leaders. These are rather men than women, relatively more often well-educated (2.1% of respondents with primary education and 6.7% of respondents with university education declared that they were the initiators) and with higher income (3.8% of respondents from the lower compared to 6.7% from the upper quartile of income per capita in household).

Summing up, collective activities on behalf of the general public are most often initiated and organized by such institutions as the local authorities and church, less often by school and social organizations, and even less often by single people. Activities on behalf of the general

public are most often undertaken by people characterized by a higher education level and higher income, who occupy the higher steps of the social ladder.

Participation in local elections and interest in the work of the local authorities are minimal forms of citizens' participation in government at a local level. The turnout of the last local election (in year 2002) in Poland amounted to 42.2%, which was considered moderate. In our research, however, as many as 62.9% of respondents declared that they voted in the election. Such a substantial difference between the declared and factual turnout, rather typical than exceptional — during the interview respondent pretends to be a “good citizen” (Sulek, 2001). Its scale (20.7%) does not allow us to treat the turnout measures in individual social categories literally. However, it does not prevent us from identifying the basic diversification tendencies in the election turnout – showing the differences between those who vote in elections and those who do not (Cześnik, 2002).

Thus men voted more often than women. The turnout increases steadily with age and drops visibly after reaching the threshold of 65 years old. The turnout is lower in towns and cities than in rural areas and it decreases systematically along with an increase in the size of the city. It increases regularly along with education and income.

A measure of interest in the activity of the local authorities is knowledge of the name of the commune administrator, town or city mayor. This is a very liberal criterion, since as many as 88.4% of respondents declare that they know this name. Definitely, some of them did not know the name, but wanted to look good in the eyes of the interviewer. The pattern of diversification is almost the same as in the case of the election turnout. Familiarity with the local authorities increases with age up to 65, it is lower in towns and cities than in rural areas and decreases with the city size; it increases along with the education level, but is not correlated with income.

The correlations observed here indicate that the members of the upper social categories are more interested and participate more actively in local politics, and, through a higher level of participation in voting, exert greater influence upon election of local authorities. Once again, it has been shown that civic society has an element of stratification.

Theoreticians of democracy point to a peculiar relation between civic society and trust: trust between people is a basic element of social capital, it is conducive to the development of a civic society, and vice versa - voluntary organizations and co-operation of people at a local level contribute to the establishment of trust. In our survey, the trust (as an individual trait) was measured by using a question from PGSS (1999): *Generally speaking, would you say that most people can be trusted or that you can't be too careful in dealing with people?* (table 6.3).

Only 10.9% of respondents stated that most people can be trusted, and 80.1% said that one could never be careful enough with other people. It is worth noting that only 9.0% of respondents found it so difficult to answer the question that they finally provided no response; it shows that people usually have an established view in this matter. Trusting others is not correlated with gender and it usually does not change with age. However, it does depend upon social characteristics. Trust increases visibly along with education level, from 8.1% in the group with primary education to 19.7% in the group with university education; it also increases along with income (lower quartile – 9.8%, and upper quartile – 14.2%). There is no visible difference between rural and urban areas; however, the largest cities (of more than 500 thousand inhabitants) visibly differ in a positive way from all other population types. Further analyses will show to what extent the influence of a higher education level, higher income and living in a large city are independent of each other.

The indexes of trust are visibly diversified with regard to territory. The attitude of trust towards others can be observed most often in the Warmińsko-mazurskie (15.1%), Świętokrzyskie (14.9%), Dolnośląskie (13.5%) and Mazowieckie (13%) voivodships, and the least often – in the Kujawsko-pomorskie (6.2%), Opolskie (8.2%), Śląskie (8.6%) and Lubuskie (8.7%) voivodships. Explanation of these differences would require very detailed knowledge of the structure and social experiences of inhabitants of individual voivodships; why do people in

Lower Silesia trust each other more than in Upper Silesia, and people in the Świętokrzyskie voivodship trust each other more than in Kujawsko-pomorskie voivodship?

Table 6.3. Generally speaking, would you say that most people can be trusted or that you can't be too careful in dealing with people?

(%)			
Group	Most people can be trusted	Can't be too careful	Don't know
Total	10.92	79.98	9.10
Gender			
Men	11.01	79.41	9.58
Women	10.84	80.47	8.69
Age			
up to 24	11.46	78.16	10.37
25-34	9.57	81.05	9.38
35-44	11.18	81.50	7.32
45-59	11.48	80.27	8.25
60-64	10.14	79.85	10.01
65 and over	10.93	78.35	10.73
Place of residence			
Cities above 500k	16.32	75.74	7.93
Towns 200-500k	10.09	81.68	8.23
Towns 100-200k	11.33	82.18	6.49
Towns 20-100k	10.51	81.53	7.96
Towns < 20k	10.31	80.83	8.87
Rural areas	9.64	79.41	10.95
Voivodship			
Dolnośląskie	13.36	79.21	7.44
Kujawsko-pomorskie	6.38	82.68	10.94
Lubelskie	10.23	77.01	12.77
Lubuskie	8.80	82.65	8.55
Łódzkie	10.79	82.87	6.33
Małopolskie	9.29	81.25	9.46
Mazowieckie	12.84	77.66	9.50
Opolskie	8.03	82.56	9.41
Podkarpackie	12.57	75.61	11.82
Podlaskie	12.35	79.65	7.99
Pomorskie	9.99	84.72	5.29
Śląskie	8.46	81.94	9.60
Świętokrzyskie	14.70	77.08	8.22
Warmińsko-mazurskie	14.95	75.71	9.34
Wielkopolskie	12.26	78.89	8.85
Zachodniopomorskie	9.29	80.80	9.91
Education			
Primary & lower	8.30	79.32	12.38
Vocational/grammar	8.10	81.56	10.34
Secondary	12.14	80.83	7.03
University & post-secondary	17.91	76.24	5.85
Income per capita			
First quartile	9.99	79.84	10.17
Medium 50 %	10.12	80.62	9.26
Fourth quartile	14.61	78.63	6.76
Social-professional status			
Public sector	13.39	80.76	5.86
Private sector	10.53	80.95	8.52
Self-employed	12.57	80.83	6.60
Farmers	9.65	77.97	12.38
Disability pensioners	10.87	79.22	9.91
Retirees	10.80	79.24	9.96
School/university students	14.01	75.22	10.78
Unemployed	8.46	81.41	10.13
Other professionally inactive group	6.69	82.58	10.73

Comparison of these results with the level of ability to form organizations or readiness to get involved in activities on behalf of local communities leads to the conclusion that *at the voivodship level*, trust is not correlated with civic activity, and if it is, the correlation is a negative one. The Opolskie voivodship, which is the first one in the hierarchy of forming associations, is the last one in the hierarchy of trust, while the Kujawsko-pomorskie voivodship is the first one in the hierarchy of involvement in activities on behalf of the local community, but is next to last in the hierarchy of trust. The correlation (Spearman's r) for trust and forming of associations is -0.36, while for trust and participation in activities on behalf of the local community, it is -0.38. It does not mean that trust between people living in a local community is not conducive to forming associations and taking action together. First of all, the provided correlation coefficients are not statistically significant due to the small size of the sample (16 voivodships). Secondly, voivodships are too large and too heterogeneous as units of analysis to enable identification of possible relations between trust and civic activity.

The existence of these relations, however, has been proven by analysis of correlation at the level of individual respondents (table 6.4). It indicates that trust goes hand in hand with social behaviors. Respondents expressing the opinion that most people can be trusted more often belong to some organizations, perform functions in them, participate in meetings, get involved in activities on behalf of the local community and declare participation in the last election. Only activity during meetings is not significantly correlated with trusting people.

Table 6.4. Coefficients of correlation between trust and indexes of civic activity (the number of cases is provided in brackets)

Variable	2	3	4	5	6	7
1. trust	0,036** (9625)	0,062* (1126)	0,022* (9605)	0,032 (1714)	0,041** (9585)	0,028** (9615)
2. affiliation in organizations		0,179** (1128)	0,290** (9597)	0,174** (1709)	0,330** (9578)	0,102** (9609)
3. performing functions in organizations			0,248** (1127)	0,322** (541)	0,306** (1125)	0,066* (1124)
4. participation in meetings					0,393** (9559)	0,202** (9589)
5. activity during meetings					0,272** (1711)	0,012 (1714)
6. activity on behalf of the local community						0,157** (9572)
7. participation in elections						

** correlation is significant at the level $p < 0,01$ (two-sided test)

* correlation is significant at the level $p < 0,05$ (two-sided test)

Note: the index of trust was created on the basis of question No. 100 in the individual questionnaire (see annex part II); answers "It's difficult to say" were regarded as a sign of lack of trust

Despite the significant – with one exception – correlations between the index of social trust with civic activity, it would be difficult to state on the basis of the results of this analysis that trust is a prerequisite and a sufficient condition for pro-social behaviors. The factor analysis with Varimax rotation proves that trust is a factor separate from civic activity (table 6.5). It thus turns out that Polish citizens are sometimes distrustful, and the weakest index of civic attitudes is affiliation in organizations, while the strongest – activity on behalf of the local community.

Table 6.5. Results of the factor analysis of the selected criteria of a civic attitude with Varimax rotation

Variable	Factor	
	1	2
trust		0.978
affiliation in organizations	0.470	
performing functions in organizations	0.636	
participation in meetings	0.736	
activity on behalf of the local community	0.790	
% explained variance	36	20

Note: factor loadings of value above 0.3 are presented

7. TOWARDS AN INFORMATION SOCIETY

Dominik Batorski

We are at present on the verge of a great civilization change, associated with the development and popularization of personal computers, the Internet and mobile technologies. A global information society will be created as a result of this transformation. This society will be different from the existing one in many aspects. New technologies have an impact on the psyche of individuals and their social relations and cause increasing changes in the economy, the labor market and functioning of the state institutions. Development and popularization of new technologies and the resulting changes stimulate positive consequences, but also pose some threats (DiMaggio, Hargittai, Neuman and Robinson, 2001). The expected changes, which will take place in Poland in the years ahead, have been described in detail in the UNDP Report "Poland on the way to a global information society." However, due to a lack of adequate statistical and empirical material, the report only briefly describes the position occupied by Poland on the way towards this development.

The basic threat, associated with the emergence of an information society is the problem of digital divide. As has been stated by the authors of the UNDP Report: "[...] it is to be understood in a twofold way. First of all, as the actual exclusion of Polish society from the community of the most developed societies, constituting the global information society. Secondly, as a division of the Polish society into two parts – one of them participating in the global information society, and the other excluded from it." The present part of the *Social Diagnosis 2003* report examines the latter threat²⁹.

The subject is also important due to the fact that an information society constitutes an objective, set by the state policy. Many activities of the government, ministers, the European Commission and other European institutions are undertaken in this area³⁰. Most endeavors and programs of these institutions, however, are focused on the creation of a vision and a definition of the information society. These are aimed mostly at issues associated with setting up of legislation, infrastructure and computerization in the narrow sense – computerization of offices and connecting them to the Net, and increasing the electronic accessibility of public information and enabling electronic communication between citizens and the state. Particularly in Poland, the social problem associated with the abilities of citizens with regard to use of computers and the Internet, has been somewhat pushed aside. Therefore, it seems particularly important to identify the social conditions of use of computers and the Internet and all of the associated barriers.

Adequate identification of problems and their causes may serve as a basis for further activity, aimed at the creation of an information society in Poland. Only by joining together the centrally managed activities and by making the state more open to citizens through the Net, accompanied by strong popularization of the use of computers and the Internet by citizens, will it be possible to establish an information society.

The Social Diagnosis is the first research project on use of computers and the Internet in Poland on such a great scale. Moreover, many features of this project make it unique. The large

²⁹ The problem of such "digital divide" is not only typical for Poland. It can be observed everywhere, although to a varying extent. Such countries as the United States, Canada and Australia also face this problem. (Birdsall, 2000; Bonfadelli, 2002; Lynch, 2002; McLaren and Zappala, 2002)

³⁰ The activities in Europe were initiated by the report: *Europe and the global Information Society* (1994). Recommendations of the Bangemann Group to the European Council, 26 May. On the other hand, in Poland, the present activities of the administration are guided by: *Strategies of informatization of the Republic of Poland – ePoland*. KBN, March 10th, 2003.

research sample allows us to reach many computer and Internet users. It also allows us to compare people, who use the new technologies with those who do not. It is a panel research project – obtaining information from the same people at various points in time, we are able to examine the mechanisms of social change, various transformations and processes, associated with many factors, such as use of new technologies. By gathering exhaustive information both with regard to households and individual members of these households, it is possible to make interesting comparisons of these two types of information. The research also provides information regarding the use of computers and the Internet among the children of the respondents.

7.1. Computers and the Internet in households

7.1.1. Owning of computers by households

One third of all households is equipped with a computer. The great majority of these (93%) has only one computer. It means that the penetration of computers – the number of computers per one hundred people – is almost 10.5. This index is often used as a measure of development of the access infrastructure³¹. However, it does not show the number of people, who can use a computer at home. Since households consisting of more than one person more often own computers, 37.5% of Poles have potential access to a computer at home.

Presence of children in a household is highly conducive to ownership of a computer (details are presented in table 7.1). A computer is owned by 46% of households, in which financially dependent children are present. In other households, it is only 14%. Most often, a computer is owned by households consisting of a couple with two children (55%). It is also quite often owned by households consisting of more than one family (in 34.5% of cases). On the other hand, it is very rarely owned by a household consisting of a couple without children – only by 16% of such households. The situation is even worse in non-family households (8% in one-person households and 11% in households consisting of more than 1 person). It is worth adding that a computer can be found in 27% of households of single-parent families. Thus having children is a very strong motivation to own a computer.

Having a computer at home also depends very strongly upon the size of the city/town of residence. In big towns and cities, the number of households equipped with a computer is visibly greater. In cities of more than 500 thousand inhabitants, a computer is present in 51% of households. On the other hand, in rural areas, only 21% of households are equipped with computers.

Computers are most often owned by households, where the main source of income is self-employment (as many as 71%). Also every second household of employees is equipped with a computer. Very rarely computers are owned by households of retirees, disability pensioners, farmers and people living on unearned sources.

Also the household income is significant. It is interesting that there is practically no difference between households belonging to the highest income quartile and the ones in the third and second quartile. Computers are owned as often by households with income exceeding PLN 650 per capita as by households with income ranging between PLN 400 and 650. In both cases, households with computers constitute 37%, while a computer is present only in 22% of households with income below PLN 400.

A significant level of regional diversification is also worth noting. Most households equipped with computers can be found in Pomorskie and Mazowieckie voivodships (more than 40%), while the least – in Kujawsko-pomorskie, Zachodnio-pomorskie, Lubelskie and Warmińsko-mazurskie voivodships.

³¹ For instance, in a KBN document "Gateway to Poland".

Table 7.1. Computers and the Internet in households

Household type	Computers and the Internet in households (%)					
	computer (%)	number of people per computer	households that would like to have a computer (%)	Internet access (%)	access among households with computers (%)	households that would like to have Internet access (%)
Total	33.50	3.84	34.62	17.01	50.78	31.82
Single family						
Couples with no children	15.82	2.61	17.66	8.62	54.49	14.07
Couples with 1 child	44.35	3.10	38.87	22.54	50.82	36.56
Couples with 2 children	54.98	4.05	37.74	29.09	52.91	40.46
Couples with 3 or more children	45.66	5.21	48.28	21.09	46.19	47.94
Single-parent families	26.84	2.79	48.87	11.49	42.81	39.78
Multi-family	34.48	4.86	46.13	17.45	50.61	39.83
Non-family						
One person	8.29	1.00	16.81	5.39	65.02	12.88
More than one person	11.00	2.77	21.85	5.82	52.91	14.57
Class of place of residence						
Cities over 500k	50.89	3.48	24.46	29.85	58.66	27.86
Towns 200-500k	40.48	3.45	26.80	22.32	55.14	27.80
Towns 100-200k	40.46	3.51	27.06	23.37	57.76	29.71
Towns 20-100k	34.27	3.70	33.79	17.28	50.42	32.54
Towns < 20k	34.90	4.03	35.50	16.70	47.85	33.74
Rural areas	21.03	4.53	44.00	8.11	38.56	34.34
Source of income						
households of employees	49.82		11.97	26.16	52.51	38.33
households of employee-farmers	32.77		15.82	11.24	34.30	44.38
households of farmers	18.18		24.70	8.54	46.97	40.36
households of self-employed	71.48		10.55	43.12	60.32	25.45
households of retirees	13.09		64.28	6.02	45.99	17.46
households of disability pensioners	13.52		48.93	3.01	22.26	31.12
households of people living on unearned sources	15.15		26.63	6.09	40.20	44.44
Voivodship						
Dolnośląskie	37.28	3.84	27.12	20.05	53.78	39.22
Kujawsko-pomorskie	23.54	4.03	34.63	11.35	48.22	54.85
Lubelskie	25.71	3.65	40.15	11.75	45.70	61.39
Lubuskie	28.32	3.82	32.11	14.07	49.68	49.54
Łódzkie	30.49	3.27	30.21	16.09	52.77	50.00
Małopolskie	37.81	4.28	25.57	16.37	43.30	49.18
Mazowieckie	40.51	3.79	29.76	21.34	52.68	43.91
Opolskie	34.61	3.76	30.09	18.56	53.63	53.57
Podkarpackie	27.90	4.19	29.61	14.49	51.94	54.37
Podlaskie	30.17	4.06	41.09	19.51	64.67	55.38
Pomorskie	42.31	3.69	21.88	20.16	47.65	43.11
Śląskie	36.07	3.90	34.51	17.94	49.74	53.54
Świętokrzyskie	30.13	4.04	39.10	11.87	39.40	65.41
Warmińsko-mazurskie	26.81	3.83	33.11	11.36	42.37	53.06
Wielkopolskie	36.07	3.80	25.60	22.42	62.16	40.96
Zachodniopomorskie	24.41	3.68	35.71	10.65	43.63	61.54

7.1.2. Willingness to have a computer

More than half of all households, which do not have a computer, declare that they would like to have one, but they cannot afford it due to financial reasons. This proves that there is a great potential for the computerization of households, but the high costs of equipment are a strong barrier.

There are a particularly high number of such households among families with children (especially with many children) and single-parent families. If we compare these data with information regarding households that already have a computer, it turns out that families with children are the ones most interested in computers. As many as 94% of households, in which there are two or more children, have or would like to have a computer. Among families with one child, it is 84%³², and among single-parent families - 76% (table 7.1.).

The lowest number of people willing to have a computer is found households with no children. Two thirds of all couples with no children do not have a computer and do not declare willingness to have one. It is necessary to note that most often, these are households, in which children are no longer present, because they have already become self-dependent. Moreover, only 25% of one-person households and 35% of households consisting of more than one person would like to have a computer but cannot afford it due to financial reasons.

Many households willing to have a computer are located in smaller towns (about 35%) and mostly in rural areas (44%), that is, in areas, where households are equipped with a computer much less often. It means that there is a great chance for lessening diversification in ownership of computers by the place of residence. The total percentage of households equipped with computers at present and those which would like to have one, but cannot afford it due to financial reasons, is quite similar in all classes of place of residence: in the biggest cities over 500 thousand inhabitants, it amounts to 75.5%, and in rural areas – 65.5% (which constitutes only one third of the difference with regard to ownership of a computer at present).

To sum up, it is necessary to state that Poles are very much aware of civilizational challenges and the usefulness of computers in the contemporary world. Particularly aware of this fact are younger people and parents of financially dependent children, although willingness to have a computer is also high among the households of retirees. It is an optimistic sign that so many rural households, which are least often equipped with computers, would like to have one.

7.1.3. Plans to purchase a computer

In the year 2000, 16% of households had a computer. The number has thus doubled within the last three years. However, the purchase of a computer in the near future is planned only by 8% of households. In addition, 9.3% of households have not yet made a decision in this regard. 27% of all households, which are planning such a purchase, are already equipped with at least one computer. In 37% of households planning the purchase of a computer, some members use computers in places other than at home. It means that in as many as 64% of all households planning to buy a computer, there are members familiar with this technology.

It can thus be said that the further increase in the number of new users can be predicted to be similar to the period of the last three years and it will still be quite slow.

It is mostly households with children, which are planning to buy a computer. 12% of these are planning to purchase a computer in the near future, while among the remaining households, it is only 5%. These plans do not differ with regard to size of the city/town of residence, but the number of households, which have not made the decision yet, is greater in rural areas. It is also

³² A slightly lower level of willingness of couples with one child is mostly a result of the fact that more often they have much younger children, which is a less strong motivation to purchase a computer.

worth noting that 12% of households of farmers or employees working on farms are planning to buy a computer. The percentage is the lowest in the case of households of retirees, disability pensioners and people living on unearned sources.

The purchase of a new computer in the near future is planned only by 6.6% of households, which already have a computer. This leads to a question regarding the quality of equipment, owned by households. Computers become outdated fast, and the low level of interest in new equipment may mean that the replacement of equipment takes place very slowly and many households are in possession of outdated equipment. It may also mean, however, that the respondents, participating in the interview, were not able to assess adequately the plans of the household with regard to purchase of the new equipment, and the figure is underestimated.

To sum up, we can state that there are reasons for concern with regard to computer equipment of households and perspectives for the future. At present, every third household is equipped with a workstation. Declarations with regard to the purchase of new equipment do not promise a substantial increase in the number of new users. Moreover, replacement of outdated computers with new ones may take place so slowly that the equipment used by many households may already be or quickly become outdated.

7.2. Internet access

7.2.1. Internet access in households

17% of households have Internet access. This is almost exactly half of those that are equipped with computers.

The structure of Internet access in households is very much similar to the structure of ownership of a computer at home (details have been presented in table 7.1). Mostly households of couples with children have Internet access. Most often, these are single-family households with two children (29%). Slightly less often, the Internet is used in the homes of families with one child (22.5%) or with more than two children (21%). Among multi-family households, Internet is available in 17.5%. Internet access is very rare in the case of single-parent families (11.5%) and couples with no children (8.5%). The percentage is even lower in non-family households, where slightly more than 5% have Internet access.

Internet access at home is also strongly correlated with size of the city/town of residence. In cities over 500 thousand inhabitants, 30% of households have Internet access at home, while in rural areas it is only 8% of households.

Internet access is available most often in households of the self-employed – 43% of these have Internet access. 26% of households of employees also have Internet access. Less than every tenth household of farmers, retirees, disability pensioners or people living on unearned sources have access to the Internet.

The higher the household income per capita, the greater is the probability that it has Internet access. Among households in the upper quartile of income, slightly more than 24% have Internet access, and in the lower quartile - only 6.5%.

It is worth determining how many households having a computer also have Internet access. Among all households with a computer, more or less one half has Internet access. Visibly privileged in this regard are households located in bigger towns and cities. In cities of more than 500 thousand inhabitants, 59% of households having computers also use the Internet. In towns between 20 and 100 thousand inhabitants, it is only 50%, and in those even smaller – 48%. The worst is the situation of households located in rural areas, where only 39% of households owning computers use the Internet. It means that in rural areas and small towns, not only fewer households have computers and Internet access than in bigger towns and cities, but also even among the households having a computer, the share of those with Internet access is smaller.

7.2.2. Willingness to have Internet access

32% of households would like to have Internet access. However, they cannot afford it due to financial reasons³³.

As in the case of willingness to have a computer, the greatest number of households willing to have Internet access is among households with children. 69% of households consisting of a couple with two or more children and 59% of households with one child have or would like to have Internet access at home. In the case of single-parent households, it is 51%.

Households, which do not feel the need to have Internet access, are primarily non-family households (consisting of one or more people) and couples with no children.

Interest in the Internet is much greater in cities over 500 thousand inhabitants – almost 60% of people have or would like to have Internet access at home. In smaller towns, it is slightly more than 50%, and in rural areas – 44%. It can thus be said that the difference in awareness of the usefulness and importance of the Internet between inhabitants of the biggest cities and of rural areas is smaller than the difference in factual access. It should thus be expected that the present substantial difference in Internet access in cities and towns of varying size will diminish as the costs of Internet access decrease.

7.2.3. Type of Internet access

The sole fact of having Internet access at home is not the only important factor with regard to the ability to use the Net. An important issue is also the type of access. It has a substantial influence on the time spent using the Internet and the way of using it. Examining the access type, we focused on whether households access the Net using a modem or have permanent Internet access. Although having permanent access does not mean high-speed access – characterized by high carrying capacity - it does allow for Internet use without a time limit.

Three fourths of households using the Internet use dial-up modem (in most cases, the operator is TPSA). Every fourth household with Internet access uses a cable connection. Only a very small percentage of households using the Internet (2.3%) use a mobile phone to get access to the Net. Mostly urban households have cable Internet access (details have been provided in table 7.2).

The number of households using more than one way to connect to the Internet is very small. Only 2% of all Internet users take advantage of more than one connection method. To sum up, it is necessary to state that most households use the Internet via low-capacity links – which are slow and do not encourage using the Net for long periods of time.

³³ Some of them also do not own a computer.

Table 7.2 Type of Internet connection

Household type	Type of Internet connection (%)		
	modem + stationary phone	mobile phone	cable connection
Total	73.42	2.34	25.70
One-family			
Couples without children	76.79	3.51	26.32
Couples with 1 child	74.36	1.91	23.08
Couples with 2 children	68.33	2.70	33.33
Couples with 3 or more children	77.27		22.73
One-parent families	72.55		23.53
Multi-family	83.05	1.69	15.25
Non-family			
One-person	64.00	16.00	16.00
Multi-person	87.50	11.11	33.33
Class of place of residence			
Cities over 500k	73.29	2.48	27.95
Towns 200-500k	55.96	1.83	45.87
Towns 100-200k	62.03	2.53	35.44
Towns 20-100k	71.64	0.75	25.37
Towns < 20k	83.13	3.61	13.41
Rural areas	94.34	2.83	3.77
Voivodship			
Dolnośląskie	75.81	3.23	20.97
Kujawsko-pomorskie	83.33		16.67
Lubelskie	63.33		41.38
Lubuskie	66.67	6.25	26.67
Łódzkie	72.09	2.33	27.91
Małopolskie	68.00		32.00
Mazowieckie	82.14	5.36	16.22
Opolskie	70.00	5.00	25.00
Podkarpackie	63.33		31.03
Podlaskie	54.17		41.67
Pomorskie	64.44	2.27	35.56
Śląskie	67.39	1.10	32.61
Świętokrzyskie	81.25		12.50
Warmińsko-mazurskie	75.00		25.00
Wielkopolskie	82.67	2.70	17.57
Zachodniopomorskie	60.00		40.00

7.2.4. How long households have had Internet access

Internet access at home has been an issue for the last three years. Before the year 2000, only 13% of households, which at present are connected, had Internet access (details have been provided in Table 7.3). In the following years, the number of households with Internet access grew more and more rapidly: 17.4% of households which now have Internet access, got it in the year 2000, 24.5% - in 2001, and 37.7% - in 2002. Up to March 2003, when the research was conducted, another 7.4% of households got Internet access. This may indicate a growing dynamic in the process of getting Internet access at home.

Table 7.3. How long households have had Internet access

Household type	How long the household has had Internet access						
	average years	between 2002 and 2003	since 2001	since 2000	since 1999	since 1997-1998	since 1996 and earlier
Total	2.05	45.01	24.45	17.26	6.02	5.64	1.62
One-family							
Couples without children	1.87	58.25	16.67	11.11	6.75	4.72	2.50
Couples with 1 child	2.16	41.61	23.31	18.86	9.85	4.59	1.77
Couples with 2 children	2.05	42.75	29.05	15.73	4.39	6.74	1.33
Couples with 3+ children	2.08	44.93	20.43	19.71	6.86	6.99	1.08
One-parent families	2.23	51.35	12.30	19.40	5.21	7.43	4.31
Multi-family	1.69	51.03	25.03	19.56	2.48	1.90	0.00
Non-family							
One-person	2.17	37.55	28.26	22.51	4.87	4.30	2.53
Multi-person	2.03	18.11	74.82	0.00	0.00	7.07	0.00
Class of place of residence							
Cities over 500k	2.34	37.23	25.52	17.32	7.05	9.88	3.00
Towns 200-500k	1.68	56.49	23.00	10.19	4.91	5.40	0.00
Towns 100-200k	2.24	34.75	26.12	26.92	6.94	2.70	2.57
Towns 20-100k	2.08	45.83	23.85	18.65	4.03	6.05	1.58
Towns < 20k	1.88	51.58	22.78	13.52	8.41	1.48	2.23
Rural areas	1.88	46.54	25.22	18.98	5.12	4.14	0.00
Voivodship							
Dolnośląskie	2.07	49.44	16.37	17.77	3.54	10.96	1.91
Kujawsko-pomorskie	1.76	50.59	18.95	26.48	0.00	3.98	0.00
Lubelskie	2.18	43.14	22.72	7.41	15.53	11.20	0.00
Lubuskie	2.59	40.38	22.21	18.61	7.40	7.45	3.94
Łódzkie	1.98	54.37	23.94	2.75	10.72	5.40	2.82
Małopolskie	2.21	37.11	22.91	26.00	4.76	9.21	0.00
Mazowieckie	2.28	36.25	24.92	22.57	7.44	7.50	1.32
Opolskie	2.23	30.82	34.68	25.03	3.09	3.28	3.11
Podkarpackie	2.28	37.88	30.47	16.09	9.42	0.00	6.15
Podlaskie	1.78	53.53	19.46	17.24	4.94	4.84	0.00
Pomorskie	1.64	50.65	34.77	10.44	2.03	2.11	0.00
Śląskie	1.75	56.71	24.02	9.64	4.83	3.21	1.58
Świętokrzyskie	1.91	48.26	25.71	12.73	4.45	8.86	0.00
Warmińsko-mazurskie	1.82	54.74	13.68	22.38	4.52	4.68	0.00
Wielkopolskie	2.09	39.07	28.27	22.80	4.90	1.60	3.36
Zachodniopomorskie	2.04	43.49	21.38	22.48	8.36	4.29	0.00

7.2.5. Reasons for lack of Internet access

As many as 39% of households that do not have Internet access would like to have it, but they cannot afford it due to financial reasons. It is also worth adding that among households, which already have a computer, this percentage amounts to 58%.

One of the most often cited reasons for lack of Internet access among households owning a computer was the cost of access being too high (72%)³⁴. Thus the cost is one of the most important reasons for lack of Internet access, provided that a household already owns a computer. Newer computers are usually equipped with a built-in modem, which provides Internet access using phone lines. Perhaps not everyone is aware of such a possibility, but a great majority of owners of such equipment are probably aware of the fact that they cannot afford such access due to its cost.

³⁴ It was possible to select maximum three answers to this question.

Table 7.4. Reasons for lack of Internet access in households owning a computer

Household type	Reasons for lack of Internet access in the household (%)					
	lack of adequate equipment	use of Internet elsewhere	lack of interest and need	fear of losing privacy	Internet can be harmful	high access cost
Total	18.21	13.00	2.66	1.53	12.51	69.54
One-family						
Couples without children	14.85	16.32	5.47	2.20	0.00	47.52
Couples with 1 child	23.07	16.22	4.59	1.20	9.46	63.00
Couples with 2 children	16.02	12.56	1.87	0.47	16.14	74.50
Couples with 3+ children	20.70	8.98	0.00	2.03	19.76	70.46
One-parent families	14.68	13.87	1.25	3.36	10.86	76.87
Multi-family	16.68	5.65	4.20	2.99	9.89	76.04
Non-family						
One-person	15.86	27.48	6.52	0.00	0.00	66.27
Multi-person	13.78	22.55	0.00	0.00	0.00	63.67
Class of place of residence						
Cities over 500k	13.78	18.62	1.21	0.00	14.17	63.86
Towns 200-500k	8.24	18.47	2.83	3.71	12.53	66.59
Towns 100-200k	13.16	8.06	4.06	1.33	12.47	72.82
Towns 20-100k	21.31	14.94	2.42	2.26	13.04	67.81
Towns < 20k	33.23	10.12	3.50	0.76	10.70	67.75
Rural areas	19.05	7.26	2.76	1.29	12.89	76.97
Voivodship						
Dolnośląskie	17.47	11.00	0.00	4.15	10.79	76.09
Kujawsko-pomorskie	14.35	3.69	0.00	3.78	14.30	60.23
Lubelskie	12.30	22.49	3.30	0.00	15.68	74.14
Lubuskie	19.96	16.24	8.19	0.00	12.04	67.52
Łódzkie	14.97	14.58	0.00	0.00	9.22	69.53
Małopolskie	16.77	14.63	0.00	1.71	7.47	59.01
Mazowieckie	19.92	13.11	4.38	0.00	11.36	69.95
Opolskie	20.96	14.87	7.37	3.81	14.91	63.68
Podkarpackie	37.19	19.08	3.80	3.68	29.60	73.42
Podlaskie	13.41	0.00	0.00	0.00	9.03	68.46
Pomorskie	16.27	12.38	6.21	2.08	16.33	58.62
Śląskie	18.70	9.26	1.58	1.69	9.26	74.22
Świętokrzyskie	17.94	9.06	3.30	3.02	6.13	75.89
Warmińsko-mazurskie	17.19	20.85	0.00	3.34	20.90	68.86
Wielkopolskie	21.24	16.38	0.00	0.00	18.90	75.67
Zachodniopomorskie	20.18	6.81	10.40	0.00	13.81	75.84

The second most important reason is lack of adequate equipment (19.3%). Other reasons listed as important were: being able to use the Internet elsewhere (13.4%) and the harmfulness of the Internet (for instance, it can be demoralizing for children, it can consume too much time) (13.2%). Very rarely, the respondents selected the answer “the Internet is not useful and it has nothing interesting to offer” (2.8%) and “fear of losing privacy on the Internet” (1.5%) (table 7.4).

The harmfulness of the Internet is underlined primarily by members of households with a greater number of children. This argument appears in the case of 16% of households with two children and in 20% of households with three or more children. On the other hand, it was not used even once by non-family households or couples without children. Parents base their belief that the Internet is harmful on observation of the behavior of children. In households, where children use computers, the percentage of respondents stating that the Internet can be harmful is as high as 20%. Moreover, most of these respondents are also concerned with how and for how long the children use the computer and the Internet.

Use of the Internet in places other than home is a reason for not having access at home more often for members of non-family households (27.5% in the case of one-person households

and 22.5% for households consisting of more than one person), as well as – although to a slightly lesser extent – for couples with no children or with one child (16.5%).

7.2.6. Declaration of willingness to get Internet access

Among households owning a computer and not having Internet access, only 1.7% declares that they will definitely get Internet access by the end of the year; 21.8% declare that they “probably will”. 43% of these households will not get access for sure. Those declaring willingness to get access within the next year are mostly households, which do not mention financial difficulties as a reason for lack of access.

Respondents declaring that their household would definitely get Internet access by the end of the year, provided the following reasons for lack of access at present: high access cost (28%), lack of adequate equipment (20%), being able to use Internet elsewhere (16%) and other reasons (42%).

Households, in which respondents perceive the Internet in a negative way, are the least eager to get access. People stating that the reason for lack of Internet access is the fact that Internet is not needed and has nothing interesting to offer, as well as that it can be harmful and pose a threat to their privacy, are practically unwilling to get Internet access. As few as 6% of them declare that they will “probably get Internet access by the end of 2003.”

7.3. Stationary and mobile phones

7.3.1. Households equipped with a stationary phone

An important index of the development of an information society is the development of telephony, both mobile and stationary. The telephone is becoming more and more frequently a tool providing access to services (for instance, banking) and information.

82.2% of households were equipped with a phone in March 2003. This means that 87% of Poles had access to a phone. However, it is necessary to note that the number of telephone lines per one hundred citizens in Poland is still lower than in the European Union countries, as well as in the Czech Republic and Hungary.

Usually, households equipped with a stationary phone are located in larger towns/cities (table 7.5). In towns above 200 thousand inhabitants, a phone is available in 9 out of 10 households. A slightly lower index of telephonization can be observed in smaller towns of less than 200 thousand inhabitants. The situation in rural areas is visibly worse – 73% of households here have a stationary phone.

A stationary phone is particularly rarely available in households of people living on unearned sources (only 56% of these have a phone) and disability pensioners (72%). The situation of farmers is slightly better – 77% of them have a phone.

Diversification among voivodships is not great, although the difference between the Pomorskie voivodship with the highest number of households equipped with a phone (87%) and the Świętokrzyskie voivodship with the lowest number (75%) is quite high.

Table 7.5. Stationary phones in households

Household type	Stationary phone in household (%)
Total	82.15
One-family	
Couples with no children	87.85
Couples with 1 child	86.69
Couples with 2 children	87.37
Couples with 3 or more children	80.41
One-parent families	75.90
Multi-family	83.62
Non-family	
One-person	70.96
Multi-person	66.67
Class of place of residence	
Cities over 500k	90.02
Towns 200-500k	89.18
Towns 100-200k	86.18
Towns 20-100k	86.45
Towns < 20k	81.95
Rural areas	73.13
Source of income	
households of employees	86.68
households of employees working on farms	84.83
households of farmers	76.97
households of self-employed people	91.48
households of retirees	83.09
households of disability pensioners	71.67
households of people living on unearned sources	56.57
Voivodship	
Dolnośląskie	85.02
Kujawsko-pomorskie	78.64
Lubelskie	79.07
Lubuskie	84.26
Łódzkie	77.51
Małopolskie	84.92
Mazowieckie	81.52
Opolskie	82.88
Podkarpackie	81.95
Podlaskie	85.27
Pomorskie	86.94
Śląskie	83.80
Świętokrzyskie	75.19
Warmińsko-mazurskie	82.31
Wielkopolskie	82.23
Zachodniopomorskie	85.08

In March 2000, a stationary phone was available in 73.5% of households. It means an increase of almost 10% within the last three years. In the year 2000, 77% of Poles had a phone at home. Three years later, this number was also greater by 10%.

44% of households that previously had not had a phone got one. On the other hand, almost 4.5% of those having a stationary phone in the year 2000 lost use of it. These were households in which income per capita was low and most probably use of the phone was lost due to financial reasons. The size of place of residence was not significant in this case.

7.3.2. Mobile phone

At present, mobile telephony in Poland is developing more quickly than stationary telephony. There are more mobile phones than stationary phone lines already. In the forthcoming years, we can expect these differences to increase. Integration of mobile telephony, computers and the Internet will also be increasingly progressive. Mobile technologies – mobile phones, portable computers and wireless Internet access – are the future.

Every fourth Pole (regardless of age) has a mobile phone. Most often, these are people between 20 and 35 years of age (figure 7.1.).

Men more often own mobile phones than women. 29% of men and 21% of women have mobile phones. Women are in the majority only among school and university students (24% of women and 20% of men in this group have a mobile phone) and among professionally inactive people (11% of women and 9% of men have a mobile phone). In the remaining social and professional groups, men are in the majority. This is most visible in the private sector, where 55% of men and 40% of women (table 7.6) have a mobile phone. All of these differences are statistically significant.



Figure 7.1. Ownership of a mobile phone by age

This means that women have a mobile phone much less often. It is also worth noting that the fact that there is a majority of women among school and university students is mainly due to age. Among teenagers, more than 22% of girls and 17% of boys have a mobile phone. Among people between 22 and 23 years of age, the difference diminishes. It proves that parents are more eager to buy mobile phones for girls than boys. This does not mean that they invest more willingly in daughters, but are more eager to control them and to ensure their safety.

In general, 42% of people employed in the public sector and 49% of employees of the private sector have a mobile phone.

Ownership of a phone is also strongly correlated with education (table 7.7). A difference between the percentage of mobile phone owners with an education lower than secondary level and graduates of a college or university among men is more than three times, and among women – more than five times. The higher the education level (at least to a bachelor's degree), the smaller the difference between women and men. Among people with primary education, there are two and a half times more male owners of mobile phones than female, and among those who

have earned a bachelor's degree, the difference disappears completely; however, in the group with an education level higher than a bachelor's degree, it reappears again.

Table 7.6. Ownership of a mobile phone by social and professional status and gender

Social-professional status	(%)	
	men	women
Public sector	46.74	38.10
Private sector	54.66	39.73
Farmers	19.52	11.89
Disability pensioners	19.81	11.03
Retirees	10.10	4.33
School/university students	19.52	23.58
Unemployed	24.15	19.69
other professionally inactive	8.85	10.86
Total	29.12	20.94

Table 7.7. Ownership of a mobile phone by education

Education, excluding students	(%)	
	men	Women
Primary	12.02	4.83
Vocational	27.21	14.02
Secondary	48.52	27.73
Bachelor's degree	57.86	57.72
Master's+	67.52	52.95
Total among people, who have finished education	34.86	21.90

Higher income, both individual and per capita in a household, is conducive to ownership of a mobile phone. Among respondents earning more than PLN 1500 per month, 57% have a mobile phone.

As in the case of computers and Internet access, use of mobile phones is correlated with size of the city/town of residence. The number of mobile phone owners living in big cities is the greatest, and in rural areas – the smallest. In cities of more than 500 thousand inhabitants, 41% have a mobile phone. In towns of 200 to 500 thousand inhabitants, every third person has a mobile phone. On the other hand, in smaller towns, 26% of inhabitants have mobile phones, and in rural areas – only 15%.

In the year 2000, people owning mobile phones were found in 18% of households. In March 2003, mobile phones were present in 48% of households. In 27% of all households, there is one mobile phone, in 15% - two, and in 6% - three or more.

7.4. Use of computers and the Internet by households

People who use a computer (not necessarily at home) are members of almost one half of all households (49.7%). On the other hand, members of 39% of households use the Internet.

This is important due to the fact that sometimes people who do not use a computer or the Internet, may ask another household member who is familiar with these technologies, for assistance or ask them to perform a specific task.

Diversification of these households is similar to diversification of households having a computer and Internet access. In cities of more than 500 thousand inhabitants, computer users are present in 60% and Internet users in 53% of households. In smaller towns, there are 52-55%

of households with computer users and 41-44% of households with Internet users. The situation is the worst in rural areas, where members of 40% of households use computers and of 29% - the Internet. Even more important is the type of biological family.

7.4.1. Who has a computer at home, but does not use it?

Not everyone who has a computer/Internet access at home, takes advantage of these technologies. A computer is present in 33.5% of households of 37.7% of Poles aged 16 and over. Within the last week, 64.5% of those with a computer at home used it, and 31% of those who have a computer at home, have never used it. This constitutes 12% of the entire population.

It is worth underlining that every tenth computer user, who has a computer at home, does not use the equipment at home. In further analysis, however, these people will be included as active users in the group of people using computers.

Who, then, are the people having a computer at home, but not using this equipment at home or in any other place? These are primarily older people. The average age of a computer user is 33, and that of a person not using a computer – 49. More often, these are women – they constitute 56% of the group of non-users (51% of those using a computer at home).

Much more often, these are also inhabitants of rural areas. In towns and cities, 72-77% of people use a computer at home, while in rural areas – only 55%.

Also the education level is very important. If we exclude students (among whom the percentage of computer users is very high), it will turn out that the chances for use of a home computer increase dramatically with the education level. Only 13% of people with primary education used a computer owned by their household. Among people with vocational education, as many as 42% used the computer. The situation was quite different in the case of people with secondary or university/college education. 72% of people with secondary and 87% with university/college education use a computer. These differences are enormous. They are both due to the fact that people with a higher education level are usually better prepared to manage and use a computer, and due to the fact that they are more often motivated to use it. This motivation may, among other things, be due to the necessity of using computers at work.

As we could expect, the social and professional status is also of great importance for use of a home computer. It is associated with motivation and the need to use the computer. Thus, for instance, employed people use a computer much more often. Within the last week, it was used by 75% of those employed by the public sector, 71% of those working in the private sector and 68% of the self-employed. Also 92% of school and university students used a home computer (this pertains to people 16 years of age and over).

A household-owned computer is less often used by the unemployed (56% used them within last week), other professionally inactive groups (42%), farmers (38%) and disability pensioners (34%). Definitely computers at home were used the least often by retirees – only 14%. Moreover, only 20% of retirees use a computer at all.

It is also interesting that if we examine the group of those who have a computer at home, the fact of using a computer is not influenced by having children (even if we take into consideration older children, who could help their parents to use the computer or teach them). It means that the fact of having children is conducive to the purchase of a computer, but it does not have influence on the use of the computer by other household members.

7.4.2. Who takes advantage of Internet access at home?

Almost 19% of people aged 16 and over are members of households with Internet access. So far, two thirds of them have used the Internet, and 58% used it last week, which indicates quite regular use. Almost 6% use the Internet only in places other than the home and do not take

advantage of access at home. People, who have Internet access at home, but do not use it, constitute almost 8% of the entire population³⁵.

The number of people not using the Internet is slightly higher in households, which have only recently got Internet access. In households connected at the beginning of 2003, almost half of all household members did not use the Internet. On the other hand, the percentage of people not using the Internet in the group of households that got access in year 2002, does not differ significantly from the average.

People who have Internet access at home, but do not use it, usually belong to the older generation. The average age is slightly more than 46, while people using the Internet at home are 32 years old on average. Also gender is very significant. Women constitute 48% of the group using the Internet at home and 59% of those who do not.

Education is very important – it is even more significant than with regard to use of computers. Only 8% of people with primary education have ever used the Internet at home! Among people with vocational education, 36% took advantage of the opportunity to get Internet access at home. Mostly students – children and youth – use the Internet at home, as well as people with a higher level of education. 59% of people with secondary education and as many as 84% of people with university/college education used the Internet at home.

There was also a significant correlation between use of the Internet at home and size of the city/town of residence. Most people used the Internet at home in households located in cities of more than 500 thousand inhabitants. 74% of people aged 15 and over took advantage of Internet access at home here. In towns between 20 and 500 thousand inhabitants, the extent of use of Internet at home was very similar and amounted to approximately 69%. The situation was worse in the case of towns below 20 thousand inhabitants (59%) and rural areas (53%).

Employees of the public sector (62%) and the private sector (66%) use the Internet at home slightly more often. Among the self-employed, the percentage of Internet users at home is the same as among the total population of those having Internet access at home. Most often, the Internet is used at home by school and university students (84%) and least often – by retirees (12%) and farmers (20%). It is interesting that the unemployed use the Internet at home more often (44%) than other professionally inactive groups (33%). This can be partially associated with the need to look for a job and information necessary to get it.

The fact of having children has no influence upon whether people having Internet access at home use it or not. Even having older children does not result in an increase in the percentage of household members using the Internet. Thus children motivate parents only to invest in new technologies – computers and the Internet. The ability to use them at home is a substantial motivation to use these technologies, while children have no additional influence upon this fact. It can be proved that the phenomenon of children teaching parents to use new technologies, which is often described, may be of little importance. Perhaps children are helpful in performing specific tasks, in completing them faster or better. However, they do not directly influence the sole fact of use of computers or the Internet. They only exert indirect influence – they motivate parents strongly to purchase a computer and obtain Internet access.

7.4.3. Importance of a computer at home for use of new technologies

People who have a computer at home use it much more intensely than those, who only have computer access elsewhere. This is similar in the case of the Internet. Access at home allows for a much more intense use of the Net.

People who have a computer at home use it for 15 hours and 40 minutes per week on average (this is total time, including also use in other places). On the other hand, computer users, who are members of households not equipped with a computer, use it for less than 10 hours per week on average.

³⁵ It is worth remembering that less than 20% regularly use the Internet.

