

Polish Panel Survey, POLPAN 1988-2013: Social Structure and Mobility

(Excerpts of the grant proposal "Polish Panel Survey, POLPAN 1988-2013: Social Structure and Mobility" submitted to the National Science Centre, Maestro 1 competition)

Summary

The Polish Panel Survey POLPAN is a unique program of panel surveys carried out since 1988 in 5-year intervals, and focused on describing social structure and its change during the last 25 years in Poland. The resulting POLPAN 1988-2013 dataset will be invaluable for the social sciences, as it will allow for testing hypotheses about the impact of intellectual and social resources on individuals' biographies, and more importantly, how the latter shape the social structure.

The research team is composed of:

prof. dr hab. Kazimierz M. Słomczyński (Institute of Philosophy and Sociology, Polish Academy of Sciences – IFiS PAN) as principal investigator,

prof. dr hab. Henryk Domański (IFiS PAN), prof. dr hab. Krystyna Janicka (IFiS PAN), dr. Irina Tomescu-Dubrow (IFiS PAN), dr. Anna Kiersztyn (Institute of Sociology, University of Warsaw), dr. hab. Zbigniew Sawiński (IFiS PAN), dr Zbigniew Karpiński (IFiS PAN), dr Michał Bojanowski (Interdisciplinary Centre for Mathematical and Computational Modelling, University of Warsaw), and dr Joshua Kjerulf Dubrow (IFiS PAN) as co-principal investigators, with

dr Katarzyna Andrejuk, Marta Kołczyńska, Anna Baczko-Dombi, Ewa Jarosz, dr Kinga Wysieńska, Danuta Życzyńska-Ciołek as researchers,

and in cooperation with: Prof. dr hab. Ireneusz Białecki, Prof. dr hab Anna Firkowska-Mankiewicz, Dr Christie Glass, Dr Brian Green, Dr Natalie Knistner, Dr Maciej Kryszczuk, Prof. dr Robert Kunovich, Prof. dr Sheri Kunovich, Dr Rachel Lovell, Prof. Dr Bogdan W. Mach, Prof. dr Marquart-Pyatt, Dr Brian Martin, Dr Ann Oakes, Dr Scott Orr, Prof. Elizabeth Osborn, Prof. dr Peoples, Prof dr Goldie Shabad, Dr Ann Shadley, Dr Joanna Sikorska, Prof. dr hab. Paweł Sztabiński, Dr Franciszek Sztabiński, Dr Ann Weaver, Dr Chu Wang, Dr Christina Xydias, Dr Alexis Yamokoski, and a number of other experienced and early-stage researchers.

Experience and knowledge gained through participation in POLPAN potentially could lead to a breakthrough in studying social structure. This breakthrough would stem from taking into account the actual dynamics of social structure through analyses of individuals' life courses in a long time span, utilizing:

- (a) a rigorous theoretical approach,
- (b) appropriate data collection,
- (c) a selection of currently important sociological problems,
- (d) advanced statistical techniques of data analysis.

The project's theoretical approach is based on major assumptions of the rational action paradigm and life course analysis developed by Blossfeld and Perin (1998; also Blossfeld and Drobnic 2001), Mayer (2009), Goldthorpe (2006), diPrete (2006, 2007), and Breen (2010). Our proposed contribution is to shift from considering social structure in static terms to considering it in dynamic fashion. Differential equations are particularly well suited to studying time changes since they involve the concept of derivative. A derivative can be thought of as how much a quantity is changing at some given point. At any point in the individual's trajectory, differential equations can describe the rate of change in sociologically relevant quantities. These quantities can relate, for instance, to social status, health, as

well as psychological variables such as self-assessment of one's position. Although this approach is prevalent in our research, we also use different frameworks focusing on qualitative changes.