Table 7.8. Conditions of the time spent using the Internet*

Type of connection	Average time spent using the Internet by the household member	Total time spent using the Internet by household members
Dial up modem (TP S.A.)	6 hours	13 hours 55 minutes
Dial up modem (other operator)	7 hours 35 minutes	18 hours 20 minutes
Cable connection (cable TV)	9 hours 45 minutes	24 hours 25 minutes
Using mobile phone	7 hours 25 minutes	16 hours
Radio link	11 hours 35 minutes	35 hours 45 minutes
Permanent connection	12 hours	31 hours 45 minutes
Households with no access at home	3 hours 30 minutes	5 hours and 20 minutes

* The table takes into consideration the time of use of the Internet, regardless of whether it was used at home or elsewhere!

People who have Internet access at home, spend 7 and a half hours per week surfing the Net, while people who have no access at home, spend only 3 and a half hours.

It is interesting that the ways of using the Internet depend upon the connection type. Although we do not have information with regard to intensity of use of the computer and the Internet by households, we can compare information regarding the total time spent by household members using the Internet and the type of Internet connection. Table 7.8 illustrates this.

7.5. Individual use of a computer

7.5.1. Characteristics of users

35.5% of people aged 16 and over declare that they use a computer at least from time to time. Exactly the same percentage of women and men use the computer.

The factor that most strongly determines use of a computer, is age (table 7.9). Most computer users are young people. More than two thirds of people aged 16-24 declare that they use a computer at least from time to time. The percentage of systematic computer users decreases systematically with age.

The education level is also very important (table 7.9). Among people with university/college and post-secondary education, almost 70% use a computer, while among those with the lowest education – only slightly more than 10%.

Also among the inhabitants of larger towns and cities, there are more computer users. In cities of more than 500 thousand inhabitants, among people aged 16 and over, it is almost 50%. In towns of 200 to 500 thousand inhabitants, computer users constitute 45%, and in towns of 100 to 200 thousand inhabitants – only slightly less. In smaller towns, about 37%, and in rural areas – only 19% of people aged 16 and over use a computer.

Table 7.9. Conditions for use of computers

Factor	B	S.E.	Wald	Sig.	R	Exp(B)
Age	.0943	.0025	1412.037	.0000	.3566	1.0989
Education level	-.9212	.0358	662.7281	.0000	-.2441	.3980
Size of place of residence	.2471	.0176	197.7813	.0000	.1329	1.2803
Income per capita in household	-.0014	.0001	190.7581	.0000	-.1305	.9986
Number of people aged 24 or less in a household	-.2215	.0262	71.3721	.0000	-.0791	.8013
Constant	-.6497	.1607	16.3499	.0001		
Chi ²	4007.030	df=5	Sig.	.0000		

Application of logistic regression to examine the importance of individual factors showed that the structural factors exert a very strong influence upon the fact of use of a computer (table 7.9). Use of a computer is very strongly conditioned by younger age, higher education level, size of the city/town of residence, income level, as well as the number of people aged 24 and under in a household. The presence of children at school age is conducive to owning a computer at home. Therefore, the importance of having children has different consequences for people in different age groups (table 7.10).

Table 7.10. Use of a computer depending upon having children in various age groups

Group	20-29 30-39 40-49 (%)		
	20-29	30-39	40-49
Total	50	41	33
Having no children	64	34	26
Having children	39	46	37

Among people aged 20-29, having children exerts a negative influence upon use of computers. Only 39% of parents and 64% of people with no children use them. On the other hand, among people aged 30 and over, children are a motivation to purchase a computer and thus cause the parents to use modern technologies more often.

7.5.2. Place of use of a computer

Both time spent using a computer and the way of using it are strongly correlated with the place in which a given person has access to a computer; therefore, before we find out how the Poles use computers, it is worth examining, where they do it.

Slightly more than two-thirds of people using a computer at least from time to time use it at home. 43% of them use a computer at work, 24% - at school or university, 22% - at friends or family, while almost 13% use computers at Internet cafes. One fourth use a computer both at home and at work.

Use of a computer at work is strongly correlated with use of a computer at home – more than 61% of those who use a computer at work, also use it at home. People using a computer at work practically do not use it anywhere else except home.

Using a computer both at work and at home is correlated with using it elsewhere less frequently than the average. On the other hand, use of a computer at school or university is conducive to use also at Internet cafes, family and friends. People using computers in one of the three places mentioned last also use them more often in the remaining two locations. These are usually young people.

People using computers at their family and friends seem to be particularly interesting. Usually young people – under 24 years of age – take advantage of this opportunity (and, slightly less frequently, people aged between 25 and 30). There are also more such users aged 60 and over. Possibly, in the case of older people, it is associated not only with availability of a computer, but also with the opportunity to get advice or assistance from a younger person.

Table 7.11. Conditions of using a computer at work

Predictor	B	S.E.	Wald	Sig.	R	Exp(B)
Gender	-1.1455	.2804	16.6846	.0000	-.0611	.3181
Age (men)	.0283	.0054	27.2178	.0000	.0800	1.0287
Age (women)	.0625			.0000		
Education level	1.0034	.0615	266.5607	.0000	.2593	2.7275
Income per capita in household	.0006	.0001	27.6212	.0000	.0807	1.0006
Constant	-3.4947	.4503	60.2157	.0000		
Chi-Square	903.442	df=5	Sig.	.0000		

Older people, usually men (particularly younger men, since in the age group above 36, there is a majority of women) use a computer at work. Also people with much better education and income use a computer at work (table 7.11).

Members of households in which there are more people aged 24 and under, more often use computers at home. It is associated with the fact that such households are equipped with a computer much more often, because the presence of children and young people is highly conducive to ownership of a computer. People who use computers at home more often, have attended education institutions for longer periods, they live in larger towns and cities and have a higher income. In the case of men, age is also important – those who are older use a computer at home more often.

Table 7.12. Conditions of using a computer at home.

Predictor	B	S.E.	Wald	Sig.	R	Exp(B)
Age (men)	.0079	.0037	4.4256	.0354	.0257	1.0079
Number of years of education	.0784	.0167	21.9700	.0000	.0736	1.0816
Size of place of residence	-.1362	.0240	32.2274	.0000	-.0906	.8727
Income per capita in household	.0009	.0001	43.1860	.0000	.1057	1.0009
Number of people aged 24 and under in household	.3130	.0408	58.9332	.0000	.1243	1.3675
Constant	-1.0490	.2913	12.9702	.0003		
Chi-Square	181.479	df=6	Sig.	.0000		

Table 7.13. Conditions of using a computer at school or university

Predictor	B	S.E.	Wald	Sig.	R	Exp(B)
Age (men)	-.3442	.0272	160.0673	.0000	-.2108	.7088
Age (women)	-.2125			.0000		
Number of years of education (men)	.2464	.0452	29.7630	.0000	.0883	1.2795
Number of years of education (women)	-.0489					
Education level	-.2267	.0872	6.7587	.0093	-.0366	.7971
Constant	4.5006	.3330	182.6703	.0000		
Chi-Square	1479.737	df=5	Sig.	.0000		

Mostly people who are younger and – which is understandable – are studying (completed education at a lower level) use computers at schools and universities (table 7.13).

Computers at Internet cafes are much more often used by younger people, and slightly more frequently by men than by women (table 7.14.).

Table 7.14. Conditions of using a computer at Internet cafes.

Predictor	B	S.E.	Wald	Sig.	R	Exp(B)
Gender	-.3700	.1148	10.3955	.0013	-.0584	.6907
Age	-.1466	.0092	255.5339	.0000	-.3208	.8637
Constant	2.4551	.2757	79.2680	.0000		
Chi-Square	505.063	df=2	Sig.	.0000		

Generally younger people, living in households where income per capita is low and there are less people aged 24 and under, use computers at friends or family (table 7.15.).

Table 7.15. Conditions of using a computer at friends or family.

Predictor	B	S.E.	Wald	Sig.	R	Exp(B)
Age (men)	-.0620	.0051	150.5941	.0000	-.2208	.9399
Age (women)	-.0718			.0024		
Income per capita in household	-.0004	.0001	8.5150	.0035	-.0462	.9996
Number of people aged 24 and under in household	-.2160	.0451	22.8968	.0000	-.0828	.8057
Constant	1.3478	.2009	44.9982	.0000		
Chi-Square	272.574	df=4	Sig.	.0000		

7.5.3. Time spent using a computer

Almost as important as the use of computers is how much time is spent using them. Computer users spend 14 hours and 45 minutes per week on average using it. Men use computers for a longer time – 16 hours and 15 minutes on average. In the case of women, the average time is 13 hours and 20 minutes.

Users belonging to the age group between 25 and 34 spent the longest time using a computer – 17 hours and 20 minutes per week on average. Inhabitants of larger towns and cities use computers much more. Computer users living in cities of more than 500 thousand inhabitants spent 18 hours and 15 minutes per week on average using a computer. Inhabitants of rural areas spent less than 11 hours per week using a computer. Also people with university/college education use computers a lot (18 hours and 50 minutes on average), as well as those employed in the private sector (18 hours and 40 minutes) and those who have the highest income (the average for people in the upper quartile is also 18 hours and 40 minutes).

However, on the basis of a comparison of time spent using computers in different groups, it is difficult to determine precisely the influence of individual factors. It is, for instance, due to the fact that people with higher income also belong to the group with a higher education level more frequently. Therefore, it is difficult to state which of the factors – education or income – is more important for time dedicated to use a computer. Regression analysis allows for determination of the influence of individual independent variables upon the dependent variable and for measuring the effect of changes in the level of value of one variable, while values of other variables remain unchanged. The time spent using a computer depends on many factors. However, it is interesting that individual factors exert very different influences upon the time spent using a computer by women and men, and therefore the analysis of these two groups was conducted separately.

The most important factor, of course, is use of a computer at work. The influence of this factor is much more significant for women. Use of a computer at work by women causes them to spend 14 hours and 40 minutes per week more, using a computer, than those women who use computers elsewhere. In the case of men, use of computers at work leads to a lengthening of the time spent using a computer only by 10 hours. It is probably due to the specificity of work. In the case of women, it is more often “office” work, associated with more intense use of a computer. Another important factor is the use of a computer at home. Women who use a computer at home spent 5 hours and 10 minutes per week more, on average, using a computer, than those who do not use it at home. On the other hand, men who use a computer at home spent 8 hours and several minutes more using it. Less important is use of a computer at school or university. It results in lengthening of the time spent using a computer by about 2 and half hours, both in the case of men and women. Use of a computer in other places did not influence the overall time spent using a computer.

Table 7.16. Number of hours spent by men using a computer last week.

Predictor	Non-standardized coefficients		Standardized coefficients Beta	t-Student statistics	Critical significance level
	B	S.E.			
Constant	7.040	2.674		2.633	.009
Age in March 2003	-.306	.038	-.226	-8.007	.000
Size of place of residence	-.705	.227	-.075	-3.105	.002
Number of years of education	.850	.158	.142	5.386	.000
Use of a computer at work	10.032	.932	.289	10.761	.000
Use of a computer at home	8.127	.893	.217	9.103	.000
Use of a computer at school or university	2.403	1.139	.059	2.109	.035

Table 7.17. Number of hours spent by women using a computer last week

Predictor	Non-standardized coefficients		Standardized coefficients Beta	t-Student statistics	Critical significance level
	B	S.E.			
Constant	7.854	1.515		5.183	.000
Age in March 2003	-6.77E-02	.032	-.056	-2.092	.037
Size of place of residence	-.783	.178	-.096	-4.402	.000
Number of years of education	14.624	.746	.492	19.612	.000
Use of a computer at work	5.200	.687	.168	7.571	.000
Use of a computer at home	2.567	.912	.075	2.813	.005

Another important factor is the age of the computer user. However, the significance of this factor is also different for women and men. In general, younger people use computers more often than older people, but this correlation is much stronger in the case of men, for whom every year of age is equivalent to an average of 18 minutes less time using a computer. Among women, the difference is equivalent to an average of only 4 minutes.

The place of residence is also important, and in this case there are no significant differences between men and women. On the other hand, there are substantial differences with regard to education level. It has a strong influence on the quantity of time spent using a computer by men and no influence upon use of computers by women.

7.5.4. Ability to use a computer

The social importance of the use of computers would be much lower, if it was not for the fact that it may have a very strong influence on the improvement of the situation of the computer user. A computer can be an invaluable work and study tool, allowing us to perform many tasks quicker or better. Therefore, it is not only important whether people have access to a computer, but also whether they know how to use it and take advantage of it. Thus if lack of access is a primary barrier and poses a basic threat to development of an information society, lack of skills is a kind of secondary barrier (Hargittai, 2002).

Answers to questions regarding the self-perception of skills possessed by computer users indicate a rather low level. The percentage of respondents declaring a very high level of computer skills is very low (less than 6%). 21.5% declare that their skills are at a high level. More than half of the respondents declare that they have average skills, and almost every fifth person using a computer says that his/her skills are at a very low level. If we keep in mind the fact that only 35.5% of people aged 16 and over use computers, it turns out that only every tenth Pole has good or very good computer skills.

People having a computer at home are obviously able to use it more efficiently. However, the most important factor influencing the declared skill level is age. In general, younger people declare that their skills are much better. It is worth noting, though, that the highest levels of skills are declared by people aged 21-30. Younger people rarely declare that they have very good skills.

Gender is also important. Men declare themselves to be more skilled – 34% of them declare that they have a high or a very high skill level. Among women, there were only 21.5% of such responses. Moreover, the greatest differences were observed among people with the highest level of skills (table 123, appendix 3). The effect of gender on the ability to use computers is rather an indirect one, that is, it is active only in interaction with other factors; primarily, gender and the number of years of education, as well as the number of friends, which is only important for the skills possessed by women (table 7.18. and 7.19.).

Table 7.18. Ability to use a computer (men)

Predictor	Non-standardized coefficients		Standardized coefficients Beta	t-Student statistics	Critical significance level
	B	S.E.			
Constant	2.784	.133		20.896	.000
Age in March 2003	.028	.002	.421	15.475	.000
Number of years of education	-.055	.013	-.180	-4.366	.000
Education level	-.083	.039	-.094	-2.142	.032
Size of place of residence	.043	.012	.091	3.578	.000
Income per capita in household	.000	.000	-.107	-4.046	.000
	R ² =0.202	S.E.=0.76			

Table 7.19. Ability to use a computer (women)

Predictor	Non-standardized coefficients		Standardized coefficients Beta	t-Student statistics	Critical significance level
	B	S.E.			
Constant	2.947	.095		31.145	.000
Age in March 2003	.023	.001	.363	18.491	.000
Number of years of education	-.045	.008	-.156	-5.358	.000
Education level	-.061	.025	-.076	-2.472	.014
Size of place of residence	.037	.008	.085	4.719	.000
Income per capita in household	.000	.000	-.098	-5.192	.000
Number of friends	-.022	.011	.036	-2.050	.040
	R ² =0.151	S.E.=0.72			

Among both men and women, the most significant factor influencing the ability to use a computer is age; then there is the number of years of education and the education level. The influence of these factors is consistent with expectations – people who are younger and have better education declare higher levels of skills. Regardless of the remaining factors, the average income level in the household within the last year is also significant for the declared level of computer skills. Higher income is correlated with a higher level of these skills.

Also significant, regardless of the factors mentioned above, is the size of the city/town of residence. This fact may be a derivative of a greater percentage of people using computers in large towns and cities, which results in greater opportunities to get advice and assistance from others (for instance, friends). This probably explains the positive influence of the number of friends upon the ability to use a computer among women. A greater number of friends means better chances of getting assistance. However, this factor is significant only in the case of women, which may be a result of the reluctance of men to ask for help.

Definitely the least number of people with good computer skills can be found among the retirees, the professionally inactive groups and the unemployed. These groups are faced with a particularly substantial threat of “digital exclusion” – depriving them of the advantages associated with the development of new technologies, also due to the fact that these groups include much fewer computer users.

Computer skills are one of the most important indicators of the extent to which people are able to use a tool like a computer to their advantage. One of the basic conditions for development of computer skills is also the ability to get in touch with people who are able to provide assistance. Most assistance provided when learning to use a computer is obtained from family members and friends, and not in training courses. Therefore, a question regarding the availability of such people is also important. As it has been shown by Fong, Wellman, Kew and Wilkes (2001), in places, where much fewer people use computers and the Internet, and the presence of these technologies is observed to a much lesser extent, it is also more difficult to get such assistance. Therefore, it is very important to compare data regarding the spatial distribution of diffusion of the new technologies and the ability to use them.

Let us remember that one of the important factors influencing skills is the size of place of residence. Of course, the size itself is associated with the “density” of the population of people using computers. There is also a geographical correlation between the number of people in a given area (voivodship) using a computer and their skills. The more people in a given voivodship use a computer, the higher is the level of skills declared by them ($p < 0.05$). It is a strong argument for the existence of additional regional diversification, confirming the observations of Fong et al., that in places where less people use a computer, the level of skills is also lower, which leads to additional deprivation of such regions.

It means that another problem, following the issues of availability of computers and ability to use them, is the problem of co-existence of these two factors and their mutual strengthening. Less privileged areas, in which fewer people have access to computers, are faced with an additional threat: people able to use this equipment may not know how to take full advantage of it. If this situation continues, it may lead to the exclusion of entire regions.

7.6. Use of the Internet

7.6.1. General description of Internet users

The Internet is used or was used by 24.7 % of Poles, and by 71.2 % of all computer users. The percentage of people who have used the Internet is bigger among men (26%) than among women (23.5%). The largest differences, however, occur in groups relating to age, place of residence and education.

The largest percentage of Internet users is to be found among young people. In the age category of 16 to 24 year-olds, almost 59% of people use the Internet (85% of computer users). The percentage is over 60% among teenagers aged 16 to 19. In the group of people aged from 25 to 34, it is 36%, and among 35 to 44 year-olds, it is 25.5%. Much fewer Internet users are to be found in older age groups. Among people aged from 45 to 59 there are only 12.5%, and among even older ones the percentage is only 1.5%. Age is a very strong predictor of Internet use. Just the differences connected with age alone account for 25% of variances of Internet use.

There are also large differences connected with education. The largest percentage of Internet users is to be found among people with a university education (60%), and the smallest among people with primary (1%) and vocational (7%) education.

There are also other important factors. Higher income is conducive to easier access to the Net. Another significant factor is the size (number of inhabitants) of the place of residence.

Generally, the largest percentage of Internet users is to be found among students⁴⁰ - 74%. The Internet is used by 38% of public sector workers, by 32% of private sector workers and by the same percentage of self-employed. There are few Internet users among the retired (2%), farmers (5%) and pensioners (9%).

The results of logistic regression analysis, presented in table 7.20, show the variables that have a statistically significant influence on the likelihood of Internet use. The most important variable is age; the older a person is the less likely they are to use the Internet. The second in importance is education and the size of the place of residence. There are also elements that are conducive to Internet use independently of the other factors, i.e. high income and the presence of people under 24 years old in a household. The positive coefficient of regression for the "gender" variable means that if we compare men and women of the same characteristics it will turn out that the women are more likely to use the Internet. This difference, however, is strongly modified by the interaction of "gender" and "education" categories. In the case of women the number of years spent at school does not correspond to the increase in the likelihood of Internet use to the same extent as it does in the case of men. That is why, combining the influence of "gender" and "education" categories, one can conclude that among people with a lower level of education, it is women who use the Internet more often, and among people who studied for at least 11 years it is men.

As people who used the Internet once may not use it any longer it is worth checking who is using the Internet at present. In fact only 75% of former Internet users are still using it. Not all of them do it regularly, either. During the last week only 20% of people aged 16 or more used the Internet, i.e. only 79% of those who have ever done it.

Table 7.20. Factors influencing the use of the Internet.

Predictor	B	S.E.	Wald	Sig.	R	Exp(B)
Gender	,9789	,3471	7,9541	,0048	,0251	2,6615
Age	-,0994	,0030	1064,287	,0000	-,3348	,9054
Education level	,1998	,0636	9,8770	,0017	,0288	1,2211
Length of education (men)	,3758	,0275	186,9851	,0000	,1397	1,4561
Length of education (women)	,2835			,0000	,1075	
Size of the place of residence	-,2438	,0190	164,2679	,0000	-,1309	,7836
Income per capita	,0010	,0000	121,9148	,0000	,1125	1,0010
Number of people under 24 years old in a household	,1523	,0287	28,0945	,0000	,0525	1,1645
Constant	-3,4090	,5883	33,5727	,0000		
Chi ²	3647,107	Df=8	Sig.	,0000		

It is worth analyzing what kind of people use the Internet regularly and who doesn't use it anymore or uses it only sporadically. As Katz, Rice and Aspden observed (2001) the regularity and the cessation of Internet use is another measure of diversification; people who are in the worst situation according to this measure are IT-handicapped in other aspects as well.

It turns out that men use the Internet slightly more regularly than women. 22% of men and 18% of women used the Internet for at least an hour during the last week. That is 85% of the men and 75% of the women who have ever used the Internet. People who have used the Internet are younger than average users and live in households with a higher income than average.

The percentage of Internet users is higher among people with university education. As many as 84% of them used the Internet during the last week. The percentage of people with secondary or lower education who used the Net during the last week was only 73%. The Internet

⁴⁰ Concerns people who are at least 16 years old

was much more often used by students (81%) than by the retired (59%) or unemployed or professionally passive (67%).

Similarly as in the case of computer use, Internet use is connected with the presence of children in a household. It is because of children who want to have a computer at home, that parents have a greater chance of using the Internet. That is why older parents use the Internet more often, while the younger ones - those who have small children - use it less frequently (table 7.21).

Table 7.21 The use of the Internet in relation to the possession of children of various ages (%)

	20-29 years old	30-39 years old	40-49 years old
Total	40	27	18
No children	52	25	13
With children	30	30	21

7.6.2. The place of Internet use

Over half of the people who use the Internet do so at home. Every third Internet user does so at work, 27.5% at school, university or college, 22% at friends' or relatives' homes and 19% of Internet users go to Internet cafes.

30% of Internet users use it in more than one place. Almost half of them use it both at home and at work and very rarely in other places. Those who use the Net at school or university also often use it in other places. Almost three fourths of students use the Net in more than one place. What factors influence the use of the Internet in particular places?

People using the Internet at work are usually older and better educated than average Internet users. Besides, people who use the Net at work have a higher income (table 7.22.).

Table 7.22. Factors relating to the use of the Internet at work

Predictor	B	S.E.	Wald	Sig.	R	Exp(B)
Age	,0369	,0051	52,9265	,0000	,1442	1,0376
Education level	1,0473	,0816	164,5756	,0000	,2577	2,8499
Income per capita in a household	,0006	,0001	28,4569	,0000	,1040	1,0006
Constant	-5,6937	,2924	379,0859	,0000		
Chi-Square	548,592	df=3	Sig.	,0000		

Using the Internet at home is connected with age - older people more often use the Net at home. The percentage of people using the Internet at home is also higher among those with better education and living in bigger towns or cities, as well as among those who live in households with a higher income per capita and with a bigger number of people under 24 years old (table 7.23.).

Table 7.23. Factors relating to the use of the Internet at home

Predictor	B	S.E.	Wald	Sig.	R	Exp(B)
Age (men)	,0325	,0047	47,8353	,0000	,1300	1,0330
Age (women)	,0250			,0000		
Length of education	,0566	,0188	9,0421	,0026	,0510	1,0583
Size of the place of residence	-,1175	,0272	18,5975	,0000	-,0782	,8892
Income per capita in a household	,0007	,0001	27,3833	,0000	,0968	1,0007
Number of people under 24 years old in a household	,2563	,0469	29,8256	,0000	,1013	1,2922
Constant	-2,0862	,3251	41,1724	,0000		
Chi-Square	172,288	df=6	Sig.	,0000		

Young people use the Internet at school, university or college but those who have studied longer use it more often (this is more important in the case of men). Another stimulus for the use of the Net at school in this case is also a lower income per capita in a household, which is connected with smaller chances of access to the Net at home (table 7.24)

Table 7.24. Factors relating to the use of the Internet at school, college or university.

Predictor	B	S.E.	Wald	Sig.	R	Exp(B)
Age (men)	-,3585	,0348	106,0331	,0000	-,2125	,6987
Age (women)	-,3632			,0000		
Length of education (men)	,1962	,0520	14,2587	,0002	,0730	1,2168
Length of education (women)	,0532					
Income per capita in a household	-,0004	,0002	5,1760	,0229	-,0371	,9996
Constant	5,0328	,3572	198,5198	,0000		
Chi-Square	876,833	df=5	Sig.	,0000		

People who use the Internet in Internet cafes are usually men, rather young and coming from households with a low income per capita and with a lower number of people under 25 years old (table 7.25.).

Table 7.25. Factors relating to the use of the Internet in Internet cafes.

Predictor	B	S.E.	Wald	Sig.	R	Exp(B)
Gender	-,2869	,1236	5,3927	,0202	-,0418	,7506
Age	-,1196	,0098	149,4686	,0000	-,2756	,8873
Income per capita in a household	-,0006	,0002	11,0338	,0009	-,0682	,9994
Number of people under 24 years old in a household	-,1261	,0590	4,5703	,0325	-,0364	,8816
Constant	2,7434	,3647	56,5922	,0000		
Chi-Square	319,518	df=4	Sig.	,0000		

It is usually young people, living in bigger towns or cities, that use the Internet at friends' or relatives' homes. In the case of women another important factor is also the shorter length of education (table 7.26.).

One should emphasize here the importance of the size of the place of residence for the use of Internet at friends' or relatives' homes. In bigger towns and cities many more people have access to the Internet so it is much easier for those who live in such places to find a friend or a relative who has access to the Internet. Using the Internet at somebody else's means one can also benefit from their assistance, which helps get rid of the inhibitions connected with the lack of Internet skills. The possibility of Internet use at friends' or relatives' places in bigger towns or

cities is another important factor that creates significant differences in Internet access and use between towns and the country, and between smaller and bigger towns.

Table 7.26. Factors relating to the use of the Internet at friends' or relatives' homes.

Predictor	B	S.E.	Wald	Sig.	R	Exp(B)
Age	-,0659	,0059	126,7072	,0000	-,2313	,9362
Length of education (women)	-,0266	,0078	11,7924	,0006	-,0648	,9737
Size of the place of residence	-,1074	,0293	13,4076	,0003	-,0700	,8981
Constant	1,1260	,2054	30,0394	,0000		
Chi-Square	181,643	df=3	Sig.	,0000		

7.6.3. Time spent on Internet use

The fact that the Internet is used does not say much about the user. We can learn much more by studying the time spent on the Internet. It is also this time, and not the fact that it is used, that can better explain the psychological and social effects of Internet use, though, of course, the way it is used is obviously important too.

Table 7.27. Factors relating to the time spent on the Internet.

Predictor	Non-standardized factors		Standardized factors Beta	Critical level of significance
	B	S.E.		
(constant)	12,702	2,348		,000
Age in March 2003	-,167	,030	-,180	,000
Length of education	-,477	,187	-,120	,011
Education level (men)	1,280	,615	,109	,038
Education level (women)	-,943	,200	-,143	,000
Size of the place of residence	-,518	,185	-,082	,005
Using the Internet at work	2,435	,794	,101	,002
Using the Internet at home	2,672	1,312	,059	,042
How many years a person has used the Net	,790	,173	,143	,000
Broad-band Internet connection at home	4,147	,712	,170	,000
	R ² =0,131	S.E.=10,5		

The majority of people who use the Internet do not do so intensively. Over three fourths of people who used the Internet during the last week spent no more than 7 hours on it, that is about one hour a day. 14% of those surveyed did not use the Net at all during that time, and 41% used it for one to three hours. 15.4% of all Internet users use the Net for 8 to 19 hours per week. The percentage of "intensive users", using the Internet for at least 20 hours per week, is 8.4%. The majority of both groups are men.

The amount of time spent on the Internet depended primarily on the place of the Internet use. Those who have broad-band Internet connection at home use the Internet for over 8 hours and twenty minutes (in the case of men) or almost 6 hours (in the case of women) longer than those who do not have such an access. Also those who have modems at home spent more time each week using the Internet. The increase is bigger in the case of men (over 4 hours) than in the case of women (an hour and a half). People using the Internet at work spent over 3 hours more on it than those who do not use it at work. Other places of Internet use do not have any significant influence on the number of hours spent on the Net (table 7.27).

Another factor that corresponds with the amount of time spent on Internet use is age. Older people spend much less time on the Net than the younger ones. The difference between age groups which differ by one year only is about 10 minutes per week.

People who have used the Net for a long time spent more time on it. This dependence is shown in figure 7.2. Every year means about 45 minutes more spent on the Net. There may be two reasons for this. Firstly, people who started to use the Internet earlier may have bigger needs, and the Internet is more useful to them in everyday life. Secondly, it may be that people who have been using the Net for a longer time (have more Internet experience) have better skills and can use it more efficiently. At present we are not able to state which of the two effects is true or which is more important. However, by further observation of the people surveyed and by checking the time they spend on the Internet, we will be able to determine whether those who have used the Net for a longer period spend more time on it per day.

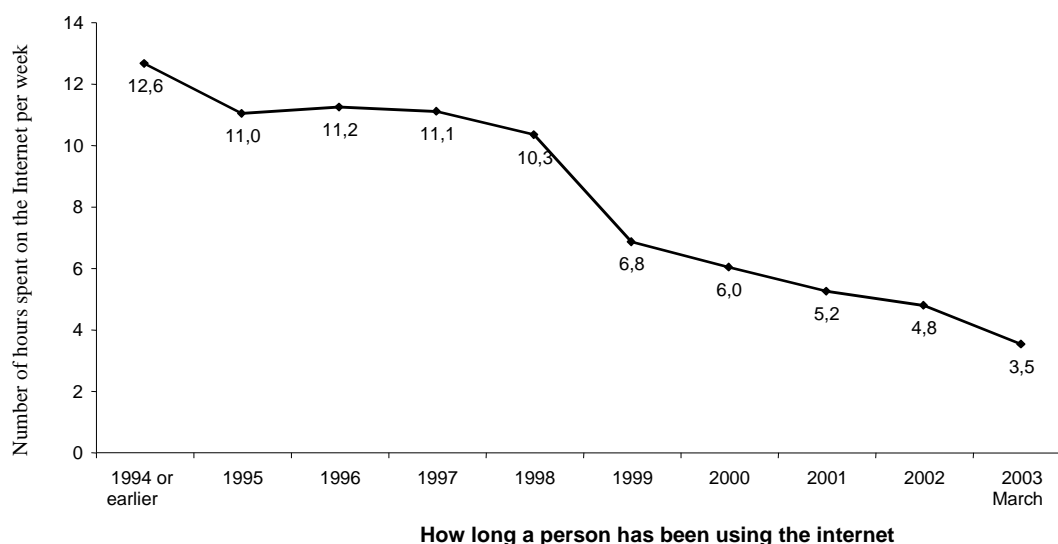


Figure 7.2. The amount of time spent on the Internet in relation to Internet experience

The amount of time spent on the Internet is also connected with education i.e. the number of years spent on studying so far. Apart from all the other differences, people who studied for a longer period spend less time on the Net⁴¹. People who have children also use the Internet less often. The retired, on the other hand, use the Net more often - that is in the case of people of the same age, those who are retired spend much more time on the Net (almost 7 hours per week more) than those who are still working. The last important factor connected with the amount of time spent on Internet use is the size of the place of residence. People in bigger towns or cities use it more often. Factors like gender, level of education or income are not particularly important in relation to the amount of time spent on the Net.

7.6.4. Amount of Internet experience (since when a person has been using the Internet)

The time when a person started to use the Internet is important for many reasons. As was mentioned above, the period of Internet experience is connected directly with present intensity of Internet use. It is also one of the most important factors influencing the method of Internet use. What is more, by observing tendencies of the increase in the number of Internet users, we can make predictions about dissemination of the Net.

Figure 7.3. shows the increase in the number of Internet users. The succeeding numbers show the percentage of people who started to use the Net in a particular year together with those who had used it before. The greatest increase took place in 2000, when almost 25% of the present Internet users started to use the Net.

⁴¹ This may be the result of the fact that people who are still studying spend a lot of time on the Internet.

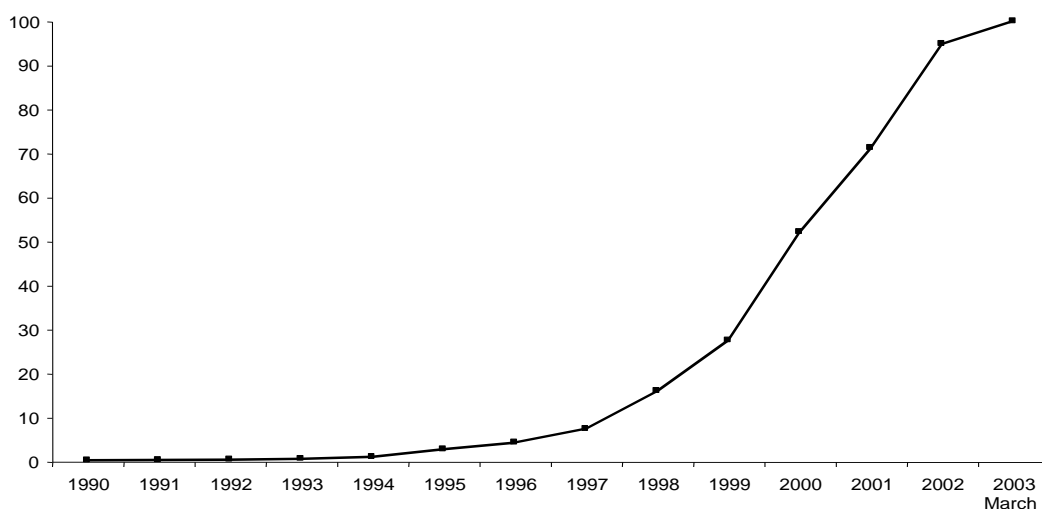


Figure 7.3. Cumulative increase in the number of Internet users (in percentages)

However, while analyzing the issues connected with the start of Internet use, one should take into account the divisions connected with gender. One could say that men play the role of innovators here. Many more men started to use the Internet in the 1990s than did women. Up to 1999, the Internet was used by 8.3% of men and only by 4.6% of women. Since 2000, however, the percentage of new Internet users has been bigger among women than among men though the difference is still rather small. In 2002, however, it was 6% of women who started to use the Internet and only 4.9% of men. One can conclude, then, that the increase in the number of new Internet users is getting bigger among women than it is among men now. Probably soon the percentage of male and female Internet users will be equal. This tendency has also been observed in other countries. At present being a man among Internet users means using the Net for a year and five months longer.

Of course a significant factor determining the time when a person started to use the Internet is their income. The influence of that variable, however, is relatively small.

What is interesting, if we compare people of different ages but similar in all other aspects, is that younger people usually started to use the Internet earlier. It is another indication of the fact that the older generation does not adapt to technological changes as fast as the younger one.

7.6.5. New Internet users

People who started to use the Internet from the beginning of 2002 to March 2003 constitute 29% of all Internet users. Quite a big percentage of those are people who started to use the Net at the beginning of 2003 (5.3%). It is worth studying the differences between people who have used the Net for some time already and those who have just started. The results of Internet use are different in the case of the new users⁴² so it is worth studying the way they use the Net.

⁴² The consequences of the internet use are described in one of the following chapters entitled "The consequences of computer and the internet use".

The new Internet users use the Net at home much more often than the others do. As many as 84% of the people who started to use the Net in 2003 do it at home. In comparison with other Internet users these people use the Internet much less often in other places.

There are considerable differences in Internet use between people who have just started to use it and those who have used it for over a year. The groups differ from each other practically in every aspect. The experienced Internet users have used more Internet functions and communicated via the Net with a larger number of people. This includes contacts and functions performed during the last week. The new Internet users use the Net for about 3½ hours per week, and those who have been Internet users for at least 15 months use it twice as long. Perhaps those who started to use the Internet later have fewer needs and the Internet is not as important or as attractive to them as it is to the more experienced users. The difference, however, may be also a consequence of the fact that the new Internet users are not as skilled in using the Net as the older ones.

People who started to use the Internet in 2002, i.e. those who at the time of the study have used it for between three and fourteen months, also use it less than the more experienced Internet users - they spend about 4 hours and 40 minutes per week on it. There are also significant differences concerning the method of Internet use between the people who have used the Net for at least 15 months and those who have used it for a shorter time. The only aspect of use that was not statistically different during the last week was browsing through Web pages.

The difference between the people who have just started to use the Internet and those who have used it for some time (3 to 14 months) is also significant. The more experienced users spend more time on the Net. The new Internet users have used fewer Net functions so far, that is they performed fewer operations than those who have used the Internet for 3 to 14 months. They communicate, however, with a similar number of people (this concerns both contacts in general and those which took place during the last week). The only significant differences concern communication with co-workers - it is the more experienced users who have more such contacts. The smaller number of contacts with people who cannot be contacted in any other way (in the case of the new Internet users) results probably from the smaller number of instances of separation with friends - just because of the shorter period of the Internet use.

As regards the functions of Internet there are no differences concerning the simplest operations (browsing through Web pages, possessing and modifying one's own Web page⁴³, using chats and communicators for synchronous conversations). There are, however, differences concerning all the more advanced functions of the Internet, for example performing financial operations, shopping, participating in Internet auctions as well as participating in discussion groups and playing Internet games.

7.6.6. Methods of Internet use

It may be quite interesting to observe the ways in which different people use the Internet. We asked a number of questions to check this. The questions concerned the operations performed during an Internet session, both throughout the whole period of Internet use so far, and those performed during the last week.

All the types of operations performed so far show what the users' interests are as well as their competence - they show the skills (including technical ones) needed to perform a particular operation (DiMaggio, Hargittai, 2001). That is why the general number of the operations performed so far will be treated here as an indicator of skills and versatility of the Internet use. The methods of Internet use from the last week are rather an indicator of the actual behavior - in what manner and how intensively the Net is used by Internet users.

⁴³ For quite a lot of people it is the first serious contact with the internet.

Table 7.28. Factors relating to the number of operations performed on the Net

Predictor	Non-standardized factors		Standardized factors Beta	Statistics of t-Student	Critical level of significance
	B	S.E.			
Constant	5,894	,339		17,383	,000
Age	-,726	,113	-,119	-6,412	,000
Age in March 2003	-,079	,006	-,310	-13,556	,000
Size of the place of residence	-,124	,032	-,074	-3,930	,000
Using the Internet at work	,953	,143	,147	6,647	,000
Using the Internet at home	1,744	,126	,285	13,806	,000
Using the Internet at school/ university	,838	,152	,122	5,505	,000
Using the Internet in Internet cafes	,555	,158	,071	3,515	,000
Using the Internet at friends'/ family's homes	,508	,145	,069	3,507	,000
How many years a person has used the Internet	,391	,032	,239	12,277	,000
	R ² =0,292	S.E.=2,58			

The number of functions for which the Internet is used depends mainly on the age of the users and their experience. An almost equally important factor is the number and kinds of places in which a person can use the Net. The most important factor here is the access to the Net at home but other factors are also significant. Gender is also important here - men use the Internet more widely - as well as the size of the place of residence (table 7.28.).

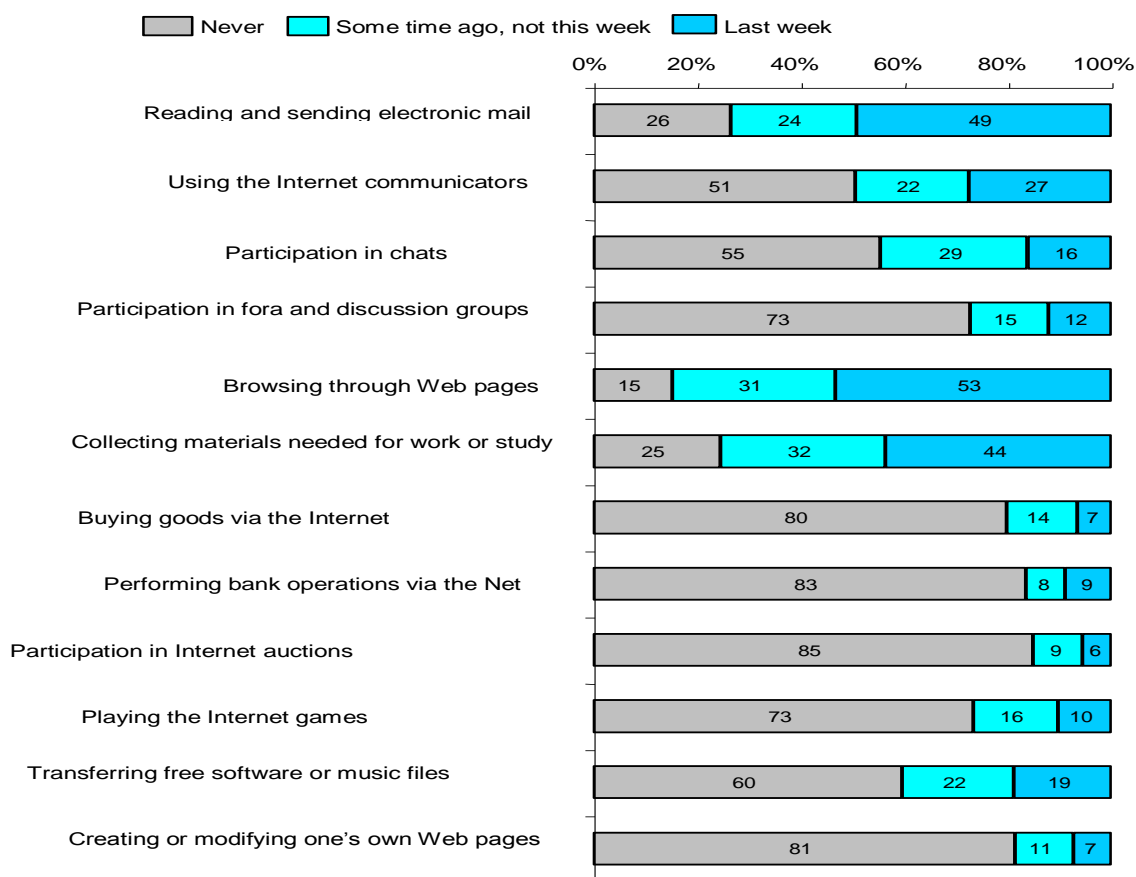


Figure 7.4. Functions performed on the Internet

The Internet function used most often during the last week was browsing through Web pages. Over 71.5% of people who used the Internet during this time entered Web pages. 66% of Internet users used e-mail. It should be mentioned here that 80% of Internet users have used e-mail.

As many as 58% of the Net users searched for material needed for their work or study. This is a significant quantity: it shows that Poles can benefit from the Internet and improve their situation. Thus for many people the Internet is a source of important information. Unfortunately, on the basis of this study we can state only that people search for such useful information and material on the Net and that there is quite a large number of people who do this. We cannot determine, however, whether the main reason for such use of the Internet is easy access to information in general or access to "better" information. Also we are not able to evaluate the users' competence and how effective they are in finding and using such information and material.

A relatively small percentage of Internet users use the financial functions of the Net though the data is still quite optimistic. 12% of Internet users performed various bank operations via the Net, 8.6% did shopping on the Net and 7.4% participated in auctions.

What is interesting is the quite large percentage of people (24.8%) who transferred some music, films or programmes from the Internet. Music files are the most popular and most often transferred files here. MP3 is the most popular entry in the search engines. The scope of this phenomenon is large and it may lead to reshaping of whole markets, especially those connected with copyrighted products.

Internet games are a form of entertainment used by 13.7% of those who have used the Net lately. 9.6% of the Internet users who used the Net during the last week dealt with their own Web pages.

Though the Internet was most often used for browsing through Web pages its basic function is rather facilitating communication among people and, in fact, this communicative function of the Internet was used most often. Every third person communicated with others via e-mail but quite often other forms of communication were employed too. 36% of people who used the Internet during the last week employed various instant messaging communicators, 21.5% took part in chats and 16% participated in discussions on special discussion fora. Whom did the Internet users contact?

7.6.7. Forms of Internet users' behavior - social communication

One of the main advantages of the Internet is its incredible ability to increase social communication (Wellman, Haase, Witte, Hampton, 2001; Hampton, Wellman, 2001; Castells 2001). Communication via the Internet helps overcome the barriers of distance and, in a way, of time. Electronic messages reach people on the other side of the globe almost immediately. What is more, the communication can take place both in real time, i.e. synchronously, and asynchronously. The cost of communication via the Internet is much lower than the cost of telephone or traditional mail communication, especially in the case of communication over large distances. Thanks to the Internet one can also easily meet other people especially those of similar interests or those who can give some professional advice in a given field.

As many as 83% of people who have used the Internet so far have employed it already for communication with other people. Among those who used the Net during the last week 71% employed it to communicate with other Internet users. Thus one can state without a doubt that communication with other people is the most common and most often used function of the Internet.

42% of the Internet users used the Net to communicate with their families; among those who used the Net during the last week 22% employed it for contacts with their families. 38% of

the Internet users communicated with their co-workers via the Net; the percentage among those who used the Internet during the last week was a little over 27%.

The largest group of people contacted via the Internet is made up of friends and acquaintances (64% of Internet users communicate with such people) who can be contacted also without the aid of the Net. In such cases the Internet may serve as an additional medium – giving extra contact between people, facilitating co-operation (e.g. by sending various materials and works), co-coordinating joint projects, giving advice and support, and sending the same information or message to a big group of people.

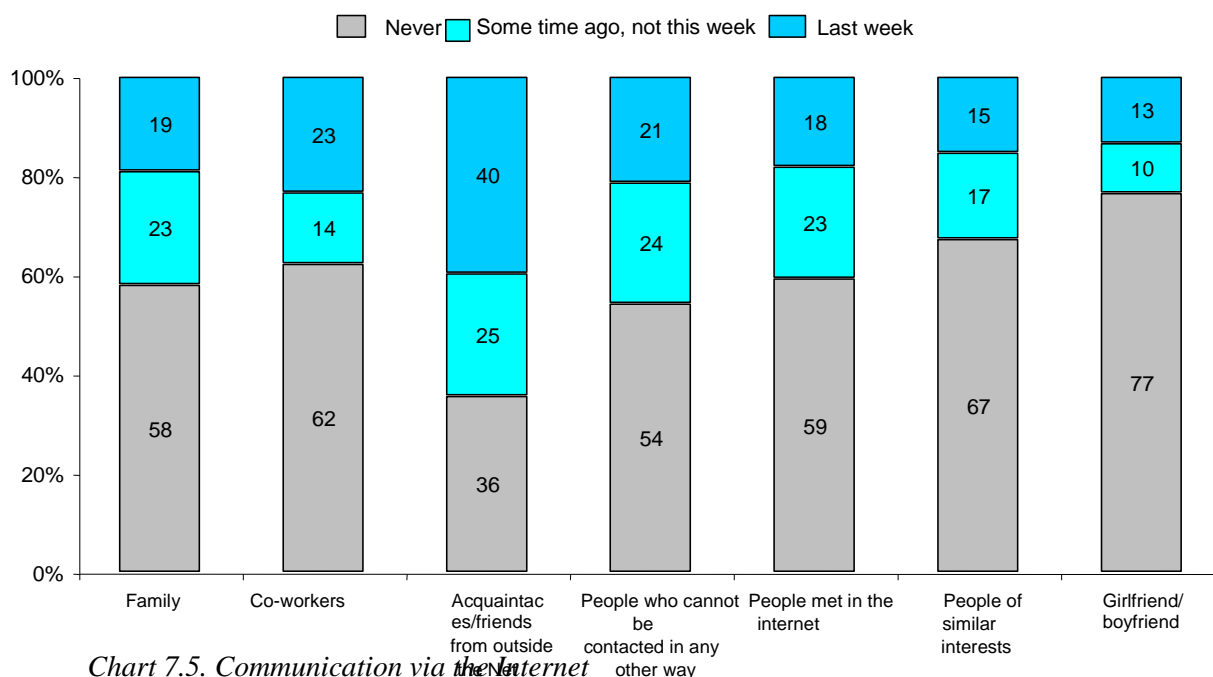


Figure 7.5. Communication via the Internet

45% of Internet users used the Internet to communicate with people who could not be contacted in any other way. This is one of the most important characteristics of the Internet - it helps cultivate relationships between people living in distant places (Wellman, Haase, Witte, Hampton, 2001; Hampton, Wellman, 2001). This results from the fact that such communication is cheaper than telephone calls and faster than traditional correspondence. This kind of communication can take place in real time as well as just from time to time.

The Internet is used not only for the maintenance of old relationships; it is also quite often used for meeting new people. These contacts are not only fleeting acquaintanceships - they can also develop into true friendships (Parks and Floyd, 1995). 41% of Polish Internet users have met somebody via the Net. 21% of the Internet users who used the Net during the last week contacted people then whom they had met there previously. This does not mean that all of the Internet users met someone new during the last week: in many cases it was communication with people whom they had met on the Net before. On the basis of the data gathered so far we cannot determine precisely how often the Internet users meet new people on the Net and how permanent such acquaintances are.

People also very often use the Internet for communication with similar interests. 33% of Internet users contacted such people. During the last week the Internet was used for such a purpose by 17% of the users. This kind of communication concerns mainly professional matters

connected with one's work or hobby. Apart from the exchange of information and knowledge, however, the communication is important for creating social relationships (Rheingold, 1993; Wellman, 1997).

Usually the Internet is used for communication with friends and acquaintances who can be contacted also in another way (during the last week 45% of the Internet users contacted their friends via the Net⁴⁴) and with co-workers (over 27%). One can also say that over 60% of those who have ever communicated with any of their friends or co-workers contacted such people during the last week. Communication with family and people who cannot be contacted in any other way is rather sporadic.

Regular communication with people via the Internet is connected mainly with access to the Net at home or at work and with longer use of the Net (both in respect to the Internet experience and to the time spent on the Net per day). People who work a lot and bring up children less frequently use the Internet for communication. Other factors were not significant in relation to the use of the Net for communication. However, the number and variety of such contacts depend on age and gender. It is young people, especially men, who have more varied contacts⁴⁵.

What are the factors that determine who contacts whom on the Internet? As in the case of functions and operations performed on the Net, we analyzed the contacts of people who used the Net during the last week.

7.6.7.1. *Contacts with family*

As was mentioned already, 22% of those who used the Internet during the last week contacted someone in their family. What is interesting, is that women have more such contacts (23%) than men (21%). The differences are statistically significant. They confirm the results of the American studies concerning different forms of Internet use in relation to men and women. Women use the Net more often for cultivating relationships with family, and men more often contact their friends and co-workers (Boneva, Kraut, Frohlich, 2001; Singh 2001)⁴⁶. Besides, people who use the Internet for communicating with family usually live in households where the income is much higher than the average. Probably it results from the fact that such people, or their closest relatives, spend a lot of time at work and the Internet is a convenient form of additional contact for them.

The age factor was not of great significance here, though it was older people who more often used the Internet for communication with family. The largest percentage of people who contacted family via the Net is among the retired (52% while the average is 22%).

The better their education, the more people communicate with family via the Internet. Only 13% of the Internet users with primary education contacted somebody in their family during the last week. Among people with university education the percentage was 28%. It may result from the fact that people with university education use the Internet much more widely. This fact, in turn, means that they have many more relatives who use the Net.

A similar situation may be observed in the case of the factor relating to the size of the place of residence. 25% of the Internet users who live in cities of over 500,000 inhabitants contacted their families during the last week, while among those who live in the country or small towns (less than 20,000 inhabitants) the percentage was 17%.

⁴⁴ 65% of all Internet users declare that they communicate with their friends via the Net.

⁴⁵ What we mean here is the variety of the groups contacted via the net.

⁴⁶ This dependence does not apply to Poland only. The Pew Internet & American Life Project (2000). *Tracking online life: How women use the Internet to cultivate relationships with family and friends*. URL: <http://www.pewinternet.org/reports/>

7.6.7.2. *Contacts with co-workers*

27% of those who used the Internet during the last week contacted their co-workers via the Net. The percentage was higher among men (29%) than among women (25%). This is another result confirming differences observed in other countries (Boneva, Kraut, Frohlich, 2001). Besides, the Internet is used for this purpose more often by older Internet users (from 30 to 45 years old) and those with higher incomes.

Contacts with co-workers are more frequent among people who use the Internet more intensively, people with better education and living in bigger towns or cities. The Internet was used for communication with co-workers by 45% of the Internet users with a university degree, by only 18% of those with vocational education, by nobody with primary education, by 31% of the Internet users living in bigger towns or cities and by 19% of those living in the country. The Internet users working in private sector contacted their co-workers more often (47% during the last week) than the self-employed (40%) and those working in the private sector (38%).

7.6.7.3. *Contacts with friends and acquaintances*

45% of those who used the Internet during the last week contacted the friends and acquaintances whom they had met outside the Net. These were mainly young people (up to 35 years old) and rather men (48%) than women (42%). Education was not an important factor here though the largest percentage of the Internet users who communicated with their friends and acquaintances is among those with primary education (56%). Besides, the Internet is used for this purpose mainly by students (55%) and pensioners (57%).

The Internet was used for this purpose much less frequently by the retired (during the last week it was 25% of the users only). It may result from the fact that there are only a few of their friends who use the Internet at all. The situation in this respect is different in the US, for example, where the number of retired Internet users has already exceeded the "critical mass" and is still increasing. It results from the fact that it is quite easy there to meet other retired people on the Net, to cultivate old relationships and to develop one's interests⁴⁷. In Poland the number of the retired Internet users is still very small and that is why they can feel alone on the Net - apart from their family they have nobody they could contact.

Another factor that determines the frequency of contacts with friends is the size of the place of residence. In cities of over 500,000 inhabitants, 53% of Internet users communicate with their friends via the Net; in the country only 35% do. This result is connected with the fact that there are many more Internet users in big cities and so there are many more people they can communicate with. What is more, from a certain point this dependency is a "driving force" of the increase in the number of the Internet users. Somebody whose friends and acquaintances are Internet users has stronger motivation for becoming another Internet user.

7.6.7.4. *Contacts with people who at present cannot be contacted in any other way*

21% of the Internet users (24% of those who used the Internet during the last week) used the Internet to contact friends and relatives who cannot be contacted in any other way. These were mainly young people living in bigger towns or cities (28% of those living in big cities and 18% of those living in the country). There are more such people among men (26%) than among women (22%).

It is people using the Internet at home rather than those using it in other places who employ the Internet for maintaining communication with people that cannot be contacted in any

⁴⁷ An additional motivation for using the Internet by the retired in the USA is a large quantity of materials - Web pages and discussion groups - dealing with health and different forms of support for the aged, which is still not popular in the Polish Internet.

other way. Besides, people who have used it for a longer time more often employ the Internet for such a purpose.

7.6.7.5 Contacts with people met on the Internet

21% of people who used the Internet during the last week contacted people whom they had met on the Net. This was 23% of men and 18% of women. The Internet was more often used for this purpose by younger people and those living in households with lower incomes.

Students are more willing to meet new people on the Internet than average users. During the last week 33% of students aged 16 and over contacted people met on the Net. Among people who are not studying any longer, it is those with a lower education who more often contact people whom they met on the Internet. The Internet was used for this type of communication by 44% of people with primary education and by only 13% of people with secondary or university education.

The size of the place of residence was not an important factor here though people living in towns of more than 200,000 inhabitants maintain such relationships less often (18%) than those living in smaller towns (23%). In the case of Internet contacts with people whom an Internet user knows from outside the Net, it favors those who have a bigger chance of finding their friends or acquaintances there, i.e. people living in bigger towns or cities. In the case of meeting new people on the Net, access to relatives and friends is not really important. On the contrary - probably people living in smaller towns, who have less chance of finding old friends and acquaintances on the Net, are more willing to meet new people.

7.6.7.6. Contacts with people of similar interests

Among those who used the Internet during the last week it was rather young people (17%) who contacted Internet users of similar interests more often. These were men (21%) rather than women (14%). The size of the place of residence and education were not important here; in all the groups the frequency of contacts with people of similar interests was more or less the same.

7.6.7.7. Relation of a communicative tool to the type of social contact

One can communicate with other people via the Internet in many ways. Each of them has its advantages and disadvantages and is used for slightly different purposes. The basic ways of communicating with other people are the following:

- Electronic mail (e-mail) is the most often used form of contact with other people via the Internet. It is asynchronous communication - it enables the exchange of letters that can be answered at any time and the time for answering is not limited. The exchange of e-mails is possible between people who know each other's addresses, that is people who have contacted each other before in another way. One can send a message to many people at once.

- Instant messengers (e.g. ICQ, gadu-gadu) enable mainly synchronous communication. In order to communicate with a person one should know their identification number.

- Chats and IRC, i.e. synchronous communication. Though the chat rooms in chats and IRC channels are usually connected with a certain topic, communication often concerns other subjects. The chats take place either on the common channel, where all those present take part in the conversation, or on private channels, which enable communication with some people only.

- Fora and discussion groups are a type of asynchronous communication. The fora and groups are devoted to particular subjects and straying from the subject is not accepted. Quite often the fora are a communication tool for some interest groups or professionals.

- One can also contact other people via Web pages (e.g. blogs, private pages, comments written in blogs or by the texts published on news pages).

There are considerable differences between the types of communication used in these various environments. The communication requirements and psychological conditions are quite different in the case of synchronous communication, where one has to answer immediately, and in that of asynchronous communication, where one can answer at any time (Joinson 2003). In addition, various communication tools help users to meet new people and contact those already known in various ways.

Based on our survey only, we cannot determine precisely what kind of communicative tool is used for a particular type of communication. We can try, however, to check what tools are used by people who contact different groups of people. Table 29 shows the ways of communication used by people contacting others via the Internet.

Table 7.29. Relation of contacts to the communication tool used.

type of contacts	communication tool used			
	electronic mail	Instant messengers	chats	fora and discussion groups
family	yes	yes		
co-workers	yes		no	yes
acquaintances from outside of the Net	yes	yes		
people who cannot be contacted in any other way	yes			
people met on the Net	yes	yes	yes	
people of similar interests				yes
boyfriend/girlfriend		yes		

People communicating with family use mainly electronic mail and instant messengers . In both types of communication (synchronous and asynchronous) one needs to know the other person's address or identification number so these are rather forms of private contact.

People contacting their co-workers via the Internet usually use e-mail and they also participate in fora and discussion groups. The latter may be a communication tool used within a company but they may also constitute a source of professional knowledge and contacts connected with work.

Communication with people who could not be contacted in any other way was done mainly by means of e-mail. Browsing through Web pages was also important here. It may, partly at least, result from the fact that many of those who have gone abroad for a long time create their own Web pages or blogs. Such pages enable the transfer of information about a given person and their situation; what is more, they enable the person to create one message for everybody so that he or she does not have to write separate messages, usually containing the same information, to different friends and relatives.

Communication with people met on the Internet was done by means of e-mail, instant messengers and chats. It is worth mentioning here that the most popular place for meeting new people is chats; e-mail and instant messengers are used later. Meeting new people by instant messaging is also possible but e-mail is used as a tool for the first contact only when the address of a given person can be found on the Internet. Quite a lot of people who have their own Web pages or blogs put their e-mail addresses or communicator numbers there, enabling others to contact them.

Contacts with people of similar interests are made by means of fora and discussion groups dealing with these interests.

Contacts with boy- or girlfriends were connected with instant messaging communicators use only.

7.7. Internet and computer use among children

A very important issue connected with the technological changes occurring nowadays is preparing new generations to function in rapidly changing conditions (Bolt, Crawford, 2000). In Poland the campaigns for increasing computer and Internet use are limited to using computers at school. The main motivation for buying a computer in the majority of Polish households is the presence of children who attend school. What is the general picture of Internet and computer use among children?

Based on the answers of people who took part in our survey we estimated the amount of time spent by children on the Internet and computer use. Computers are used by almost 60% of children under 16 years old, the Internet is used by 26% of such children. The technology is used more often by boys than by girls. It is worth mentioning here - just for comparison - that only 7% of children at this age have mobile phones. You can find more information concerning this subject in table 7.30.

Table 7.30. The use of mobile phones, computers and the Internet among children

Group of children respondents	Possession of a mobile phone	Use of a computer	Use of the Internet
Total	6.69	59.48	26.24
Gender	6.50	62.10	28.53
Boys			
Girls	6.91	56.38	23.53
Age	1.53	35.91	7.95
up to 10 years old			
11-13 years old	6.40	73.17	35.48
14-16 years old	15.30	70.24	43.37
Place of residence	14.40	64.96	27.34
Cities over 500k			
Towns 200-500k	7.27	58.07	31.16
Towns 100-200k	6.68	70.86	37.25
Towns 20-100k	6.84	60.18	25.16
Towns < 20k	7.08	59.62	24.57
Rural areas	2.33	38.60	14.66
Voivodship	4.80	53.92	25.27
Dolnośląskie			
Kujawsko-pomorskie	4.91	50.68	20.90
Lubelskie	6.95	43.54	22.49
Lubuskie	5.57	71.14	30.97
Łódzkie	4.63	45.52	17.32
Małopolskie	7.96	55.36	25.71
Mazowieckie	9.99	47.95	18.92
Opolskie	12.64	67.14	23.51
Podkarpackie	2.23	45.10	18.30
Podlaskie	4.59	61.59	27.11
Pomorskie	3.24	65.93	29.11
Śląskie	5.73	59.50	22.95
Świętokrzyskie	3.34	31.94	12.41
Warmińsko-mazurskie	1.92	50.17	17.64
Wielkopolskie	5.37	53.46	24.17
Zachodniopomorskie	5.73	50.20	25.89
Income per capita	2.48	38.81	14.02
First quartile			
Middle 50%	8.37	65.22	30.71
Forth quartile	18.06	76.91	40.82

Computers are used much more often by teenagers (over 70%) than by younger children. Teenagers also use the Internet more often.

According to their parents' estimation, children who use a computer spend about 9½ hours on it per week. On average, boys use computers much longer (11 hours) than girls do (7 hours and 45 minutes) (more information in table 7.31). Computers are used more often by children living in bigger towns and cities (children living in towns of 100,000 to 200,000 inhabitants use them for the longest time - over 13 hours per week), and least often in the country where fewer children have access to computers (on average they use computers for only 7 hours per week). Children aged under 10 use a computer for 4 hours less per week.

Table 7.31. Intensity of computer use among children

Group of children respondents	Intensity of use						
	average number of hours	up to 2 hours (%)	2 to 5 hours (%)	5 to 10 hours (%)	10 to 20 hours (%)	20 to 40 hours (%)	over 40 hours (%)
Total	9.52	22.55	21.57	31.49	14.36	7.61	2.41
Gender	10.95	17.97	20.94	31.14	17.18	9.43	3.34
Boys							
Girls	7.72	28.31	22.37	31.94	10.82	5.31	1.25
Age	7.62	29.04	26.02	29.54	7.56	6.44	1.39
up to 10 years old							
11-13 years old	9.43	22.81	21.66	31.46	14.10	7.53	2.44
14-16 years old	11.69	18.25	17.61	30.40	21.91	8.13	3.70
Place of residence	12.44	18.73	20.92	28.33	15.37	10.53	6.13
Cities over 500k							
Towns 200-500k	12.79	15.04	18.56	25.42	26.19	10.51	4.28
Towns 100-200k	13.30	20.21	15.99	27.85	17.06	14.38	4.51
Cities 20-100k	8.78	19.50	22.83	37.80	13.26	5.21	1.40
Towns < 20k	9.51	22.77	22.35	26.78	17.41	9.14	1.55
Rural areas	6.90	31.64	23.37	31.07	9.70	3.18	1.04
Voivodship	9.79	23.24	23.69	26.42	13.41	11.59	1.65
Dolnośląskie							
Kujawsko-pomorskie	8.98	33.23	20.36	21.92	12.78	10.34	1.36
Lubelskie	9.72	19.11	14.84	34.28	21.27	10.50	0.00
Lubuskie	9.31	13.62	16.41	50.13	13.83	6.02	0.00
Łódzkie	8.34	27.35	28.21	33.03	6.86	0.00	4.55
Małopolskie	7.93	20.45	30.94	33.87	7.74	6.01	0.99
Mazowieckie	10.27	20.61	23.59	28.69	14.73	8.90	3.47
Opolskie	8.85	11.41	34.09	34.04	14.64	3.83	1.98
Podkarpackie	9.33	23.33	11.08	35.94	23.34	6.32	0.00
Podlaskie	11.57	20.72	18.81	31.25	17.25	6.87	5.10
Pomorskie	8.66	21.25	24.75	29.77	16.87	5.33	2.03
Śląskie	13.14	22.84	21.48	22.37	15.09	12.91	5.30
Świętokrzyskie	8.18	13.69	31.12	37.98	6.44	10.78	0.00
Warmińsko-mazurskie	5.65	35.94	26.47	26.39	7.39	3.81	0.00
Wielkopolskie	8.63	26.29	10.73	38.67	19.84	2.33	2.14
Zachodniopomorskie	12.48	33.81	9.91	20.03	21.79	6.31	8.15
Income per capita	7.58	32.00	21.06	29.01	11.55	5.35	1.03
First quartile							
Middle 50%	10.66	15.40	20.75	35.87	17.52	7.32	3.14
Forth quartile	13.79	18.12	22.11	22.10	15.46	16.77	5.44

The use of a computer at home is connected with the income of a household. Children living in households where income per capita is higher than the average use a computer much more often. Those whose families belong to the highest quartile of income per capita use a

computer for almost 14 hours per week. Children from the households of the lowest income, on the other hand, use a computer for only 7½ hours per week.

As many as 81% of children who, according to their parents, use a computer, have a workstation at home. This enables them to use a computer much more intensively. According to their parents' estimation the children use their computers almost for 11 hours per week, while children who use a computer outside their home spend almost three times less time on it.

According to their parents' estimation children using the Internet spend about 2 hours and 25 minutes on it per week; boys use the Net slightly longer but the difference between boys and girls is not big - it is about 20 minutes (more information in table 7.32). Considering other variables we may state that the difference is not significant.

75% of children using computers use the Internet as well. Only 46% of them, however, do it at home. As one can expect, access to the Internet at home is connected with its longer and more frequent use. Children who can use the Internet at home do it for about 4 hours per week while those who do not have such a possibility use the Net only for about an hour and 20 minutes per week. There is also a big difference in the duration of the Internet use in relation to the kind of connection used in a household. Children in houses where the connection is realized by means of a modem use the Net for about 2½ hours per week, and those who have a broad-band Internet connection use the Net for almost 8 hours per week. About 30% percent of children who use the Internet at home have a broad-band connection.

What is interesting, is that the amount of time spent by children using the Internet is closely related with the amount of time spent on computer use. Each hour of Internet use means about one hour and 9 minutes of additional computer use. One may conclude then that the Internet use increases the general amount of time spent on computer use, not only by the time spent on the Net but also by additional time of computer use.

As many as 19.7% of people living in households where children use computers but do not have access to the Net say that they do not want the access because of the "harmful influence" of the Net.

3% of parents are really worried about "how and how often a child uses a computer (and the Internet)". 13% of them are quite concerned, 14% have problems with evaluating the way in which children use the new technology. Most parents (70%) are satisfied and every fifth parent says that they are very satisfied.

What are the factors influencing the evaluation of the computer and Internet use among children? The most important one is the gender of a child ($\beta=0.287$; $p<0.001$). Generally speaking the interviewed parents are more satisfied with girls who use computers. It is probably the result of the fact that girls and boys use computers in different ways.

Another important element is the age of a child ($p=0.012$). The older the child, the less satisfied the parent is, that they use a computer. In this case it may also result from the way in which a computer is used - for example time spent on computer games.

Still another factor is the number of hours a child spends on computer use ($p=0.022$), though it does not matter if the time is spent on the Internet or not. Generally speaking, the more time a child spends on computer use the more concerned the parents are.

In what way does computer and Internet use among children influence their educational chances? We checked what the estimation of chances for attaining the demanded education level depends on. Most respondents believe that it is girls who have a better chance ($p<0.001$) as well as younger people ($p=0.012$). The latter factor, however, is not really important and it probably results from the respondents' own expectations rather than from the real situation. It is connected with uncertainty caused by the longer period of attaining the demanded education level by younger children.

Table 7.32. Intensity of Internet use among children

Group of children respondents	Intensity of use						
	average number of hours	up to 2 hours (%)	2 to 5 hours (%)	5 to 10 hours (%)	10 to 20 hours (%)	20 to 40 hours (%)	over 40 hours (%)
Total	2.41	80.12	9.48	7.00	1.69	1.41	0.30
Gender	2.55	78.35	11.12	6.72	1.73	1.87	0.22
Boys							
Girls	2.24	82.42	7.34	7.37	1.64	0.82	0.40
Age	1.00	89.60	4.92	4.79	0.36	0.34	0.00
up to 10 years old							
11-13 years old	2.59	79.01	11.75	4.97	2.23	1.78	0.26
14-16 years old	3.91	65.92	16.76	10.53	3.62	2.67	0.51
Place of residence	3.26	72.05	11.57	8.66	4.64	3.07	0.00
Cities over 500k							
Towns 200-500k	4.67	64.21	9.11	13.90	7.94	4.20	0.63
Towns 100-200k	4.43	64.09	18.08	9.51	3.18	4.05	1.09
Towns 20-100k	2.32	76.89	15.14	5.09	1.32	1.55	0.00
Towns < 20k	1.78	79.06	14.70	5.65	0.00	0.59	0.00
Rural areas	1.66	87.19	6.91	5.24	0.30	0.00	0.36
Voivodship	3.03	64.57	19.91	13.34	0.00	2.17	0.00
Dolnośląskie							
Kujawsko-pomorskie	1.37	86.66	7.71	5.63	0.00	0.00	0.00
Lubelskie	2.53	76.19	11.99	4.82	6.99	0.00	0.00
Lubuskie	1.80	74.05	18.32	7.62	0.00	0.00	0.00
Łódzkie	1.41	85.03	10.12	4.85	0.00	0.00	0.00
Małopolskie	1.98	80.52	11.46	5.78	1.10	1.14	0.00
Mazowieckie	2.28	79.28	10.47	6.34	2.64	1.28	0.00
Opolskie	0.78	95.33	2.28	2.40	0.00	0.00	0.00
Podkarpackie	3.74	73.64	10.19	12.24	2.04	0.00	1.89
Podlaskie	6.16	63.07	10.43	13.24	5.34	5.28	2.64
Pomorskie	1.95	74.53	12.74	10.48	2.25	0.00	0.00
Śląskie	3.25	75.55	11.47	5.71	2.88	4.39	0.00
Świętokrzyskie	0.98	95.06	4.94	0.00	0.00	0.00	0.00
Warmińsko-mazurskie	1.74	81.72	12.27	2.99	3.02	0.00	0.00
Wielkopolskie	3.64	64.63	19.57	9.90	1.92	3.99	0.00
Zachodniopomorskie	5.91	73.92	6.34	4.44	6.54	6.52	2.24
Income per capita	2.36	81.72	9.48	5.06	2.29	0.94	0.50
First quartile							
Middle 50%	2.34	75.44	13.97	7.65	1.80	1.14	0.00
Forth quartile	5.12	63.81	13.65	12.11	2.83	6.62	0.97

It is quite interesting that the factor which turns out to be very important for the estimation of educational chances is the number of hours that a child spends each week on computer use ($p < 0.001$). Internet use is also important ($p < 0.001$) though the number of hours spent on it is not taken into account as a separate factor. Summing up, one can state that in the respondents' opinions, using a computer has a positive influence on the chances of attaining the required level of education. Using the Internet has a similar effect.

The results are almost identical if we analyze the estimation of chances for attaining university education.

7.8. Consequences of computer and Internet use

The analyses presented so far concern mainly the conditions of computer and Internet use. These issues are important because of the hazards connected with the problem of "digital divide". There

are whole social groups and categories that can be permanently deprived of the chance of using the new technologies and employing them for work, studying, making and cultivating social contacts and, generally speaking, increasing their chances of success in life.

Another problem, as important as the conditions of Internet and computer use, is the consequences of this use (DiMaggi et al., 2001). The effects of the widespread use of the global Net are visible not only on the level of individuals – a person's psychology, interpersonal relations, material status (Wallace, 2001; Wellman 2001, 2001a; Joinson, 2003). The Net also changes communities, institutions, companies and the state (Rheingold, 1993; Castells, 1997, 2001; Wilhelm, 2000).

New technologies, like all inventions, can be used in a good, beneficial way as well as in a bad way, which presents a hazard to the individual (Joinson, 2003). A good example of such negative consequences is addiction to the Internet, which causes a deterioration of relationships with other people, higher levels of depression (this effect was presented in the first studies of Internet use made by Kraut et al., 1998), problems with identity (Turkle 1996, 2001).

We cannot determine precisely the consequences of Internet use on the basis of our study alone, as there were no questions concerning computers and the Internet in the first stage of the survey conducted in the year 2000. That is why in our analyses we will use information given by the respondents (information concerning the time they started to use the Internet). On the basis of this data we will compare the changes in the situation of people surveyed in 2000 and 2003, both those who used the Internet during this time and those who did not. The situation of households will be compared on the basis of information concerning the time spent on Internet use and the question about computer possession asked in the year 2000. More precise analyses will be possible after the same people have been surveyed again some time in the future.

7.8.1. The importance of possessing a computer at home

The possibility of Internet use at home increases the life chances of a household's members. It enables them to gain additional knowledge and information needed to work. It can also facilitate contact with various people and meeting new people. The results of our study indicate that the longer a household has access to the Internet, the higher its income is in relation to households, which do not use the Net.

Income increases faster in households with Internet access. From 2000 to 2003 income in households without Internet access increased by 68 PLN per capita. Every year of Internet use in a household means 30 PLN more per capita in the household.

Households equipped with a computer and Internet access much more often declare that their situation has improved during the last three years. Material status improved in 13% of the households possessing a computer (worsened in 44%) and in only 5% of the households, which do not have a computer (it worsened in 57% of such households). Material status also improved in 15% of the households with Internet access. In most cases these were households, which have had the access for a short time. However, the possession of Internet access is not statistically significant if we take into account the differences concerning income per capita in the households.

What is interesting, is that in most households equipped with a computer, there was also an improvement in the satisfaction of cultural needs and income.

7.8.2. The importance of Internet use for individuals

7.8.2.1. Hazards to the new Internet users' well-being

Some of the earliest and most famous studies concerning the consequences of Internet use implied that almost all of these consequences are negative (Kraut et al., 1998). Participants in the experiments, surveyed at various intervals, got more and more depressed, their social relationships deteriorated, they felt more and more alone and stressed. However, later studies showed that these are only short-lived consequences, that they concern new Internet users only (Kraut et al., 2001), and that they decrease as the Internet users gain new Internet skills (LaRose et al., 2001).

The results of *Social Diagnosis 2003* confirm the observations of the American scientists. People who have just started to use the Internet have many more depression symptoms than they had 3 years earlier. The change is significantly different from the change in situation of people who have used the Net for a longer period ($p < 0.05$) and people who do not use the Internet at all ($p < 0.1$).

In comparison with the year 2000 new Internet users are also less satisfied with their life achievements. This decrease is significantly bigger than among people who have used the Net for some time already.

7.8.2.2. Social relations

It is interesting to observe the way in which Internet use influences the quality and quantity of social relations. Does it help the Internet users increase the number of their acquaintances and facilitate communication with old friends? Or does it destroy the old relations? Is it true that because of Internet use, people have less time for contacts with family and friends?

Among people who had started to use the Internet two or three months before the survey took place, satisfaction with relationships with friends and family lessened in relation to the satisfaction declared in the year 2000. At the same time the change among people who had used the Internet for a longer time was definitely smaller⁴⁸. Thus people who are just starting to use the Internet feel that their social relations are deteriorating⁴⁹. These results are in accordance with HomeNet research (Kraut et al., 1998).

This deterioration of social contacts does not last long, however. There are no significant differences between people who have used the Net for a longer period and those who do not use it at all. Thus one can state that in the long run the Internet does not influence relations with family and old friends. This was also the conclusion of the successive researches conducted by Kraut and his team (Kraut et al., 2001). Besides, the research confirmed that the only negative effect connected with Internet use is greater stress. Those surveyed declared that from 2000 to 2003 they had significantly less stressful events than before. However the decrease was smaller among Internet users than among those who did not use the Net ($p < 0.001$).

The very fact of using the Internet does not change in any way the number of friends or acquaintances. People using the Net declare that they have more friends than the others but this results from other factors (e.g. age). We do not observe any relation between the change in the number of friends and the fact of Internet use or the amount time it has been used. The number of friends increased between 2000 and 2003 both in the case of those who did not use the Internet and those who started to use it at that time. Summing up, one can conclude that using the Internet does not worsen social relations and does not change the number of friends. There are no significant differences even in the case of those who met new people via the Internet. It may

⁴⁸ However, because of a small number of people who have just started to use the Net the results are statistically on $p < 0.1$ level.

⁴⁹ One should add here that the new users, unlike the ones with more experience, are less satisfied with their children.

mean that relations established on the Internet are not lasting — one should call them acquaintanceships rather than friendships.

It may be also interesting to check what kind of people meet others on the Net; whether they have more or less friends; whether the Internet is a cure for the lonely or if it is rather used by those who have better contacts with other people anyway. It turns out that the Internet users who have met somebody on the Net have many more friends than those who have not met anybody there. It implies that it is rather extroverts who make contacts on the Internet. As Kraut noticed, people who have more friends in general are also more inclined to meet new people on the Net (Kraut et al., 2001). One should emphasize here, however, that making contacts via the Internet does not mean the increase in the number of friends.

7.8.2.3. *Personal income*

There has been a considerable increase in the income of households of people who have used the Internet for some time already. This confirms that the Internet use helps improve the users' life situation.

7.9. Formation of an information society in Poland and hazards to the process

Plans and campaigns, which aim to create an information society in Poland, should take into account not only the development of the infrastructure, the computerization of various institutions and better access to on-line administrative services. What is equally important is a human factor - whether Polish citizens have access to the new technologies and how they can use them.

The present situation engenders misgivings about the way the Polish information society will be formed. The Internet and computer use and access in Poland are still - in comparison with the most developed countries - insufficient. What poses a real threat here is digital divide — depriving a large part of society of the chances given by the new technologies, in other words, a form of social exclusion. It may mean that such people will not be able to participate fully in social life and that they will have more and more problems in everyday life as the economic and social importance of computers and the Internet grow⁵⁰. We can already observe very strong structural conditioning of the use of the new technologies. They are accessible mainly to people who are, in various respects, in better situations - better educated, with a higher income, living in bigger cities.

Another important issue is the possession of skills needed to use a computer and different functions of the Internet. After the issue of accessibility, competence - or rather lack of it - in using this technology is the second type of barrier that may be a cause of social exclusion. Mainly young people who learn easily and for whom the new technologies are more understandable use computers and the Internet. Besides, both computer and Internet skills are dependent on other structural factors, mainly level of education and the place of residence.

Special attention should be given here to the hazards connected with the place of residence. Particularly in the country, but also in small towns, access to computers and the Internet is very limited. It is also more difficult to have faster Internet connection there, and the

⁵⁰ The spreading of new technology may also be a good predictor of types of civic behavior. It turns out that in the voivodship divisions, the degree of computerization and number of mobile phones correspond to a great extent with turnout (but not with the number of votes in favor of accession) at the last EU referendum (respectively: $r=0.63$ and $r=0.53$). However, because this indicator of civilisational development depends to a great extent on the level of income, when that level is excluded both correlations become statistically insignificant.

time spent on Internet use is also very limited. The users have less experience and skills. Another factor that decreases the number of users is little or no help from friends and family.

More attention should also be paid to the situation of middle-aged people. The older people are, the fewer of them want to use computers and the Internet; the older users are also less skilled in using these technologies. Quite often such people just cannot follow the changes in the technologies use, and they also just do not know where they could learn to use them. Popularizing the computer and Internet use and teaching middle-aged people new skills is very important if they are to participate fully in social life and be present on the labor market.

It is quite probable that in the future these huge differences between particular social groups will diminish and disappear, as happened with differences between men and women in respect to computer use. An important limiting factor relating to the increase in the number of Internet users is the high cost of the Net use.

A gradual popularization of computers and the Internet may be insufficient to solve the problem. We should also remember the importance of technical skills connected with new technologies and providing widespread access to the Net as this will enable us to realize the potential presented by the development of the information society.

8. SOCIAL EXCLUSION

8.1. The concept of social exclusion

Janusz Czapiński

In recent years the attention of the EU politicians and intellectuals has shifted from the problem of poverty to the more general phenomenon of social exclusion. It has become the subject of much scientific research (e.g. Gallie and Paugam, 2002; Hills, Le Grand, Piachaud, 2002; Matheau, 1999), conferences (e.g. European Commission, 1995) or of official documents issued by the European Commission and EU Summits in Lisbon and Nice. The Lisbon Summit, which took place in March 2002, recognized struggle against poverty and social exclusion as the strategic aim of the Council of Europe policy (basing on articles 136 and 137 of the Amsterdam Treaty). The Open Method of Co-ordination that was established there was developed during the Nice Summit and gave basis for a common plan concerning poverty and exclusion and for the project of regular monitoring of the exclusion phenomena based on indicators accepted by all the EU member countries.

The notion of social exclusion has been controversial since it was invented and as it gets more and more popular among the scientists and politicians it also gets less and less precise. There is no definition of the notion that could be generally accepted, even a very general one. Some say that it refers to all the cases of incomplete participation in important aspects of social life, others limit it to involuntary forms of incomplete participation (or no participation) only. Some relate it to structural and institutional barriers violating the rules of social justice and restricting the social rights of individuals, others speak rather about isolation or self-isolation of certain social groups (e.g. youth subcultures, immigrants, religious minorities), about lack of proper education or about disability, still others emphasize the role of changeable cultural and civilisational factors such as erosion of family ties, rapid development of technology responsible for the unemployment increase, decrease of the social capital (mutual trust), wrong social and economic policy of a given country. Some treat the notion as a macrosocial phenomenon (the exclusion is determined by the criteria of social categorization - e.g. disability, criminal record, unemployment, place of residence, age, income, being a member of a minority), others as an individual phenomenon (here the exclusion is a consequence of a person's weaknesses, motivation, intellectual and personality traits, character).

The birthplace of the modern notion of social exclusion is France (Helene Riffault and Jacques-Rene Rabier — the first research programme *The perception of poverty in Europe* in 1976: Riffault, Rabier, 1977) but the notion made a true career in Great Britain (CASE - Centre for Analysis of Social Exclusion, in London School of Economics, founded in 1977); some emphasize its similarity to the Marxist notion of alienation. "European" social exclusion is also regarded as equivalent to the American *underclass* (the USA) or marginalisation (South America).

The aim of all the European programmes of struggle against social exclusion is "social integration" on the level of a region, country or the whole EU.

According to the leading researchers on social exclusion (e.g. Chiary Saraceno from Turin University, 2001; L. Mejer from Eurostat, 2000; Kitty Stewart from CASE, 2002) this phenomenon is multidimensional (poverty or unemployment are only two of the potential but not necessary or sufficient conditions of the exclusion), dynamic and not static (e.g. prospects for getting employed are more important than the present state of unemployment) and relational and not structural (participation, motivation, involvement, social relations and not a static level of income or basket of basic goods).

The exclusion may concern work, consumption, and participation in culture, in local community life and in politics.

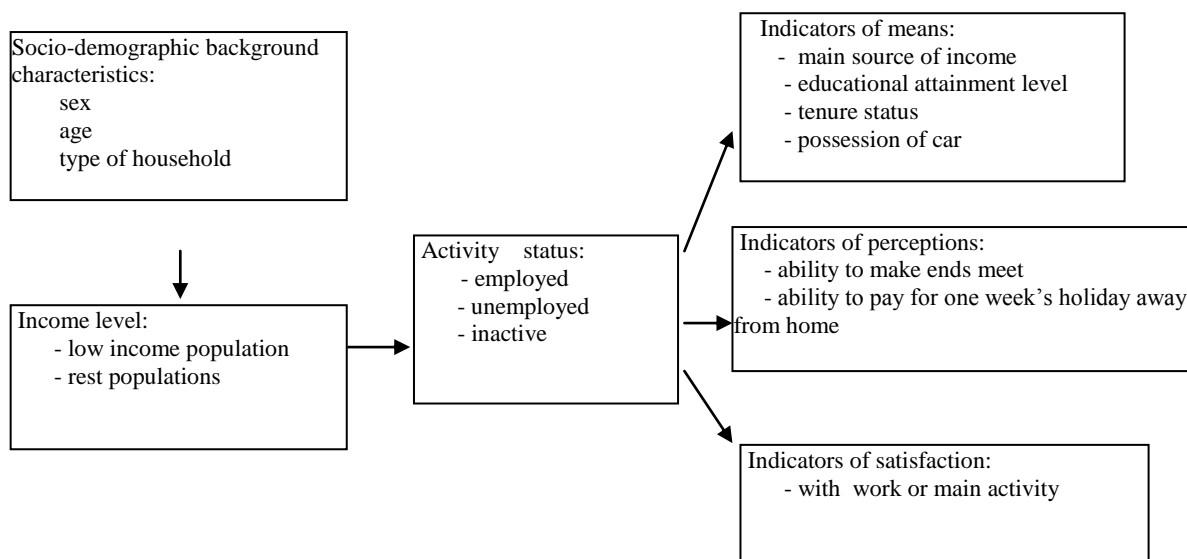


Figure 8.1. Framework for analyzing social exclusion in the EU countries (Mejer, 2000).

Most studies concerning the social exclusion as well as most of detailed programmes of struggle against this phenomenon concentrate on:

- analyzing and decreasing/preventing unemployment,
- analysis of poverty and income inequalities and social welfare programmes (indexes of subjective and objective poverty; objective index of the risk of poverty in the EU from 2001; under 60% of median in distribution of households' weighted income — the first adult = 1, other members aged 14+ = 0.5, children under 14 = 0.3),
- problems of the handicapped,
- sources of homelessness and homelessness prevention,
- children's situation (inheriting the exclusion),
- social rights of particular social groups with special regard to minorities (especially immigrants),
- regional policy,
- post-penitentiary ministrations,
- youth criminal groups and subcultures.

According to most of the studies, the most important factor in preventing exclusion, both on the individual and social level, is education including on-going improvement of qualifications (permanent education).

The groups which are particularly endangered by social exclusion in Poland are those who live in the country, children of large (having many members) families, the unemployed (high index of permanent unemployment), the aged, people with poor education and those deprived of access to modern communication media (the Internet, digital TV).

Poland in general is characterized by the high risk of exclusion within the EU.

8.2. Poverty and income inequalities

Tomasz Panek

8.2.1. The method of measurement and analysis

8.2.1.1. Assumptions of the poverty analysis

Defining the category of poverty is the first and the key step on the way to measuring its incidence and depth. The choice of a particular poverty definition is of fundamental importance for getting the results of the poverty measurement (Hagenaars, 1986). It may depend on the definition which group of a society will be regarded as the poor. It is also the poverty definition and measurement methods that influence programmes formed by the social policy whose aim is to limit poverty.

The actual differences in evaluation of the poverty incidence and depth and, as a consequence of these, divergences concerning the policy of limiting poverty are caused by the lack of a precise and generally accepted definition of the phenomenon. Besides, the category varies in relation to time and a region (Sen, 1983).

In all the definitions present in the literature of the subject poverty is connected with the fact that some needs are not satisfied to a demanded degree (Drewnowski, 1977). Definitions formed in the literature of the subject are so general that they do not raise controversy and are generally accepted. However, this acceptance results from the fact that they omit most controversial issues, i.e. which needs should be regarded as basic ones and what degree of their satisfaction should be regarded sufficient.

This analysis uses so-called financial definition of poverty (Panek, 2003). Poverty is defined here as the situation in which a household does not possess enough money to satisfy its needs. Thus the analysis does not include problems connected with the deprivation of the chances for the satisfaction of the needs of a household, which is caused by the lack of resources gathered so far, and it does not include sociological and cultural aspects causing social exclusion.

On the basis of the poverty definition accepted here it was assumed that the basic measure of the material standing of a household is its current available monthly income divided by the equivalence scale calculated for the household. The income estimated in this way is called available equivalent income.

Equivalence scales are the parameters that enable comparing income of households of various characteristics with the poverty line estimated for the household, which is the reference point here (so called "standard household" with equivalence scale equal to 1). Equivalence scale for a household of a given type shows how many times its income should be bigger (or smaller) if it is to reach the same level of consumption (identified with a degree of satisfaction of needs) as the standard household. A household (and thus all its members) is considered poor if its available equivalent income is lower than the poverty line.

There were two complementary approaches used in the analysis: objective and subjective ones (Panek, Podgórski, Szulc, 1999). The terms "subjective" and "objective" should not be connected with the degree of arbitrariness of the criteria used for the measurement of the poverty incidence and depth. In either of the measurement method there are certain arbitrary assumptions. In case of the objective approach the poverty line is determined by experts, independently of personal evaluation of the household members. In the subjective approach the poverty line is determined also with regard to the opinion of the household.

8.2.1.2. Identification of the poverty sphere

Objective approach

In the objective approach the poverty line is defined as adjusted minimum income, estimated by the Institute of Labor and Social Affairs, for a single-person employee household. The poverty line for all other types of households was defined as the product of minimum income and corresponding equivalence scale.

The level of the minimum income is the same as the value of basket of consumption goods defined for a household of defined social and demographic parameters. The contents of the basket should secure such living conditions for the household that will enable it not only to reproduce its stamina and to have children but also to maintain its relations with a society (Demiszczuk, Sajkiewicz, 1996).

Minimum income has been calculated on the basis of the same basket of goods for several years already. The accepted solution ensures comparability between individual years. At the same time, however, the structure of the basket (structure of the consumption expenses) established several years ago is not the same as the present structure of the expenses of households with available income approximating the value of the social minimum. Thus the actual value of the minimal income was increasing in the 90's much faster than the consumer price index, what led to considerable overestimation of the minimum income value. Overestimating the value of the minimum in successive years necessitated correction of the minimum. Finally the poverty line was defined as the value of minimum income from 1990 restated in real terms for 2000-2003 by using the consumer price indexes calculated on the basis of household's expenses structure for households with disposable income approximating the value of the social minimum.

Subjective approach

In the subjective approach the poverty line was defined by the method of a subjective poverty line (Goethart, Halberstadt, Kapteyn and Van Praag, 1997). In this method households define the lowest level of income necessary to make ends meet, and that level is regarded as their poverty line. The estimates relating to the income, made by particular households, depend mainly on their size (number of members) and their actual income.

The dependency 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 members of the household

y - the actual income of the household

y_{\min} - the lowest level of income necessary to make ends meet, indicated by the household

The parameters of the above regression function, estimated on the basis of the least squares method, constituted basis for estimating the poverty line for the successive years of research. We determine it as the value of income y^* which put in place of y_{\min} and y fulfils the equation (1). The poverty line (y^*), dependent on the size of a household, is defined on the basis of the following equation:

$$y^* = \exp \frac{\alpha_0 + \alpha_1 \ln x}{1 - \alpha_2} \quad (2)$$

8.2.1.3. Equivalence scales

Objective approach

Equivalence scales assumed in the objective approach were estimated on the basis of a procedure using information about the value of a household's expenses (Szulc, 1995). The procedure takes into account the fact, that households of different content spend their income in different ways. For example, households of young people spend less money on medical services and more money on food than households of older people do. At the same time it was assumed that the consumption structure of a household reflects its real needs.

The household assumed as the reference point was a single-person employee household aged from 30 to 59. Thus the value of the equivalence scale for any other household may be interpreted as the number of "standard" households contained therein (in this case the number of "standard" persons). The equivalence scales were estimated on the basis of the following formula:

$$\ln m_i = \frac{1}{2} \sum_{j=1}^m \sum_{s=1}^n \left[m_{sj} \left(w_{si} + w_{sr} \right) \ln \frac{A_{ji}}{A_{jr}} \right] \quad (3)$$

where:

m_i - the equivalence scale for the i -th household

w_{si}, w_{sr} - the percentage of expenses the i -th household and the r -th household spent on the s -th good or a group of goods; in this case the r -th household is a standard household

m_{sj} - the elasticity of expenses spent on the s -th good in relation to the j -th demographic attribute ($j=1, 2, \dots, m$).

A_i, A_r - vectors of the demographic attributes of the i -th and r -th households

In this study vectors of demographic attributes took into account the number of adult people in a household (i.e. older than 16), number of children (younger than 10 and aged from 10 to 15) and the age of the household head (16 to 29, 30 to 60 and over 60 years).

Parameters m_{sj} are defined by the estimating of the consumer demand model, where the explanatory variables are expenses of a household, number of adults and children in the household and prices of consumption goods. These are interpreted as demographic elasticities of expenses for particular goods. Thus the equivalence scale determined on the basis of the equation (3) is geometric mean of expenses elasticity in relation to demographic variables weighted by the percentage share of expenditures on particular goods in total expenditures.

Subjective approach

The basis for the estimation of equivalence scales in the subjective approach was poverty lines estimated for households with different number of household members in accordance with formula (2). The household assumed as the "standard" household, constituting the reference point (with equivalence scale equal to 1), was a single-person household. The value of equivalence scale for a L -person household is estimated by dividing the value of its poverty line by the poverty line of a single-person household:

$$m_L = \frac{y^* \left(\sum_{i=1}^L \right)}{y^* \left(\sum_{i=1}^1 \right)} \quad (4)$$

8.2.1.4 Aggregate poverty indices.

This study makes use of two aggregate indices providing complementary information about the poverty. First of the indices, estimating the poverty incidence the head count ratio that is the percentage of the households below the poverty line:

$$I_H = \frac{q}{n} \quad (5)$$

where:

q - number of poor households in the population under research,

n - total number of the surveyed households

The index equals 0 when there are no poor households and it equals 1 when all the households are below the line of poverty.

Percentage of the poor does not say anything about the poverty depth in the poor population (it has the same value independently of whether the poor have income approximating the poverty line or approximating zero).

The other index of poverty is the index estimating poverty depth, that is mean, the average relative distance of "welfare" of a poor household (average equivalent income falling on a poor household) to the poverty line. The study bases on the poor income gap index, using the formula proposed by Dalton (1920).

$$I_D = \frac{y^* - \xi \bar{Y}_u}{y^*} \quad (6)$$

where:

\bar{Y}_u - vector of available income of the poor households

ξ - social welfare function.

The social welfare function may be interpreted as the average welfare of the surveyed group of households (in case of Dalton's index these are poor households) identical with average level of equivalent income per household. Using the formula one should define the value of a parameter representing so-called to inequality aversion. In this study this parameter's value assumed equals zero (so-called anti-egalitarian variant). It means that when estimating the value of the index we do not take into account any inequalities concerning the levels of equivalent disposable income earned by the surveyed households. It results from the fact that it is difficult to estimate the value of this parameter in a rational manner; besides the poverty indices in this study were supplemented in the research with inequality indices.

The value of social welfare function in the anti-egalitarian variant equals mean weighted equivalent income of poor households where the weights are the equivalence scales of these households.

If, for example, the value of Dalton's index equals 0.2, the average welfare of a group of poor households is 20% lower than the poverty line. Dalton's index equals 0 when there are no poor households in the surveyed community, and it equals 1 when the income of all the poor households equals zero.