The proposed research, POLPAN 1988-2013, would build on data collected earlier. Initially, in 1988, the survey was conducted among a national sample representing Poland's adult population (aged 21-65), with N = 5,817. In 1993, this sample was randomly reduced to 2,500 individuals, whom researchers tried to reach in each of the consecutive five-year waves. To ensure an adequate age balance, additional subsamples involving young cohorts have been supplemented later. For example, the 2008 sample comprises 1,825 respondents of whom 1,244 belong to the strict panel, while 581 cases consist of newly added individuals aged 21-25 years. Many Polish and international researchers using POLPAN urged us to expand its sample size in the future to have enough cases for cohort analyses. We fully agree with this assessment. Therefore, in 2013 we aim at reaching all individuals who took part in any of the five waves of POLPAN. This brings our target list to 7,026 individuals who participated in at least one prior POLPAN wave, plus an additional 235 young respondents. To date, there is no other research worldwide, in which life histories of individuals from a nationally-representative sample of adults would be collected for such a long time span, reaching 25 years, while also opening the possibility of panel research on the renewal samples of the young.

The POLPAN study is unique also with respect to the scope of the collected data. Socio-demographic information of respondents and their families is supplemented by items on socio-political attitudes, some of them present in cross-national studies. At the same time, POLPAN includes the nonverbal Raven test, which captures intellectual flexibility (an essential IQ component), and the Nottingham Health Profile, which measures certain aspects of physical and mental health.

Substantively, the range of problems covered in POLPAN is very broad. Questionnaires deal with interdisciplinary problems that can be labeled as follows: the "old" and "new" elements in the social structure; changes in the class structure; social mobility; differences in the standard of living; the process of adaptation to a market economy; the impact of the location in social structure on political attitudes and behavior; perception of social conflicts; winners, losers, and the European integration; health issues; emigration. These research areas are important since they pertain to individuals' allocation (who and where is located in the social structure?) and distribution of goods (who gets what and why?). Both the individuals' allocation and distribution of goods can be more or less effective. We plan to assess allocative and distributional effectiveness in the context of the impact of intellectual and social resources on individuals' biographies.

Research on class structure and social stratification employs advanced mathematical and statistical techniques. We plan to use covariance analysis, multidimensional scaling, log-linear modeling, multinomial logit regression, linear programming, and analysis of dynamic data. Our team is well versed in SPSS, STATA, and R.

The POLPAN 1988-2013 project should lead to achieving the following:

1. Dataset. All data from our project – after protecting individual records in accordance with the current law – will be in public domain and available through our webpage and archiving agencies, ICPSR ESRC, GESIS.
2. Publications. We plan to publish two edited volumes from the materials of POLPAN 1988-2013, at least one with a leading commercial publisher. We aim also at publishing articles in leading social science journals, including American Sociological Review, American Journal of Sociology and European Sociological Review.

3. Webpage. Due to the complexity of the POLPAN 1988-2013 data, it would be necessary to provide interested researchers from centers around the world with well-organized assistance. For this purpose we will create a special webpage connected to social media.

4. Didactic instruments. We will fulfill the need for training doctoral students and early-career researchers in analyzing large data sets using appropriate statistical techniques for POLPAN data.

Research Team

Prof. dr hab. Kazimierz M. Słomczyński (Institute of Philosophy and Sociology, Polish Academy of Sciences – IFiS PAN) – principal investigator,

Prof. dr hab. Henryk Domański (IFiS PAN) – co-principal investigator,

Prof. dr hab. Krystyna Janicka (IFiS PAN) – co-principal investigator,

Dr Irina Tomescu-Dubrow (IFiS PAN) – co-principal investigator,

Dr Anna Kiersztyn (Institute of Sociology, University of Warsaw) – co-principal investigator,

Dr hab. Zbigniew Sawinski (IFiS PAN) – co-principal investigator,

Dr Zbigniew Karpiński (IFiS PAN) – co-principal investigator,

Dr Michał Bojanowski (Interdisciplinary Centre for Mathematical and Computational Modelling, University of Warsaw) – co-principal investigator,

Dr Joshua Kjerulf Dubrow (IFiS PAN) – co-principal investigator,

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Project description, methodology, and expected results

Goal

This project aims at examining and explaining the dynamics of social structure in Poland over the past 25 years, with special attention to the country's adaptation to the European political and economic system. Pursuing this cause is possible by extending the Polish Panel Survey POLPAN 1988-2008,

which contains longitudinal data collected in face-to-face interviews in 1988, 1993, 1998, 2003, and 2008, to 2013. One of the project's main results will be the creation of a

unique data file, POLPAN 1988-2013, prepared for testing hypotheses about the impact of intellectual and social resources on individuals' biographies, and how the latter further shape social structure.

Significance

To properly understand the functioning of social structure, a dynamic framework of analysis is necessary. The proposed research, POLPAN 1988-2013, offers this unique opportunity as it extends the richness of earlier collected data. Initially, in 1988, the survey was conducted among a national sample representing Poland's adult population (aged 21-65), with N = 5,817. In 1993, this sample was randomly reduced to 2,500 individuals, whom researchers tried to reach in each of the consecutive five-year waves. To ensure an adequate age balance, additional subsamples involving young cohorts have been supplemented later. For example, the 2008 sample comprises 1,825 respondents of whom 1,244 belong to the strict panel, while 581 cases consist of newly added individuals (aged 21-25). Many Polish and international researchers using POLPAN urged us to expand its sample size in the future to have enough cases for cohort analyses. We fully agree with this assessment. Therefore, in 2013 we aim at reaching all individuals who took part in any of the five waves of POLPAN. This brings our target list to 7,026 individuals who participated in at least one prior POLPAN wave, plus an additional 235 young respondents. To date, there is no other research worldwide, in which life histories of individuals from a nationally-representative sample of adults would be collected for such a long time span, reaching 25 years, while also opening the possibility of panel research on the renewal samples of the young.

The POLPAN study is unique also with respect to the substantive scope of the collected data. Socio-demographic information of respondents and their families is supplemented by items on socio-political attitudes (some of them included in various cross-national studies). At the same time, POLPAN contains, in contrast to the standard surveys, two tests: nonverbal Raven test (capturing intellectual flexibility, an essential IQ component) and the Nottingham Health Profile (measuring certain aspects of physical and mental health).

In the tradition of empirical research in sociology, the position of individuals in the social structure is usually considered an independent variable explaining individuals' intellectual resources and attitudes. Analyses of panel data allow researchers to turn around the direction of this relationship and test hypotheses about how intellectual resources and attitudes determine individuals' achievements and their placement in the social structure. POLPAN 1988-2013 will provide a unique opportunity for testing such hypotheses.

Literature review

In our study we are particularly receptive to recent theoretical innovations stemming from the work of Blossfeld and Prein (1998; also Blossfeld and Drobic 2001), Mayer (2009), Goldthorpe (2006), diPrete (2006, 2007) , and Breen (2010) in which social structure is considered in the framework of rational action and the life course. However, we also base our research on a rich tradition of Polish sociology, including analytical approach of Stanisław Ossowski, class theory of Julian Hochfeld, historical orientation of Jan Szczepański, and research program of Włodzimierz Wesołowski. We also utilize empirical research on social structure originated in Poland by Adam Sarapata, Stefan Nowak, Włodzimierz Wesołowski, Stanisław Widerszpil, Jan Malanowski, Krzysztof Zagórski and Michał Pohoski. Their classical contributions – discussed in Wesołowski and Słomczyński (1977) – provide a framework for historical comparisons that could be made using our POLPAN data for 1988-2013. For

comprehensive analyses that we plan, the studies conducted by Henryk Domański, Marek Ziólkowski, Edmund Wnuk-Lipiński and Jacek Wasilewski are also of great importance.

In the core of the POLPAN project we study the dynamics of individuals' jobs, focusing on both structural opportunities and individual determinants. We build on the technical definition of job-trajectory, as a time-ordered set of states (values) of a dynamical system, In practical terms, we define this trajectory to be a set of values of status (S) as a function (dependent) of time: $S = S(t)$.