8.2.1.5. Poverty nature

Using dynamic analyses of poverty phenomenon one should know if the surveyed household belongs to the poverty sphere temporarily only or whether its poverty is chronic in nature (Panek, in print; Rodgers and Rodgers, 1993; Stevens, 1999). It is particularly important in planning these elements of social policy whose aim is to struggle against poverty. This kind of policy should concentrate on counteracting chronic poverty. Determination of the poverty nature is possible only in the panel survey where the same households are observed for several successive periods (years). That is why in this analysis determination of the poverty nature is based on information concerning only those households that took part in both stages of the survey, both in 2000 and in 2003.

Determining the degree of the permanence of the poverty in Poland in years 2000 - 2003 we used transition matrices describing the mobility of households in relation to their poverty status (whether they belonged to the poverty sphere or not) in these two years of the survey. Values on the diagonal of transition matrix show the number of households, which did not change their poverty status for the two years of the survey (i.e. in both compared years they belonged or did not belong to the poverty sphere). Values below the diagonal present the number of the households, which "left" the poverty sphere in 2003, and those above the diagonal present the number of households that „entered” the poverty sphere this year.

Basing on the transition matrix we estimated the mobility indices, which are synthetic measures of the scale of households mobility in relation to the poverty risk (Shorrocks, 2001).

A classic and frequently used index of mobility calculated on the basis of transition matrices is Shorrocks's measure of mobility presented as the following formula (Shorrocks, 2001):

$$S = \frac{n - \text{tr}(N)}{n - 1}, \quad (7)$$

where:

$\text{tr}(N)$ - trace of the transition matrix⁵¹

$N=[n_{ij}]$ - the transition matrix

n - number of the households surveyed

Index (7) assumes values from the range $\left[0, \frac{n}{n-1}\right]$. The higher value of the index the higher mobility of the households.

Decomposing index (7), to expand the analytical opportunities, we derive the equation (Panek, 2001):

$$S = \frac{n - \text{tr}(N)}{n - 1} = \frac{\sum_{i>j} n_{ij} + \sum_{i<j} n_{ij}}{n - 1} = \frac{\sum_{i>j} n_{ij}}{n - 1} + \frac{\sum_{i<j} n_{ij}}{n - 1} = SU^+ + SU^-, \quad (8)$$

The first element on the right side of the equation shows the percentage of the households that climbed out of poverty in the years compared. The second one presents the percentage of

⁵¹ Sum of the values presented on the matrix diagonal, i.e. number of households which did not change their poverty status in the periods compared.

the households that fell into poverty in the surveyed period. The mobility index is complemented by the index of the nature of household's mobility:

$$CM = \frac{\sum_{i>j} n_{ij}}{n-1} - \frac{\sum_{i<j} n_{ij}}{n-1} = SU^+ - SU^-, \quad (9)$$

The value of the index may range from -1 to 1. Positive index value means that there are more households, which climbed out of poverty than those, which fell into poverty. Negative value indicates the opposite situation. The higher absolute value of the index the bigger difference between the two types of flow.

8.2.1.6. Poverty determinants

A popular method of determining the causes of poverty is dividing the surveyed group into smaller groups according to some socio-economic attributes and evaluation of the phenomenon within the groups by means of poverty indices, usually the head count ratio. High value of the poverty index in a certain group of households on one hand, and considerable differences of the value of the same index between particular groups on the other hand, suggest that a given variant of an attribute characterizing the chosen group of households generates poverty.

Estimation of the influence of particular variables on generating poverty independently of other values may be misleading as it does not take into account the linkage between these variables and other variables. For example high value of the poverty index in a group of rural households indicates that living in the rural area generates poverty. However high value of the poverty index for this group of households is a total effect produced not only by living in the rural area but also by other factors (e.g. bigger number of children in the rural households than in the city ones, lower level of the household members' education in comparison with the level of education in city households). Thus in order to determine poverty determinants one must estimate the net influence of particular variables on generating poverty; this requires using multi-dimensional methods of correlations study, particularly multi-variable regression.

Estimating the influence of the features described in the study on the degree of poverty risk one can use probit or logit models (Green, 1997). The dependant variable used in the models is the dummy variable, which equals 1 when a household is in the poverty and it equals 0 in the opposite case.

The probit model may be described in the following way:

$$\Phi^{-1} [p(X)] = \alpha_0 + \alpha_1 X_1 + \alpha_2 X_2 + \dots + \alpha_k X_k + \varepsilon, \quad (10)$$

where:

X - vector of potential determinants of poverty (explanatory variables),

$p(X)$ - probability that a household will enter the poverty sphere (in a defined configuration of potential determinants of poverty)

$\Phi^{-1}(p)$ - inverse cumulative density function of standard normal distribution

ε - random error

The explanatory variables presented in the models as potential determinants of poverty may be expressed, just like the independent variable, by means of dummy variables systems⁵². When estimating the models with dummy variables systems we omit one of the dummy variables (variants of the attribute) in each of the systems in order to avoid collinearity. This means that the parameters standing by the independent variables of the model are relative measures of the risk of becoming impoverished. The higher positive value of the parameter standing by variable (feature variant) the higher risk of entering the poverty sphere by the households characterized by this variant in relation to the households which are presented in the model without the variant of the given attribute. Negative value of the parameter standing by variable (attribute variant) indicates lower risk (in relation to the omitted feature variant) of "entering" poverty.

8.2.2. The results of the poverty analysis zone and of income inequality

8.2.2.1. Incidence and depth of poverty

Poverty indices used in the analyses contain the basic information being the aim of any poverty study. However, because of the conventionality of the notion "poverty line" one should not overestimate the importance of the information presented by the indices. What seems much more important, in respect to the basic aims of the study, are any changes in their value in a given period and their distribution among the distinguished typological groups of households.

The value of adjusted social minimum assumed in the study (constituting the poverty line for single-person worker household) was 563 zlotys (in February 2003). The poverty line for single-person household assumed in the subjective approach was 1099 zlotys. This is almost twice as much as in the objective approach. This means that the aspirations of the surveyed households, concerning their income situation, which would ensure satisfying their needs on a minimal accepted level, are higher than the norms established by experts indicate. It results from the fact that the surveyed households compare their material situation with that of richer households.

According to the objective approach, in March 2003 25% of the households in Poland lived below the poverty line, according to the subjective approach the percentage was 57%. However this data should be regarded as overestimated as most households have tendency to declare their income lower than it is in reality⁵³. The indices of poverty depth equaled 27% in the objective approach and 33% in the subjective one, which means that the poverty zone in Poland is not very deep. The percentage of the poor households in Poland decreased during the last 3 years by over 7% in the objective approach and by over 4% in the subjective one.

The highest percentage of the households living in poverty was to be found among the households living on unearned sources (61% in the objective approach and 87% in the subjective one) and farmers' households (56% in the objective approach and 80% in the subjective one). It was also in these socio-economic groups that poverty was the deepest. The index of poverty depth for the former group of households was 46% in the objective approach and 52% in the subjective one and for the latter group it was 34% in the objective approach and 42% in the subjective one.

In March 2003 as many as 50% (according to the objective approach) of the households with unemployed members lived in poverty (78% according to the subjective approach) while in the group of households without unemployed members the percentage was only 17% in the objective approach and 57% in the subjective one. Also the poverty depth in the former group

⁵² This method is quite often used in practice as it enables the use of quality-type variables as exogenous variables in the model.

⁵³ The index of the declared income underestimation assumed in this study is about 15%.

was much higher than in it was the latter one (the index of income gap of the poor was 34% /objective/ and 40% /subjective/ for the former and 24% /objective/ and 33% /subjective/ for the latter).

In another kind of categorization, i.e. connected with the type of households, the highest percentage of the poor was among households of married couples with many children (53% of them lived in poverty in the objective approach and as many as 78% in the subjective one) and non-family multi-person households (45% of them lived in poverty according to the objective approach and 70% according to the subjective one). The poverty depth in relation to the category of a household type is much less diversified than the poverty incidence. The index of poverty depth had the highest value (33% in the objective approach and 38% in the subjective one) in groups of households of married couples with many children and of incomplete families.

The results suggest a strong influence of the size of the place of living on the poverty incidence. The percentage of households living in poverty in March 2003 increases proportionally to the decrease in the size of the place of living. As many as 37% (in the objective approach) of the rural households had income below the poverty line (in the subjective approach the percentage was 71%).

The differences in poverty depth between various classes of the size of the place of living were not big. It was the rural area that had the highest value of the poverty depth index; 30% in the objective approach and 35% in the subjective one. Thus the rural households were not only threatened by poverty to the greatest extent but their poverty was also the deepest.

According to the objective approach the percentage of the poor households in March 2003 was the highest in *Warmińsko-mazurskie*, *Podkarpackie* and *Kujawsko-pomorskie* voivodships (34% and 32% of the households) and according to the subjective approach the percentage was the highest in *Warmińsko-mazurskie*, *Podkarpackie* and *Lubelskie* voivodships (68% and 67% of the households). The differences in poverty depth in relation to particular voivodships were not big. According to the objective approach poverty was the deepest in *Warmińsko-mazurskie*, *Podlaskie*, *Podkarpackie* and *Łódzkie* voivodships (the value of poverty depth index for these voivodships was 33% in case of the two former and 32% for the two latter voivodships) and according to the subjective approach the deepest poverty was in *Warmińsko-mazurskie* voivodship (the value of the poverty depth index in this voivodship was 37%).

The only socio-economic groups of households where poverty increased during the last three years were self-employed households and households living on unearned sources (almost 5% increase in the objective approach and over 3% and 4% increase in the subjective one). The percentage of poor households in the group of households with unemployed members and income below the poverty line increased by over 3% in the period, while in the group of households without the unemployed it decreased by over 10% during the same period. The only type of households where the poverty incidence increased considerably during the analyzed period - and that only in the objective approach - was the group of non-family multi-person households (increase by over 17%).

In all the classes of the size of the place of living, apart from the cities with 200,000 to 250,000 inhabitants, there was a decrease in the poverty incidence during the last 3 years (both in the objective and in the subjective approach s). In the group of cities with 200,000 to 500,000 inhabitants the poverty incidence increased significantly only according the objective approach. The poverty incidence in the analyzed period increased significantly only in the objective approach in *Dolnośląskie* and *Opolskie* voivodships (by over 5.5% in the former and over 1% in the latter).

The poverty depth during the last three years increased slightly in the objective approach (by almost 1.3%). One could observe a significant increase of the income gap in groups of households living on unearned sources and of the retired households during the analyzed period (by over 8% in the former case and almost 7% in the latter).

A significant increase of the income gap among the poor in this period took place only in the objective approach in smaller cities (from 20 to 100 thousand inhabitants) and in the biggest

cities (by 6% in the former and by almost 3% in the latter case) and in Podkarpackie, Małopolskie, Śląskie, Świętokrzyskie, Lubelskie and Wielkopolskie voivodships (respectively by over 6.5%; by 4%; by almost 4%; by over 3%, and by 3%).

8.2.2.2. Poverty nature

Poverty was permanent in case of most of the households, which took part in both stages of the survey. 57% of the 31.78% (the objective approach) of the households, which were regarded as poverty-stricken in March 2000, belonged to the poverty sphere also in March 2003 (table 8.1). According to the subjective approach permanently poor households constituted as many as 76% of the poor households in 2000 (table 8.2). The largest percentage of the households regarded as permanently poor in the objective approach (i.e. poor in both of the analyzed periods) was among the households living on unearned sources and among farmers (46.9% for the former and 40.1% for the latter). In the subjective approach the permanent poverty had the biggest range among the households living on unearned sources and among the retired (85.6% for the former and 78.3% for the latter).

Table 8.1. Mobility of the households in relation to their presence in poverty sphere in March 2000 to March 2003 period; objective approach

	(%)		
Specification	Poor households in March 2003	Non-poor households in March 2003 r.	Total
Poor households in March 2000	17.76	14.01	31.78
Non-poor households in March 2000	8.89	59.33	68.22
Total	26.66	73.34	100.00

Table 8.2. Mobility of the households in relation to their presence in poverty sphere in March 2000 to March 2003 period; subjective approach.

	(%)		
Specification	Poor households in March 2003	Non-poor households in March 2003	Total
Poor households in March 2000	51.04	16.23	67.27
Non-poor households in March 2000	6.88	25.85	32.73
Total	57.91	42.09	100.00

The incidence of permanent poverty was much bigger in case of the households with unemployed members than it was in case of the households without the unemployed (35.6% vs. 12.6% of permanently poor households in the objective approach and 71.1% vs. 45.2% in the subjective one).

In the objective approach the permanent poverty incidence is the biggest among marriage households with many children and among incomplete families (47.4% in the former and 23.8% in the latter case). In the subjective approach the permanent poverty incidence is the biggest in groups of marriage households with many children (74.3%) and of non-family one-person households (65.3% of permanently poor households).

Most of the permanently poor households live in the rural area and in small towns. According to the objective approach the permanently poor households constituted 29.6% (rural area) and 17.1% (small towns) of all the households in these classes of the size of the place of living. In the subjective approach permanently poor households constituted 66.2% of all the country households and 51.9% of the households living in small towns.

Almost 23% of the households changed their poverty status between 2000 and 2003 according to the objective approach (table 8.3.) What is important, there were many more of the households which left the poverty sphere during the last three years than those which entered it (the difference is over 5%). However, in some groups of households there were more negative transitions ("entering" poverty) than

the positive ones ("leaving" poverty). These were households living on unearned sources, self-employed households, households with unemployed members, non-family multi-person households and those living in the cities of 200,000 to 500,000 inhabitants (tables 8.3 to 8.6).

Similar tendency of the poverty status mobility may be observed in the subjective approach (tables 8.3 to 8.6). The income situation of 16.2% of the surveyed households improved during the last three years to such a degree that they could leave the poverty sphere. The income situation of 6.9% of the households impaired during the period so much that they entered the poverty sphere. The negative changes were more frequent only in the group of households living on unearned sources and in households with unemployed members.

*Table 8.3. Mobility of households in relation to their presence in poverty sphere during the last three years (from March 2000 to March 2003) in socio-economic groups**

Socio-economic group	Indices of mobility							
	Objective approach				Subjective approach			
	S	SU ⁺	SU ⁻	CM	S	SU ⁺	SU ⁻	CM
employees	20.03	12.50	7.53	4.97	27.75	18.77	8.99	9.78
employee-farmers	20.20	17.05	3.15	13.90	17.28	14.35	2.93	11.42
farmers	39.35	22.84	16.51	6.33	16.04	12.63	3.41	9.22
self employed	19.25	8.83	10.42	-1.60	22.86	7.29	15.58	-8.29
retirees	20.82	15.12	5.70	9.42	24.21	19.32	4.90	14.42
pensioners	34.84	20.56	14.28	6.29	14.20	10.55	3.65	6.89
living on unearned sources	25.91	1.52	24.39	-22.87	9.17	4.22	4.94	-0.72
total	22.91	14.01	8.89	5.12	23.11	16.23	6.88	9.36

*Detailed analysis of the indexes - see ch. 3.5.8.5.; SU⁺ - percentage of the households which left the poverty sphere in the given period; SU⁻ - percentage of the households which entered the poverty sphere in the given period; S - the sum of SU⁺ and SU⁻; CM - the difference between the positively and negatively mobile.

*Table 8.4. Mobility of households in relation to their presence in poverty sphere during the last three years (from March 2000 to March 2003) in classes of the place of living**

Class of the place of living	Indices of mobility							
	Objective approach				Subjective approach			
	S	SU ⁺	SU ⁻	CM	S	SU ⁺	SU ⁻	CM
cities: more than 500 thousand inhabitants	15.33	8.34	6.99	1.35	24.74	15.20	9.54	5.66
cities: 200-500 thousand inhabitants	17.04	8.01	9.04	-1.03	27.48	21.68	5.80	15.88
cities: 100-200 thousand inhabitants	18.88	11.20	7.68	3.52	29.23	23.47	5.77	17.70
cities: 20-100 thousand inhabitants	24.67	16.19	8.48	7.71	24.95	15.21	9.74	5.46
cities: less than 20 thousand inhabitants	22.38	12.81	9.57	3.24	25.64	18.65	6.99	11.67
rural area	27.78	17.96	9.82	8.13	17.80	12.93	4.87	8.06
total	22.91	14.01	8.89	5.12	23.11	16.23	6.88	9.36

*Detailed analysis of the indices - see ch. 3.5.8.5.; SU⁺ - percentage of the households which left the poverty sphere in the given period; SU⁻ - percentage of the households which entered the poverty sphere in the given period; S - the sum of SU⁺ and SU⁻; CM - the difference between the positively and negatively mobile.

Table 8.5. Mobility of households in relation to their presence in poverty sphere during the last three years (from March 2000 to March 2003) in different types of households*

Type of a household	Indices of mobility							
	Objective approach				Subjective approach			
	S	SU ⁺	SU ⁻	CM	S	SU ⁺	SU ⁻	CM
One-family: married couples without children	12.28	8.76	3.52	5.24	23.16	19.05	4.12	14.93
married couples with one child	20.17	10.50	9.67	0.82	27.54	17.87	9.67	8.19
married couples with two children	23.83	14.91	8.93	5.98	22.76	13.37	9.39	3.98
married couples with three and more children	24.27	16.39	7.88	8.51	16.49	9.90	6.59	3.31
one parent families	27.66	15.00	12.66	2.34	22.79	15.07	7.72	7.35
Multi-family	23.49	13.83	9.65	4.18	30.41	21.96	8.44	13.52
Non-family: one person	28.45	26.66	1.80	24.86	20.81	19.65	1.15	18.50
multi-person family	35.65	9.47	26.17	-16.70	18.19	14.13	4.06	10.06
total:	22.98	14.08	8.90	5.18	23.16	16.25	6.91	9.34

*Detailed analysis of the indexes - see ch. 3.5.8.5.; SU⁺ - percentage of the households which left the poverty sphere in the given period; SU⁻ - percentage of the households which entered the poverty sphere in the given period; S - the sum of SU⁺ and SU⁻; CM - the difference between the positively and negatively mobile.

Table 8.6. Mobility of households in relation to their presence in poverty zone during the last three years (from March 2000 to March 2003) in relation to their economic activity*

Type of economic activity	Indices of mobility							
	Objective approach				Subjective approach			
	S	SU ⁺	SU ⁻	CM	S	SU ⁺	SU ⁻	CM
households without unemployed	20.62	14.61	6.01	8.60	24.51	18.57	5.93	12.64
households with unemployed	30.72	11.97	18.75	-6.78	18.34	8.21	10.13	-1.92
total	22.91	14.01	8.89	5.12	23.11	16.23	6.88	9.36

*Detailed analysis of the indexes - see ch. 3.5.8.5.; SU⁺ - percentage of the households which left the poverty sphere in the given period; SU⁻ - percentage of the households which entered the poverty sphere in the given period; S - the sum of SU⁺ and SU⁻; CM - the difference between the positively and negatively mobile.

8.2.2.3. Determinants of poverty

Tables 8.7 and 8.8 show the results of probit analysis of poverty risk in the objective and subjective approaches. The comparison of the empirical values of χ^2 statistics, which equals 1076.5 in the objective approach and 982.5 in the subjective one (at 37 degrees of freedom) with corresponding critical values that equal 0.000 indicates high goodness both models and significance of all their independent variables (variants of the attributes) regarded as a total. The level of significance assumed for the analysis of the significance of particular independent variables chosen for the model equals 0.05. This means that a given variable (variant of the attributes) is significant when the corresponding critical level of significance (p -value) is lower than 0.05.

Socio-economic group (source of income of the household head)

The reference point assumed for the estimation of the influence of a socio-economic category (i.e. which socio-economic group a households belongs to) on the poverty risk was the group of self-employed households. This means that the degree of poverty risk relating to a group of households, divided by the socio-economic type they belong to, will be regarded in relation to the degree established for the self-employed households. In the objective approach it is only the employee-households and employee-farmers households that do not differ statistically from the self-employed households (table 8.7). However in the subjective approach all the socio-economic groups are significantly more threatened by poverty than the self-employed households (table 8.8).

Both in the objective and subjective approaches the groups of households which are most seriously threatened by poverty are the households living on unearned sources other than pension or retired pay and the households of farmers and pensioner. This is confirmed by the highest positive values of the parameters standing by these categories. Members of the former group of households are often unemployed and so they have the lowest income. What is interesting, in the objective approach the relatively least risk of poverty occurs in the households of the retired.

The influence of variables determining which socio-economic group a household belongs to is much bigger in the subjective approach than it is in the objective one.

Number of people in a household

The reference point for the estimation of the influence of the number of people on the risk of entering the poverty sphere was a one-person household. According to the subjective approach the number of people in a household effects significantly, though with varying intensity, the risk of entering the poverty sphere by a household (table 8.7). The unimportant features in the model are 3 and 4 people. The biggest poverty risk occurs in groups of numerous households (4 and more people). At the same time the increase in the number of people in households belonging to these groups increases significantly the poverty risk. Most probably it is caused by the fact that most of numerous households are households with many children where most of people do not work.

In the subjective approach the highest level of the poverty risk occurs in one-person households (table 8.7). This means that the determinants of poverty in the subjective approach differ significantly from the determinants in the objective approach.

Class of the place of living

The reference point assumed for the estimation of the influence a class of the place of living has on the poverty risk is a household living in the rural area. The values of parameters standing by all the other groups of households are negative which means that the city households are less threatened by poverty than the rural ones, both in the objective and in the subjective approaches (tables 8.7 and 8.8).

In the subjective approach the poverty risk decreases proportionally to the increase in the class of the place of living. In the objective approach the situation is not so clear though also here the city households are less threatened by poverty than the rural ones.

The education of the household head

The education level of a householder determines unquestionably the risk of entering the poverty sphere, both in the objective and subjective approach (tables 8.7 and 8.8). The reference point assumed for the estimation of the influence that the education level of the householder has on the poverty risk was a group of households where the head person had a university degree.

Table 8.7. Probit estimates of poverty risk according to the objective approach in March 2003.

Group of variables and variable	Estimation of parameter	Standard error	t-Student statistic	p-value
Constant	-0.401	0.195	-2.058	0.040
Socio-economic group:				
Employees	0.015	0.112	0.136	0.892
Employee-farmers	0.076	0.152	0.501	0.616
Farmers	0.589	0.150	3.916	0.000
self-employed				–
retirees	-0.360	0.126	-2.860	0.004
pensioners	0.421	0.127	3.310	0.001
living on unearned sources	0.766	0.145	5.284	0.000
Number of persons in a household:				–
1				
2	-0.229	0.092	-2.491	0.013
3	-0.112	0.096	-1.169	0.242
4	0.059	0.098	0.605	0.545
5	0.245	0.107	2.285	0.022
6 and more	0.367	0.114	3.236	0.001
Class of the place of living:	-0.410	0.107	-3.843	0.000
cities over 500 thousand				
cities 200-500 thousand	-0.287	0.094	-3.053	0.002
cities 100-200 thousand	-0.191	0.102	-1.880	0.060
cities 20-100 thousand	-0.311	0.074	-4.198	0.000
towns < 20 thousand	-0.161	0.082	-1.966	0.049
rural area				–
Education of the household head :	0.923	0.101	9.159	0.000
elementary or lower				
Vocational	0.776	0.094	8.279	0.000
Secondary	0.344	0.097	3.541	0.000
University				–
Voivodship:	-0.152	0.138	-1.103	0.270
Dolnośląskie				
Kujawsko-pomorskie	-0.189	0.144	-1.315	0.189
Lubelskie	-0.099	0.143	-0.695	0.487
Lubuskie	-0.243	0.148	-1.648	0.100
Łódzkie	-0.172	0.143	-1.202	0.229
Małopolskie	-0.466	0.146	-3.183	0.001
Mazowieckie	-0.373	0.134	-2.782	0.005
Opolskie	-0.285	0.155	-1.843	0.065
Podkarpackie				–
Podlaskie	-0.052	0.147	-0.351	0.726
Pomorskie	-0.417	0.150	-2.778	0.005
Śląskie	-0.415	0.132	-3.136	0.002
Świętokrzyskie	-0.150	0.150	-1.000	0.317
Warmińsko-mazurskie	-0.067	0.144	-0.465	0.642
Wielkopolskie	-0.407	0.140	-2.912	0.004
Zachodniopomorskie	-0.259	0.148	-1.752	0.080
Age of the household head:	-0.079	0.227	-0.348	0.728
under 25 years				
25-34 years	0.139	0.079	1.761	0.078
35 and more				
Household status on labor market:				
at least one unemployed person				
no unemployed persons	-0.780	0.058	-13.440	0.000

Table 8.8. Probit estimates of poverty risk the subjective approach in March 2003.

Group of variables and variable	Estimation of parameters	Standard estimation error	Statistics of t-Student	Level of significance
Constant	0.569	0.175	3.243	0.001
Socio-economic group:				
Employees	0.305	0.093	3.279	0.001
Employee-farmers	0.349	0.141	2.478	0.013
Farmers	0.680	0.149	4.550	0.000
self-employed				–
retirees	0.188	0.104	1.808	0.071
pensioners	0.766	0.118	6.519	0.000
living on unearned sources	1.161	0.156	7.445	0.000
Number of people in a household:				–
1				
2	-0.772	0.078	-9.887	0.000
3	-0.640	0.084	-7.588	0.000
4	-0.384	0.087	-4.406	0.000
5	-0.244	0.102	-2.403	0.016
6 and more	-0.616	0.109	-5.630	0.000
Class of the place of living:				
Cities: more than 500 thousand inhabitants	-0.442	0.089	-4.981	0.000
cities: 200-500 thousand inhabitants	-0.380	0.083	-4.583	0.000
cities: 100-200 thousand inhabitants	-0.328	0.089	-3.670	0.000
cities: 20-100 thousand inhabitants	-0.157	0.069	-2.287	0.022
cities: less than 20 thousand inhabitants	-0.173	0.077	-2.244	0.025
rural area				
Education of the household head:				
elementary or lower	1.215	0.081	14.914	0.000
Vocational	0.931	0.072	12.897	0.000
Secondary	0.542	0.070	7.719	0.000
University				
Voivodship:				
Dolnośląskie	-0.331	0.133	-2.492	0.013
Kujawsko-pomorskie	-0.167	0.141	-1.181	0.238
Lubelskie	0.020	0.141	0.144	0.885
Lubuskie	-0.266	0.144	-1.844	0.065
Łódzkie	-0.121	0.138	-0.879	0.380
Małopolskie	-0.384	0.136	-2.830	0.005
Mazowieckie	-0.380	0.126	-3.013	0.003
Opolskie	-0.486	0.147	-3.294	0.001
Podkarpackie				–
Podlaskie	-0.140	0.145	-0.969	0.332
Pomorskie	-0.509	0.139	-3.674	0.000
Śląskie	-0.378	0.124	-3.052	0.002
Świętokrzyskie	-0.142	0.146	-0.967	0.333
Warmińsko-mazurskie	-0.086	0.145	-0.596	0.551
Wielkopolskie	-0.316	0.132	-2.393	0.017
Zachodniopomorskie	-0.400	0.142	-2.830	0.005
Age of the household head:				
under 25 years	0.072	0.214	0.338	0.735
25-34 years	0.104	0.073	1.422	0.155
35 and more				
Household status on labor market:				
at least one unemployed person				
no unemployed persons	-0.668	0.060	-11.059	0.000

All the values of the parameters are positive and statistically significant. This means that, according to both of the approaches, the lowest risk of entering the poverty sphere occurs among

the households where the head person has a university degree. The lower the educational level of a householder the higher poverty risk of this household.

Voivodship

Results of the survey in relation to voivodship classification are not definite. Many parameters values turned out to be statistically insignificant, particularly in the subjective approach (tables 8.7 and 8.8). The voivodship assumed here as the reference point was Podkarpackie voivodship. The highest risk of entering the poverty sphere occurs in the households living in the rural voivodships of eastern Poland, i.e. in Podkarpackie, Lubelskie, Podlaskie and Warmińsko-mazurskie voivodships (it is particularly evident in the objective approach).

Age of a household head

The reference point assumed here was a household whose head is 35 or older. The differences in the level of poverty risk between the group of households constituting the reference point and all the other groups of households turned out to be insignificant in both models (table 8.7 and 8.8).

Status of a household on the labor market

The households surveyed in relation to their status on the labor market were divided into the households without unemployed members and those where at least one person was unemployed. The former of the groups was assumed as the reference point. The results of the analysis show that both in the objective and in the subjective approaches the poverty risk is considerably high in the households with unemployed people (tables 8.7 and 8.8).

8.3. Disability

Irena E. Kotowska, Paweł Strzelecki

As many as 10.5% of the respondents have valid certificates of disability issued by a medical board. Apart from that 3% of the surveyed claim that because of their disability or disease they have fully or partially impaired ability to perform such activities as studying, working or housekeeping but they do not have the certificate of a medical board. Thus the total number of the disabled, both legally (qualification on the basis of the certificate) and biologically (without the certificate) constituted almost 14% of the surveyed population (in General National Census—2002 — GNC, 2002 — this index equaled 14.3%).

The percentage of the disabled among men and women is similar. Among people younger than 45 the percentage of the disabled does not exceed 10%, like in GNC 2002, but among the respondents aged from 50 to 54 the percentage is 20% and in the older age groups about 30%.

There are more women among the disabled respondents (54%). Most of them live in towns and cities (60%). The percentage of people aged from 16 to 44 was 16%, and 37% of those aged from 45 to 59. Thus over half of the disabled were of working age. It is worth noting here that more than every fourth disabled person is aged from 50 to 59 both in the country and in cities.

When focusing on the disabled respondents under 59 years of age the proportions between particular age groups significantly change: almost every fifth person is not older than 40, a little bit more than every fourth person is aged between 40 and 49 and slightly over 50% is aged between 50 and 59. There are definitely fewer women than men in the group of people aged

under 40 (16% vs. 21%) but there are more disabled women aged between 50 and 54 (30% vs. 23%).

Every second disabled person living in a city was a household head, almost every third was a partner of household head. In the country disabled people were much more seldom heads of household and more often their partners, and almost every fifth person was a father, a mother or a father-in-law or mother-in-law. The difference in these structures in relation to the place of residence results mainly from different status in a household in relation to gender. Disabled women in towns and cities were usually household heads and partners (38% vs. 42%), disabled women in the country were much more seldom household heads (27% vs. 40%) and more often (every fourth) a mother or a mother-in-law. As many as 70% of disabled men in towns and cities are household heads, in the country the percentage is 65%. 17% of disabled men are partners in towns and cities and 9% in the country. In both regions every tenth disabled man is a child in the family.

The disabled are worse educated in relation to the whole sample and, unlike in the case of the whole, the differences are disadvantageous for women: only 5% of women and 7% of men have a university degree, the percentage of people with primary or vocational education is 71% for women and 68% for men. It might result from the specific age structure — 47% of the disabled are 60 or more years old. However, limiting the analysis to the group of disabled aged between 16 and 59 does not change the evaluation of the disabled people's education though the gender differences are smaller. Still the percentage of people with university education is significantly lower than in the surveyed population (3% for men and 5% for women) and the percentage of people with a primary or vocational degree — significantly higher (66% for men and 64% for women). One should remember, however, that three fourths of this subpopulation of respondents is aged over 40.

Disability combined with low level of education may increase the risk of staying outside the labor market. The disabled constituted 5% of employed respondents and 4% of the unemployed ones. 17% of the disabled with certificate of disability are employed, 2% are unemployed, and others are inactive. Among disabled without the certificate slightly fewer were employed (almost 16%), many more of them were looking for a job (6% of them were unemployed).

Evaluation of the labor market participation of the disabled people based on the labor market status of people at the working age (16 to 59 years for both sexes), indicates that only 30% of people the working age is in the labor force - every fourth person is employed while 6% are unemployed (table 8.9). Men are more often economically active than women - they are employed or want to find a job.

Table 8.9. The disabled by gender and the labor market status

(%)

The disabled	Labor market status		
	Employed	Unemployed	Inactive
Total	16.4	3.1	80.5
Men	20.5	4.5	75.0
Women	12.8	1.9	85.3
Total aged 16-59	24.9	5.8	69.3
Men	27.8	7.8	64.4
Women	21.9	3.8	74.2

8.4. Unemployment

8.4.1. Households on labor market

Irena E. Kotowska, Paweł Strzelecki

The unemployment risk may be described in terms of people without a job, which is usually done in analyses of the labor market, or in terms of households with unemployed members. We shall begin with the information about households.

The percentage of households with employed people was 70% (72% in March 2000), while households with unemployed people constituted almost 21% of all the households surveyed (20% three years ago). One should emphasize here that, just as three years ago, there were 6.5% households with unemployed people only (without employed persons).

36% of the households with unemployed members were households in the country. This share is constant in two groups of households: those with unemployed and employed people and those with unemployed people only. However, the unemployment risk, expressed by means of the percentage of the households with unemployed members, is higher in the country and equals 22% (in towns and cities it is 20%).

Most of the households with unemployed members were households with one unemployed person (81%), as many as 15% had two unemployed members. Households without employed people constituted 32%, in 47% of the households there was only one employed person.

8.4.2. Individual respondents on the labor market

8.4.2.1. Socio-demographic characteristics of the unemployed

Irena E. Kotowska, Paweł Strzelecki

According to the definitions applied in the study (consistent with those used in the Labor Force Survey, BAEL) the employment rate was 46.1% so it was a little higher than that found in BAEL for the first quarter of 2003 (43.3%). Only 12.4% of the employed had part-time jobs (BAEL — 10.5%).

Unused employment resources, estimated on the basis of the share of employed in the whole population (aged 15 and more), are significantly bigger for women than for men - the female employment rate was much lower than that of males (40% vs. 53.2%). These values were slightly higher than those from BAEL for the whole quarter (BAEL – 37.7% and 49.4%). The employment rates of people in the country are bigger than that of people living in cities (47.6% vs. 45.3% while in BAEL these measures were 44.3% and 42.6% respectively).

As many as three fourths of persons without a job, who constituted 53.9% of those surveyed, did not look for a job. In relation to the whole population it was 35% of men and 50% of women. The reasons for not seeking for a job differ significantly by gender. As many as 42% of the respondents claimed that they did not look for a job because of their age (44% of women and 39% of men), almost every fourth person did not do it because they were studying or attending training (20% of women and 29% of men), 17% because of poor health (15% of women and 21% of men). 16% of women and 1% of men claimed that they had to look after children or disabled members of their household or to manage their households.

8.7% of the household members (aged 15 or more) may be classified as unemployed; 86% of them are registered (in BAEL - 76%). Many more people were registered in the labor office as unemployed (12%) though only 67% of them meet the BAEL criteria of unemployment. Only 14% of the registered receive unemployment benefit (the same as in BAEL) and only 7% claimed that they participated in training.

The results of the survey indicate lower unemployment in March 2003 than estimated on BAEL for the whole quarter — the values differ by 3-4 percent points, but relations in unemployment between

women and men as well as those between urban and rural areas are the same. The total unemployment rate was 16.9% (BAEL — 20.5%). The unemployment risk is higher for women than for men (17.3% vs. 16.5%). The unemployment rate is slightly higher among people living in cities than among those living in the country (17.2% vs. 16.4%).

Data the survey allows us to directly compare registered unemployment and unemployment as defined by BAEL. If we take into account people registered in the labor offices as the unemployed the unemployment rate is higher by 3 to 5 percent points than that established on the BAEL definition. The registered unemployment rate for women was 22.4% and for men 19.2% while for urban and rural areas this rate was 20.5% and 21% respectively.

It is also the structures of both populations of the unemployed presented in the study that differ accordingly to gender, place of residence and age. There are more women than men among the registered unemployed (51.7% vs. 48.3%), as well as more people living in the country than those living in towns and cities (39% vs. 37%). Respondents classified as unemployed according to the BAEL definition are slightly younger than those classified for the first quarter of 2003 (table 8.10). It concerns also population of women and men: they are also younger than respondents classified as registered unemployed. Registered unemployed are more frequently older than 44. One can link this to social insurance entitlement, acquired by registration, which seems to be much more important for older people than for the younger ones.

Table 8.10. The unemployed by source of data, unemployment measure, gender and age

Age	Diagnosis 2003 Total		I quarter 2003* total	Diagnosis 2003 Men		I quarter 2003 men	Diagnosis 2003 Women		I quarter 2003 women
	BAEL	Registration		BAEL	Registration		BAEL	Registration	
	%								
up to 24	29.3	27.4	23.6	30.5	27.9	24.4	27.6	26.7	22.8
25-34	30.4	28.8	29.3	30.7	28.3	29.5	30.2	29.3	29.1
35-44	19.8	18.8	22.6	16.4	16.2	20.1	23.7	21.6	25.3
45-54	17.7	20.6	20.8	17.8	20.3	21.4	17.7	20.8	20.2
55-74	3.8	4.4	3.7	4.6	7.3	4.6	0.8	1.6	2.6
Total	100	100	100	100	100	100	100	100	100

* BAEL

The education structures of both unemployed populations are similar: it is only among the registered unemployed that there are more people with a low level of education, mainly women. Data shown in table 8.11 confirm that:

- a high educational level still does not protect women from the risk of unemployment as it does for men — the education level of unemployed women, independently of the definition of an unemployed person, is definitely higher than that of unemployed men,

- lack of skills increases the unemployment risk — unemployed respondents have a much lower education than the rest of surveyed population, e.g. the percentage of people with primary or vocational education among the unemployed is by 7 to 8 percent points higher, while the percentage of people with university education is by 6 percent points lower.

Table 8.11. The unemployed by source of data, unemployment measure, education and gender

Education	Diagnosis 2003 Total		I quarter 2003* total	Diagnosis 2003 Men		I quarter 2003 men	Diagnosis 2003 Women		I quarter 2003 women
	BAEL	Registration		BAEL	Registration		BAEL	Registration	
	University	5.5		5.0	5.0		4.1	3.7	
Post-secondary	2.5	2.6	3.1	1.5	1.6	1.4	3.5	3.6	4.8
Secondary vocational	20.9	20.7	22.8	16.7	16.0	20.0	25.5	25.2	26.1
Secondary general	9.1	8.4	8.9	4.6	3.9	5.2	14.1	12.6	13.0
Vocational	45.5	44.6	42.3	52.5	52.9	50.1	38.1	36.6	33.6
Primary and below	16.5	18.8	17.8	20.6	21.9	19.1	11.8	15.8	16.5

* BAEL

Criteria defining unemployment may be more liberal or more restrictive. The most liberal one is the criterion of registration in employment offices, a less liberal one is the criterion used in BAEL studies. However, one can use a criterion more restrictive than that of BAEL. Table 8.12 shows the unemployment rate according to different criteria of unemployment definition. If we take into account the last criterion - registration + readiness to start working + looking for a job + not working or only part-time working during the last week + monthly personal net income lower than 850 PLN — the unemployment rate among our respondents decreases from 19.6% to 13.5%, that is by as much as over 6 percent points. Taking into account real material status and activity connected with employment we should regard as the actual unemployed only those registered unemployed who meet the last criterion. It is worth noting here that though among the registered unemployed the percentage of women is higher than that of men (51.7% vs. 48.3%), among the actually unemployed the relation is reversed: 48.5% of women and 51.5% of men.

Table 8.12. Percentage of the unemployed among people of working age (women 18 - 60, men 18 - 65) without the retired, disability pensioners and students, by various criteria of unemployment*

Unemployment criterion	Unemployment rate among people at the working age
Registration in a labor office	19.6
Registration + readiness to start working	16.6
Registration + readiness to start working + looking for a job	14.8
Registration + readiness to start working + looking for a job + not working or part time working + monthly personal net income lower than 850 PLN	13.5

*The table takes into account only people who completed the individual questionnaire, as one of the unemployment criteria was personal net income, and such an item was not present in the household questionnaire; that is why younger members of households are omitted in the table.

Irrespective of the unemployment definition unemployed men more often in a child position within a household (about 50%), almost every fifth of them was a household head and only a little bit more seldom the partner of a household head. Almost every second unemployed woman was a household head's partner, while 36% to 39% of the unemployed women were in child position. Thus men's unemployment may be regarded as a factor, which hinders achieving the status of material independence regarded as one of the main conditions to start one's own family, and then as a factor hindering the development of the family. In the case of women the unemployment concerns more those who already formed a family than those who have not started it yet.

The differences in economic activity in towns/cities and in the country, especially among women, may account for the fact that in urban areas the unemployed are as often partners as they are children, while in the country there are more unemployed in the position of a child than those being a head of household's partner (in both cases the total percentage is about 76%-78%).

55% of the unemployed (46% of men and 65% of women) have not had a job for at least a year (according to BAEL the figures were 51%, 48% and 53%, respectively). Almost every fourth person of the unemployed has been searching for a job for at least a year but no longer than for two, while 20% have been unemployed for 3 years or longer. Long-term unemployment (longer than a year) is more common among women — percentage of those who have been unemployed for over a year is higher and in average they stay longer in long-term unemployment - 23% of women have been searching for a job for over a year but no longer than for two years and as many as 42% for longer than two years. The same indicators in the case of men are 22% and 24% respectively.

Long-term unemployment hazard is similar both in urban areas and in the country - it concerns 55% of the unemployed. In both regions the differences between the situation of men and women are similar to those observed in the whole country.

The unemployment duration depends also on the level of education: the longer period of unemployment the more unemployed with primary and vocational education and the fewer people with a university education. However, because of the difficult situation on the labor market, which has been affecting our country for a few years already, people with a university degree also have problems with finding a job - we can also observe an increase in the number of people with post-secondary and secondary education who are long-term unemployed (table 8.13).

Table 8.13. Unemployment duration by education

Unemployment duration	University						Grammar-school, primary and below
	University	Post-secondary	Secondary vocational	Secondary general	Vocational	(%)	
up to 1 year	7.3	1.3	20.8	8.8	45.1	16.7	
1 - 2 years	4.0	4.0	22.5	10.0	42.5	17.0	
2 - 3 years	9.0	2.7	17.1	9.9	53.2	8.1	
3 - 4 years	2.0	2.0	24.5	8.2	51.0	12.3	
4 - 5 years	3.7	3.7	18.8	10.0	46.3	17.5	
5 and more	0.0	2.1	23.9	8.7	45.7	19.6	

Another factor that increases the risk of long-term unemployment is age. Every third person who has been looking for a job for over a year is older than 39, while the percentage of such people among those who have been looking for a job for a period shorter than a year is 27%. People aged under 30 constituted 54% of those unemployed for a short time, but the percentage of such people among those permanently unemployed was as high as 44%. Detailed analysis of this group of the unemployed shows that half of them have been looking for a job no longer than for a year, 22% longer for a year but no longer than for two years, and 15% for over two years but no longer than for three. So one can conclude that the long-term unemployment risk is also very high for the youngest group of the unemployed.

Because of the difficult situation on the labor market, which has been gradually worsening since 1998, many people become repeatedly unemployed, which is reflected in the number of registrations. The risk of multiple unemployment may be estimated on the basis of the number of registrations in labor offices during the last five years.

51% of the unemployed according to BAEL were registered once during the five years (1March 998-March 2003), 23% of them twice, and every tenth — from 3 to 5 times. During the

five years almost every fifth respondent was registered as an unemployed person. Most of them (68%) were registered once, almost every fourth - twice, a little less than every tenth - more than twice (3 to 8 times).

Data on the unemployment duration over the past five years enables us to estimate the range of this phenomenon in this period. As many as 19% of respondents were unemployed for some time during the period (18% of women and 20% of men). For most of them the total period of unemployment was over a year, though this value differs by gender and place of residence (53% of men and 63% of women, 54% of people living in towns/cities and 63% of those living in the country). The highest risk of long-term unemployment among women is also confirmed by the fact that almost every fifth woman was unemployed for 4 to 5 years (more often in the country than in towns/cities), while the percentage of men in the same situation was only 8% (table 8.14).

Table 8.14. Total unemployment duration over the last five years (March 1998 - March 2003) by gender and place of residence

Unemployment duration	%								
	Women	Men	Women urban	Men urban	Women rural	Men rural	Urban	Rural	Total
up to 1 year	37.4	46.5	41.7	48.4	29.8	43.8	44.9	37.1	41.7
1 - 2 years	21.2	25.1	20.9	25.3	21.5	25.2	23.0	23.3	23.0
2 - 3 years	14.8	13.4	14.1	11.5	16.3	16.6	12.8	16.3	14.3
3 - 4 years	8.1	7.4	6.6	7.3	11.3	6.7	7.0	8.7	7.8
4 - 5 years	18.5	7.6	16.7	7.5	21.1	7.7	12.3	14.6	13.2
Total N	914	911	588	548	326	363	1137	688	1825

Most of the respondents aged under 59 who have been unemployed during the last five years are those who at the time of the survey were under 30 years of age (table 8.15). Even in this group more than 50% of those surveyed were unemployed for longer than a year. The older the respondents were, the more of them experienced such a situation.

Table 8.15. Total unemployment duration over the last five years (March 1998 - March 2003) by age

Unemployment duration	Age (%)			
	16-29	30-39	40-49	50-59
up to 1 year	48.3	36.4	34.8	40.7
1 - 2 years	23.3	22.2	24.4	23.3
2 - 3 years	16.2	12.4	13.4	11.4
3 - 4 years	6.0	10.6	8.8	6.9
4 - 5 years	6.2	18.4	18.6	17.7
Total N=1807	804	434	365	204
Per cent	44.5	24.0	20.2	11.3

The education level determines the fact of being unemployed and the total period of unemployment during the five years. The differences between groups of people determined according to the total period of unemployment are bigger than those in the whole unemployed population (table 8.13 and 8.16). One can conclude then that education level influences not only the current risk of unemployment but also the risk of cyclical returns to unemployment.

Table 8.16. Total unemployment duration over the last five years (March 1998 - March 2003) by education

Unemployment duration	University					
	University	Post-secondary	Secondary vocational	Secondary general	Vocational	Grammar school, primary or none
up to 1 year	14.2	3.4	25.8	8.1	36.8	11.7
1 - 2 years	5.0	2.1	26.4	6.9	43.3	16.3
2 - 3 years	4.6	3.1	17.8	11.9	45.2	17.4
3 - 4 years	0.7	2.9	23.0	6.5	42.4	24.5
4 - 5 years	2.9	4.6	19.2	6.3	46.2	20.8

What may serve here as the complement to and recapitulation of the above analysis are the results of the estimated of logistic regression model where the endogenous variable was the probability of unemployment ($Y=1$ when the respondent is unemployed, $Y=0$ when the respondent is employed), formulated for males and females separately. Exogenous variables (predictors) are: age, education, source of household income, place of residence, number of people in a household and region of living (voivodship).

The results shown in table 8.17 confirm the importance of age and education level for the unemployment risk. This is highest for the group of the youngest respondents; as they get older the risk decreases. The decrease is a little larger for men than for women. A higher education level decreases the risk of unemployment though the decrease is different by gender. The situation of men with vocational education is the same as the situation of men with primary education while in the case of women only university and secondary vocational education decrease the unemployment hazard — a university degree decreases the risk even more than for men and secondary education decreases it less than for men.

Members of households where the main source of income is a disability or retirement pension as well as other non-earned income are threatened by unemployment more than the members of workers' households, particularly men. The unemployment risk is also lower in the case of members of the employee-farmer households than in the case of employee household's members. Women of farmers' households are definitely less threatened by the unemployment than those of worker households, in the case of men this variable is insignificant.

Another important variable is the size of a household - both men and women belonging to numerous households are threatened by the unemployment more than people from other households.

The size of the town or city, which is the place of residence, is not a significant variable in the case of men's unemployment, though the unemployment risk is bigger for people living in the country than for those living in big towns and cities. In the case of women's unemployment the size of the place of residence is unimportant. The region (voivodship) of residence also does not affect the risk of unemployment (both for women and men).

Table 8.17. The results of the logistic regression model of the probability to fall in unemployment

Predictor	Men				Women			
	β	Stand-ard error	Level of signifi-cance	Exp (β)	β	Stand-ard error	Level of signifi-cance	Exp (β)
Age								
up to 24 years old								
25-34 years old	-1.028	0.228	0	0.358	-0.919	0.238	0	0.399
35-44 years old	-1.975	0.251	0	0.139	-1.412	0.237	0	0.244
45-54 years old	-1.677	0.247	0	0.187	-1.919	0.259	0	0.147
over 55 years old	-2.895	0.424	0	0.055	-3.927	0.876	0	0.020
Education								
University	-1.291	0.401	0.001	0.275	-1.417	0.385	0	0.242
Secondary vocational	-0.63	0.3	0.036	0.533	-0.529	0.296	0.073	0.589
Secondary general	-0.749	0.465	0.107	0.473	-0.161	0.35	0.645	0.851
Vocational	0.032	0.256	0.899	1.033	0.118	0.288	0.683	1.125
Source of income of a household								
Workers								
Workers running a farm	-1.162	0.491	0.018	0.313	-0.957	0.391	0.014	0.384
Farmers	-0.584	0.411	0.155	0.558	-1.079	0.471	0.022	0.34
Self-employed	-0.315	0.337	0.349	0.73	0.403	0.296	0.173	1.497
Retired, disability pensioners	1.757	0.233	0	5.794	0.393	0.289	0.174	1.481
Sources other than earnings	1.943	0.269	0	6.982	1.091	0.294	0	2.978
Number of people in a household	0.134	0.054	0.014	1.143	0.104	0.061	0.085	1.11
Class of the place of residence								
500+ thousand								
200-500 thousand	-0.065	0.415	0.876	0.937	0.41	0.405	0.312	1.506
100-200 thousand	-0.306	0.45	0.497	0.737	0.201	0.424	0.636	1.223
20-100 thousand	-0.246	0.338	0.465	0.782	-0.021	0.35	0.953	0.979
Up to 20 thousand	-0.597	0.37	0.106	0.55	0.356	0.367	0.332	1.428
Country	-0.724	0.327	0.027	0.485	-0.011	0.336	0.974	0.989
Voivodship								
Dolnośląskie								
Kujawsko-pomorskie	-0.079	0.473	0.867	0.924	-0.173	0.467	0.711	0.841
Lubelskie	0.598	0.434	0.168	1.819	0.055	0.446	0.902	1.057
Lubuskie	0.71	0.449	0.114	2.034	-0.199	0.516	0.7	0.82
Łódzkie	0.162	0.423	0.701	1.176	0.079	0.434	0.855	1.083
Małopolskie	-0.038	0.39	0.922	0.963	0.302	0.383	0.43	1.353
Mazowieckie	0.465	0.361	0.197	1.592	-0.203	0.4	0.612	0.816
Opolskie	0.741	0.477	0.12	2.099	-0.07	0.51	0.891	0.933
Podkarpackie	0.107	0.431	0.803	1.113	-0.553	0.477	0.246	0.575
Podlaskie	-0.215	0.51	0.674	0.807	0.075	0.469	0.872	1.078
Pomorskie	-0.207	0.417	0.619	0.813	-0.223	0.426	0.601	0.8
Śląskie	-0.843	0.421	0.045	0.43	-0.251	0.39	0.519	0.778
Świętokrzyskie	-0.194	0.541	0.72	0.823	-0.193	0.525	0.714	0.825
Warmińsko-mazurskie	-0.254	0.474	0.592	0.776	-0.056	0.492	0.909	0.945
Wielkopolskie	-0.333	0.401	0.407	0.717	-0.681	0.409	0.096	0.506
Zachodniopomorskie	0.167	0.461	0.718	1.181	-0.222	0.489	0.649	0.801
Constant	-0.668	0.495	0.177	0.513	-0.639	0.541	0.237	0.528

8.4.2.2. Change of employment status in the panel sample — a dynamic model of unemployment

Janusz Czapiński

In order to analyze psychological reasons and the consequences of differences in the employment status between 2000 and 2003 the researchers distinguished five categories of people who during the second survey were of working age (18-60 for women and 18-65 for men)⁵⁴. The socio-demographic characteristics of the categories are presented in table 8.18. One can see here almost perfect balance between people losing a job and those recovering it. The secret of the unemployment increase that has been taking place in Poland in the last few years, is hidden in the considerable percentage of the "falsely" unemployed, where the majority is constituted by people registered as unemployed in 2003 but not registered in 2000 (60%).

There is an interesting but dangerous phenomenon, which is becoming more and more common in Poland, that of using all the tricks there are, all the inadequacies of Polish law and its institutions, to enable a person to live at the expense of the state. First we experienced some other symptoms of this phenomenon, e.g. a sudden increase in the number of tax-deductible donations. Now we have a growing number of the falsely unemployed, who are not interested in any legal job but register in labor offices in order to get unemployment benefit and other social privileges. It may result partially from the belief that the ruling social-democrats will not be "too severe on the poor who improve their life situation: we voted for them, after all".

Table 8.18. The percentage of people of working age (18 -60 for women, 18-65 for men) in 2003, excluding the retired, disability pensioners and students, in the panel sample, belonging to various categories determined on the basis of the comparison of employment status in 2000 and 2003 in various socio-demographic sections

Group	Employment status 2000-2003				
	Permanently unemployed	Lost their jobs	Permanently employed	Recovered their jobs	Falsely unemployed
Total	7,1	10,5	65,2	10,3	6,9
Gender	5,7	11,4	68,7	8,9	5,3
Men					
Women	8,7	9,4	61,2	12,0	8,7
Education in 2003					
Primary or none	9,5	14,5	64,1	15,8	14,1
Vocational	10,4	13,5	57,7	12,1	6,3
Secondary	5,9	9,9	67,1	9,4	7,7
University and post-secondary	1,6	4,1	85,2	6,2	2,8
Place of residence	7,0	9,7	67,6	8,9	6,8
Towns/cities					
Country	7,1	10,4	65,2	10,3	6,9
Age in 2003					
18-24 years old	11,0	35,9	17,2	19,3	16,6
25-34 years old	9,5	11,9	60,3	11,5	6,9
35-44 years old	5,8	5,6	77,3	8,0	3,3
45-59 years old	5,2	5,0	74,6	8,5	6,7
60-64 years old	0,0	0,0	83,3	6,7	10,0
Income per capita in a household in 2003					
1 st quartile	14,2	18,4	42,4	12,8	12,1
2 nd +3 rd quartiles	4,3	8,5	69,9	11,5	5,8
4 th quartile	0,2	2,3	89,4	6,5	1,7

⁵⁴ During the first survey people who are now 18 years old were 15 and did not belong to the group of professionally active (were not of working age).

There are fewer men among the permanently unemployed and the falsely unemployed than there are women (it indicates that most of the unemployed who are registered but do not meet the criteria of actual unemployment are housewives, who would not work even if the state provided jobs for everybody, as they have other duties or they are supported by their husbands and do not need to work).

Level of education is the most significant factor differentiating the employment status of the surveyed. The percentage of permanently employed among the people with a university degree is higher by 20 percent points than the percentage of those with lower educational level. The lowest percentage of the employed was among people with vocational education (both in 2000 and in 2003), it was also in this group that the percentage of the permanently unemployed was the highest. The pride of the communist PRL government — universal and fast education in narrow vocational specializations (2-3 years vocational schools) — turned to be a drag on post-communist Poland.

The largest percentage of the falsely unemployed, registered after 2000, is among people with primary or no education, mainly because of the young people who are still students and the oldest ones who, on the whole, have the lowest education. The oldest age group (60 to 64) in our subsample consists of men only. Most of the youngest falsely unemployed, however, are women - poorly educated, busy with housekeeping and with rearing children — called colloquially housewives.

There are no significant differences between towns/cities and the country. The only distinct difference is in the relation of the number of people losing a job to those recovering it; there are a little bit more of the former among people living in the country than among those living in towns and cities.

Considerable differences in the section of income level are rather an effect than a reason for unemployment though low income is correlated with individual factors of the risk of losing a job/the threat of unemployment (the issue is discussed in a later part of the study).

There may be various reasons for losing a job or the inability to find one (no first job/never worked). The dynamic model of unemployment (figure 8.1) distinguishes three general categories of factors determining the threat of unemployment.

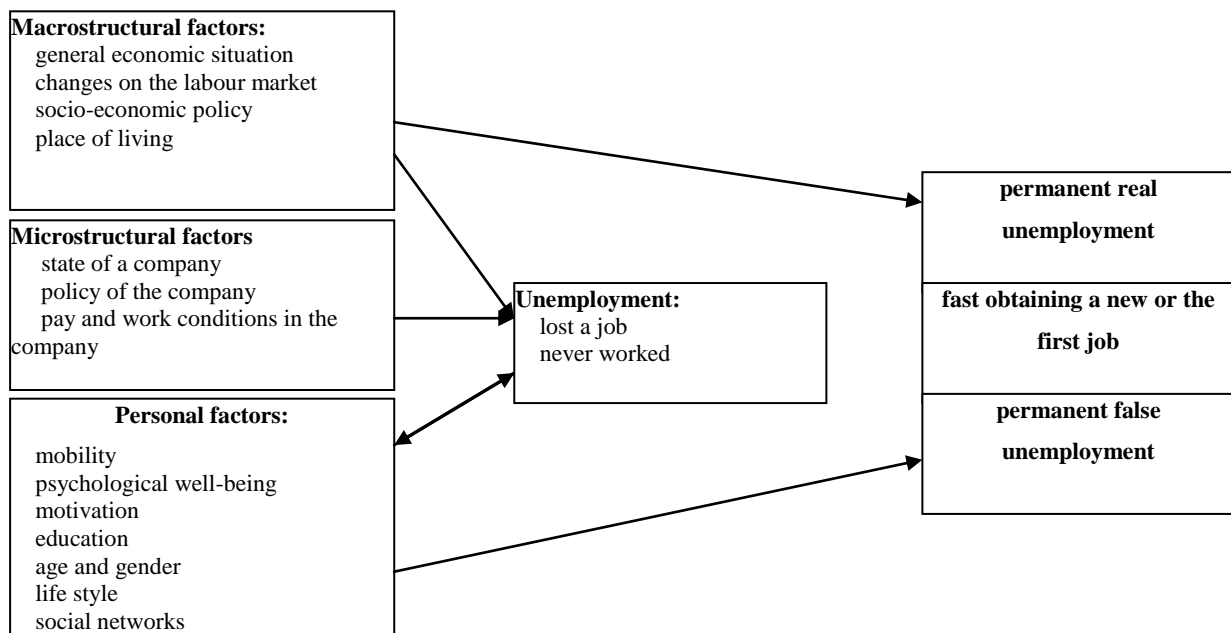


Figure 8.1. Dynamic model of unemployment

The first group comprises macrostructural factors that an individual cannot change (apart from the place of residence). The threat of unemployment increases when the economic situation worsens and when changes on the labor market decrease the demand for popular professions (e.g. miners, metallurgists or sailors). Socio-economic policy influences the registered unemployment rate by changing the size of the gray area (taxes), investment incentives adapted to needs and situation of particular regions, relation of the number and quantity of various social services to work income. The influence of the place of residence on an unemployment rate is determined by the policy of a regional government, changes in the profitability of those branches of economy which dominate in a given region, state of transport infrastructure in a given region (e.g. canceling railway connections), changes in local structure of the labor market (supply and demand in given professional categories).

Macrostructural factors influence not only the threat of unemployment but also its character and permanence. Thus the size of the gray area and easy access to various social services (both factors are regulated by the state policy) may influence the percentage of the falsely unemployed in the group of the registered unemployed. The condition of the economy and interference of the state in the professions structure also influence the permanence of unemployment in general or in particular occupation categories.

The second group of factors refers to the situation in particular companies. The level of the threat of unemployment connected with the microstructural factors is not determined (or determined only to a small degree) by the workers themselves (a good example here is the case of the cable company in Ożarów near Warsaw). When a company is closed, moved to another, distant place (abroad) or if it goes bankrupt, it is all the workers of the company, independently of their individual features, that lose their jobs. These factors are not important, however, in relation to the character and permanence of the unemployment; they determine only if there are jobs in the company or if there are not. Losing jobs because of the microstructural factors does not determine the permanence of unemployment unless the reason for the microstructural causes of the unemployment are macrostructural factors e.g. privatization policy of the state.

When the level of micro- and macrostructural factors is the same or similar for everybody it is the individual features that determine the employment status for particular people. However even if one searched through the whole literature of the subject it would be difficult to find a decisive (well-documented in theory and empirically) answer to the question of the nature of relations between individual features and the status of employment, e.g. whether the unemployed are more depressed, often break the law and drink a lot of alcohol because they have lost their jobs or they have lost their jobs just because they were more depressed, broke the law and drank too much alcohol.

Of course in situations where dismissals are the result of closing a company, eliminating a number of positions or massive employment reduction, the causes of dismissal are independent of the dismissed. We cannot always point out such a definite external reason, however. Nevertheless most researchers assume that unemployment is *the source* of all negative states and forms of behavior of an individual. That is why there is so much talk about the psychological effects of the unemployment but almost none about its psychological causes.

One of the few researchers who has seen the problem, Platt (1984), suggests only that in the case of suicides committed by the unemployed, which are more frequent than among the employed, losing a job may be the effect of some mental disorders which had started before a person lost their job and which led to the dismissal and later to the suicide.

More direct evidence of the influence of psychological variables on the threat of unemployment is provided by research conducted in Holland (Verkley and Stols, 1990). According to the study people feeling less happy are more prone to losing a job than happier people, and after the dismissal have bigger psychological problems and less chance of finding another job. However psychological well-being turned out to be a worse predictor than other

factors distinguished by the authors of the study, such as: physical well-being, financial problems, gender or education.

What do the *Diagnoses* say in this matter? As we have stated earlier in this volume, people who lost their jobs between the first and the second wave were quite similar to those permanently unemployed in 2000 even when they were still working (see chapter 5.10.5.2 and 5.10.7); e.g. they drank too much alcohol and showed more pathological behavior than the permanently employed. Losing a job, in turn, influenced these aspects of their life-style, which earlier increased the threat of unemployment: dismissed people drank even more alcohol and broke the law more often.

Some factors have obvious, undisputed influence on the threat of unemployment as well as on its character and permanence. Thus education (both its level and type) determines the adjustment and the rate of adaptation to the structure of demand on the labor market. Old age may not increase the threat of unemployment but it certainly decreases the chances of getting a job back after losing it. It is also gender that makes it difficult to find a job (women may get pregnant so sometimes they are discriminated against by employers). Motivation determines reliability, efficiency and obedience of a worker and thus also their place on the list of people to be dismissed. Mobility, both geographical (readiness to change the place of residence in order to get a job) and professional (readiness to change one's qualification) also determines the level of the threat of unemployment, especially duration of unemployment.

What we are left with is the analysis of the relations between psychological well-being and unemployment. As we have mentioned above, most researchers believe that losing a job has a destructive influence on the worker's psyche. Of course nobody questions the influence of mental disorders (such as schizophrenia, mental handicap or Alzheimer's disease) on the risk and permanence of unemployment. However, our model assumes that even definitely subtler, non-clinical symptoms of decreased well-being, perceived so far only as the consequences of unemployment, may also increase the threat of unemployment as well as influence the character and permanence of unemployment. Data obtained during the panel survey allow us to check if this hypothesis is true⁵⁵.

Figures 8.2, 8.4, 8.6 and 8.8 show that, similarly as in the case of alcohol drinking and pathological behavior, even before their dismissal the psychological well-being of people who lost their jobs after 2000 was considerably lower than that of the permanently employed. The result is identical in relation to all four indicators of well-being: the will to live, general subjective well-being, symptoms of depression and satisfaction with life as a whole. However the level of well-being in this group of people (those who were to become unemployed at some time) was significantly higher (apart from one index in the case of women) than that of the permanently unemployed.

It is exactly this kind of result that should be expected in accordance with the dynamic model of unemployment. There are various reasons for losing a job. In many cases these may be reasons completely independent of the characteristics of the dismissed but in many others losing a job is connected mainly — or partially — with individual features of the dismissed. It is only in relation to the latter group that we could expect as bad a well-being as that which is characteristic of the permanently unemployed. People who lose their jobs because of the reasons they cannot control should feel as well before their dismissal as the permanently employed do; thus the average level of well-being for the whole group of people losing a job should be exactly as the one we observed — between that of the permanently unemployed and that of permanently employed. One could question the hypothesis indicating the bad emotional state as the reason for losing a job and assume that people dismissed because of some "external" reasons could

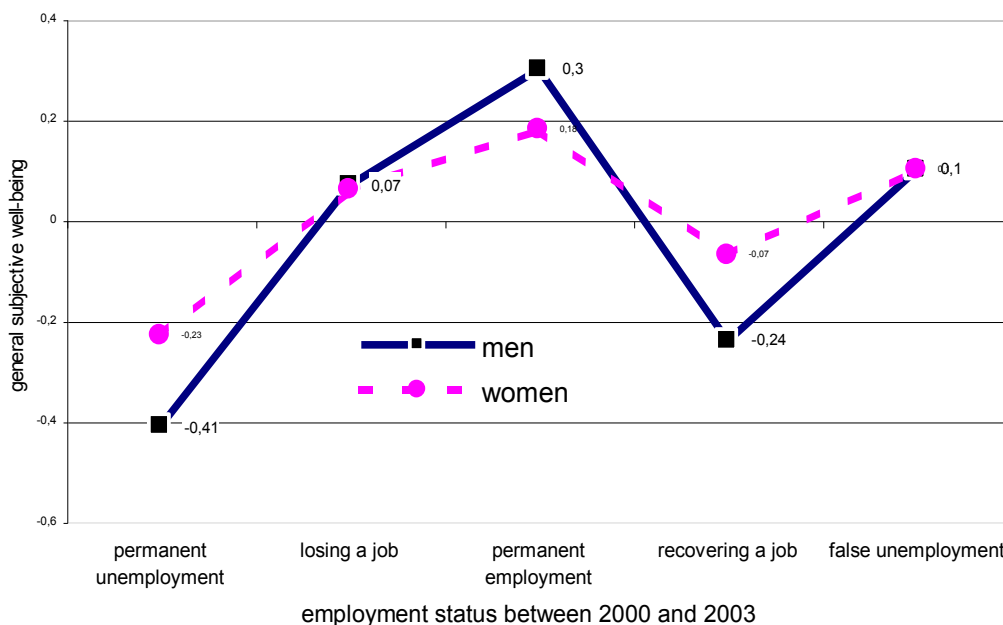
⁵⁵ A fully conclusive survey would be possible only if the same group of people were tested three times (i.e. if the same variables were measured three times). Let us hope that such a survey will be possible, i.e. that *Social Diagnosis* will have its third edition in two or three years.

experience greater stress (than did the permanently employed) even during the first survey. The stress could be connected with expected bankruptcy of the firm or reduction of employment, with economic policy of the government etc., that is with the structural factors of the threat of unemployment, which occurred even before the respondents lost their jobs. In such a case one could argue that it was because of the external and not personal factors that the dismissed were in a bad emotional condition even before they lost their jobs — the bad condition was caused by the stress of "bad expectations". However the data deny this alternative hypothesis.

The intensity of life stress estimated during the first survey in the group of people who were to lose their jobs does not differ at all from the level of life stress experienced by the permanently employed, and it is lower than in the case of all the people who were unemployed during the first survey in 2000 (both these who later recovered their jobs and those permanently unemployed) (figure 8.10). One could assume then that they did not expect at that point that they would lose their jobs; thus the "bad expectations" could not be a factor, which worsened their emotional state before they were dismissed. It was only after they lost their jobs that the intensity of their life stress increased (the increase was observed in this group only) (figure 8.11).

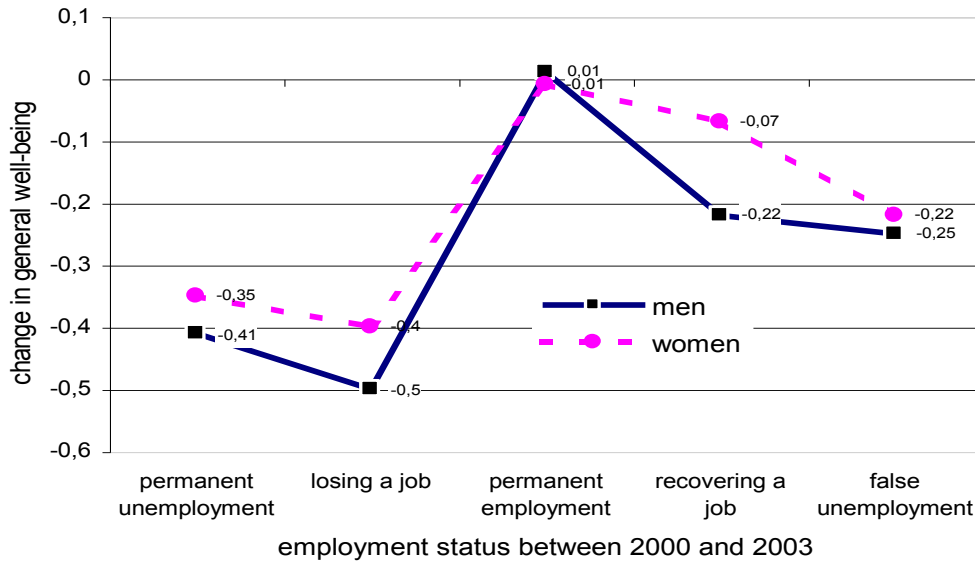
The data concerning dynamics of the indicators of well-being are also in accordance with our model (figures 8.3, 8.5, 8.7, 8.9). The only group where they did not change is the group of the permanently employed. In the case of people who lost their job after the first wave the data were much worse.

Thus we have the following situation (perfectly in accordance with what the model predicts): some of the unemployed lose their jobs for personal reasons (alcoholism, inclination to break the law, depression, weak will to live, lack of satisfaction with life); losing a job, in turn, increases their level of stress and strengthens the individual problems, which decreases the chance for recovering their job. Most of the permanently unemployed may come just from this group.



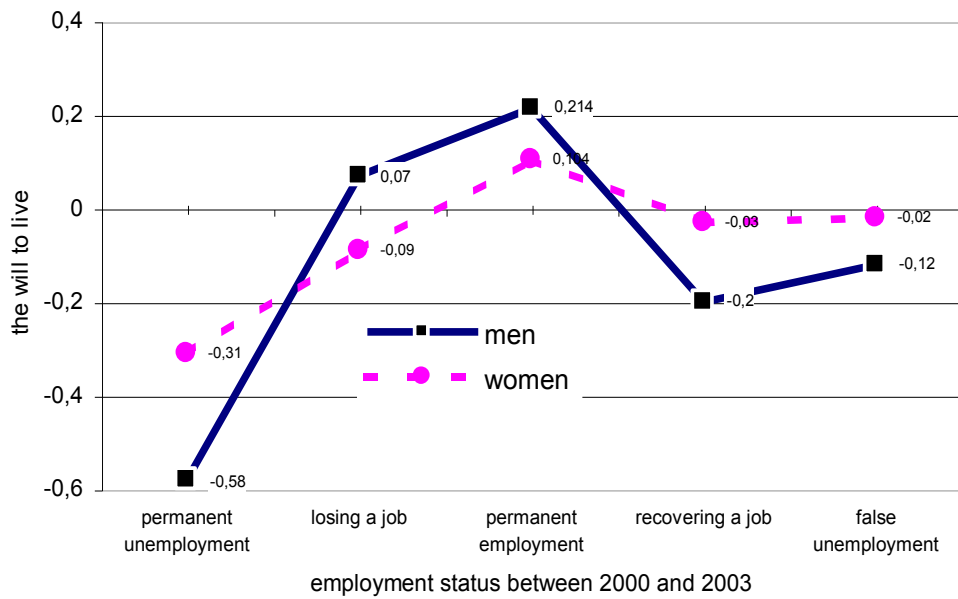
Note: the covariate in the analysis was age; effects: of gender $F(1,2521)=2.97$ $p<0.10$; of employment status $F(4,2521)=46.15$ $p<0.0000$; of employment status and gender interaction $F(4,2568)=5.00$ $p<0.0001$.

Figure 8.2. General subjective well-being in 2000 by gender and employment status in 2000-2003



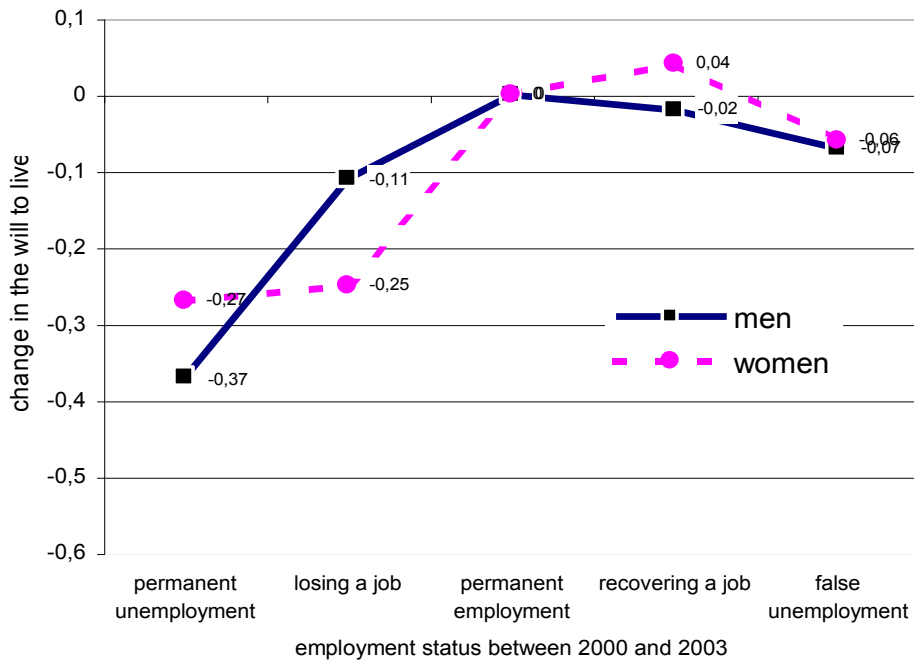
Note: the covariate in the analysis was age; effects: of gender $F(1,2441)=2.73$ $p<0.10$; of employment status $F(4,2441)=38.67$ $p<0.0000$; of employment status and gender interaction $F(4,2441) < 2ns$.

Figure 8.3. Change in general subjective well-being between 2000 and 2003 by gender and employment status in 2000-2003



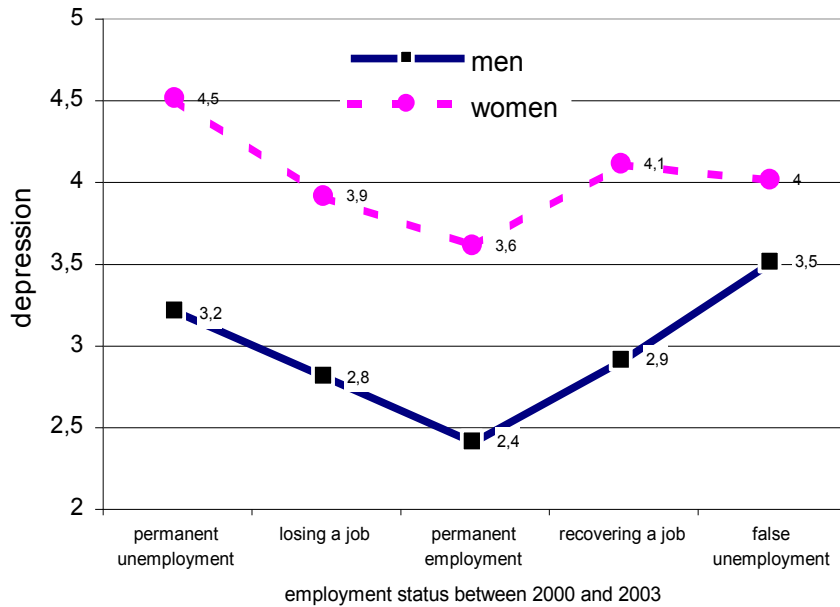
Note: the covariate in the analysis was age; effects: of gender $F(1,2569) < 2$ ns; of employment status $F(4,2569)=30.46$ $p<0.0000$; of employment status and gender interaction $F(4,2569)=4.63$ $p<0.001$.

Figure 8.4. The will to live in 2000 by gender and employment status in 2000-2003



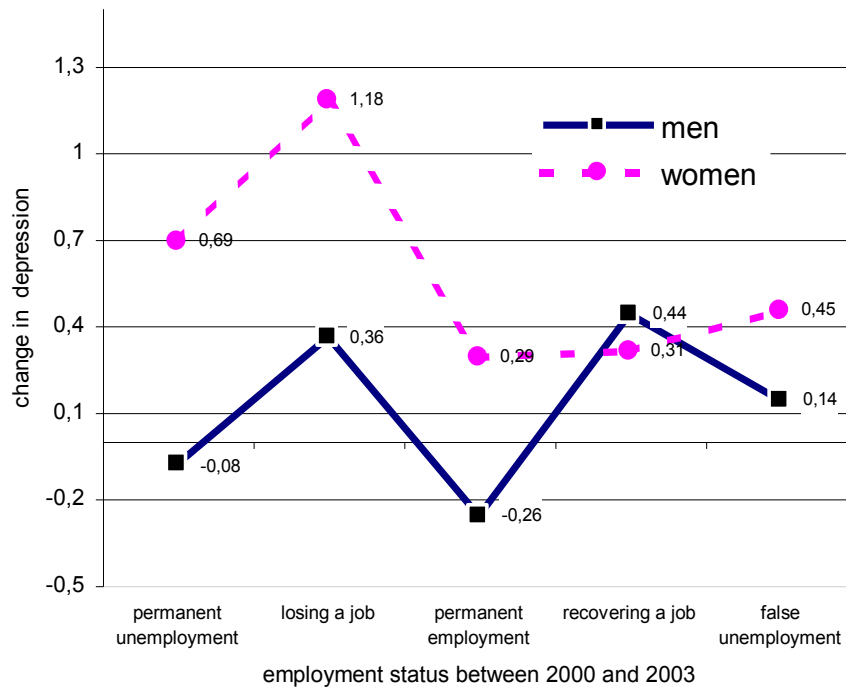
Note: the covariate in the analysis was age; effects: of gender $F(1,2562) < 1$ ns; of employment status $F(4,2562)=9.30$ $p < 0.0000$; of employment status and gender interaction $F(4,2562) < 1$ ns.

Figure 8.5. Change in the will to live between 2000 and 2003 by gender and employment status in 2000-2003



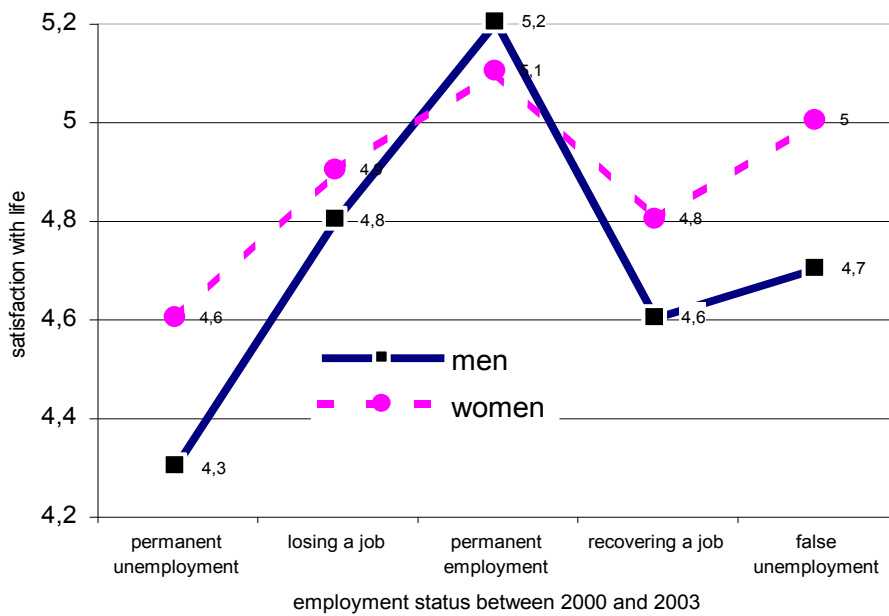
Note: the covariate in the analysis was the age; effects: of gender $F(1,2542)=40.94$ $p < 0.0000$; of employment status $F(4,2542)=6.94$ $p < 0.0000$; of employment status and gender interaction $F(4,2545) < 1$ ns.

Figure 8.6. The intensity of depression symptoms in 2000 by gender and employment status in 2000-2003



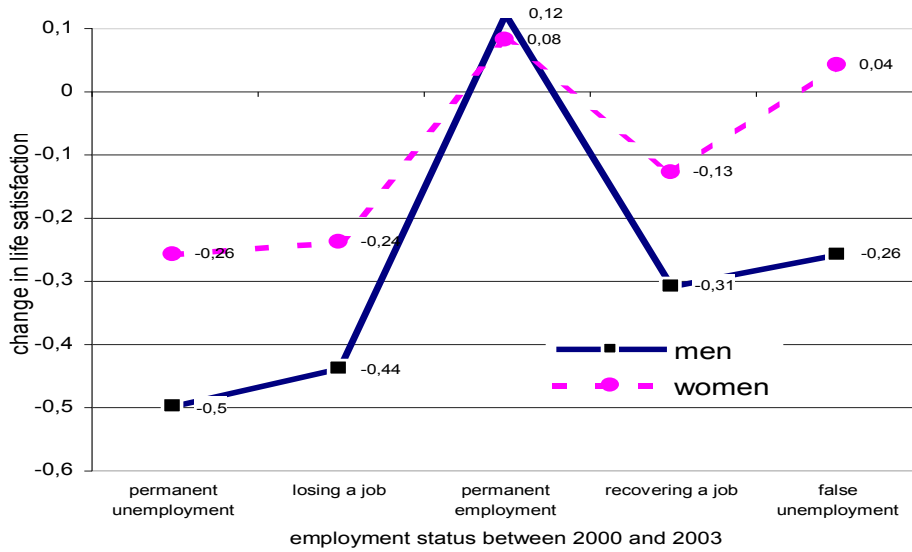
Note: the covariate in the analysis was age; effects: of gender $F(1,2498)=9.02$ $p<0.005$; of employment status $F(4,2948)=4.57$ $p<0.01$; of employment status and gender interaction $F(4,2498)<2$ ns.

Figure 8.7. Change in the intensity of depression symptoms between 2000 and 2003 by gender and employment status in 2000-2003



Note: the covariate in the analysis was age; effects: of gender $F(1,2568)=63.60$ $p<0.0000$; of employment status $F(4,2568)=2.47$ $p<0.05$; of employment status and gender interaction $F(4,2568)<1$ ns.

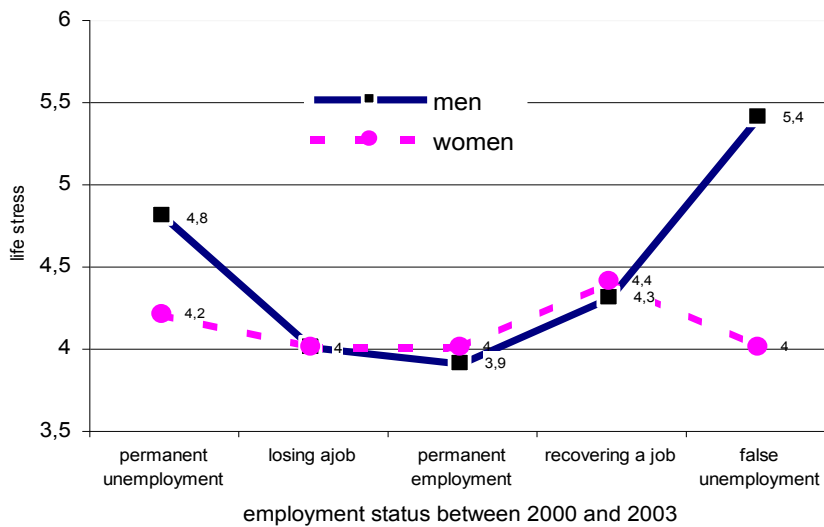
Figure 8.8. Satisfaction with life as a whole in 2000 by gender and employment status in 2000-2003



Note: the covariate in the analysis was age; effects: of gender $F(1,2561)=10.92$ $p<0.01$; of employment status $F(4,2561)=21.90$ $p<0.000$; of employment status and gender interaction $F(4,2561)=2.84$ $p<0.05$.

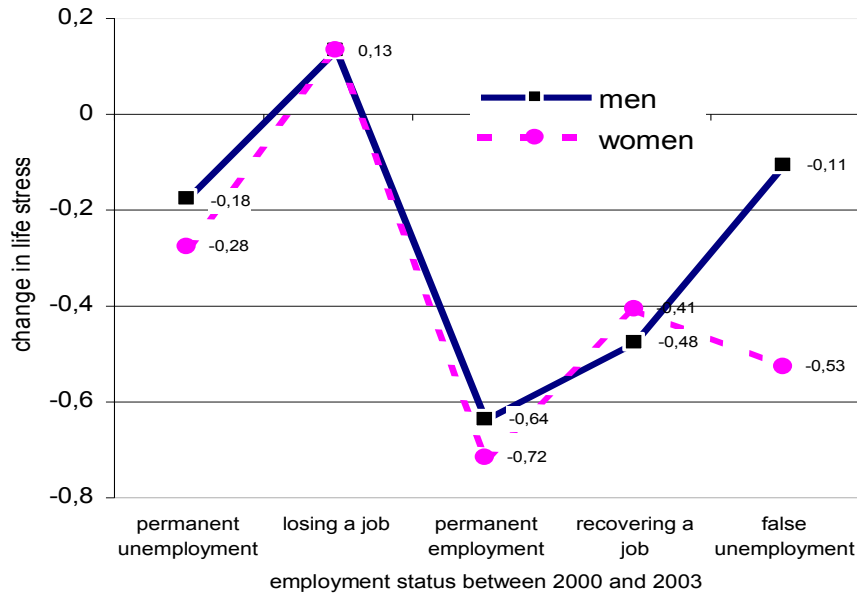
Figure 8.9. Change in satisfaction with life as a whole between 2000 and 2003 by gender and employment status in 2000-2003

What seems quite interesting here are the results of the analysis of income situation in relation to the employment status. It turns out that already in the first wave the income of people who were to lose their jobs was significantly lower than that of the permanently employed. What is more, their income at that time was as low as the income of the unemployed (figure 8.12). Even more interesting is the fact that their income did not change even after they lost their job (in fact it decreased but only by inflation rate and not proportionally to the earnings lost) (figure 8.13). This is a very mysterious phenomenon: the indigent lose their jobs but that does not make them poorer. Perhaps their income was not significantly higher than the social benefit they got after losing their jobs or maybe they got more financial help from their families.



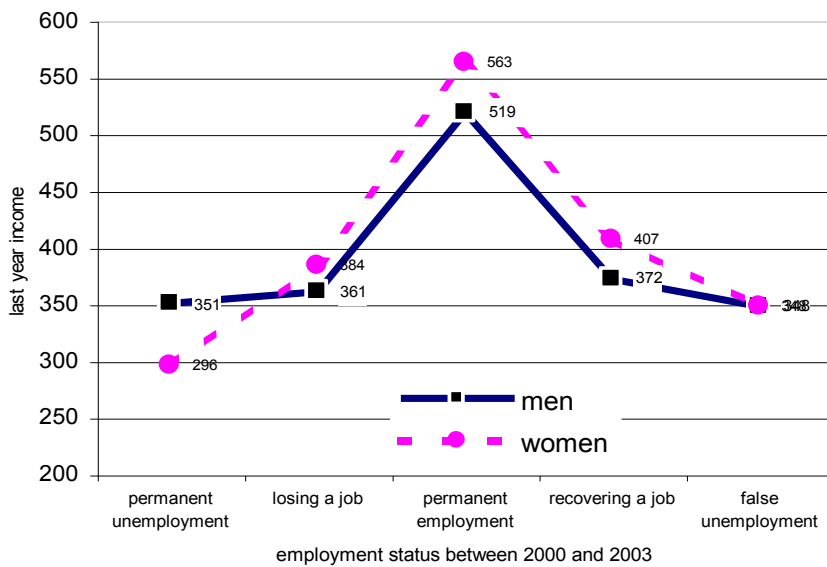
Note: the covariate in the analysis was age; effects: of gender $F(1,2592)=4.09$ $p<0.05$; of employment status $F(4,2592)=3.14$ $p<0.05$; of employment status and gender interaction $F(4,2592)=2.03$ ns.

Figure 8.10. Level of life stress in 2000 by gender and employment status in 2000-2003



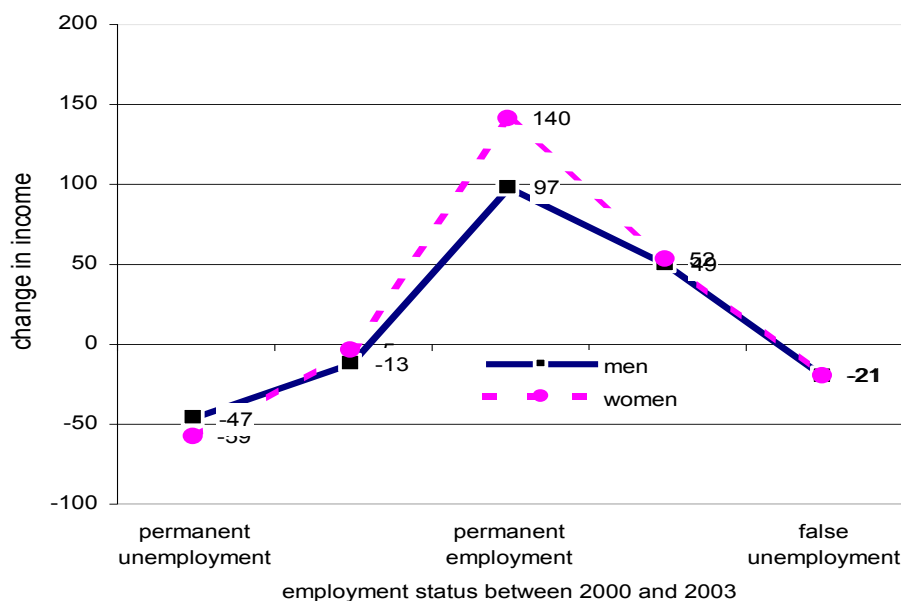
Note: the covariate in the analysis was age; effects: of gender $F(1,2591) < 1$ ns; of employment status $F(4,2591) = 4.43$ $p < 0.01$; of employment status and gender interaction $F(4,2591) < 1$ ns.

Figure 8.11. Change in the intensity of life stress between 2000 and 2003 by gender and employment status in 2000-2003



Note: the covariate in the analysis was age; effects: of gender $F(1,2604) < 1$ ns; of employment status $F(4,2604) = 35.12$ $p < 0.000$; of employment status and gender interaction $F(4,2568) < 1$ ns.

Figure 8.12. Monthly income per capita in a household in 2000 by gender and employment status in 2000-2003



Note: the covariate in the analysis was age; effects: of gender $F(1,2418) < 1$ ns; of employment status $F(4,2418) = 22.82$ $p < 0.000$; of employment status and gender interaction $F(4,2418) < 1$ ns.

Figure 8.13. Change in monthly income per capita in a household between 2000 and 2003 by gender and employment status in 2000-2003

One should also emphasize that, unlike in the case of addictions and criminal inclinations, the relation of well-being to the employment status is generally the same both in the case of men and in the case of women. It should not be surprising, however, as there is no significant difference between men and women in well-being level (apart from depression) and its dynamics (see Czapiński, 1992, 2001a).

8.5. The threat of social exclusion

Irena E. Kotowska, Paweł Strzelecki

The social exclusion risk may be estimated on the basis of the risk of entering the poverty zone and staying in it. The results of the poverty range and its depth as well as of its permanence, presented in chapter 8.2.2., show the increasing importance of the unemployment of a household's members in relation to its material status. It is not only the range of poverty, analyzed both in the subjective and objective categories, or its depth that differ significantly in relation to households with no unemployed and the ones with unemployed people; it is also the changes of the relevant indexes in time (March 2000 - March 2003) that confirm the increasing difference in material status between the two groups of households.

According to the objective attitude the range of poverty among the households with the unemployed increased during the last three years, while in the group of households with no unemployed it decreased significantly. That is why in March 2003 the percentage of the poor was almost three times higher among the households with the unemployed than among the ones without the unemployed. Depth of poverty, definitely greater in the case of the households with the unemployed in 2000, also increased more among such households.

The analysis of poverty status change (percentage of the households which entered the poverty zone and those who left it) confirms the increasing material handicap of households with the unemployed. The decrease in the poverty range (according to the objective attitude) for households with no unemployed results from the fact that households left the poverty zone much

more often (over twice as often) than they entered it. In the case of households with the unemployed, however, the "inflow" into the poverty zone was not only bigger than the "outflow" but the risk of transition from the group of "non-poor" households to the group of poverty was three times higher (than in the case of the households with no unemployed). What confirms the permanent character of poverty of the households with the unemployed is the fact that as many as 75% of the households classified in 2000 as poor were still in the poverty zone in 2003. In the case of households with no unemployed the percentage was 46%.

The changes are reflected in the evaluation of the subjective material situation of the households. The evaluation improved in the case of the households with no unemployed but it worsened in the case of the other group of households (though it had been very bad already). As many 90% of the households belonging to that group and classified as poor in 2000 stayed in the poverty zone in 2003 and the percentage of the poor households increased to 81%.

8.6. Three types of social exclusion

Janusz Czapiński

Relations between the particular criteria of exclusion are rather weak. Thus it is difficult to define one coherent syndrome. In Poland, both in 2000 and 2003, the 10 criteria formed three orthogonal factors accounting for over 40% of variance (table 8.17). The first of these factors may be called structural exclusion; it is defined mainly by: the place of residence, the person's and their father's education, as well as correlated — and most probably dependent on the above criteria — income below the poverty line. The second factor — physical exclusion — is determined mainly by age and handicap and also — though to a lesser degree — by education of the person's father (older people's parents are usually poorly educated). The physical exclusion, connected with physical disability, is correlated negatively with the status of the unemployed (only in 2000). It is understandable as older people are usually retired and the handicapped get the disability pension. The relation of this category of exclusion to poverty is not so obvious. Most probably it results from the fact that the income of the retired, i.e. elderly people, is usually higher than that of other social groups (see chapter 4.11.), and there are few handicapped without permanent income (disability pension). The third factor, that may be called normative exclusion, is formed by the following criteria: alcoholism and drug addiction, law-breaking, loneliness, being a victim of discrimination connected with nationality, appearance, beliefs or with other factors.

The analysis of the stability of the first factor confirms the accuracy of the term "structural exclusion". Correlation of the factor values measured in 2000 and 2003 is as much as 0.837. In other words, as many as 76% of the people excluded structurally in 2000 were still excluded in 2003. In the case of the second factor — physical exclusion — the percentage was 59% (some of the respondents exceeded the critical age of 50 years old in 2003, some others changed the disability status). The least stable category is normative exclusion as it depends to a considerable extent on an individual's activity and motivation. Only 8% of the respondents belonging to this group may be classified as the permanently excluded. This means that the state policy concerning "social integration" should concentrate on the two former factors of the risk of exclusion: handicap and education level, especially in respect to people living in the country. Of course, preventing addictions, demoralization and unemployment is also important but in the case of this factor it is mainly the excluded themselves that are responsible for their lot.