Job trajectories characterize social inequality in a dynamic manner. We focus on predicting mean values of status for each of specified points on the trajectories of selected groups. Each person's job receives its score according to the scale applied, such as socioeconomic index (SES), occupational prestige (OCPR), or complexity of work (COMPLEX); for a review, see Domański, Sawiński, and Słomczyński 2009.

Approaches to study job trajectories have been diverse, involving:

(1) Optimal matching analysis that uses an iterative minimization procedure to find the distance between every pair of sequences in a sample, and then applies cluster analysis to ascertain if the sequences belong to distinct types drawn from a typology.

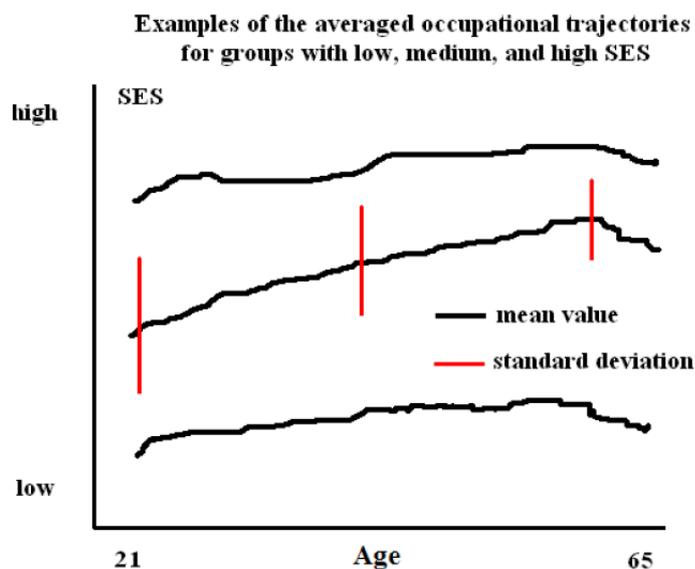
(2) Event history analysis utilizing event-count models and duration models.

Both approaches are summarized and compared in Arosio 2004.

(3) Dynamic modeling using differential (or difference) equations. The purpose of this approach, as applied to occupational trajectories, is to predict values of SES through time. This approach originated with the paper "A Model for Occupational Careers," which Sørensen published in 1974. For recent work in this framework, see Brown 2007. When representing trajectories one should consider that for individuals SES is stable for a

given job but it can change with each new job. Hence, individual trajectories are usually smoothed; the mean values of SES, with its standard deviation, are considered. Figure 1 depicts examples of the averaged occupational trajectories for groups with low, medium and high SES. Standard deviations of SES will show how the trajectories are spread.

Figure 1.



The model considered in the literature (e.g. Brown 2007; Słomczyński, Krauze, and Peradzyński 1986; Słomczyński and Tomescu-Dubrow 2011) is contained in the following equation:

$$d(S - M)/dt = -a(S - M) + \sigma dM/dt$$

where S denotes observed status, M refers to the status imputed by its determinants, the parameter a is the rate of convergence of actual status S to an equilibrium enforced by M, and parameter σ is a correction factor, which increases or decreases the impact of changes in the recalibrated imputed status. Presence of $\sigma dM/dt$ makes the model flexible, allowing for a decrease in status at the end of career. One could expect that parameters a and σ differ among groups. Sociologists should explain the reasons for these differences.

Differential equations are particularly well suited to studying changes since they involve the concept of derivative. A derivative can be thought of as how much a quantity is changing at some given point. Differential equations can describe the rate of change of SES at any point in the career trajectory. Of course in this framework the rate of change is not limited to SES and it can refer to other important variables related to individuals' characteristics such as state of health or self-evaluation of one's position in the social structure.