Table 8.17. Results of the factor analysis of exclusion criteria with Varimax rotation

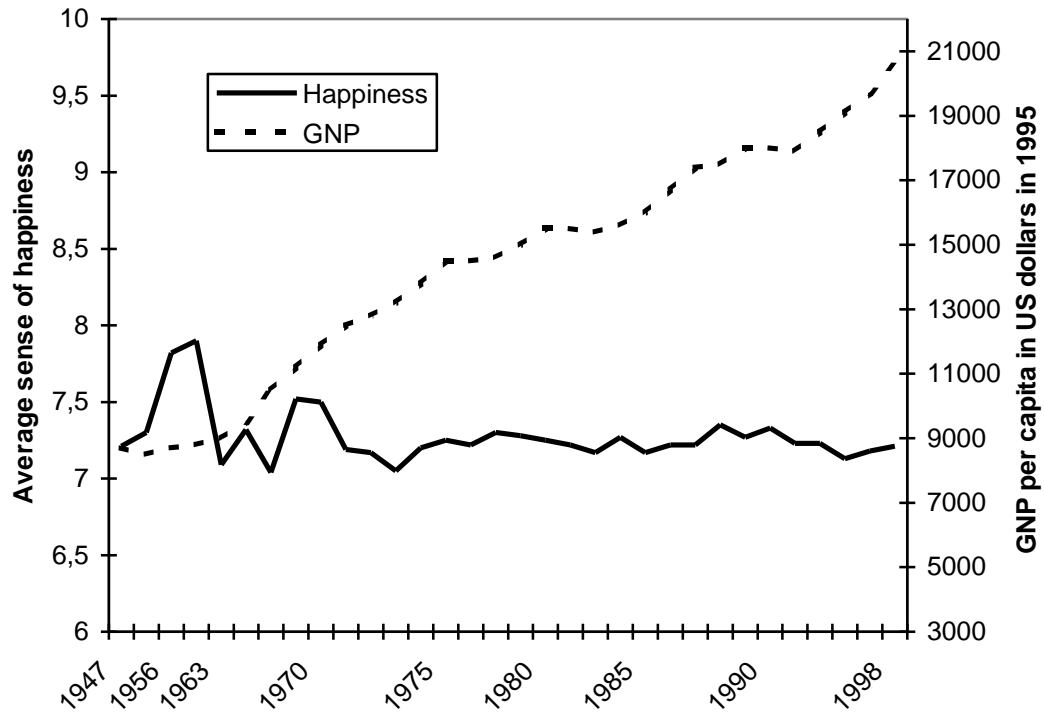
Criteria	Factors					
	I structural exclusion		II physical exclusion		III normative exclusion	
	2000	2003	2000	2003	2000	2003
age 50+			0,81	0,82		
loneliness					0,41	0,41
poverty	0,57	0,61	-0,43	-0,41		
living in the country	0,65	0,66				
education lower than secondary	0,69	0,71				
father's education - primary or none	0,64	0,56	0,43	0,49		
addiction (alcohol, drugs)					0,57	0,66
law-breaking					0,62	0,64
discrimination					0,51	0,38
disability			0,66	0,60		
unemployment			-0,41			0,32
% of variance	16,0	15,9	14,6	13,9	11,0	11,6

Note: the table shows factors loadings higher than 0.3.

Data source: 2000 — Social Diagnosis 2000 (computer database)

The factors related to the risk of social exclusion are a negative phenomenon, especially in respect to social order. No responsible politician can ignore things like a high unemployment rate (here the role of this factor is questionable), a high percentage of the disabled, a high crime rate or increasing poverty. This does not mean, however, that the exclusion defined by these factors must influence negatively the subjective quality of life (psychological well-being). The unemployed, the poor, the disabled and criminals need not be less happy, more depressed or less motivated to live than the employed, rich, healthy and honest citizens. Many studies prove that the objective life conditions have only minor influence on well-being (Andrews, Withey, 1976, Campbell, Converse, Rodgers, 1976; Czapiński, 1992, 2001a, in print; Myers, 1993). The poor are only slightly less happy than the rich, the old are as happy as the young, the well-educated only slightly happier than the uneducated. It is only marital status and health (but only its subjective evaluation and not objective medical diagnosis) that influence the level of well-being consequently and significantly. People living alone, especially the widowed and the divorced, as well as those considering themselves ill are much less happy than those who are married and feel well. Though the state may increase the medical security of citizens and thus their satisfaction with their physical well-being, it cannot influence interpersonal relations and marital status of the citizens.

It has been proved that a change of life situation does not cause a proportional change of well-being. For example, satisfaction with life and sense of happiness in the USA, Great Britain and most of other developed countries have not changed for many years in spite of continuous economic growth (figure 8.14).



Data source: Veenhoven, R., *World Database of Happiness*, Distributional findings in Nations 11.11.2002: U.S. Commerce Department, Bureau of the Census.

Figure 8.14. Happiness (on a scale of 1 - 10) and real income per capita in the USA between the years 1947 and 1998.

In Poland, however, the relation between the objective conditions of life and well-being is much stronger than in other countries (Czapiński, 1996, 2001b). That is why one could expect that social exclusion also has a significant influence on subjective quality of life. In order to check it we estimated the predictive value of factors determining the three types of exclusion for various indicators of well-being (estimation by means of logistic regression).

As far as general subjective well-being is concerned, all three factors have similar, significant value in both waves (2000 and 2003) and account for about 20% of variance. The well-being of people excluded structurally, physically and normatively is significantly lower than well-being of non-excluded people.

Table 8.18. Results of the multiple regression analysis: predictive value of various categories of exclusion in relation to subjective quality of life - general subjective well-being*

Predictor	B		Beta		Level of significance		Adjusted R ²	
	2000	2003	2000	2003	2000	2003	2000	2003
Constant	-0,02	-0,08			0,02	0,366		
structural exclusion	0,20	0,18	0,27	0,24	0,00	0,00		
physical exclusion	0,19	0,20	0,27	0,29	0,00	0,00		
normative exclusion	0,16	0,14	0,25	0,23	0,00	0,00		
							0,22	0,19

*index consisting of standardized variables: depression, evaluation of life as a whole, happiness and evaluation of the last year
Data source: year 2000 — Social Diagnosis 2000 (computer database)

A similar distribution of relations may be observed in the case of the evaluation of life as a whole and of the sense of happiness. However in these two measures of well-being the

exclusion explains variance, which is twice as small as in the case of general subjective well-being (tables 8.19. and 8.20.).

Table 8.19. Results of the multiple regression analysis: predictive value of various categories of exclusion in relation to subjective quality of life - evaluation of life as a whole

Predictor	B		Beta		Level of significance		Adjusted R ²	
	2000	2003	2000	2003	2000	2003	2000	2003
Constant	3.09	3.02			0.00	0.00		
structural exclusion	0.24	0.20	0.22	0.19	0.00	0.00		
physical exclusion	0.08	0.13	0.08	0.13	0.00	0.00		
normative exclusion	0.19	0.16	0.20	0.18	0.00	0.00		
							0.098	0.085

Data source: 2000 — Social Diagnosis 2000 (computer database)

Table 8.20. Results of the multiple regression analysis: predictive value of various categories of exclusion in relation to subjective quality of life - sense of happiness

Predictor	B		Beta		Level of significance		Adjusted R ²	
	2000	2003	2000	2003	2000	2003	2000	2003
Constant	2.30	2.35			0.00	0.00		
structural exclusion	0.12	0.13	0.21	0.19	0.00	0.00		
physical exclusion	0.05	0.07	0.10	0.12	0.00	0.00		
normative exclusion	0.09	0.11	0.18	0.21	0.00	0.00		
							0.087	0.095

Data source: 2000 — Social Diagnosis 2000 (computer database)

The influence of the three types of exclusion is more varied in relation to other, more detailed measures of subjective quality of life. The intensity of depression symptoms and psychosomatic symptoms depends mainly on the physical exclusion (tables 8.21 and 8.22) though other categories of exclusion are also significant in both cases.

Table 8.21. Results of the multiple regression analysis: predictive value of various categories of exclusion in relation to subjective quality of life - depression symptoms

Predictor	B		Beta		level of significance		Adjusted R ²	
	2000	2003	2000	2003	2000	2003	2000	2003
Constant	4.54	4.33			0.00	0.00		
structural exclusion	0.88	0.61	0.21	0.15	0.00	0.00		
physical exclusion	2.24	2.20	0.54	0.56	0.00	0.00		
normative exclusion	0.52	0.24	0.14	0.07	0.00	0.00		
							0.37	0.33

Data source: 2000 — Social Diagnosis 2000 (computer database)

Table 8.22. Results of the multiple regression analysis: predictive value of various categories of exclusion in relation to subjective quality of life - psychosomatic symptoms

Predictor	B		Beta		Level of significance		Adjusted R ²	
	2000	2003	2000	2003	2000	2003	2000	2003
Constant		1,34				0,00		
structural exclusion		0,02		0,08		0,00		
physical exclusion		0,12		0,40		0,00		
normative exclusion		0,02		0,07		0,00		
								0,17

Data source: 2000 — Social Diagnosis 2000 (computer database)

The decreased will to live, in turn, is connected mainly with normative exclusion (table 8.23).

Table 8.23. Results of the multiple regression analysis: predictive value of various categories of exclusion in relation to subjective quality of life - the will to live

Predictor	B		Beta		Level of significance		Adjusted R ²	
	2000	2003	2000	2003	2000	2003	2000	2003
constant	0.02	0.03			0.03	0.01		
structural exclusion	-0.11	-0.09	-0.14	-0.12	0.00	0.00		
physical exclusion	-0.05	-0.05	-0.07	-0.07	0.00	0.00		
normative exclusion	-0.17	-0.17	-0.24	-0.25	0.00	0.00		
							0.081	0.081

Data source: 2000 — Social Diagnosis 2000 (computer database)

Table 8.24. Results of the multiple regression analysis: predictive value of various categories of exclusion in relation to subjective quality of life - the level of life stress

Predictor	B		Beta		Level of significance		Adjusted R ²	
	2000	2003	2000	2003	2000	2003	2000	2003
constant	3.88	1.78			0.00	0.00		
structural exclusion	-0.24	-0.10	-0.07	-0.10	0.00	0.00		
physical exclusion	0.09	-0.11	0.03	-0.12	0.02	0.02		
normative exclusion	0.96	0.20	0.32	0.24	0.00	0.00		
							0.11	0.085

Data source: 2000 — Social Diagnosis 2000 (computer database)

What seems interesting here is the relation of the three types of exclusion to the level of life stress. The normative exclusion increases the stress while the structural and physical types of exclusion are connected with lower levels of life stress (table 8.24). It may result from the fact that both people excluded physically and those excluded structurally are less active, the former play also a smaller number of social roles and can count on better social services. This does not mean, however, that people excluded physically and structurally are in a better psychological situation; there are fewer stressful events in their life but their life situation is basically one permanent stress.

9. CONCLUSION: NEW POLAND —LOVING MOTHER OR WICKED STEPMOTHER?

Janusz Czapiński

In conclusion, it is worth considering the general question of the varying fortunes of different groups in post-transformation Poland. For some the new Poland has turned out to be a loving mother, for others a wicked stepmother. Some Poles have found their feet in the post-communist Polish realities and others have got bogged down. Some have found their feet quickly and easily, others slowly and with great difficulty. It seems that overall as a society we have the worst time of adaptation behind us. Those were the years 1992-1993. Later, after the introduction of the four great social reforms (health, education, pension system and administration) we lost balance for a short time, but today we are in the best condition we have ever been in, since the very beginning of transformation. The pitiful condition of the state itself is another matter. However, in theory at least, the state is easier to fundamentally reform than society as a whole. But only in theory, because instead of a public-oriented society, we have seen the rise of what we might call a self-oriented society. This self-orientation, or resourcefulness, of Poles too often allows them to improve their own situation at the expense of the state. This means that a reform of the state would have to once again violate the interests of certain groups. It would destroy the fragile newly-acquired skill of coping in the difficult conditions of early capitalism – which at the same time is already post-modern (liberal morals, technological acceleration, moral and cognitive relativism). However if the divorce of citizens from their state is just passively observed, this could lead to an even more dangerous consequence, namely that the chance of a sustainable development is missed. This means, that apart from the paralysis in infrastructure (e.g. the road system), the economic lethargy, growing corruption and the inefficiency of public institutions such as the police, courts, and departments of central and local government, it is possible that there will be a structuralization (hardening) of the caste-like divisions in Polish society.

Although on average the standard of living of the majority is getting better and better year by year, for some it is much better, for others just a little better and for still others it is a little or a lot worse. And even if “worse” here does not mean worse in an absolute sense, increasing social stratification is bringing with it frustration, anti-social behavior and the silent rebellion of those who have had the doors to a better but receding world shut in their faces. Already today, due to the increasing social inheritance index, young people who have themselves been “badly” born will produce children who are worse born and from them in turn will come children born even worse. Rural areas are making no progress in comparison to the towns and cities, and yet their population shows no decrease. Perhaps the quality of life of people in the villages is not yet by any means as tragic as suggested by much of the media and the opinions of politicians (especially from the opposition). However, the fact that the pace of educational development of urban youth is several times higher than their rural counterparts does not augur well for Poles as a whole, even for those who are allergic to the term “social justice”.

As our analysis indicates, Polish society is clearly stratified, and in many cases this is unjustified – the cumulative result of state neglect, blindness and the opportunism of those in power. The mantra repeated by successive governments: first the economy, we’ll take care of the rest later, or - in its most cynical expression - the rest will take care of itself (those who cannot cope will die out), was a contradiction of reality and an expression of blindness in relation to the strengthening mechanisms of social divisions. Today, to paraphrase the famous words of Bill Clinton from his presidential campaign, we should be saying loudly: “the economy, stupid, is not everything”. Theoreticians of sustainable development have long recognized this (see Czapiński, 2002c). Economic indexes, which are the most important for the poorest countries, become less and less significant as a society develops. The quality of life

is multidimensional. And this is true in Poland too, which after all is no longer among the poorest.

The whole program of *Social Diagnosis* is devoted to a multidimensional study of the conditions and quality of life. The picture, which our research has drawn, proves that there are beneficiaries of the transformation and there are victims. Nevertheless, apart from a few groups (e.g. the very well educated on the one hand, and the long-term unemployed on the other), there are none who have been absolutely favored or absolutely disadvantaged. Everyone complains and nearly everyone has an important reason to be unsatisfied. The better off (e.g. retirees) are by no means more healthy or loved than those less well off (e.g. couples with many children); inhabitants of rural areas (hardest hit as a result of the change from communism) are less exposed to the various kinds of social pathology experienced increasingly in larger urban areas, and they have maintained much better interpersonal relationships.

We showed earlier that there is no single coherent social exclusion syndrome. This discovery is at one and the same time encouraging and saddening. It is true that the different risk factors do not accumulate, so that the phenomenon itself is not usually the worst problem for the person excluded, but at the same time it means that it is easy to be excluded. It is enough to fulfill one of many uncorrelated conditions: e.g. fall ill, become an invalid, experience poverty, be born in a rural area, or into a family with a low level of culture.

So, let us examine how a multidimensional quality of life is stratifying Polish society today. We can do this by taking into account the most important indicators discussed separately in the particular chapters above. Can we speak of clear winners and clear losers? How big are the differences between the former and the latter? Which groups have a poor quality of life through their own fault, and which have been treated badly by the new Poland, acting as a wicked stepmother?

In creating synthetic measure of the quality of life we have tried as far as possible to keep a balance between objective and subjective variables, and also to include various aspects of life. We have distinguished 8 general quality of life indicators, which we consider to be relatively independent:

- psychological well-being (the sum of standardized measures of depression, evaluation of life as a whole and evaluation of the last year, and happiness);
- physical well-being (the sum of standardized measures of health: the intensity of somatic symptoms, use of health care, hospitalization and disability);
- social well-being (the sum of standardized measures of social support: being loved and trusted, loneliness and the number of friends);
- poverty (see chapter 8.2);
- modernity (the sum of standardized measures of familiarity with and access to modern communication technologies – satellite or cable TV, mobile phone, computer and the Internet – and the level of education);
- social pathology (the sum of standardized measures of addiction to alcohol and drugs, visits to a psychologist or psychiatrist, being the victim or perpetrator of crimes);
- life-stress (the sum of standardized measures of all kinds of stress – see chapter 5.7);
- civic behavior (the sum of standardized measures of civic attitudes and behavior – membership and activity in organizations, participation in meetings, voting in local government election, opinions on the democracy).

We examined the extent to which these indicators are intercorrelated and whether they form one coherent quality of life syndrome, or if, like the indicators of exclusion, they are relatively independent factors allowing individuals and social groups to compensate for failings in one with better positions in other areas. A factor analysis with varimax rotation reveals three orthogonal factors explaining a total of 57% of variance (table 9.1). The first factor which

explains the largest portion of variance (25.1%), can be defined as well-being; this is mainly physical and psychological well-being, and – to a lower degree – social well-being and the index of modernity. The second factor, explaining 18.5% of variances, defines two negative measures of the quality of life: the intensity of social pathology and the amount of stress experienced in life; it can be called the stress of living. The third factor (living standard), which explains the smallest portion of variance (13.4%), links poverty to a low level of modernity and civic behavior.

This structure of results confirms the thesis that in Poland today there is no one measurement of the quality of life. And so those who are not doing well materially, are not particularly modern or not active socially may still be able to enjoy other aspects of life in which they have been favored. For example, they don't experience social pathology, they are in good health or they have satisfying interpersonal relationships. But perhaps it is that this independence of indicators of the quality of life at an individual level disappears or reduces radically at the level of groups. We cannot exclude the possibility that some segments of society are like the biblical Job who experienced all kinds of misfortunes whereas others enjoy a good life in every regard. In order to examine if that is indeed the case, we took 58 groups, which we distinguished on the basis of 8 not fully separate socio-demographic criteria (age, gender, level of education, class of place of residence, voivodship, family type, social and professional status, employment status). We defined the position of these groups in terms of each of the 8 dimensions of the quality of life, indicating their variation from the estimated average for the whole population⁵⁶, and then summarized these positive or negative variations to obtain a final unweighted result for the quality of life (table 9.2).

Table 9.1. Results of factor analysis of chosen measurements of quality of life with Varimax rotation

Measurements of quality of life	Factors		
	Factor 1- well-being	Factor 2 – life-stress	Factor 3- standard of living
Poverty			- 0.742
Civic behavior			0.524
Modernity	0.404		0.636
Social well-being	0.415		
Physical well-being	0.785		
Psychological well-being	0.717		
Life-stress		0.803	
Anti-social behavior		0.806	
% of explained variance	20.03	19.21	17.78

Note: We have shown factor loadings with a value of above 0.4.

The value of the quality of life balanced in the above way could oscillate from –16 to +16. However, we can see that the real range of differences between the groups at either extreme reached just a bit more than half the potential range (from 8 to –10). This proves that from a multidimensional point of view there are no absolute winners and losers in Poland today. There are, however, those who are more or less winners and more or less losers. The ranking of the 58 social groups, from the ones enjoying relatively speaking the highest quality of life to those whose balance is, compared to the whole community, the most negative (table 9.3), generally fits our expectations. Educated young people in permanent employment are doing best. In contemporary Poland, the unemployed and disability pensioners are doing worst.

⁵⁶ The criterion of variation was the standard deviation (SD): below one SD the group was given 0, between one and two SD, the group was given one minus or one plus, depending on the direction of the deviation; for two or more SD, the group was given two minuses or two pluses.

This does not mean that each group in the higher levels of ranking owes its success to the state, or that each group in the lower levels has been wronged by the state. For example, university education is achieved by the citizens themselves, often even despite the educational policy of successive Polish governments; and among the unemployed, it has been shown in the previous chapter that a lot of people are responsible for their own misfortune.

However, in order to consider these faults and merits fairly, to estimate the degree of responsibility of the state and individual citizens for our quality of life, it would be necessary to carry out a separate survey of the relations between citizens and the state. The findings of the *Social Diagnosis* are not a sufficient basis for such an analysis.

In conclusion, there are some surprising results that are worth noting. According to general public opinion, the position of self-employed is surprisingly low (in sixth position, equal with their employees). It is also food for thought, that the highest position is shared by people with a university education and public sector employees. It seems that, due to its size, it is this group, which contributes largely to the generally good condition of Polish society in the year 2003.

The measurements of quality of life according to the division of voivodships are not quite what we would have expected either. The inhabitants of Pomorskie voivodship definitely have the best quality of life (figure 9.1.1), and Lubuskie voivodship has the worst, along with the regions neighboring Pomorskie voivodship – Kujawsko-pomorskie and Warmińsko-mazurskie voivodships. The region of Małopolska can be characterized by a higher quality of life than Mazowsze, which is considered as the most developed, but it is lower than Wielkopolska and the neighboring Łódzkie voivodship. The regional stratification does not correspond either to the divisions related to the historical partitions of Poland, or to the contemporary differentiation of material development, although the majority of typically farming regions fall to a greater or lesser degree below the national average.

Table 9. 2. The quality of life of various groups of Poles in March 2003

Socio-demographic group	Indicators of quality of life *								General index of quality of life **
	Psycho-logical well-being	Physical well-being	Social well-being	Poverty	Moderni-ty	Anti-social behavior	Life-stress	Civic behavior	
One-family									
Couples without children	0	—	++	—	—	0	—	++	+5
Couples with 1 child	+	0	0	—	++	0	0	0	+4
Couples with 2 children	++	+	+	0	++	+	0	0	+5
Couples with 3+ children	+	++	+	++	—	0	0	—	+4
One-parent family	—	0	—	0	—	++	+	0	-8
Multi-family	0	0	+	0	—	—	0	0	-1
Non-family									
One-person	—	—	—	—	—	—	—	++	-2
Multi-person	—	—	—	0	—	—	0	—	-9
Urban areas									
Cities above 500 thousand	0	0	—	—	++	++	++	0	-2
Towns 200-500 thousand	0	—	—	—	++	+	+	0	-1
Towns 100-200 thousand	+	0	—	—	++	0	0	0	+3
Towns 20-100 thousand	0	—	+	—	+	0	0	0	+2
Towns below 20 thousand	0	0	0	0	0	0	0	0	0
Rural areas	—	+	+	++	—	—	—	0	-1
Voivodship									
Dolnośląskie	0	0	0	+	+	++	+	0	-3
Kujawsko-pomorskie	0	0	0	++	—	0	0	—	-6
Lubelskie	0	—	0	0	—	++	+	+	-5
Lubuskie	—	—	—	0	+	+	++	0	-8
Łódzkie	0	0	++	0	0	—	—	+	+5
Małopolskie	+	0	++	0	0	—	0	0	+4
Mazowieckie	0	—	0	—	++	+	0	0	0
Opolskie	0	++	—	—	+	+	++	0	0
Podkarpackie	—	0	0	++	—	—	0	0	-2
Podlaskie	—	+	0	0	0	0	+	0	-2
Pomorskie	++	+	0	—	++	+	0	++	+7
Śląskie	0	0	0	—	0	0	0	—	+1
Świętokrzyskie	0	++	0	++	—	—	0	0	+1
Warmińsko-mazurskie	—	+	—	++	—	0	0	0	-6
Wielkopolskie	++	+	0	0	0	—	—	+	+6
Zachodniopomorskie	0	—	—	0	0	0	0	0	-4

Table 9. 2. The quality of life of various groups of Poles in March 2003 (continued)

Socio-demographic group	Indicators of quality of life *								General index of quality of life **
	Psychological well-being	Physical well-being	Social well-being	Poverty	Moderity	Anti-social behavior	Life-stress	Civic behavior	
Men	0	+	+	0	0	+	0	+	+2
Women	0	-	-	0	0	-	0	-	-2
Education									
Primary and below	---	---	-	+	---	0	-	---	-9
Basic vocational	0	0	0	+	-	0	-	0	-1
Secondary	+	0	0	-	+	0	0	+	+4
University	++	+	+	-	++	0	+	+	+8
With children	0	+	0	+	+	0	+	+	+1
No children	0	0	0	-	-	0	-	-	0
Social-professional status									
Public sector	++	+	0	-	++	0	0	++	+8
Private sector	+	+	+	0	+	0	+	0	+3
Self-employed	0	+	0	0	++	+	++	+	+3
Farmers	0	++	++	++	---	0	+	+	0
Pensioners	---	---	---	0	---	0	0	0	-8
Retirees	-	-	0	---	---	-	-	0	-2
Pupils and students	++	++	++	+	+	+	---	-	+6
Unemployed	-	+	---	++	-	+	++	-	-9
Others, inactive	-	0	-	+	-	0	0	---	-6
Age									
Up to 24 years old	++	++	++	+	++	++	-	-	+5
25 – 34 years old	+	+	0	0	++	+	0	0	+3
35 – 44 years old	0	0	-	+	+	0	+	+	-1
45 – 59 years old	-	0	0	0	0	0	+	+	-1
60 – 64 years old	---	---	-	---	---	---	-	+	+3
65 and over	---	---	-	---	---	---	-	+	-2
Status of employment									
Permanent unemployment	---	+	---	++	-	+	+	-	-10
Temporary unemployment	-	0	-	+	-	++	++	-	-9
Permanent employment	++	0	0	-	+	0	0	+	+5
Resumption of work	0	+	0	0	+	0	0	0	+2
False unemployment	-	0	+	+	-	0	0	-	-3

* Indications: ++ much above the average of the whole sample, + above the average, 0 close to the average, - below the average, --- much below the average

** The index is the sum of the indications for a given group after reversion of the indications assigned negative dimensions (poverty, anti-social behaviors and life-stress)

Table 9.3. Quality of life of various socio-demographic groups in Poland in March 2003

Rank	Socio-demographic group	Quality of life in the scale of -16 to +16
1.	University education	+ 8
2.	Public sector employees	+ 8
3.	Pomorskie voivodship	+ 7
4.	Pupils and students	+ 6
5.	Wielkopolskie voivodship	+ 6
6.	18 - 24 year olds	+ 5
7.	Permanent employment	+ 5
8.	Marriages with no children	+ 5
9.	Marriages with 2 children	+ 5
10.	Łódzkie voivodship	+ 5
11.	Secondary education	+ 4
12.	Marriages with 1 child	+ 4
13.	Marriages with 3 and more children	+ 4
14.	Małopolskie voivodship	+ 4
15.	Private sector employees	+ 3
16.	Self-employed	+ 3
17.	25 - 34 year olds	+ 3
18.	60 - 64 year olds	+ 3
19.	Towns of 100-200k	+ 3
20.	Men	+ 2
21.	Unemployed who returned to work after the year 2000	+ 2
22.	Towns of 20-100k	+ 2
23.	Śląskie voivodship	+ 1
24.	Świętokrzyskie voivodship	+ 1
25.	Providing for children	+ 1
26.	Farmers	0
27.	Mazowieckie voivodship	0
28.	Opolskie voivodship	0
29.	No children to provide for	0
30.	Towns below 20k	0
31.	Vocational education	- 1
32.	35 - 44 year olds	- 1
33.	45 - 59 year olds	- 1
34.	Multi-family households	- 1
35.	Towns of 200-500k	- 1
36.	Rural areas	- 1
37.	Women	- 2
38.	Retirees	- 2
39.	65 year olds and over	- 2
40.	Non-family households (one person)	- 2
41.	Cities over 500k	- 2
42.	Podkarpackie voivodship	- 2
43.	Podlaskie voivodship	- 2
44.	False unemployed	- 3
45.	Dolnośląskie voivodship	- 3
46.	Zachodniopomorskie voivodship	- 4
47.	Lubelskie voivodship	- 5
48.	Others, professionally passive	- 6
49.	Kujawsko-pomorskie voivodship	- 6
50.	Warmińsko-mazurskie voivodship	- 6
51.	Retirees	- 8
52.	Lubuskie voivodship	- 8
53.	One-parent families	- 8
54.	Primary education and below	- 9
55.	Unemployed - in general	- 9
56.	Unemployed who lost their job after the year 2000	- 9
57.	Multi-person non-family household	- 9
58.	Permanently unemployed (in 2000 and now)	- 10

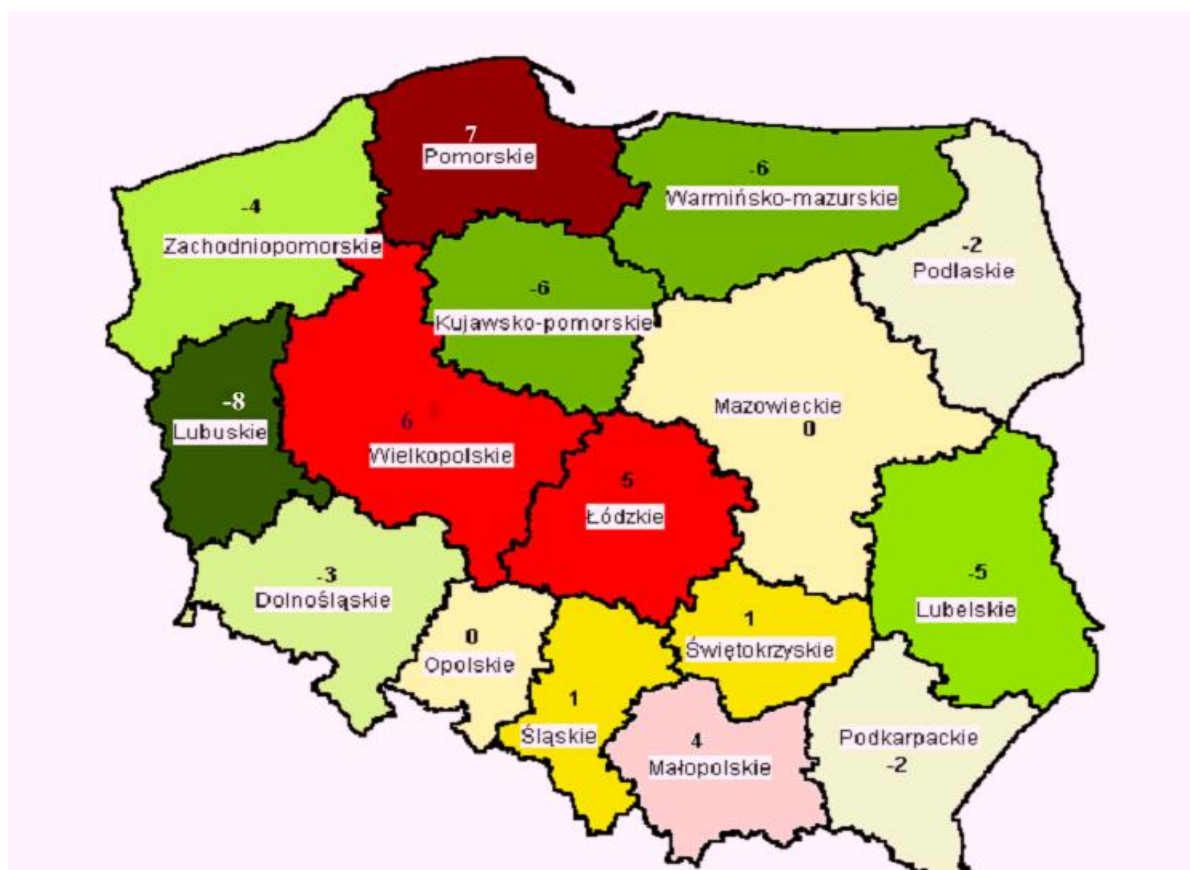


Figure 9.1. Level of quality of life by voivodship

Bibliography

- Anderson R. H, Bikson T. K, Law S. A., Mitchell B. M, (1995). *Universal Access to E-Mail – Feasibility and Societal Implications*. Santa Monica, CA: RAND.
- Andrews F.M., Withey S.B. (1976). *Social indicators of well-being: Americans' perception of life quality*. New York: Plenum Press.
- Andrews F. M., Withey S. B (1976). *Social indicators of well-being: Americans' perception of life quality*. New York: Plenum.
- Anell A., Rosen P. (1995/1996). Patient choices and influence in the health services – a generation issue? *IHE Information*, no. 4/1995 & 1/1996.
- Anell A., Rosen P., Hjortsberg C. (1997). Choice and participation in the health services: a survey of preferences among Swedish residents. *Health Policy*, 40, 157-168.
- Baker P.M.A. (2001). Policy Bridges for the Digital Divide: Assessing the Landscape and Gauging the Dimensions. *First Monday*, nr 6 (5) (http://firstmonday.org/issues/issue6_5/baker/index.html).
- Bartkowski J. (2003), *Tradycja i polityka. Wpływ tradycji kulturowych polskich regionów na współczesne zachowania społeczne i polityczne*. Warszawa: Żak.
- 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.
- 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.
- Birdsall W.F. (2000). The Digital Divide in the Liberal State: a Canadian Perspective. *First Monday* 5 (12) (http://firstmonday.org/issues/issue5_12/birdsall/index.html).
- Błaszczak-Przybycińska I., Kotowska I. E., Panek T., Podgórski J., Rytelewska G., Szulc A. (1999). *Determinanty różnicowania warunków życia gospodarstw domowych w okresie transformacji gospodarczej*. Warszawa: Szkoła Główna Handlowa.
- Bolt D., Crawford R. (2000). *Digital Divide: computers and our children's future*. New York: TV Books.
- Boneva B. Kraut R., Frohlich D. (2001). Using e-mail for personal relationships: The difference gender makes. *American Behavioral Scientist*, 45(3): 530–549.
- Bonfadelli H. (2002). The Internet and Knowledge Gaps: A Theoretical and Empirical Investigation. *European Journal of Communication*. 17, 65–84.
- Campbell, A., Converse, P. E., Rodgers, W. L. (1976). *The quality of American life*. New York: Russell Sage.
- Castells M. (1997). *The Rise of the Network Society*. London: Blackwell.
- Castells Manuel (2001). *The Internet Galaxy: Reflections on the Internet, Business, and Society*. Oxford University Press. Wydanie polskie: *Galaktyka internetu: refleksje nad internetem, biznesem i społeczeństwem*, Warszawa: Rebis, 2003.
- Cele i kierunki rozwoju społeczeństwa informacyjnego w Polsce (2000)*, Dokument programowy przyjęty przez Radę Ministrów na posiedzeniu 28 listopada 2000.
- Cellary W. (red.) (2002). *Polska w drodze do globalnego społeczeństwa informacyjnego*. Raport UNDP o rozwoju społecznym. Warszawa.
- Czapiński J. (1988). *Wartościowanie — efekt negatywności: O naturze realizmu*. Wrocław: Ossolineum
- Czapiński J. (1992). *Psychologia szczęścia: przegląd badań i zarys teorii cebulowej*. Poznań: Akademos.
- Czapiński J. (1994). The anchorage of the Polish soul: Social indicators of psychological well-being in the systemic transformation period. *Polish Psychological Bulletin*, 25, 163-186.
- Czapiński J. (1996). *Cywilizacyjna rola edukacji: Dlaczego warto inwestować w wykształcenie*. Warszawa: Instytut Studiów Społecznych Uniwersytetu Warszawskiego.
- Czapiński J. (1998). *Jakość życia Polaków w czasie zmiany społecznej*. Warszawa: Instytut Studiów Społecznych Uniwersytetu Warszawskiego (www.diagnoza.com).
- Czapiński J. (2000a). Niewdzięczne społeczeństwo. *Charaktery*, nr 1, 28-29.
- Czapiński J. (2000b). Niekliniczne wskaźniki zdrowia psychicznego Polaków: identyfikacja społecznych grup podwyższonego ryzyka, [w:] Cz. Czabała (red.), *Zdrowie psychiczne: zagrożenia i promocja* (s. 231-326). Warszawa: Instytut Psychiatrii i Neurologii.
- Czapiński 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.
- Czapiński J. (2001b). Makropsychologia, czyli psychologia zmiany społecznej, [w:] M. Lewicka i J. Grzelak (red.), *Jednostka i społeczeństwo*. Gdańsk: Gdańskie Wydawnictwo Psychologiczne.
- Czapiński J. (2002a). Dlaczego reformatorzy tracą poparcie społeczne. (w:) K. Skarżyńska (red.), *Podstawy psychologii politycznej* (s. 324-343). Poznań: Zys i S-ka, 2002.
- Czapiński J. (2002b). Cebula szczęścia, [w:] D. Krzemionka-Brózdka, J. Siuta, B. Białek (red.), *Czym jest psychologia* (s. 72-79). Kielce: Charaktery.

- Czapiński J. (2002c). Quo vadis homo? Zrównoważony rozwój, jakość życia I złudzenie postępu.. [w:] M. Marody (red.), *Wymiary życia społecznego. Polska na przełomie XX i XXI wieku*. Warszawa: Wydawnictwo Naukowe Scholar.
- Czapiński J. (2004). Ekonomiczne przesłanki i efekty dobrostanu psychologicznego (Economic foundations and effects of psychological well-being), [w:] T. Tysza (red.), *Psychologia ekonomiczna (t. 1)*. Gdańsk: Gdańskie Wydawnictwo Psychologiczne.
- Czapiński J., Panek T. (red.) (2001). *Diagnoza społeczna 2000*. Warszawa: Polskie Towarzystwo Statystyczne i Wyższa Szkoła pedagogiczna TWP [www.diagnoza.com].
- Czapinski J., Peeters G. (1991). The Onion Theory of Happiness: Basic Concepts and Cross-Cultural Test. In: N.Bleichrodt & P.J.D.Drenth (Eds.), *Contemporary Issues in Cross-Cultural Psychology* (pp 196-206). Amsterdam: Swets & Zeitlinger B.V..
- Cześniak M. (2002). Partycypacja wyborcza w Polsce w latach 1991-2001, [w:] R. Markowski (red.), *System partyjny a zachowania wyborcze. Dekada polskich doświadczeń* (s.49-72). Warszawa: Instytut Studiów Politycznych PAN i Fundacja im. Eberta.
- Dalton H. (1920). *The Measurement of Inequality of Income*. „Economic Journal”, No. 30, s. 361-384.
- Deniszczuk L., Sajkiewicz B. (1996). Kategoria minimum socjalnego, [w:] *Polska bieda. Kryteria, ocena, przeciwdziałanie* (s. 146-185). Warszawa: Instytut Pracy i Spraw Socjalnych.
- DiMaggio P., Hargittai E. (2001). From the 'Digital Divide' to 'digital inequality': studying internet use as penetration increases. Working Paper 19, Center for Arts and Cultural Policy Studies, Woodrow Wilson School, Princeton University.
- DiMaggio P., Hargittai E., Neuman W. R., Robinson J. P. (2001). Social implications of the internet. *Annual Review of Sociology*, 27, 307–336.
- Drewnowski J. (1977). Poverty: Its Meaning and Measurement. *Development and Change*, No. 8, 183-208.
- Dziubińska-Michalewicz M. (1994). Sektor prywatny w opiece zdrowotnej, wyniki badań ankietowych. *Antidotum – Zarządzanie w Opiece Zdrowotnej*, nr 12, 27-34.
- Ellison C. G. (1991). Religious involvement and subjective well-being. *Journal of Health and Social Behavior*, 32, 80-99.
- Europe and the global Information Society* (1994). Recommendations of the Bangemann Group to the European Council, 26 May.
- European Commission (1995). *The social exclusion indicators: Problematic issues*. Collective paper from Seminar on 'Social exclusion indicators' held in Brussels, May 1995.
- Evaluation of the primary health care reform. The conclusions of a questionnaire – based investigation* (1997). Budapest: Social Research Informatics Centre.
- Falkowska M. (2000). Polacy o reformach społecznych: akceptacja, przyzwolenie czy odrzucenie? [w:] L. Kolarska-Bobińska (red.), *Cztery reformy. od koncepcji do realizacji* (s. 285-313). Warszawa: Instytut Spraw Publicznych.
- Fong E., Wellman B., Kew M., Wilkes R. (2001). *Correlates of the Digital Divide: Individual, household and spatial variation*. Toronto: Department of Sociology, University of Toronto.
- Gallie, D., Paugam, S. (2002). *Social precarity and social integration*. Report for European Commission, October 2002.
- GNC — General National Census of Population and Households 1988 (1988). Warsaw: Central Statistical Office
- GNC — General National Census of Population and Households 2002 (2003). Warsaw: Central Statistical Office <http://www.stat.gov.pl>.
- Getzen T. (2000). *Ekonomia zdrowia – teoria i praktyka*. Warszawa: Wydawnictwo Naukowe PWN.
- 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.
- Golinowska S., Tymowska K. (1995). Poland, [w:] Johnson (red.), *Private markets in health and welfare. An international perspective* (s. 137-153). Oxford: Berg Publishers Limited.
- Grabowska M., Szawiel T. (2002). *Budowanie demokracji. Podziały społeczne, partie polityczne i społeczeństwo obywatelskie w postkomunistycznej Polsce*. Warszawa: Wyd. Naukowe PWN.
- Greene W., H. (1997): *Econometric Analysis*. New York: Prentice Hall.
- Gurin G., Veroff J., Feld S. (1960). *American view of their mental health*. New York: Basic Books.
- GVU's 10th WWW User Survey.
- Hagenaars A. J. M. (1986). *The Perception of Poverty*. Amsterdam: North-Holland.
- Hampton K.N., Wellman, B. (2001). Long Distance Community in the Network Society: Contact and Support Beyond Netville. *American Behavioral Scientist*, 45, 477-496.
- Hargittai E. (2002). Second-level digital divide: Differences in people's online skills. *First Monday*, 7(4).
- Hills J., Le Grand J., Piachaud D. (Eds) (2002). *Understanding social exclusion*. Oxford: Oxford University Press.
- Hirshman A. (1995). *Lojalność, krytyka, rozstanie*. Kraków: Wydawnictwo Znak.
- Hoffman D. L., Novak, T. P., Schlosser, A. (2000). The evolution of the digital divide: How gaps in internet access may impact electronic commerce. *Journal of Computer-Mediated Communication*, 5(3).

- McKee M., Healy J. (red.) (2002). *Hospital in a changing Europe*. Buckingham Philadelphia: Open University Press.
- Iversen L. i 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.
- Joinson A.N. (2003). *Understanding the Psychology of Internet Behaviour: Virtual Worlds, Real Lives*. New York: Palgrave Macmillan.
- Kahneman D., Tversky A. (1979). Prospect theory: Analysis of decision under risk. *Econometrica*, 47, 263-291.
- Kalda R., Polluste K., Lember M. (2003). Patient satisfaction with care is associated with personal choice of physician. *Health Policy*, 64, 55-62.
- Katz J.E., Rice R.E., Aspden P. (2001). The internet, 1995-2000: Access, civic involvement, and social interaction. *American Behavioral Scientist*, 45, 405-419.
- Keskimäki I., Salinto M., Aro S. (1996). Private medicine and socioeconomic differences in the rates of common surgical procedures in Finland. *Health Policy*, 36, 245-259.
- KGP (2001). *Przestępczość w Polsce 1989-2000*. Warszawa: Komenda Główna Policji.
- Kolosi T., Toth J., Vukovich G. (red.) (1998). *Social report*. Budapest: Social Research Informatics Center. 1999
- Kornai J. (1998). *Reforming the Hungarian health system*. Budapest: Economical Legal Publishers.
- Kornai J., Eggleston K. (2001). *Welfare, choice and solidarity in transition. Reforming the health sector in Eastern Europe*. Cambridge University Press. Cambridge
- Kraut R. E., Kiesler S., Boneva B., Cummings J., Helgeson V. Crawford A. (2001). Internet Paradox Revisited. *Journal of Social Issues*.
- Kraut R. E., Patterson M., Lundmark V., Kiesler S., Mukhopadhyay T., Scherlis W. (1998). Internet paradox: A social technology that reduces social involvement and psychological well-being? *American Psychologist*, 53, 1017-1032.
- Kraut, R. E., Mukhopadhyay T., Szczypula J., Kiesler S., i Scherlis B. (2000). Information and communication: Alternative uses of the Internet in households. *Information Systems Research*, 10, 287-303.
- Kufel J. (1997). Obowiązkowe ubezpieczenia gospodarcze *Przegląd ubezpieczeń społecznych i gospodarczych*, nr 8, s. 9-10.
- LaRose R., Eastin M. S., Gregg J. (2001). Reformulating the Internet paradox: Social cognitive explanations of Internet use and depression. *Journal of Online Behavior*, 1 (2), (<http://www.behavior.net>).
- Lazarus R. S., Folkman S. (1984). *Stress, appraisal, and coping*. New York: Springer.
- Lewicka, M. (1993). *Aktor czy obserwator: Psychologiczne mechanizmy odchylenia od racjonalności w myśleniu potocznym*. Warszawa: Polskie Towarzystwo Psychologiczne.
- Lynch B. P. (2002). The digital divide or the digital connection: A U.S. perspective. *First Monday*, 7(10), (http://firstmonday.org/issues/issue7_10/lynch/index.html).
- Matheu, X. (1999). *Training against social exclusion*. Final report, September 1999. European Training Foundation.
- McLaren J., Zappala G. (2002). The 'digital divide' among financially disadvantaged families in Australia. *First Monday*, 7(11) (http://firstmonday.org/issues/issue7_11/mclaren/index.html).
- Mejer, L. (2000). Social exclusion in the EU member states. *Statistics in Focus*, Theme three, March 2000.
- Michalos A. (1980). Satisfaction and happiness. *Social Indicators Research*, 8, 385-422.
- Mokrzycki E. (2000). Młot związkowy, kowadło demokracji. *Gazeta Wyborcza* z 28-29 października.
- Myers, D. G. (1993). *The pursuit of happiness*. New York: Avon Books.
- Nesse R. M., Williams G. C. (1994). *Why we get sick*. New York: New York Times Books.
- Panek T. (2001): *Wymiary ubóstwa w Polsce w latach 1996-1999*. *Wiadomości Statystyczne*, 11, s. 37-55.
- Panek T. (2003). Ubóstwo i nierówności, [w:] T. Panek i A. Szulc (red.), *Statystyka społeczna. Wybrane zagadnienia*. Szkoła Główna Handlowa, Warszawa, str. 197-226.
- Panek T. (red.) (1997). *Warunki życia gospodarstw domowych w Polsce w okresie maj – listopad 1995: Stan, zagrożenia, perspektywy*, Warszawa: Główny Urząd Statystyczny i Szkoła Główna Handlowa.
- Panek T., Podgórski J., Szulc A. (1999). *Ubóstwo: metodologia i praktyka pomiaru*. Warszawa: Szkoła Główna Handlowa.
- Panek T. (w druku). Multidimensional Analysis of Poverty in Poland in 1996-1999, [w:] A. Lemmi, J. Silber (red.), *Fuzzy Approaches to Multidimensional Poverty Measurement*. Dordrecht: Kluwer Academic Publisher.
- Parker S. C., Rougier, J. (2001). Measuring Social Mobility as Unpredictability. *Econometrica*, 68, 63-76.
- Parks M. R., Floyd K. (1995). Making Friends in cyberspace. *Online Journal of CMC* 1(4).
- Peeters G, Cammaert M.-F., Czapiński J. (1997). Unrealistic optimism and positive-negative asymmetry: A conceptual and cross-cultural study of interrelationships between optimism, pessimism, and realism. *International Journal of Psychology*, 32, 23-34.
- Peeters G., Czapiński J. (1990). Positive-negative asymmetry in evaluations: The distinction between affective and informational negativity effects' [w:] W. Stroebe i M. Hewston (eds.), *European Review of Social Psychology*. London: Wiley.
- Peeters G., Czapiński J., Hoorens, V. (2001). Comparative optimism, pessimism and realism with respect to adverse events and their relationship with will to live. *Revue Internationale de Psychologie Sociale - International Review of Social Psychology* (Special issue on 'Social Comparison and Risk Perception'), 14, 143-161.

- PGSS (1999). *Polski Generalny Sondaż Społeczny*. Warszawa: Instytut Studiów Społecznych Uniwersytetu Warszawskiego
- Podgórski J. (1994). Wyznaczanie subiektywnych linii ubóstwa. *Wiomości Statystyczne*, 12, 12-19.
- Putnam R. D. (2000). *Bowling Alone: The Collapse and Revival of American Community*. Simon & Schuster.
- Reforma systemu edukacji* (1998). Warszawa: WSiP.
- Rheingold, H. (1993). *The Virtual Community. Homesteading on the Electronic Frontier*. (<http://www.rheingold.com/vc/book/>)
- Riffault, H., Rabier, J. J. (1977). *The perception of poverty in Europe*. Brussels: European Commission.
- Rodgers R., Rodgers J. L. (1993). Chronic Poverty in the United States, *The Journal of Human Resources*, 28, 25-54;
- Saraceno, C. (2001). *Social exclusion: Cultural roots and diversities of a popular concept*. Paper presented at the conference on 'Social exclusion and children', Institute for Child and Family Policy, Columbia University, 3-4 May 2001 (www.childpolicy.org).
- Sen A. (1983). Poor, Relatively Speaking. *Oxford Economic Papers*, No. 35, 153-169.
- Shorrocks A. F. (1978). The Measurement of Mobility. *Econometrica*, 46, 1013-1024.
- Siemaszko A., Gruszczyńska B., Marczewski M. (2003). *Atlas przestępczości w Polsce 3*. Warszawa: Instytut Wymiaru Sprawiedliwości i Oficyna Naukowa.
- Singh S. (2001). Gender and the use of the internet at home. *New Media & Society*, 3, 395-416.
- Stevens A. H. (1999). Climbing out of poverty, falling back in. *The Journal of Human Resources*, 34, 557-588,
- Stewart, K. (2002). *Measuring well-being and exclusion in Europe's regions*. CASEpaper 53, March 2002. Center for Analysis of Social Exclusion, London School of Economics.
- Strategia informatyzacji Rzeczypospolitej Polskiej – ePolska*. KBN 10 marca 2003.
- Sulek A. (2001). *Sondaż polski. Przygarść rozpraw o badaniach ankietowych*. Warszawa: Wyd. Instytutu Filozofii i Socjologii PAN.
- Sztompka P. (2000). *Trauma wielkiej zmiany: społeczne koszty transformacji*. Warszawa: Instytut Studiów Politycznych PAN.
- Szulc A. (1992). Quasi-exact Equivalence Scales Estimation. *Przegląd Statystyczny*, 3/4, 302-307.
- Szulc A. (1995). *An Equivalence Exercise for Poland: Towards a Balanced Consumer Market*, referat przedstawiony na 7. Światowym Kongresie Towarzystwa Ekonometrycznego, Tokio 22-29 sierpień.
- Szumlicz T. (1994). *Modele polityki społeczne*. Warszawa: Oficyna Wydawnicza SGH.
- Szumlicz t. (1999). Monitoring reformy systemu zabezpieczenia emerytalnego, [w:] L. Kolarska-Bobińska (red.), *Cztery reformy: od koncepcji do realizacji*. Warszawa: Instytut Spraw Publicznych.
- Szumlicz T. (2002). O systemie zabezpieczenia społecznego – podobnie i inaczej. [w:] J. Auleytner (red.), *O roztropną politykę społeczną* (s. 124-). Katowice: Wydawnictwo Naukowe Śląsk.
- The Pew Internet & American Life Project (2000). *Tracking online life: How women use the Internet to cultivate relationships with family and friends*. (<http://www.pewinternet.org/reports>)
- Turkle S. (1996). *Life on the Screen: Identity in the Age of the Internet*. London: Weidenfeld and Nicholson.
- Turkle, S. (2001). Tożsamość w epoce Internetu, [w:] Z. Rosińska-Blaustein (red.), *Koncepcja odbioru mediów*. Prószyński i s-ka (www.wiwi.pl/biblioteka/blaustein/_rosinska/01.asp).
- Tversky A., Kahneman D. (1992). Advances in prospect theory: Cumulative representation of uncertainty. *Journal of Risk and Uncertainty*, 5, 297-323.
- Tymowska K. (1999). *Sektor prywatny w systemie opieki zdrowotnej*. Warszawa: Instytut Spraw Publicznych
- Tymowska K. (2000). Projekt naprawy systemu opieki zdrowotnej – eksperckie opracowanie autorskie. *Zdrowie i Zarządzanie nr 3-4*, 85-90.
- Tymowska K. (2000). Przekształcenia własnościowe w opiece zdrowotnej – aspekty teoretyczne i praktyczne. *Zdrowie i Zarządzanie nr 2*, 6-14.
- Tymowska K. (2000). Założenia i rzeczywistość w reformowaniu opieki zdrowotnej, [w:] L. Kolarska-Bobińska (red.), *Cztery reformy. od koncepcji do realizacji* (s. 169-195). Warszawa: Instytut Spraw Publicznych.
- Tymowska K. (2002) *System opieki zdrowotnej w Polsce. Rocznik PWN*. Warszawa: PWN
- Tymowska K. (2003). Przerzucanie kosztów w systemie opieki zdrowotnej w Polsce. *Zdrowie i zarządzanie, 1*, 58-62
- Tymowska K. (in print). Health care under transformation system in Poland. *Health Policy*
- Tymowska K., Kowalska K. (2002). Stawki kapitałowe a zachowania dostawców usług medycznych. *Lekarz Rodzinny, 11*, 100 – 107
- Tymowska K., Musiałowicz A. (2003). Odchodzenie od publicznych zakładów opieki zdrowotnej. *Menedżer zdrowia, 4*, 54 – 65
- Van der Hayden J.H.A., Demarest S. Tafforeau J. (2003). Socio- economic differences in the utilisation of health services in Belgium. *Health Policy*, 65, 153-167
- Van der Meer J., van den Bos J., Mackenbach J. (1996). Socioeconomic differences in the utilization of health services in a Dutch population: the contribution of health status. *Health Policy*, 37, 1-18.
- Veenhoven R. (1994). *World Database of Happiness*. Rotterdam: RISBO.

- Verkley H., Stolk J. (1990). Does happiness lead into idleness? [w:] R.Veenhoven (red.), *How harmful is happiness?* (s. 79-93). Rotterdam: Universitaire Pers Rotterdam.
- Wallace P, (2001). 'Psychologia Internetu.' Warszawa: Rebis.
- Warschauer M. (2002). Reconceptualizing the Digital Divide. *First Monday*, 7,7 (http://firstmonday.org/issues/issue7_7/warschauer/index.html).
- Weinstein N.D. (1980). Unrealistic optimism about future life events. *Journal of Personality and Social Psychology*, 39, 806-820.
- Weinstein N.D. (1987). Unrealistic optimism about susceptibility to health problems: Conclusions from a community-wide sample. *Journal of Behavioral Medicine*, 10, 481-500.
- Wellman B. (1997). An electronic group is virtually a social network, [w:] S. Kiesler (Ed.), *Culture of the Internet* (179 – 205). NJ: Lawrence Erlbaum.
- Wellman B. (2001). Physical Place and CyberPlace: The Rise of Personalized Networking, [w:] T. Blokland, M. Savage (Eds), *Networks, Class and Place* oraz w *International Journal of Urban and Regional Research* 25.
- Wellman B. (2001a). Computer networks as social networks. *Science*, 293(14):2031–2034.
- Wellman B., Haase A. Q., Witte J., Hampton K. (2001). Does the internet increase, decrease, or supplement social capital? social networks, participation, and community commitment. *American Behavioral Scientist*, 45, (special issue on The Internet in Everyday Life).
- Wellman B., Hampton K. (1999). Living networked on and off line. *Contemporary Sociology*, 28, 648-654.
- Wilhelm, A. G. (2000). *Democracy in the digital age: Challenges to political life in cyberspace*. New York: Routledge
- Williamson Ch. (1992). *Whose standards? Consumer and professional standards in health care*. Buckingham: Open University Press.
- Wrota Polski* – wstępna koncepcja projektu. KBN 11 grudnia 2002.
- Zagórski K., Strzeszewski M. (red.) (2000). *Nowa rzeczywistość. Oceny i opinie 1989-1999*. Warszawa: CBOS i Wyd. Akademickie Dialog.

List of tables and figures

Table 3.1. Households by socio-economic group and class of place of residence.....	32
Table 3.2 Households by household type and class of place of residence	33
Table 3.3. Households by voivodship and class of place of residence	33
Table 3.4. Household population by socio-demographic characteristics	35
Table 3.5. Number and percentage of respondents belonging to different samples	37
Table 4.1. Variability of household net income by socio-economic group in March 2003.....	41
Table 4.2. Variability of household net income by household type in March 2003	41
Table 4.3. Variability of households net income by the class of place of residence in 2003.....	42
Table 4.4. Variability of household's net income by voivodship in 2003.....	42
Figure 4.1. Ability of households to make ends meet at the present level of income earned in the years 2000 and 2003 in a panel sample.....	45
Figure 4.2. Way of managing income by households in the years 2000 and 2003 in a panel sample	46
Table 4.5. Percentage of households declaring that their regular income does not allow them to fulfill their current needs in the years 1992-2003	47
Table 4.6. The percentage of households declaring various ways of coping with financial difficulties in fulfilling their current needs in the years 1992-2003*	48
Table 4.7. Comparison of the percentage of households resulting from two measurements - in the years 2000 and 2003 - on a panel sample (of the same households), whose regular income does not allow for the fulfillment of basic needs, which, in this situation, apply various ways of coping with the difficulties	48
Figure 4.3. The range of unsatisfied needs of households with regard to food items in the years 2000 and 2003 in a panel sample.....	51
Figure 4.4. Scope of use of food items obtained free of charge from various sources by households in the years 2000 and 2003 in the panel sample	53
Figure 4.5. Selected durable goods owned by households in the years 2000 and 2003 in the panel sample	56
Figure 4.6. Percentage of household, in which lack of goods is caused by lack of financial resources for purchase in the years 2000 and 2003 in the panel sample.....	57
Figure 4.7. Percentage of households which have savings, and percentage of households with various amounts of savings among all households that have savings in the years 2000 and 2003 in the panel sample	58
Figure 4.8. Forms of saving by households in the years 2000 and 2003 in the panel sample	59
Figure 4.9. Purposes of making savings by households in the years 2000 and 2003 in the panel sample.	60
Figure 4.10. The percentage of households in debt and the percentage of households with various levels of debt among the households in debt in the years 2000 and 2003 in the panel sample	62
Figure 4.11. Source of debt of households in the years 2000 and 2003 in the panel sample.....	63
Figure 4.12. Purposes of loans and credit incurred by households among households in debt in the years 2000 and 2003 in the panel sample.	65
Figure 4.13. Percentage of households not equipped with selected appliances and installations in the years 2000 and 2003 in the panel sample.....	69
Figure 4.14. Overdue payments of households associated with rent in the years 2000 and 2003 in the panel sample	70
Figure 4.15. Overdue gas and electricity charges in households in the years 2000 and 2003 in the panel sample ...	71
Figure 4.16. Overdue mortgage payments of households in the years 2000 and 2003 in the panel sample.....	71
Table 4.8. Population aged 15 and over by the level of education, place of residence and gender (GNC, 1988; GNC, 2002).....	73
Table 4.9. Population aged 15 and over by education level, gender and place of residence (GNC 2002, Diagnosis 2003).....	73
Table 4.10. Household population by educational status and the place of residence (the percentage of people in a given age, inhabiting a given type of place of residence, educationally active).....	75
Figure 4.17. The scale of withdrawals of households from selected forms of participation in culture and recreation due to financial difficulties in the years 2000 and 2003 in the panel sample	81
Figure 4.18. Scale of withdrawals of households from taking advantage of selected medical services due to financial difficulties in the years 2000 and 2003.....	89
Table 4.11. Household expenditure on services rendered by health care units according to socio-economic group in 2003, in the group of households bearing various types of expenses (expenses in the year 2000 are provided in brackets).....	90
Table 4.12. Average household expenditure for services of health care units and medications and other pharmaceutical products associated with illness by socio-economic group in 2003, in the group of all households taking advantage of any form of health care and which purchased medications in the last three months.	90

Table 4.13. Household expenditures for services of health care units and medications and other pharmaceutical products associated with illness by class of place of residence in 2003, in the group of all households taking advantage of any form of health care and which purchased medications in the last three months.	91
Table 5.1. Percentage distribution of answers over time to the question: “How do you feel about your life as a whole?”	95
Table 5.2. Percentage distribution of answers over time to the question: “How often in the past months have you felt so depressed that you thought about suicide?”	95
Table 5.3. Percentage distribution of answers over time to the question: “How strong is your willingness to live these days?	95
Table 5.4. Average level of depression in consecutive studies (for 7 symptoms).....	95
Table 5.5. Percentage distribution of answers over time to the question: “Taken all together, how would you say things are these days? Would you say that you are...?”	96
Table 5.6. A comparison of the variable values of general psychological well-being from two waves — in 2000 and 2003 on a panel sample (of the same respondents).....	96
Table 5.7. Percentage indications of particular decades as the happiest time in the respondents’ lives in four consecutive studies on two panel samples (1995-1997 and 2000-2003).....	97
Table 5.8. Comparison of the number of years indicated as the happiest in the respondents’ lives in particular decades between the surveys in 2000 and 2003 on the panel sample (of the same respondents)	97
Table 5.9. Average level of satisfaction of particular areas and aspects of life on a 1-6 scale, where “1 = very satisfied....6 = very unsatisfied” over time in the sequence from the most positive to the least positive in 2003.	98
Table 5.10. Change of domain satisfactions between years 2000 and 2003.....	99
Table 5.11. Percentage of variance of particular indicators of general well-being explained specifically by particular predictors after excluding effects of other predictors, and the rank of particular predictors due to their average percentage of explained variance of all indicators of general well-being (data in brackets from 2000).....	101
Table 5.12. Percent of variance of satisfactions with social aspects of life specifically explained by particular predictors after excluding effects of other predictors and the rank of predictors for particular aspects (data in brackets from 2000)......	102
Table 5.13. Percentage of variance of satisfactions with material aspects of life explained specifically by particular predictors after excluding effects of other predictors and the rank of predictors for particular aspects (data in brackets from 2000)......	103
Table 5.14. Percentage of variance of satisfactions with life conditions and health accounted for specifically by particular predictors after excluding effects of other predictors and the rank of particular predictors for particular indicators (data in brackets from 2000).....	104
Table 5.15. Percentage of variance of satisfactions with one’s own achievements, prospects in life, and lifestyle accounted for specifically by particular predictors after excluding the effect of other predictors, and the rank of predictors for particular aspects (data in brackets from 2000).....	105
Table 5.16. Ranking of predictors by their specific importance in explaining 30 overall and detailed aspects of well-being.....	106
Table 5.17. Percentage difference between the period in two years’ time and current net income.....	108
Table 5.18. Personal income tax thresholds of the fully employed, excluding farmers*.....	111
Table 5.19. Using modern communication technologies among people belonging to different tax potential groups	112
Table 5. 20. Help used by households included in different tax potential groups	113
Table 5.21. Entrepreneurship in tax potential groups (% in columns)	114
Table 5.22. Attitude and civic behavior of people belonging to different tax potential groups	114
Table 5.23. Desired level of education of children, assessment of chances of obtaining a desired education level and satisfaction with the school children attend, in terms of tax potential group.....	115
Figure 5.1. Private return rate from investing in education on a higher level (bachelor’s and master’s studies) for women and for men aged 24-39 in 2003	116
Figure 5.2. Private return rate of the investment in education on a higher level for women and men aged 24-29 and 30-39 in 2003	117
Figure 5.3. A private rate of return on investments in education on bachelor’s and master’s levels for employees of the public and private sectors in 2003	117
Figure 5.4. Private rates of return from higher education investment for women and men in 1993/1995 and 2003.	118
Figure 5.5. Private rates of return from higher education investment in 1993/1995, 1999 and 2003.	118
Figure 5.6. Private rates of return from higher education investment in different faculties in 1993/95, 1999 and 2003.....	119
Figure 5.7. Private rates of return from higher education investment in different subjects for men and for women of professional activity age in 2003	119

Table 5.24. Do you use any additional form of remuneration; if so, what? (only for the professionally active).....	120
Table 5.25. If an employer offered an additional form of remuneration, would you be most happy with: (up to two possibilities could have been chosen; only for professionally active).....	121
Table 5.26. Do you trust Polish financial institutions?.....	122
Table 5.27. Do you trust foreign financial institutions?	123
Figure 5.8. Creating scope for additional insurance protection.....	125
Table 5.28. Reasons for using insurance by selected socio-demographic features with differentiation on perceived threats to the household's future	128
Table 5.29. Compulsory insurance owned by households	130
Table 5.30. Personal insurance owned by households	131
Table 5.31. Voluntary property insurance most often owned by households.....	131
Table 5.32. Property insurance which households use the least often.....	131
Table 5.33. Choice of open pension funds by respondents' age and gender.....	133
Table 5.34. Participation in additional pension plan	136
Table 5.35. Intention to participate in additional pension plan.....	136
Table 5.36. Intention to participate in additional pension plan by the pension enterprise.....	136
Table 5.37. Intention to participate in additional pension plan provided that contributions are paid by the employer	137
Table 5.38. Intention to participate in additional pension plan provided that contributions will be exempt from tax	137
Table 5.39. Intention to participate in additional pension plan provided savings are exempt from tax.....	137
Table 5.40. Intention to participate in additional pension plan regardless of exemptions and tax relieves	138
Table 5.41. Percentage distribution and average scale values of answers to the question "How would you evaluate your current material situation at present?" over time.....	139
Table 5.42. Percentage distribution and average scale values of answers to the question "To what extent does your present material situation meet your aspirations, what you would like to have?" over a period of time.	139
Table 5.43. Percentage distribution and average scale value of answers to the question about the evaluation of the current material standard of living in the respondent's life in comparison to what most people of the same gender and similar age have – over a period of time.	139
Table 5.44. Comparison of variable values of economic well-being from two studies — in 2000 and in 2003 on the panel sample (of the same respondents).....	140
Table 5.45. Comparison of intensity of overall life stress ^a from two measurements — in 2000 and in 2003 on the panel sample (of the same respondents).....	145
Table 5.46. Percentage of respondents aged 18+ experiencing psychosomatic symptoms for at least 15 days a month shown in three studies... ..	145
Table 5.47. Percentage of respondents aged 18+ experiencing different number of psychosomatic symptoms for at least 15 days a month displayed in three studies.....	146
Figure 5.9. Average number of symptoms experienced for at least 15 days in a previous month in three studies... ..	146
Table 5.48. Ranking of particular life stress categories in explaining various aspects of the quality of life (lack of value ranking means that a given category of stress does not explain statistically significant portion of variance of a given indicator of subjective quality of life after excluding other categories of stress.	149
Table 5.49. Ranking of particular socio-demographic factors in explaining different categories of life stress and distress (psychosomatic symptoms) (no rank value means that a given factor does not account for significant portion of variance of a given category of stress and distress. when other factors are controlled).	150
Table 5.50. Percentage of respondents indicating particular ways of reacting to trouble or difficult life situations in the years 1995, 1996, 1997, 2000 and 2003.....	152
Figure 5.10. Evaluation of life as a whole by life stress intensity and number of friends.....	153
Figure 5.11. Value of standardized indicator of will to live by life stress intensity and the number of friends	153
Table 5.51. Main effect of number of friends and interaction effect of number of friends x life stress intensity on well-being indicators (controlling for age)	154
Table 5.52. Percentage of respondents declaring various forms of social support in the years 1991/1992 and 2000	154
Table 5.53. Average number of friends over the years.....	154
Table 5.54. Percentage of respondents declaring no friends and more than 5 friends over years	154
Table 5.55. Percentage of respondents listing particular values as the most important conditions of happiness in the following years.	155
Table 5.56. Ranks of socio-demographic predictors for particular values.....	156
Table 5.57. Are you generally satisfied or dissatisfied with yourself?.....	157
Table 5.58. Percentage of indications in three studies, who or what did it depend on that the past year was successful or unsuccessful for the respondent.....	158

Figure 5.12. Who did it depend on that the past year was in a respondent's life successful or unsuccessful? (percentage of indications for oneself, for authorities, destiny and other people among people evaluating the past year as successful or unsuccessful)	158
Table 5.59. Percentage distribution of answers in the scale of optimism (answers "It has already happened to me" were omitted).....	160
Table 5.60. Results of factor analysis of will to live and optimism variables with Varimax rotation.....	160
Figure 5.13. Percentage inclination of the unrealistic trend in optimism (positive value) and in pessimism (negative value) for positive and negative events in the group of the unemployed and the employed.....	161
Figure 5.14. Percentage inclination of the unrealistic trend in optimism (positive value) and in pessimism (negative value) for positive and negative events related to the amount of personal income.....	161
Figure 5.15. Percentage inclination of the unrealistic trend in optimism (positive value) and in pessimism (negative value) for positive and negative events by level of education	162
Figure 5.16. Percentage inclination of the unrealistic trend in optimism (positive value) and in pessimism (negative value) for positive and negative events in the group of respondents with various level of depression	162
Figure 5.17. Percentage inclination of the unrealistic trend in optimism (positive value) and in pessimism (negative value) for positive and negative events in the group abusing alcohol and using narcotics (drug addicts) and people free of addictions.....	163
Table 5.61. Correlation between defensive and expansive optimism in three studies	163
Table 5.62. Do you gamble?.....	165
Table 5.63. Frequency of participation in religious practices or other solemn religious events in the year 2003... 167	167
Table 5.64. Difference in average participation in religious practices or other religious events between 2000 and 2003.....	168
Table 5.65. Percentage of people who pray to God in difficult life situations.....	169
Table 5.66. Percentage of respondents participating in religious and solemn practices at least 4 times a month and praying to God in difficult situations in 1992-2003	170
Table 5.67. Interaction effects of religious practice frequency and life stress intensity on indicators of well-being with age as a covariate	170
Figure 5.18. Evaluation of life as a whole by level of life stress and frequency of religious practices.....	171
Figure 5.19. Value of a standardized indicator of will to live by level of life stress and frequency of religious practices.....	171
Table 5.68. Percentage of cigarette smokers, former smokers among the non-smoking and average number of cigarettes smoked a day in 1995-2003.....	172
Table 5.69. Do you smoke cigarettes?.....	173
Table 5.70. If you smoke cigarettes, how many a day do you smoke?	174
Table 5.71. Did you drink too much alcohol in the past year?.....	176
Figure 5.20. Percentage of respondents admitting to alcohol abuse in 2003 among women and men differing in employment status between the years 2000 and 2003.....	177
Figure 5.21. Percentage change of the number of people admitting to alcohol abuse in 2003 in reference to the year 2000 among men and women differing in employment status in 2000 and 2003.....	177
Table 5.72. Percentage of respondents admitting to using narcotics in the years 1991-2003 in the adult population of Poles.....	178
Figure 5.22. Percentage of men and women of different ages, admitting to alcohol abuse in 2003	178
Table 5.73. Did you take drugs last year?.....	179
Table 5.74. Percentage of respondents admitting to drugs use in the years 1991-2003 in the adult population of Poles.....	180
Figure 5.23. Percentage of men and women of different ages admitting using drugs in 2003.....	180
Table 5.75. Percentage of respondents admitting to having had an experience of breaching the law in the years 1993-2003	181
Table 5.77a. An overall indicator of social pathology.....	184
Table 5.77b. An overall indicator of social pathology (continued).....	185
Figure 5.24. An indicator of the threat of social pathology by age and gender.....	185
Figure 5.25. An indicator of the threat of anti-social behavior with regard to religious practices among men and women	186
Figure 5.26. An indicator of anti-social behavior in 2000 by status of employment and gender.....	186
Figure 5.27. Percentage change of anti-social behavior by employment status and gender.....	187
Table 5.78. Percentage distribution of answers to the question "Were reforms conducted in Poland after 1989 successful in general or rather unsuccessful?" in the years 1997, 2000 and 2003.	190
Table 5.79. Percentage distribution of answers to the question "Did the changes that took place in Poland after year 1989 have any influence upon your life?" in the years 1996, 1997, 2000 and 2003.	191
Table 5.80. If the changes which were conducted in Poland since 1989 had any influence upon you life, then would you say that this influence was positive or negative?.....	192

Table 5.81. Percentage distribution of people who admitted that reforms carried out in Poland from 1989 had had impact on their lives, and to the question what this impact was – in the years 1996, 1997, 2000 and 2003. .	193
Table 6.1. The percentage distribution of answers to the question with regard to attending public meetings and participation in discussion by education categories.....	196
Table 6.2. When people do something for the public good in your local community, who usually comes up with the idea or organizes such activities?	197
Table 6.3. Generally speaking, would you say that most people can be trusted or that you can't be too careful in dealing with people?.....	200
Table 6.4. Coefficients of correlation between trust and indexes of civic activity (the number of cases is provided in brackets)	201
Table 6.5. Results of the factor analysis of the selected criteria of a civic attitude with Varimax rotation	202
Table 7.1. Computers and the Internet in households.....	205
Table 7.2 Type of Internet connection.....	209
Table 7.3. How long households have had Internet access.....	210
Table 7.4. Reasons for lack of Internet access in households owning a computer	211
Table 7.5. Stationary phones in households.....	213
Figure 7.1. Ownership of a mobile phone by age	214
Table 7.6. Ownership of a mobile phone by social and professional status and gender	215
Table 7.7. Ownership of a mobile phone by education	215
Table 7.8. Conditions of the time spent using the Internet*.....	218
Table 7.9. Conditions for use of computers	218
Table 7.10. Use of a computer depending upon having children in various age groups	219
Table 7.11. Conditions of using a computer at work	219
Table 7.12. Conditions of using a computer at home.....	220
Table 7.13. Conditions of using a computer at school or university.....	220
Table 7.14. Conditions of using a computer at Internet cafes.....	220
Table 7.15. Conditions of using a computer at friends or family.....	221
Table 7.16. Number of hours spent by men using a computer last week.....	222
Table 7.17. Number of hours spent by women using a computer last week	222
Table 7.18. Ability to use a computer (men)	223
Table 7.19. Ability to use a computer (women).....	223
Table 7.20. Factors influencing the use of the Internet.....	225
Table 7.23. Factors relating to the use of the Internet at home	227
Table 7.24. Factors relating to the use of the Internet at school, college or university.....	227
Table 7.25. Factors relating to the use of the Internet in Internet cafes.....	227
Table 7.26. Factors relating to the use of the Internet at friends' or relatives' homes.....	228
Table 7.27. Factors relating to the time spent on the Internet.....	228
Figure 7.2. The amount of time spent on the Internet in relation to Internet experience.....	229
Figure 7.3. Cumulative increase in the number of Internet users (in percentages).....	230
Table 7.28. Factors relating to the number of operations performed on the Net.....	232
Figure 7.5. Communication via the Internet	234
Table 7.29. Relation of contacts to the communication tool used.....	238
Table 7.30. The use of mobile phones, computers and the Internet among children	239
Table 7.31. Intensity of computer use among children	240
Table 7.32. Intensity of Internet use among children.....	242
Table 8.1. Mobility of the households in relation to their presence in poverty sphere in March 2000 to March 2003 period; objective approach.....	257
Table 8.2. Mobility of the households in relation to their presence in poverty sphere in March 2000 to March 2003 period; subjective approach.....	257
Table 8.3. Mobility of households in relation to their presence in poverty sphere during the last three years (from March 2000 to March 2003) in socio-economic groups*	258
Table 8.4. Mobility of households in relation to their presence in poverty sphere during the last three years (from March 2000 to March 2003) in classes of the place of living*	258
Table 8.5. Mobility of households in relation to their presence in poverty sphere during the last three years (from March 2000 to March 2003) in different types of households*.....	259
Table 8.6. Mobility of households in relation to their presence in poverty zone during the last three years (from March 2000 to March 2003) in relation to their economic activity*	259
Table 8.7. Probit estimates of poverty risk according to the objective approach in March 2003.	261
Table 8.8. Probit estimates of poverty risk the subjective approach in March 2003.	262
Table 8.9. The disabled by gender and the labor market status.....	264
Table 8.10. The unemployed by source of data, unemployment measure, gender and age.....	266
Table 8.11. The unemployed by source of data, unemployment measure, education and gender.....	267

Table 8.12. Percentage of the unemployed among people of working age (women 18 - 60, men 18 - 65) without the retired, disability pensioners and students, by various criteria of unemployment*	267
Table 8.13. Unemployment duration by education	268
Table 8.14. Total unemployment duration over the last five years (March 1998 - March 2003) by gender and place of residence	269
Table 8.15. Total unemployment duration over the last five years (March 1998 - March 2003) by age.....	269
Table 8.16. Total unemployment duration over the last five years (March 1998 - March 2003) by education.....	270
Table 8.17. The results of the logistic regression model of the probability to fall in unemployment	271
Table 8.18. The percentage of people of working age (18 -60 for women, 18-65 for men) in 2003, excluding the retired, disability pensioners and students, in the panel sample, belonging to various categories determined on the basis of the comparison of employment status in 2000 and 2003 in various socio-demographic sections	272
Figure 8.1. Dynamic model of unemployment	273
Figure 8.2. General subjective well-being in 2000 by gender and employment status in 2000-2003	276
Figure 8.3. Change in general subjective well-being between 2000 and 2003 by gender and employment status in 2000-2003	277
Figure 8.4. The will to live in 2000 by gender and employment status in 2000-2003	277
Figure 8.5. Change in the will to live between 2000 and 2003 by gender and employment status in 2000-2003 ...	278
Figure 8.6. The intensity of depression symptoms in 2000 by gender and employment status in 2000-2003.....	278
Figure 8.7. Change in the intensity of depression symptoms between 2000 and 2003 by gender and employment status in 2000-2003	279
Figure 8.8. Satisfaction with life as a whole in 2000 by gender and employment status in 2000-2003	279
Figure 8.9. Change in satisfaction with life as a whole between 2000 and 2003 by gender and employment status in 2000-2003	280
Figure 8.10. Level of life stress in 2000 by gender and employment status in 2000-2003	280
Figure 8.11. Change in the intensity of life stress between 2000 and 2003 by gender and employment status in 2000-2003	281
Figure 8.12. Monthly income per capita in a household in 2000 by gender and employment status in 2000-2003	281
Figure 8.13. Change in monthly income per capita in a household between 2000 and 2003 by gender and employment status in 2000-2003.....	282
Table 8.17. Results of the factor analysis of exclusion criteria with Varimax rotation	284
Figure 8.14. Happiness (on a scale of 1 - 10) and real income per capita in the USA between the years 1947 and 1998.....	285
Table 8.18. Results of the multiple regression analysis: predictive value of various categories of exclusion in relation to subjective quality of life - general subjective well-being*.....	285
Table 8.19. Results of the multiple regression analysis: predictive value of various categories of exclusion in relation to subjective quality of life - evaluation of life as a whole.....	286
Table 8.20. Results of the multiple regression analysis: predictive value of various categories of exclusion in relation to subjective quality of life - sense of happiness	286
Table 8.21. Results of the multiple regression analysis: predictive value of various categories of exclusion in relation to subjective quality of life - depression symptoms.....	286
Table 8.22. Results of the multiple regression analysis: predictive value of various categories of exclusion in relation to subjective quality of life - psychosomatic symptoms.....	287
Table 8.23. Results of the multiple regression analysis: predictive value of various categories of exclusion in relation to subjective quality of life - the will to live	287
Table 8.24. Results of the multiple regression analysis: predictive value of various categories of exclusion in relation to subjective quality of life - the level of life stress	287
Table 9.1. Results of factor analysis of chosen measurements of quality of life with Varimax rotation	290
Table 9. 2. The quality of life of various groups of Poles in March 2003.....	292
Table 9. 2. The quality of life of various groups of Poles in March 2003 (continued)	293
Table 9.3. Quality of life of various socio-demographic groups in Poland.....	294
Figure 9.1. Level of quality of life by voivodship.....	295

Annex — questionnaires part 1

Subsequent number of questionnaire in voivodship I__I__I__I

Polish Statistical Association
Office for Statistical Analyses and Research
 phone: 608 32 74, fax: 608 31 87

SOCIAL DIAGNOSIS 2003
an independent research project
realized by the Council for Social Monitoring

PART I**A. HOUSEHOLD CHARACTERISTICS**

1. Voivodship..... Territorial symbol

--	--

 -

--	--

 -

--	--

2. Address (street, building no., apartment no., zip code,
 town/city).....

3. Symbol of the class of place of residence

4. Household ID number

--	--	--	--

 -

2

 -

0	1
---	---

5. Symbol of the household source of income

B. INFORMATION REGARDING THE INTERVIEW CONDUCTED

1. Course of visits in the household dwelling

Subsequent visit number	Date of visit day/month	Hour of beginning of visit	Duration of visit in minutes	Remarks
1				
2				
3				

C. HOUSEHOLD COMPOSITION

Household ID number

				-	2	-	0	1
--	--	--	--	---	---	---	---	---

1	Person reference number		1	2	3	4	5	6	7	8
2	First name of the household member									
3	Relationship to household head									
4	Relationship to family head									
5	Family number									
6	Date of birth	day								
7		month								
8		year (two last digits)								
9	Gender (1 – man, 2 – woman)									
10	Marital status									
11	Education level completed									
12	Number of years of studying									
13	Specialization of completed education									
14	Education status (4,5,9 ⇒ row 16)									
15	Type of education services									
16	Does he/she have a mobile phone (1- YES, 2- NO)									
17	Source of income	main								
18		additional	1							
19			2							
20			3							
21	Disability									
22	Status of presence of the person in the household									
23	Reasons for temporary absence									
24	Movement of persons in household	date of arrival (month, year)								
25		date of leave (month, year)								
26		reason for arrival								
27		reason for leave								
28	Status of being subject to individual interview									
29	Result of the individual interview									

D. ECONOMIC ACTIVITY OF HOUSEHOLD MEMBERS AGED 15 AND OVERdefinition of economic activity according to BAEL (Labor Force Survey); **person reference number same as in****PART I/C)**

1	Person reference number (same as in part C)						
2	Status of presence in household (as in C row 22)						
3	Has this person performed any work, earning income, or helped without pay in any family business activity, within the last 7 days? 1 – YES (go to 5), 2- NO						
4	Has this person had a job as an employee, a self-employed person or helping without pay in any family business activity, within the last 7 days, but was temporarily not involved in this work during this period? 1 – YES (go to 6), 2 – NO (go to 7)						
5	For how many hours did this person work during the last 7 days?						
6	Was it full-time employment? 1 – YES (go to 10), 2 – NO (go to 10)						
7	Has this person been looking for a job for the last 4 weeks? 1 – YES (go to 9), 2 – NO (go to 10), 3 – NO						
8	Why is he/she not looking for a job?						
9	Is he/she able to start working this week or next week? 1 – YES, 2 - NO						
10	Is this person registered in the Labor Office?						
11	How long has this person been unemployed? (fill out for persons, who have symbol 1 or 2 in row 7 and for persons, who have symbol 3 in row 7 and symbol 1 in row 10) (in months)						
12	Has this person been registered in the Labor Office within the last 5 years? 1 – YES, 2 – NO (go to 15 or, if professionally inactive, to 18)						
13	How many times has this person been registered in the Labor Office in the last 5 years?						
14	For how long, in total, was this person unemployed during the last 5 years (in months)?						
15	Ownership of institution, which is the main employer of this person						
16	Ownership of institution, which is the additional employer of this person						
17	Presently performed occupation						
18	Occupation performed in the most recent place of employment (for the unemployed and the professionally inactive persons)						
19	If this person is unemployed, does he/she receive unemployment benefit 1- YES, 2 – NO, 3 – NOT APPLICABLE (he/she is not unemployed)						
20	If this person is unemployed, does he/she participate in any trainings for the unemployed (1 – YES, 2 – NO, 3 – NOT APPLICABLE)						

PART I (continued)

Household ID number - 2 - 0 1 Reference number of person interviewed in the name of household from part C **E. NUTRITION**

I would like to ask about the ability to satisfy the food needs by your household.

1. Is your household able to afford sufficient quantities of the following food articles?

Answers are to be provided separately for each of the food articles listed below, circling the appropriate word.

1.1. vegetables and vegetable preserves	1. YES	2. NO
1.2. fruit and fruit preserves	1. YES	2. NO
1.3. meat (including poultry)	1. YES	2. NO
1.4. meat and poultry preserves	1. YES	2. NO
1.5. fish and fish preserves	1. YES	2. NO
1.6. butter and other edible fats	1. YES	2. NO
1.7. milk	1. YES	2. NO
1.8. milk products	1. YES	2. NO
1.9. sugar	1. YES	2. NO
1.10. confectionery (sweets, chocolate etc.)	1. YES	2. NO
1.11. tobacco and alcohol products	1. YES	2. NO

2. Has your household used during the last year any products obtained from ?

Answers are to be provided separately for each of the forms of use of food articles, listed below, circling the appropriate word.

2.1. from own plot of land (raising, own household)	1. YES	2. NO
2.2. from relatives	1. YES	2. NO
2.3. free of charge from other persons or institutions	1. YES	2. NO

3. In comparison with 3 years ago, has the level of fulfillment of food needs of your household:

Choose one answer by circling the appropriate answer.

1. worsened
2. improved
3. remained unchanged

F. AFFLUENCE OF HOUSEHOLD

Now I would like to ask whether you possess some goods and savings and whether you take advantage of credits and 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 form of your household savings?

Provide separate answers for each form of savings, circling the appropriate word.

2.1. bank deposits in PLN	1. YES	2. NO
2.2. bank deposits in foreign currencies	1. YES	2. NO
2.3. in bonds	1. YES	2. NO
2.4. in investment funds	1. YES	2. NO
2.5. in pension funds	1. YES	2. NO
2.5a. in securities quoted on the stock exchange	1. YES	2. NO
2.6. shares and stocks in private joint-stock companies	1. YES	2. NO
2.7. investment in real estate property	1. YES	2. NO
2.8. investment in goods other than real estate	1. YES	2. NO
2.9. in cash	1. YES	2. NO
2.10. in other form	1. YES	2. NO

3. What is the approximate value of savings of the household?

Choose one answer by circling the appropriate number.

1. up to the equivalent of monthly income of the household
2. more than monthly income – up to the equivalent of household income for 3 months
3. more than 3 months – up to the equivalent of household income for 6 months
4. more than 6 months – up to the equivalent of household income for 1 year
5. more than the equivalent of annual income of the household
6. it is difficult to say

4. What is the purpose of your household savings?

Provide separate answers for each purpose of savings, circling the appropriate word.

4.1. a reserve for current consumer needs (such as food, clothes, shoes)	1. YES	2. NO
4.2. regular charges (such as rent)	1. YES	2. NO
4.3. purchase of durable goods	1. YES	2. NO
4.4. purchase of a house, apartment, payment made to housing association	1. YES	2. NO
4.5. renovation of house/ apartment	1. YES	2. NO
4.6. medical treatment	1. YES	2. NO
4.7. recreation	1. YES	2. NO
4.8. a reserve for random events	1. YES	2. NO
4.9. securing of the future of children	1. YES	2. NO
4.10. security for old age	1. YES	2. NO
4.10. for other purposes	1. YES	2. NO
4.11. no special purpose	1. YES	2. NO

5. Is your household currently taking advantage of loans or credits? 1. YES 2. NO

If the household is currently taking advantage of loans or credits, go to question 6, if not, go to question 9.

6. What is the total amount of debt of your household?

Choose one answer by circling the appropriate number.

1. up to the equivalent of monthly income of the household
2. more than monthly income – up to the equivalent of household income for 3 months
3. more than 3 months – up to the equivalent of household income for 6 months
4. more than 6 months – up to the equivalent of household income for 1 year
5. more than the equivalent of annual income of the household
6. it is difficult to say

7. Where did your household incur loans and credits?

Provide an answer for each of the sources of loans and credits, listed below, by circling the appropriate word.

7.1. in banks	1. YES	2. NO
7.2. in other institutions	1. YES	2. NO
7.3. from private persons	1. YES	2. NO

8. What are the purposes of loans and credits incurred by your household?

Provide an answer for each of the purposes of credits and loans incurred, listed below, by circling the appropriate word.

8.1. for current consumer expenses (such as food, clothes, shoes)	1. YES	2. NO
8.2. regular charges (e.g. rent)	1. YES	2. NO
8.3. purchase of durable goods	1. YES	2. NO
8.4. purchase of apartment, house, payment made to housing association	1. YES	2. NO
8.5. renovation of house/ apartment	1. YES	2. NO
8.6. medical treatment	1. YES	2. NO
8.7. purchase, lease of work tools (machines, rental charges etc.)	1. YES	2. NO
8.8. recreation	1. YES	2. NO
8.9. purchase of securities	1. YES	2. NO
8.10. payment of debts incurred earlier	1. YES	2. NO
8.11. development of own business activity	1. YES	2. NO
8.12. education	1. YES	2. NO
8.13. other purposes	1. YES	2. NO

9. Does your household or any of its members **have** the goods, listed below? It does not matter, whether the goods are owned, taken on lease or made available in any other way (the answer is provided in the column *Does the household have?*). **If the household does not have** a given type of goods, please indicate (The answer is provided in the column *If the household does not, then*), whether the household would like to have these goods but cannot afford them due to financial reasons (answer YES), or the household does not have these goods due to other than financial reasons, for instance, does not want to or does not need these goods (answer NO). In the column *How many*, enter the number only for three items (TV set, computer, car).

Provide an answer for each of the types of goods listed below by circling the appropriate word.

	Does the household have a		How many	If the household does not have the item, is it due to financial reasons?	
9.1. garage	1. YES	2. NO		1. YES	2. NO
9.2. washing machine (automatic)	1. YES	2. NO		1. YES	2. NO
9.3. non-automatic washing machine	1. YES	2. NO		1. YES	2. NO
9.4. refrigerator (refrigerator - freezer)	1. YES	2. NO		1. YES	2. NO
9.5. freezer	1. YES	2. NO		1. YES	2. NO
9.6. dishwasher	1. YES	2. NO		1. YES	2. NO
9.7. microwave oven	1. YES	2. NO		1. YES	2. NO
9.8. TV set	1. YES	2. NO		1. YES	2. NO
9.9. satellite or cable TV	1. YES	2. NO		1. YES	2. NO
9.10. video recorder (recorder, player)	1. YES	2. NO		1. YES	2. NO
9.11. radio cassette recorder	1. YES	2. NO		1. YES	2. NO
9.12. CD player	1. YES	2. NO		1. YES	2. NO
9.13. computer (laptop, notebook)	1. YES	2. NO		1. YES	2. NO
9.14. passenger car (semi-truck)	1. YES	2. NO		1. YES	2. NO
9.15. motorboat, sailboat	1. YES	2. NO		1. YES	2. NO
9.16. plot for recreation	1. YES	2. NO		1. YES	2. NO
9.17. summer house	1. YES	2. NO		1. YES	2. NO
9.18. Internet access	1. YES	2. NO		1. YES	2. NO

10. Are you planning to buy a computer in the near future? *Ask the question regardless of whether the household has a computer already or not.*

1. yes
2. no
3. it is difficult to say

11. In comparison with three years ago, has the material situation of your household:

1. worsened
2. improved
3. remained unchanged.

G. HOUSING CONDITIONS

Now I would like to talk about your housing conditions.

1. Does your household use a separate dwelling? 1. YES 2. NO

2. How many rooms (including kitchen) are shared by your household with persons, who are not household members?	
3. How many rooms (including kitchen) are used only by your household members?	
4. What is the usable space of dwelling of your household in m ² ?	

5. Please specify the character of occupation of dwelling by your household. Is it:
Choose one answer by circling the appropriate number.

1. ownership of a private building
2. ownership in a low-cost building, company-owned building
3. membership in a housing association – an owner-occupied apartment
4. membership in a housing association – a tenant-occupied apartment
5. rental of apartment, payment of regulated rent (former housing allocation, apartments belonging to state-owned companies)
6. rental of apartment, payment of non-regulated rent
7. welfare apartment
8. sub-rental of part of apartment
9. living with parents or other family
10. other

6. I would also like to ask about equipment of your dwelling with installations. Is there at your dwelling:
Provide an answer with regard to each of installation and equipment types by circling the appropriate word:

6.1. a water-supply system	1. YES	2. NO
6.2. a flushable toilet using running water	1. YES	2. NO
6.3. a bathroom with a bathtub or shower	1. YES	2. NO
6.4. hot running water	1. YES	2. NO
6.5. gas from a supply system	1. YES	2. NO
6.6. gas from a cylinder	1. YES	2. NO
6.7. stationary phone	1. YES	2. NO

7. How is the apartment heated?
Choose one answer by circling the appropriate number.

1. collective central heating
2. individual central heating (using gas, coal, coke, electricity, other fuels)
3. fuel-fired furnace (coal, wood, sawdust etc.)
4. other

2. From what sources does the household receive assistance?:

Provide a separate answer for each source of assistance within the confines of each form of assistance by circling the appropriate word.

2.1. social assistance centers	1. YES	2. NO
2.2. family in Poland	1. YES	2. NO
2.3 family abroad	1. YES	2. NO
2.4. friends and acquaintances	1. YES	2. NO
2.5. secular charity organizations	1. YES	2. NO
2.6. religious organizations and parishes	1. YES	2. NO
2.7. trade unions and companies	1. YES	2. NO
2.8. district centers for family assistance	1. YES	2. NO
2.9. other	1. YES	2. NO

I. EDUCATION OF CHILDREN

REMARK: QUESTIONS 1 TO 6 PERTAIN ONLY TO HOUSEHOLDS WITH CHILDREN AGED 24 AND UNDER, WHO ARE NOT FINANCIALLY INDEPENDENT

1. Does your household include children, who completed elementary school or vocational school in the last three years and discontinued education?

1. YES 2. NO

If in the household there is a child, who completed elementary school or vocational school in the last three years and discontinued education, we go to question 2; otherwise, we go to question 3.

2. What is the reason for this situation?

Show CARD No. 1; only 3 most important reasons can be selected by circling appropriate numbers.

1. the child has sufficient education
2. further education is not worth it
3. lack of school near the place of residence
4. the child attended exams, but did not get enrolled
5. the child has difficulties with learning
6. due to health condition
7. due to material situation
8. the child took up a job
9. the child does not want to continue education
10. other reasons

3. Are there children in the household, who completed secondary school and discontinued education within the last three years?

1. YES 2. NO

If in the household there is a child, who completed secondary school in the last three years and discontinued education, we go to question 5; otherwise, we go to question 6.

4. What is the reason for this situation?

Show CARD No. 1; only 3 most important reasons can be selected by circling appropriate numbers.

1. the child has sufficient education
2. further education is not worth it
3. lack of school near the place of residence
4. the child attended exams, but did not get enrolled
5. the child has difficulties with learning
6. due to health condition
7. due to material situation
8. the child took up a job
9. the child does not want to continue education
10. other reasons

5. Are you interested in purchase of a child's deferred assurance for education purposes, which would cover the expenses of education for children?

1. yes
2. no
3. we have already made such purchase

If the household is interested in purchase, we go to question 6, if not, we go to question 7, if it has already made the purchase, we go to the remark following question 7.

6. What amount of insurance premium would you be able to pay for a child's deferred assurance for education purposes?

Provide the answer by circling the appropriate number.

1. up to PLN 100 2. from PLN 100 to 200 3. more than PLN 200

7. Why are you not interested?

Provide the answer by circling the appropriate number.