Dynamic approach to social structure, in both quantitative and qualitative renditions, is reflected in the POLPAN publications. The main publications are as follows:

- *Struktura społeczna: Schemat teoretyczny i warsztat badawczy [Social Structure: Theoretical Framework and Research Design]* (Słomczyński, Białecki, Domański, Janicka, Mach, Sawiński, Sikorska, and Zaborowski 1989)
- *Social Patterns of Being Political* (Słomczyński 2000)
- *Social Structure: Changes and Linkages* (Słomczyński 2002)
- *Kariera i Sukces [Career and Success]* (Słomczyński 2007)
- *Continuity and Change in Social Life* (Słomczyński and Marquart-Pyatt 2007)
- *Inequality: Patterns and Consequences* (Słomczyński and Tomescu-Dubrow 2011)
- *Polski Survey Panelowy: POLPAN 1988-2008 [Polish Panel Survey: POLPAN 1988-2008]* (Słomczyński, Henryk Domański, Zbigniew Sawiński, Krystyna Janicka, Irina Tomescu-Dubrow and the Team 2011).

The list of the POLPAN authors involved in these publications is as follows: Białecki, I., Bojanowski, M., Domański, H., Dubrow, J. K., Firkowska-Mankiewicz, A., Glass, Ch. M., Green, B., Janicka, K., Kiersztyn, A., Knistner, N. A., Kryszczuk, M., Kunovich, R., Kunovich, S., Lovell, R. E., Mach, B. W., Marquart-Pyatt, S., Martin, B., Mikucka, M., Oakes, A. C., Orr, S., Osborn, E., Peoples, C. D., Sawiński, Z., Shabad, G., Shadley, A., Sikorska, J., Słomczyński, K. M., Sztabiński, F., Sztabiński, P., Tomescu-Dubrow, I., Weaver, A. A., Wang, Ch., Xydias, Ch. V., Yamokoski, A., and Zaborowski, W. This is a mixture of well-established and young researchers. Most of them plan on continuing involvement in the POLPAN study.

Assumptions, research questions, problems to be solved, and plan of the study

Assumptions

The project is governed by the basic assumptions that there is a need for integration of the two approaches to social structure: *relational* and *distributional*. In accordance with sociological tradition, an analysis of social structure in terms of social relations, particularly the relations of control and

subordination of certain social groups to others, can be identified as the class approach. The other approach concentrates on the analysis of the distribution of commonly desired goods; this is the stratification approach, for which the central question is who gets what, through what channels, and with what consequences. Both approaches are interrelated.

Research questions

The research questions of our project are as follows: What social divisions have been generated by technological, economic, and political transformation? How did the composition of social classes change during the last 25 years? What are the main patterns of social mobility and how do they change in recent years? How is social stratification reflected in the standard of living? What social groups gain and what social groups lose – in both objective and subjective terms – during a construction of democratic regime and a market economy? How does a location in the social structure influence political behavior, including support for political parties? To what extent does a perception of social conflicts affect inter-group relations? What segments of the social structure form a base of support for further European integration?

Research problems implied by the above questions are important since they pertain to individuals' allocation (who and where is located in the social structure?) and distribution of goods (who gets what and why?). Both the individuals' allocation and the distribution of goods can be more or less effective. Allocation of individuals is effective if (a) all relevant attributes of persons correspond to the requirements of their positions, and (b) ascribed attributes are disregarded in the process of assigning people to jobs. Distribution of goods is effective if goods are distributed according to merit. In our analyses, we would like to assess allocative effectiveness (a level of deviation from the ascriptive model) and distributional effectiveness (a level of meritocracy). Although the need for such analyses is well expressed in the literature our research is a serious candidate to be the first in which this assessment will be conducted in a comprehensive manner.