1. I cannot afford the premium 2. there's no such need 3. I don't know this type of insurance

REMARK: QUESTIONS 8 TO 12 PERTAIN ONLY TO HOUSEHOLDS WITH CHILDREN ATTENDING A SCHOOL NO HIGHER THAN SECONDARY

8. In the present school year, have you been forced, due to financial reasons, to:

Provide a separate answer for each category listed below by circling the appropriate number

8.1 withdraw from sending the child to school?	1. YES	2. NO
8.2. withdraw from extracurricular activities for the child?	1. YES	2. NO
8.3. limit or suspend payment of school charges?	1. YES	2. NO
8.4 withdraw from paying for lunch at school for the child?	1. YES	2. NO
8.5. withdraw from private lessons for the child?	1. YES	2. NO
8.6. place the child in a different school, requiring lower charges?	1. YES	2. NO
8.7. impose other limitations?	1. YES	2. NO

9. What is the education level you would like your children to attain? What are the chances for realization of this goal?

For each child, select one education level by entering the appropriate number in the column „Education level”. Then evaluate the chances for attaining the selected education level by the child, entering the appropriate number in the column “Evaluation of chances.”

education level

- 1 grammar school
- 2 vocational school
- 3 profile-oriented (general education) secondary school
- 4 vocational school or vocational secondary school
- 5 post-secondary school
- 6 vocational college (bachelor degree)
- 7 college/university (master’s degree)

assessment of chances:

- 1 the child has attained this level
- 2 good chance
- 3 moderate chance
- 4 small chance
- 5 no chance

Child name and number*	Education level	Assessment of chances
	9.1.	9.2.
	9.3.	9.4.
	9.5.	9.6.
	9.7.	9.8.
	9.9.	9.10
	9.11.	9.12.
	9.13.	9.14

* the child name and number should correspond with the name and number of the person listed in part C rows 1 and 2

10. Are you, in general, satisfied with the schools attended by your children?

Choose one answer by circling the appropriate number.

- 1. yes, definitely
- 2. yes, more or less
- 3. rather not
- 4. definitely not
- 5. it is difficult to say

11. Are your children taking advantage of social assistance organized by school in the present school year (2002/2003)?

- 1. YES
- 2. NO

If the children have taken advantage of assistance, we go to question 12, if not, we go to part J.

12. From what sources was assistance provided?

Provide separate answers for each source of assistance, listed below, by circling the appropriate word.

12.1. social assistance centers	1. YES	2. NO
12.2. state sources of assistance	1. YES	2. NO
12.3. secular charity organizations	1. YES	2. NO
12.4. religious charity organizations	1. YES	2. NO
12.5. company social fund	1. YES	2. NO
12.6. district center for family assistance	1. YES	2. NO
12.7. parent-teacher association	1. YES	2. NO
12.8. other sources of assistance	1. YES	2. NO

J. CULTURE AND RECREATION

1. Within last year, has any of your household members, due to lack of money, had to withdraw from:
Provide a separate answer for each category listed below by circling the appropriate word.

1.1. movies	1. YES	2. NO
1.2. theatre, opera, operetta, concert	1. YES	2. NO
1.3. museum or exhibition	1. YES	2. NO
1.4. purchase of a book	1. YES	2. NO
1.5. purchase of newspapers, magazines	1. YES	2. NO

2. Within the last year, have you (any adult or child in your household), due to financial reasons, had to withdraw from:

Provide a separate answer for each category listed below by circling the appropriate word..

2.1. a summer camp or a trip for children	1. YES	2. NO	3. NOT APPLICABLE
2.2. vacations, trips for adults	1. YES	2. NO	3. NOT APPLICABLE
2.3. family trips (adults and children)	1. YES	2. NO	3. NOT APPLICABLE

3. In comparison with three years ago, the fulfillment of needs of your household with regard to culture and recreation:

Choose one answer by circling the appropriate number.

1. worsened
2. improved
3. remained unchanged

K. HEALTH CARE

1. Have you or any other household member changed the family doctor last year?

1. YES 2. NO

If the household answers YES in question 1, we go to question 2, otherwise we go to question 3.

2. What was the reason for a change of the family doctor?
Show CARD No. 2; underline all reasons pointed out by the respondent and circle the appropriate numbers.

1. the new doctor's office is located closer to the place of residence
2. the previous doctor quit his/her job
3. the new doctor treats patients better
4. the previous doctor did not devote enough time to patients
5. the new doctor enjoys a better reputation
6. the new doctor is able to provide better access to other medical services
7. the new doctor's office is better equipped
8. it is easier to get to the new doctor, the waiting time is shorter
9. other reasons

3. Within last year, has any household member used the services of:

Provide answers pertaining to each of the units listed below by circling the appropriate word.

3.1. health care units rendering services paid by health care public fund	1. YES	2. NO
3.2. units rendering services paid by the household itself	1. YES	2. NO
3.3. units paid by the employer, who pays for a medical services plan	1. YES	2. NO

4. Has any member of your household been hospitalized within last year?
Provide separate answers for each type of hospital listed below, circling the appropriate word.

4.1. private	1. YES	2. NO
4.2. public	1. YES	2. NO

5. Was the cost of hospital treatment covered by:
Provide separate answers for each method of payment listed below by circling the appropriate words.

5.1. you	1. YES	2. NO
5.2. the health care public fund	1. YES	2. NO
5.3. the employer, who paid for a medical services plan	1. YES	2. NO

6. Has any member of your household visited a doctor (family doctor or a specialist) within the last 3 months?
Put a cross in applicable columns.

	family doctor	specialist
in private health care units	6.1.	6.2.
in public health care units	6.3.	6.4.

If any household member visited a family doctor or a specialist during the last 3 months, we go to question 7, otherwise we go to question 10

7. The doctor services were paid by:
Provide separate answers for each payment method by circling the appropriate word.

7.1. you	1. YES	2. NO
7.2. the health care public fund	1. YES	2. NO
7.3. the employer, who paid for a medical services plan	1. YES	2. NO

If any household member visited a doctor paid for the healthcare unit within the last 3 month, we go to question 8, otherwise we go to question 10.

8. Has the family doctor failed to provide the household member with a referral for the expected diagnostic tests, stating that: *Show CARD No. 3 and circle numbers that correspond with all reasons, provided by the respondent; if the respondent says that the doctor provided a referral, do not show the card and circle number 7.*

1. there was not enough money for such tests
2. the tests were not necessary
3. the tests will be ordered by the specialist that the household member is referred to
4. it will be better to perform the tests during hospitalization
5. the doctor did not provide a referral and did not explain why
6. I do not remember, I do not know, we did not talk about diagnostic tests at all
7. the referral was provided

If during the last 3 months any household member visited a specialist paid by the healthcare fund, we go to question 9, if not, we go to question 10.

9. Why did you choose a given specialist? *Show the CARD No. 4 and circle all relevant reasons.*
1. information regarding good quality of work of this specialist
 2. suggestion of the doctor, issuing the referral
 3. close proximity to the place of residence
 4. convenient working hours of the specialist
 5. the selected specialist working in a hospital, where further treatment was planned
 6. selected specialist working in a hospital, where the respondent got medical treatment previously
 7. the respondent was treated by this specialist earlier
 8. I don't remember/ It is difficult to say

10. Has any household member visited a dentist within the last 3 months?
Provide separate answers for each of the healthcare unit type listed below by circling the appropriate word.

10.1. in private health care units	1. YES	2. NO
10.2. in public health care units	1. YES	2. NO

If any household member took advantage of dental services within the previous 3 months, we go to question 11, otherwise we go to question 12.

11. The charges for dental services were covered by:
Provide a separate answer for each payment method by circling the appropriate word.

11.1. you	1. YES	2. NO
11.2. the health care public fund	1. YES	2. NO
11.3. the employer, who paid for a medical services plan	1. YES	2. NO

If any household member took advantage of services of any household unit within the previous 3 months (hospitalization or treatment in a sanatorium, a doctor, a dentist, medical tests, rehabilitation services), we go to question 12, otherwise we go to question 13.

12. During the previous 3 months, the household paid the total of (PLN) for:

12.1. purchase of outpatient medical services in healthcare units (including non-standard services of dentists, orthodontists, payment for orthodontic equipment etc).	
12.2. informal payments, that is, the so-called gifts of gratitude, aimed at obtaining better or faster services	
12.3. gifts of sincere gratitude for services already rendered	
12.4. treatment at a private or public hospital, where costs of treatment were covered by respondent within the confines of official purchase of medical services	
12.5. payments made at a public hospital (contributions, payments for services rendered by nurses during night duty hours, purchase of medications for a patient treated at a hospital)	

13. Please specify, how much in total was spent in the previous 3 months for medications and other pharmaceutical products associated with illness in your household (in PLN)?

--

14. During the last year, did you encounter any of the following situations in your households:
Provide a separate answer for each of the listed situations by circling the appropriate word:

14.1. there was not enough money to purchase medications prescribed or recommended by doctor	1. YES	2. NO
14.2. due to lack of money, you did not use dental services despite the need to do so	1. YES	2. NO
14.3. due to lack of money, you had to withdraw from obtaining dentures	1. YES	2. NO
14.4. due to lack of money, you had to withdraw from visiting a doctor	1. YES	2. NO
14.5. due to lack of money, you had to withdraw from medical tests (such as lab tests, X-ray, ECG)	1. YES	2. NO
14.6. due to lack of money, you had to withdraw from rehabilitation	1. YES	2. NO
14.7. due to lack of money, you had to withdraw from treatment in a sanatorium	1. YES	2. NO
14.8. due to lack of money, you had to withdraw from hospitalization	1. YES	2. NO

15. What did you do when it turned out you did not have enough money to buy medications prescribed or recommended by the doctor?

15.1. asked the doctor to prescribe other medications	1. YES 2. NO
15.2. managed to get additional money to buy medications	1. YES 2. NO
15.3. decided not to buy medications	1. YES 2. NO
15.4. took advantage of hospitalization and thus received medications free of charge	1. YES 2. NO
15.5. purchased cheaper medications recommended by a pharmacist	1. YES 2. NO

16. In comparison with three years ago, the fulfillment of healthcare needs of your household:
Choose one answer by circling the appropriate number.

1. worsened
2. improved
3. remained unchanged

17. Does your family have sufficient information regarding the rules of using medical services financed from public resources, including a change of the family doctor?

1. YES 2. NO

18. Has medical treatment of any of your household members been given up within the last year due to: *Provide answer(s) by circling the appropriate number(s)*

18.1. additional payments 1. YES 2. NO 3. NO NEED FOR TREATMENT OCCURRED

18.2. inability to obtain additional certificates or referrals

1. YES 2. NO 3. NO NEED FOR TREATMENT CCURRED

19. In comparison with the previous period, did you or any household members take advantage of services rendered by healthcare units requiring own payments last year:

Select one answer by circling the appropriate number.

1. more often
2. less often
3. equally often
4. we have never used such services
5. it is difficult to say

20. How much would you be willing to spend from the household income for voluntary medical insurance, offered by a private insurance company, in order to ensure covering of costs of medical treatment for household members?

Select one answer by circling the appropriate number.

1. a monthly premium of up to PLN 100
2. a monthly premium of PLN 100-250
3. a monthly premium of PLN 250-500
4. a monthly premium exceeding PLN 500
5. I cannot afford an additional premium
6. I am not interested in this type of insurance

21. Do the experiences of your household members show that access to doctors and health care units financed from public funds is now easier or more difficult than it used to be?

Select one answer by circling the appropriate number.

- 1.easier 2. more difficult 3. I don't know (lack of personal experience)

If it is easier, we go to question 22, if more difficult or the respondent does not know, we go to question 23
--

22. Why is it easier? Show CARD No. 5; underline all relevant reasons for improvement, indicated by the respondent.

1. it is possible to book a visit in advance
2. it is possible to book a visit by phone
3. appointments are made for a specific hour without the necessity to wait for a long time
4. more convenient and extended working hours
5. it is possible to get a doctor's advice by phone
6. doctors care more about attracting patients
7. the time of awaiting for hospitalization has shortened

23. How do you feel about your life as a whole.....? Show CARD No. 6, ask the respondent to select one statement and circle the appropriate number.

- 1 delighted
- 2 pleased
- 3 mostly satisfied
- 4 mixed
- 5 mostly dissatisfied
- 6 unhappy
- 7 terrible

L. INCOME SITUATION AND INCOME MANAGEMENT

Now I would like to ask about the financial situation and income of your household. Please take into consideration income obtained by all members of your households, who earn any income (from any source) for the common budget.

1. What was the net income of your household last month?

2. The income earned by your household last month in comparison with other average months were:
Select one answer by circling the appropriate number.

1. much higher
2. much lower
3. similar

3. Please assess the amount of the average net income in your household in year 2002.

4. Is your household able to make ends meet at the present income level:
Select one answer by circling the appropriate number.

1. with great difficulty
2. with difficulty
3. with some difficulty
4. rather easily
5. easily

5. What is the lowest net income in PLN, allowing your household to make ends meet?

6. What level of monthly net income in PLN would ensure a satisfactory standard of living of your household now and in the future?

7. Which of the following statements best characterize the way of managing income by your household?

Show CARD No. 7, ask for selection of one answer and circle the appropriate number.

1. we can afford everything and even make savings for the future
2. we can afford everything with no particular difficulties but we do not make savings for the future
3. we live economically and thus are able to afford everything
4. we live very economically to save money for significant purchases
5. we have enough money for the cheapest food, clothes, apartment charges and to pay off credit
6. we have enough money for the cheapest food, clothes and apartment charges, but not to pay off credit
7. we have enough money for the cheapest food and clothes, but not for apartment charges
8. we have enough money for the cheapest food, but not for clothes
9. we do not have enough money even for the cheapest food

8. Does the regular income of your household allow for fulfillment of current needs?

1. YES

2. NO

If the regular income does not allow for fulfillment of current needs, we go to question 9, if it does, we go to question 10.

9. What actions does your household undertake in order to fulfill the current needs?

A separate answer is to be provided for each activity by circling of the appropriate word.

9.1. takes advantage of savings made	1. YES	2. NO
9.2. sales off or pawns property owned (material goods)	1. YES	2. NO
9.3. limits the current needs	1. YES	2. NO
9.4. incurs loans, credits	1. YES	2. NO
9.5 takes advantage of assistance of the relatives	1. YES	2. NO
9.6 takes advantage of assistance of the church	1. YES	2. NO
9.7. takes advantage of social assistance	1. YES	2. NO
9.8. a household member undertakes additional work	1. YES	2. NO
9.9. undertakes other activities	1. YES	2. NO
9.10. undertakes no activity	1. YES	2. NO

10. Does anyone in your household take advantage of any form of insurance listed below?

Provide a separate answer for each insurance by circling the appropriate word.

10.1. motor third-party liability insurance	1. YES	2. NO
10.2. motor hull insurance	1. YES	2. NO
10.3. farmers third-party liability	1. YES	2. NO
10.4. insurance of buildings being part of a farm	1. YES	2. NO
10.5. basic homeowner insurance	1. YES	2. NO
10.6. life insurance	1. YES	2. NO
10.7. unit-linked life insurance	1. YES	2. NO
10.8. child's deferred assurance, dowry, endowment for child	1. YES	2. NO
10.9. annuity insurance	1. YES	2. NO
10.10. accident insurance	1. YES	2. NO
10.11. sickness insurance	1. YES	2. NO
10.12. credit insurance	1. YES	2. NO
10.13. liability insurance in private life	1. YES	2. NO
10.14. professional liability insurance	1. YES	2. NO
10.15. liability insurance for the self-employed	1. YES	2. NO
10.16. agricultural insurance (crop insurance)	1. YES	2. NO

If at least one answer YES was circled in question 10, we go to questions 11 and 12, if only answers NO were given, we go to question 13.

10. What was the main reason for you to purchase insurance?

Provide answers for each reason listed above by circling the appropriate word.

11.1. insurance obligation	1. YES	2. NO
11.2. fear for the future of the family (household)	1. YES	2. NO
11.3. an unfortunate event in the life of family (friends)	1. YES	2. NO
11.4. a suggestion, advice of acquaintances	1. YES	2. NO
11.5. advertisement	1. YES	2. NO
11.6. convinced by an insurance agent	1. YES	2. NO
11.7. other reasons	1. YES	2. NO

12. Was it necessary to obtain any of the above types of insurance while incurring a credit?

If the respondent has any of the insurance types listed, it is necessary to provide answer for each insurance type by circling the appropriate word.

12.1. life insurance	1. YES	2. NO
12.2. motor hull insurance	1. YES	2. NO
12.3. homeowner insurance	1. YES	2. NO

13. In comparison with three years ago, the income situation of your household has:

Choose one answer by circling the appropriate number.

1. worsened
2. improved
3. remained unchanged

14. Within the last three years, did your household have to limit or give up:

14.1. savings	1. YES	2. NO
14.2. purchases	1. YES	2. NO
14.3. insurance	1. YES	2. NO

15. Within the last three years, your household has:

15.1. increased savings	1. YES	2. NO
15.2. increased purchases	1. YES	2. NO
15.3. purchased a new or additional insurance	1. YES	2. NO

16. If the income of your household increased this year, what would you use the additional money for in the first place among the possibilities listed below? *Show CARD No. 8, ask the respondent to choose two possibilities and circle appropriate numbers.*

1. increase of bank deposits
2. purchase of state securities
3. participation in an investment (mutual trust) fund
4. purchase of stocks
5. purchase of additional insurance
6. extending of the already purchased insurance

M. COMPUTER AND INTERNET**Questions 1 and 2 for households equipped with a computer (answer YES in question F.9.13)**

1. Is it possible to use the Internet and e-mail using the home computer?
 1. yes → GO TO QUESTION 4
 2. no
 3. *I don't know*

2. Which of the reason describes best, why your household does not have Internet access? *Show CARD No. 9; 3 possibilities can be circled at most.*
 1. lack of adequate equipment
 2. sufficient ability to use the Internet elsewhere
 3. the Internet is not needed, it has nothing interesting to offer
 4. fear of losing privacy when using the Internet
 5. the Internet may be harmful, for instance, it may demoralize children and take up too much time
 6. the access cost is too high
 7. other

Question 3 to all households

3. How do you think, is your household going to be equipped with Internet access by the end of this year?
 1. definitely yes
 2. rather yes
 3. rather not
 4. definitely not
 5. it is difficult to say

Questions 4-5 to households with a computer with Internet access

4. How do the household members connect with the Internet at home? *(it is acceptable to circle more than one answer)*
 1. using a stationary phone (via TP S.A.)
 2. using a stationary phone (an operator other than TP S.A)
 3. via cable TV
 4. using a mobile phone
 5. a TV decoder
 6. a radio connection
 7. in some other way
 8. I do not know

5. How long have you had Internet access at home? *Please enter installation year* [_____]

Question 6-10 to respondents having children aged 16 and under

6. Does (do) your child (children) use a computer at home or elsewhere?
 1. YES
 2. NO
 3. I DON'T KNOW

7. Does (do) your child (children) use the Internet at home or elsewhere?

1. YES 2. NO 3. I DON'T KNOW

If answer YES is given in question 6 and/or 7, we go to question 8, otherwise we finish the interview.

8. *(if the child/children uses/use the computer /the Internet at home)* How many hours per week on the average did your child (children) spend using the computer and the Internet last month? *(if the respondent does not know, enter 88 in the appropriate columns).*

Child first name & number *	computer	Internet
	8.1.	8.2.
	8.3.	8.4.
	8.5.	8.6.
	8.7.	8.8.
	8.9.	8.10.
	8.11.	8.12.

* first name and number of the child from part I/C – household composition

9. In general, are you happy or concerned with the fact that your child/children uses/ use a computer and the Internet and how much time he/she/they spends/spend using it?

1. definitely happy
2. rather happy
3. rather concerned
4. definitely concerned
5. it is difficult to say / I don't know

Annex — questionnaires part 2

Questionnaire subsequent number in voivodship I__I__I__I

SOCIAL DIAGNOSIS 2003
an independent research project
realized by the Council for Social Monitoring

PART II individual questionnaire (self-report)**Gender:**

1. man
2. woman

Household ID number (*same as in Part C*) I__I__I__I__I**Person number** (*copy from part - C*) I__I__I**First name** (*copy from part - C*)

People are different. They live in different conditions and feel differently about what happens to them everyday; they cope in different ways with whatever life brings to them.

This questionnaire is about how you perceive your life. Most questions should be interesting, some may be boring and tiresome, many will be easy – this is about your life and not some unknown problem; however, some questions will be difficult. Please answer them as accurately as you can.

At some points you may have a feeling that you have answered the question already, and we are asking it again in a different way. And you will be right. We are seeking the best way to ask questions. Don't be surprised when you find that we jump over from one topic to another – the sets of questions have been put in a random order.

Your can be sure of our discretion. All answers will be used only for research purposes within the confines of collective statistical analyses.

Different possible answers may be provided along with questions. Please underline the one, which corresponds best with your situation. In case of some questions, it will be possible to underline more than one answer. If there are no ready answers below a question, please enter your answer in the space provided.

We would like to ask you kindly to fill out the questionnaire on your own, without any help from other household members. This is about individual assessments and feelings, and not about opinions consulted with other people. If you are unable to answer any question, please ask the interviewer for assistance.

1. Your **date of birth** I _ I _ I I _ I _ I I _ I _ I
day month year (two last digits)

2. What, in your opinion, is **the most important prerequisite for happy, successful life** (PLEASE CHOOSE AND UNDERLINE AT MOST THREE VALUES)

1. MONEY
2. CHILDREN
3. SUCCESSFUL MARRIAGE
4. WORK
5. FRIENDS
6. PROVIDENCE, GOD
7. CHEERFULNESS, OPTIMISM
8. HONESTY
9. KINDNESS AND RESPECT from OTHERS
10. FREEDOM, LIBERTY
11. HEALTH
12. EDUCATION
13. STRONG PERSONALITY
14. OTHER

3. **How do you feel about your life as a whole.....?** (please underline the appropriate answer)

- 1 delighted
- 2 pleased
- 3 mostly satisfied
- 4 mixed
- 5 mostly dissatisfied
- 6 unhappy
- 7 terrible

4. **When was your life easier – before year 1989 or at present?**

1. it was easier before year 1989
2. it is easier at present
3. it is difficult to say
4. I am too young to remember times before year 1989

In the recent months: (NOT APPLICABLE means no wife or husband)

5. The expectations of your wife/husband toward you were so great you were unable to meet them

1. OFTEN 2. IT HAPPENED 3. NEVER 4. NOT APPLICABLE

6. Your wife/husband was too extravagant in spending money that were your common property

1. OFTEN 2. IT HAPPENED 3. NEVER 4. NOT APPLICABLE

7. The problems of your wife/husband added to your troubles and made your life difficult

1. OFTEN 2. IT HAPPENED 3. NEVER 4. NOT APPLICABLE

In the recent months: (NOT APPLICABLE means no financially dependent children)

8. You had doubts about your children being hard-working and tough enough to cope in life

1. OFTEN 2. IT HAPPENED 3. NEVER 4. NOT APPLICABLE

9. You had to listen to complaints about your children (at school, from neighbors, from other parents)

1. OFTEN 2. IT HAPPENED 3. NEVER 4. NOT APPLICABLE

10. You had to bear some expenses because of something that your children did

1. OFTEN 2. IT HAPPENED 3. NEVER 4. NOT APPLICABLE

11. Your children disregarded and rejected your help, advice and guidance 1. OFTEN 2. IT HAPPENED 3. NEVER 4. NOT APPLICABLE
12. You felt that you were losing influence on your children 1. OFTEN 2. IT HAPPENED 3. NEVER 4. NOT APPLICABLE

In the recent months: (NOT APPLICABLE means no parents, parents-in-law or older relatives)
13. Your parents, parents-in-law or older relatives complained about you and was particularly critical of you 1. OFTEN 2. IT HAPPENED 3. NEVER 4. NOT APPLICABLE
14. You felt responsible for caring for and ensuring well-being of your parents or older relatives 1. OFTEN 2. IT HAPPENED 3. NEVER 4. NOT APPLICABLE
15. You were worried about the health or state of mind of one of your parents or older relatives 1. OFTEN 2. IT HAPPENED 3. NEVER 4. NOT APPLICABLE
16. Problems and worries of your parents, parents-in-law or other older relatives added to your troubles and made your life difficult 1. OFTEN 2. IT HAPPENED 3. NEVER 4. NOT APPLICABLE

In the recent months:
17. You felt that your source of income was unstable and uncertain 1. OFTEN 2. IT HAPPENED 3. NEVER 4. NOT APPLICABLE
18. Financial problems added to your troubles and made your life difficult 1. OFTEN 2. IT HAPPENED 3. NEVER

In the recent months: (NOT APPLICABLE means lack of paid work)
19. You felt that your work was too tiresome, dirty or dangerous 1. OFTEN 2. IT HAPPENED 3. NEVER 4. NOT APPLICABLE
20. You felt you had too many work responsibilities that you were not able to cope with 1. OFTEN 2. IT HAPPENED 3. NEVER 4. NOT APPLICABLE
21. You were treated unjustly by others at work 1. OFTEN 2. IT HAPPENED 3. NEVER 4. NOT APPLICABLE

In the recent months:
22. You had a feeling that the place you live in was overcrowded, for instance, too many people live in your apartment, neighboring apartments, the whole building 1. OFTEN 2. IT HAPPENED 3. NEVER
23. You were afraid of crime, drug addiction, hooliganism within your district, housing estate, vicinity 1. OFTEN 2. IT HAPPENED 3. NEVER
24. Problems associated with neighbors or other people living in the close vicinity of your home made your life difficult 1. OFTEN 2. IT HAPPENED 3. NEVER

In the recent months:

25. You suffered from a physical indisposition, such as bones aching, shortness of breath, which made it difficult to walk out, climb the stairs etc.

1. OFTEN 2. IT HAPPENED 3. NEVER

26. Health problems made it difficult for you to perform everyday tasks or participate in other activities

1. OFTEN 2. IT HAPPENED 3. NEVER

In the recent months:

27. You had to deal with some formal matters

1. YES 2. NO (if NO, please go to question 31)

28. You were not able to deal with a formal matter efficiently, quickly and easily

1. OFTEN 2. IT HAPPENED 3. NEVER

29. You had to search for friends or other ways in order to deal with a formal matter

1. OFTEN 2. IT HAPPENED 3. NEVER

30. You felt completely helpless and humiliated when dealing with a formal matter

1. OFTEN 2. IT HAPPENED 3. NEVER

In the recent months: (NOT APPLICABLE means that there was no need to take advantage of medical services)

31. You did not know where to seek medical assistance for yourself or for a relative or acquaintance

1. OFTEN 2. IT HAPPENED 3. NEVER 4. NOT APPLICABLE

32. You did not trust the healthcare service employees to provide medical assistance for you or a relative or acquaintance

1. OFTEN 2. IT HAPPENED 3. NEVER 4. NOT APPLICABLE

33. Although you needed to, you decided not to see a doctor, because it would have been too burdensome, onerous or costly

1. OFTEN 2. IT HAPPENED 3. NEVER 4. NOT APPLICABLE

During the last year, did you:

34. Undertake a more profitable or an additional job 1. YES 2. NO

35. Invested some money in production, trade or services 1. YES 2. NO

36. Made some money on stocks, bonds or transfer of money between bank accounts 1. YES 2. NO

37. Obtained new qualifications or skills with better earnings in mind 1. YES 2. NO

38. How would you evaluate your material situation at present:

1. GREAT
2. GOOD
3. QUITE GOOD
4. NEITHER GOOD NOR BAD
5. NOT TOO GOOD
6. BAD
7. TERRIBLE

39. Please specify, **to what extent your present material situation meets your aspirations, what you would like to have**

1. not at all
2. to a minimum extent
3. to some extent
4. it is half as good as I would like it to be
5. it largely does
6. it almost completely does
7. it does fully or it is even better than I would like it to be

40. Taken all together, **how would you say things are these days?** Would you say that you are....?

1. VERY HAPPY
2. PRETTY HAPPY
3. NOT TOO HAPPY
4. UNHAPPY

41. **Please compare your material situation with that of the average situation of people of the same gender and age as you,** does this comparison show that your life is:

1. much worse than the average
2. worse
3. a little worse
4. same as that of an average man at my age
5. slightly better than the average
6. better
7. much better than the average.

42. During the last year, **did you take advantage of the services of the following entities?**

42.1.health care units paid by health care public funds	1. YES	2. NO
42.2. units, where you had to pay for services	1. YES	2. NO
42.3. units paid by an employer, who paid for a medical services plan	1. YES	2. NO

43. **How often within the last few months you were so depressed you thought about suicide:**

1. VERY OFTEN
2. QUITE OFTEN
3. RARELY
4. NEVER

44. During the last year, did you encounter a situation, in which **you failed to take some time off work despite the fact that the doctor provided you with a sickness leave?**

1. YES 2. NO 3. I AM NOT EMPLOYED

45. **Do you trust financial institutions ?**

- | | | | |
|---------------|--------|-------|-------------------------------------|
| 45.1. Polish | 1. YES | 2. NO | 3. I HAVE NO OPINION IN THIS REGARD |
| 45.2. foreign | 1. YES | 2. NO | 3. I HAVE NO OPINION IN THIS REGARD |

46. During the last year, **did you take advantage of services of family doctors or specialists paid by the health care public fund?**

1. YES 2. NO

47. — if YES, then, **in comparison with your earlier experiences, did the medical treatment conditions:**

1. IMPROVE
2. REMAIN UNCHANGED
3. WORSEN
4. IT IS DIFFICULT TO SAY

48. **Do you trust the following financial institutions?**

48.1. banks	1. YES	2. NO	3. I HAVE NO OPINION
48.2. life insurance companies	1. YES	2. NO	3. I HAVE NO OPINION
48.3. property insurance companies	1. YES	2. NO	3. I HAVE NO OPINION
48.4. investment (mutual trust) funds	1. YES	2. NO	3. I HAVE NO OPINION
48.5. open pension funds	1. YES	2. NO	3. I HAVE NO OPINION
48.6. stock exchange	1. YES	2. NO	3. I HAVE NO OPINION

49. **Have you been hospitalized during the last three years?** 1. YES 2. NO

50. — if YES, which factors were the most important ones for selection of the hospital (please circle all important factors):

1. you selected a hospital in accordance with suggestion of the doctor, who issued the referral
2. the hospital was selected by the emergency service employee
3. you selected the hospital on the basis of own information regarding the quality of work of different hospitals
4. you selected a given hospital due its proximity to your place of residence

51. **Do you feel that you are loved and trusted?** 1. YES 2. NO

52. **Do you feel lonely, although you do not want to be ?** 1. YES 2. NO

53. **How many people would you call your friends?** I _____ I

54. Please specify, **how you usually react to troubles and difficult situations in your life?** (you can underline more than one answer)

1. I turn to others for advice
2. I pull myself together and start acting
3. I start using alcohol
4. I tell myself that it could be worse or that others face even worse situations
5. I give up, I do not know what to do
6. I use tranquilizers
7. I pray to God for assistance
8. I get preoccupied with other things, which divert my attention from problems and make me feel better

58. What was the **education level** of your **FATHER (or main custodian)**, when you were 14:

0. uncompleted primary
1. primary
2. vocational
3. uncompleted secondary
4. secondary vocational
5. secondary – general education
6. uncompleted university/ college (including post-secondary)
7. university/ college

59. **How many times a month on the average do you participate in religious services and other religious meetings?** (if less often than once a month, please enter 0)

_____ times a month

60. Listed below are several ailments associated with health condition. Please specify, whether you suffered from any of them within the **LAST MONTH**. If you did not suffer from it at all during the period of last month, please circle number 1; if you suffered from it less frequently than for 15 days of the month, circle number 2; if you suffered from an ailment for at least one half of the month, please circle number 3.

IN THE PAST MONTH:	I did not suffer	I suffered less than 15 days	I suffered at least for one half of the month
60.1. strong headaches	1	2	3
60.2. stomach pains or flatulence	1	2	3
60.3. pain or tension of neck or arm muscles	1	2	3
60.4. chest or heart pains	1	2	3
60.5. dry mouth or throat	1	2	3
60.6. sweating	1	2	3
60.7. shortness of breath	1	2	3
60.8. aching and pains all over the body	1	2	3
60.9. accelerated heartbeat (palpitation)	1	2	3
60.10. shivers or convulsions	1	2	3
60.11. pressure on the bladder and more frequent urinating	1	2	3
60.12. a feeling tiredness not associated with work	1	2	3
60.13. constipation	1	2	3
60.14. nosebleeds	1	2	3
60.15. sudden changes of blood pressure	1	2	3

61. **In your opinion, were the reforms conducted in Poland after year 1989 successful in general or rather unsuccessful?**

1. successful
2. not successful
3. it is difficult to say

62. Did the changes that took place in Poland after year 1989 have any influence upon your life?

1. YES 2. NO

63. -- if YES, then, in general, was that influence positive or negative?

1. very negative
2. rather negative
3. rather positive
4. very positive
5. it is difficult to say

64. Do you smoke cigarettes?

1. YES 2. NO

65. — if YES, how many cigarettes per day do you smoke? _____ cigarettes

66. — if NO, have you ever smoked cigarettes in your life?

1. YES 2. NO

67. We would like you to evaluate now the following aspects of your life and tell us, to what extent you are satisfied with each of them. Please mark your choice by circling the appropriate number by each aspect of life. The numbers stand for:

- 1 – VERY SATISFIED
- 2 - SATISFIED
- 3 – QUITE SATISFIED
- 4 – RATHER UNSATISFIED
- 5 - UNSATISFIED
- 6 – VERY UNSATISFIED
- 7 – not applicable

To what extent are you satisfied with:

67.1. your relations with the closest family members	1	2	3	4	5	6	7
67.2. financial situation of your family	1	2	3	4	5	6	7
67.3. relations with colleagues (a group of friends)	1	2	3	4	5	6	7
67.4. the present income of your family	1	2	3	4	5	6	7
67.5. ability to fulfill the food needs	1	2	3	4	5	6	7
67.6. health	1	2	3	4	5	6	7
67.7. what you are accomplishing in life	1	2	3	4	5	6	7
67.8. situation in the country	1	2	3	4	5	6	7
67.9. housing conditions	1	2	3	4	5	6	7
67.10. place of residence	1	2	3	4	5	6	7
67.11. goods and services you can get	1	2	3	4	5	6	7
67.12. what the future seems to hold for you	1	2	3	4	5	6	7
67.13. sex life	1	2	3	4	5	6	7
67.14. education	1	2	3	4	5	6	7
67.15. ways of spending leisure time	1	2	3	4	5	6	7
67.16. moral standards in you community	1	2	3	4	5	6	7
67.17. work	1	2	3	4	5	6	7
67.18. children	1	2	3	4	5	6	7
67.19. marriage	1	2	3	4	5	6	7
67.20. safety in the place of residence	1	2	3	4	5	6	7

68. In general, was the previous year a good one in your life ? 1. YES 2. NO

69. Who or what was the cause that the previous year was a good one or a bad one in your life? (you can choose more than one answer)

1. the authorities
2. myself
3. other people
4. destiny (Providence)

70. Have you engaged within the last three years in activity on behalf of the local community (commune, housing estate, town)?

1. YES
2. NO

IN THE PREVIOUS YEAR:

71. I visited a psychologist (psychiatrist) 1. YES 2.NO

72. I drank too much alcohol 1. YES 2.NO

73. I tried drugs 1. YES 2.NO

74. one of my relatives or acquaintances passed away 1. YES 2.NO

75. — if YES, who was it (please underline):

1. mother
2. father
3. wife (fiancée, girlfriend)
4. child
5. brother/ sister
6. grandmother/ grandfather
7. friend
8. other close acquaintance

IN THE PREVIOUS YEAR:

76. I could not get a job after graduating from school 1. YES 2. NO 3. NOT APPLICABLE

77. I was shifted to a lower work position 1. YES 2. NO 3. NOT APPLICABLE

78. I was passed over for promotion at work 1. YES 2. NO 3. NOT APPLICABLE

79. I was promoted 1. YES 2. NO 3. NOT APPLICABLE

80. I had serious problems with my superior 1. YES 2. NO 3. NOT APPLICABLE

81. I started my own business (company) 1. YES 2. NO

82. I lost a substantial amount of money doing business 1. YES 2. NO 3. NOT APPLICABLE

83. I had to take up a job not consistent with my qualifications 1. YES 2. NO 3. NOT APPLICABLE

84. I was robbed 1. YES 2. NO

85. I was attacked and beaten 1. YES 2. NO

86. Someone broke into my car or house 1. YES 2. NO

87. I was accused of an act, for which I could be liable to imprisonment or a fine 1. YES 2. NO

88. I was arrested by the police 1. YES 2. NO

89. I was a defendant in a civil case 1. YES 2. NO

90. my close friend/relative was arrested or violated the law 1. YES 2. NO

91. I was discriminated because of nationality, appearance, beliefs or for other reasons 1. YES 2. NO

92. my apartment (house) was seriously damaged	1. YES	2. NO	
93. my apartment (house) was renovated	1. YES	2. NO	
94. I had problems with the owner or manager of the building, in which I live (lived)	1. YES	2. NO	3. NOT APPLICABLE

95. Did you participate in the last local government election?	1. YES	2. NO
---	--------	-------

96. Do you know the name of the present commune administrator or city/town mayor?	1. YES	2. NO
--	--------	-------

97. Which period after the war was the best (the most happy) in your life in general? <i>please circle years that indicate the happiest time</i>
1945,6,7,8,9,1950,1,2,3,4,5,6,7,8,9,1960,1,2,3,4,5,6,7,8,9,1970,1,2,3,4,5,6,7,8,9,1980,1,2,3,4,5,6,7,8,9,1990,1,2,3,4,5,6,7,8,9,2000,1,2,2003

98. If you won a bet for PLN 200 and had a choice: take the amount of PLN 200 or toss a coin and either get nothing if it is heads or get PLN 400 if it is tails – what would you choose?
1. take PLN 200 at once
2. toss a coin and either get nothing or PLN 400

99. Which of these statements regarding democracy you find the most convincing?
1. democracy is better than any other form of government
2. sometimes non-democratic system can be better than democratic system
3. for people like me, it really doesn't matter whether the system is democratic or non-democratic
4. democracy is a bad system
5. It is difficult to say

100. Generally speaking, would you say that most people can be trusted or that you can't be too careful in dealing with people?
1. most people can be trusted
2. one can't be too careful in dealing with people
3. it is difficult to say

101. If you lost a bet for PLN 200 and had a choice: either pay PLN 200 at once or toss a coin and either pay nothing if it is heads or pay PLN 400 if it is tails – what would you choose?
1. pay PLN 200 at once
2. toss a coin and either pay nothing or pay PLN 400

102. Are you a member of any organizations, associations, parties, councils, unions, committees or religious groups?		
1. YES, one		
2. YES, two		
3. YES, three or more		
4. NO		
103. — if YES, then have you ever performed a function in any of these organizations?	1. YES	2. NO

104. **If people do something for the public good in your local community, who usually comes up with the idea or organizes such activity** (please underline all categories that in your opinion are appropriate)?

1. members of local authorities
2. priest, parish
3. teachers, school
4. company owner, local businessman
5. myself
6. social organizations, associations
7. journalists
8. other persons
9. I do not know
10. Nobody

105. **Did you attend a public meeting last year (but not at work)?** 1. YES 2. NO

106. — if YES, did you **participate in discussion during the meeting?** 1. YES 2. NO

107. **Your own (personal) average monthly net income for the last three months amounted to** _____ PLN

108. **What average monthly net income do you expect to get in two years?** _____ PLN

109. **In general, are you satisfied or dissatisfied with yourself?**

1. I am very satisfied with myself
2. I am rather satisfied with myself
3. I am rather dissatisfied with myself
4. I am very dissatisfied with myself

110. **Please compare yourself to other men/women at the same age and say whether it is more probable for the things listed below to happen to you or to other men/women at the same age:**

1. IT IS MUCH MORE PROBABLE THAT IT WILL HAPPEN TO ME
2. IT IS MORE PROBABLE THAT IT WILL HAPPEN TO ME
3. IT CAN HAPPEN TO ME JUST AS WELL AS TO OTHER MEN/WOMEN
4. IT IS LESS PROBABLE THAT IT WILL HAPPEN TO ME
5. IT IS MUCH LESS PROBABLE THAT IT WILL HAPPEN TO ME
6. IT HAS HAPPENED TO ME ALREADY

Please enter a number on the left, indicating the probability of a given event occurring to you in comparison with other men/women at the same age. If any of these things has already happened to you, enter 6.

- 110.1 _____ victim of burglary
- 110.2 _____ becoming an alcohol addict
- 110.3 _____ being imprisoned
- 110.4 _____ a successful career in your profession
- 110.5 _____ living long and healthy life
- 110.6 _____ a suicidal attempt
- 110.7 _____ getting cancer
- 110.8 _____ winning LOTTO for more than PLN 100 thousand
- 110.9 _____ living your life without losing dignity, honestly
- 110.10 _____ poverty
- 110.11 _____ a nervous breakdown
- 110.12 _____ loneliness
- 110.13 _____ realization of most plans in life
- 110.14 _____ contracting AIDS
- 110.15 _____ having a heart attack

<p>111. Do you make any bets (e.g. lotteries, horse races, sporting events etc.) 1. YES, at least once a month 2. YES, sometimes 3. NO</p>
--

<p>112. Do you use a computer at work, at home or any other place at least from time to time? 1. YES 2. NO</p>

┌ ┌ ┌ ┌ ┌ ┌ ┌ ┌ ┌ ┌ ┌ ┌ ┌ ┌

Provided below are sets of questions only for persons belonging to specific groups:

- those, who work, who have not retired yet**
- employed (working)**
- those working up to 50 years of age**
- computer users**
- Internet users**

if you meet any of the above conditions, please go to the appropriate set of questions on subsequent pages.

ONLY FOR THOSE, WHO WORK, WHO HAVE NOT RETIRED YET

<p>113. Do you have any additional pension security? 1. YES 2. NO</p>																
<p>114. — if NOT, do you plan to get any additional pension security? 1. YES, I do 2. NO, I do not</p>																
<p>115. — if YES, you plan to get some additional pension security, then of what type ? (<i>please underline the appropriate answer</i>) 1. unit-linked life insurance 2. investment (mutual trust) fund 3. other type of security 4. I don't know yet</p>																
<p>116. — if YES, you plan to get some additional pension security, then will it depend on any of the conditions listed below?</p>																
<table border="0"> <tr> <td>116.1. contribution being paid by the employer</td> <td>1. YES</td> <td>2. NO</td> <td>3. I HAVE NO OPINION</td> </tr> <tr> <td>116.2. contribution being exempt from taxes</td> <td>1. YES</td> <td>2. NO</td> <td>3. I HAVE NO OPINION</td> </tr> <tr> <td>116.3. savings being exempt from taxes</td> <td>1. YES</td> <td>2. NO</td> <td>3. I HAVE NO OPINION</td> </tr> <tr> <td>116.4. I will save regardless of these allowances</td> <td>1. YES</td> <td>2. NO</td> <td>3. I HAVE NO OPINION</td> </tr> </table>	116.1. contribution being paid by the employer	1. YES	2. NO	3. I HAVE NO OPINION	116.2. contribution being exempt from taxes	1. YES	2. NO	3. I HAVE NO OPINION	116.3. savings being exempt from taxes	1. YES	2. NO	3. I HAVE NO OPINION	116.4. I will save regardless of these allowances	1. YES	2. NO	3. I HAVE NO OPINION
116.1. contribution being paid by the employer	1. YES	2. NO	3. I HAVE NO OPINION													
116.2. contribution being exempt from taxes	1. YES	2. NO	3. I HAVE NO OPINION													
116.3. savings being exempt from taxes	1. YES	2. NO	3. I HAVE NO OPINION													
116.4. I will save regardless of these allowances	1. YES	2. NO	3. I HAVE NO OPINION													

ONLY FOR THE EMPLOYED (WORKING)

<p>117. If the employer proposed any additional form of remuneration, you would be most happy with (<i>please choose at most TWO OPTIONS</i>): 1. a medical services plan (the employer pays for some medical services) 2. additional pension security (an employee pension plan) 3. sickness insurance 4. unit-linked life insurance 5. a bonus for gasoline 6. a mobile phone 7. money</p>
--

<p>118. Do you take advantage at present of any additional form of remuneration?</p>

118.1. a medical services plan	1. YES	2. NO
118.2. additional pension security	1. YES	2. NO
118.3. unit-linked life insurance	1. YES	2. NO
118.4. a bonus for gasoline	1. YES	2. NO
118.5. a mobile phone	1. YES	2. NO
118.6. money	1. YES	2. NO

119. Do you take advantage of any group insurance provided by the employer? 1. YES 2. NO
120. — if YES, who pays the premium? 1. YES 2. NO

Provide the answer for each type of insurance by entering X in the appropriate row.

The premium is paid by:

Insurance type	You (1)	The employer (2)
120.1. life insurance		
120.2. life insurance with investment fund		
120.3. accident insurance		
120.4. professional liability insurance		

ONLY FOR THE EMPLOYED AGED UP TO 50

121. Did you select an open fund? 1. I did not
 2. I selected it and I did not change it
 3. I selected it and I changed it

122. — if you did, what did you take into consideration making the choice? (you can underline more than one answer)

1. an advertisement of a given fund
2. confidence in a given fund
3. low payments
4. advice of a relative or friend
5. information obtained from a representative of a given fund
6. previous financial results of the fund
7. other reasons

ONLY FOR COMPUTER USERS

123. How do you assess your computer skills? 1. very good
 2. good
 3. average
 4. low

124. How many hours did you spend using a computer last week? [_____]

125. Have you ever used the Internet or e-mail? 1. YES 2. NO

126. **Where do you use a computer?** (you can underline more than one answer)

1. at work
2. at home
3. at school/ university
4. at an Internet cafe/ club
5. at friends/ relatives

ONLY FOR INTERNET USERS

127. **Where do you use the Internet ?** (you can underline more than one answer)

1. at work
2. at home
3. at school/ university
4. at Internet cafe/ club
5. at friends/ relatives

128. **Who do you communicate with using the Internet?** (in the first column, enter persons that you ever contacted, and in the second – persons that you contacted last week; provide answers by entering a cross in the adequate rows)

	Ever (1)	Last week (2)
128.1. family		
128.2. work colleagues		
128.3. colleagues, friends that I also contact in ways other than via Internet		
128.4. persons that I do not have direct contact with		
128.5. persons that I met on the Internet		
128.6. persons with similar interests		
128.7. love interest		

129. **Please indicate whether you performed the tasks, listed below, while using the Internet?** (please read the list of things one can do using the Internet and mark with a cross things that you ever did and things that you did last week)

	Ever (1)	Last week (2)
129.1. receiving and sending e-mails		
129.2. instant messaging (e.g. ICQ, Gadu-Gadu, etc.)		
129.3. visiting chats		
129.4. visiting discussion groups or forums		
129.5. browsing Web pages		
129.6. gathering materials needed for school or work		
129.7. purchase of products via Internet		
129.8. accessing bank account via Internet		
129.9. participation in online auctions		
129.10. playing network games via Internet		
129.11. downloading free software, music or movies		
129.12. creating or modifying own Web page.		

130. How many hours did you spend last week using the Internet? [_____]

131. When did you start using the Internet? (please enter year) [_____]

WE ARE VERY THANKFUL FOR YOUR TIME.

**WE WOULD LIKE TO ASSURE YOU ONCE AGAIN THAT ALL INFORMATION PROVIDED BY YOU
WILL BE USED ONLY IN COLLECTIVE STATISTICAL SCIENTIFIC REPORTS**

for *THE COUNCIL FOR SOCIAL MONITORING*

Janusz Czapiński, Ph. D., professor of the University of Warsaw