Problems to solve

We intend to concentrate on several research issues raised and described in previous publications (Słomczyński 2002, 2007, and Słomczyński and Tomescu-Dubrow 2011). Here is a list of issues of major importance:

1. The "old" and "new" elements in the social structure. We will aim at identifying both the "old" elements of social structure (in particular, those causing the backward development of the country), as well as its "new" dimensions (in particular, those facilitating the development of the country in a new direction). Here are the main "old" elements:

(1) the *nomenklatura*, being the structural implementation of directive-distributive management at both the national and the regional levels;

(2) the *heavy-industry working class*, initially being a political slogan but soon becoming a distinct segment of the population and an important political force in the communist state;

(3) the *peasantry*, defined by their individual ownership of arable land, yet dependent on state-controlled access to agricultural equipment and involved in the state distributive system of agricultural products;

(4) employees in *redundant bureaucratic positions*, actually representing *hidden unemployment*;

(5) active *organizers of the informal economy*, and

(6) *semiinstitutionalized opposition* to the mainstream, communist-regime-supported, organization of life. What has happened to those segments of the social structure? How have they “adjusted” to the current conditions? In our previous research, we have obtained only a partial answer to these questions. Methodologically, we have learned new ways of gathering necessary information to answer these questions.

Major changes in the social structure result not only from the transformation of “old” elements but also from the emergence of “new” elements, mainly stemming from the implementation of democracy and capitalism. The main new categories are:

- (1) career politicians,
- (2) full-fledged capitalists,
- (3) financial and managerial specialists, and
- (4) professionals in banking, public relations, and electronic information management.

We can investigate how people reach positions in these categories.

2. Changes in the class structure. In recent years a heated discussion has emerged in international sociology circles on the issue of whether class divisions are still important in contemporary capitalist countries (Goldthorpe and Marshall 1992; Breen and Rottman 1995; Grusky and Weeden 2008, Weeden and Grusky 2005; Sørensen 1991). The question of whether class “had died,” or remained alive, was also addressed in terms of post-communist societies.

Słomczyński and Shabad (1977) presented this discussion and revealed data on the evolution of social classes in East Central Europe. Taking their presentation, we propose to use a class schema adjusted to the post-communist transformation. We distinguish the following classes: (1) employers, (2) managers, (3) experts, (4) office workers, (5) first-line supervisors, (6) selfemployed, (7) skilled manual workers, (8) unskilled manual workers, and (9) farmers. In *Social Patterns of Being Political* (2000), Słomczyński and Shabad rejected the hypothesis about the death of class (see also, Domański, 2000). However, in order to test this hypothesis in a comprehensive way, we intend to include three other class schemes – those of (1) Goldthorpe, (2) Wright, and (3) Esping-Anderson (see Grusky, 1994).

3. Social mobility. Goyder (1984) compared two approaches to the study of social mobility: the categorical analysis of the mobility table and the regression analysis of status attainment. These two approaches, still dominant in the literature on social mobility, should be considered as complementary rather than alternative (see Mach and Wesołowski, 1986; see also Morgan, Grusky, and Fields 2006; Breen 2005). We intend to continue these approaches, broadening the scope of our analyses for involving new problems.

For the first time, we were able to distinguish two types of mobility: (a) structural mobility that results from closing old positions and creating new positions, and (b) exchange mobility that occurs among positions existing at the origin and destination. It would be useful to examine these two types of mobility in a dynamic manner, during a recession period in particular. What happens to people who are forced to move out due to bankruptcy of firms – do they find jobs in new firms, assume old positions, or become unemployed? What happens to those who resign from relatively stable positions? We are prepared to answer such questions since we know how to gather information about the history of positions.

4. Differences in the standard of living. In our previous research, we focused on spending on food and luxury goods. In particular, we tested two hypotheses. The first hypothesis says that as the overall economy in Poland improves and the country progresses from the communist and post-communist organization of economic life, individuals’ spending on food decreases. The second

hypothesis postulates that as the overall economy in Poland improves, spending on luxuries increases on the expense of savings. Both these hypotheses pertain to the rising standard of living. In addition, we studied housing conditions - usable floor area per family member in square meters.

In future analyses, the list of variables defining the standard of living should be extensive. In particular, we should include a number of variables related to interpersonal communication and information management, including such durable goods as a cell phone and computer. Does the new technology diminish inter-group divisions?

5. The process of adaptation to a market economy. The question "which segments of social structure have been the main sources of support for the post-communist transformation and which segments, have been the main sources of opposition" is still open (Klebanium 2007).

In an earlier study, we found that four groups of variables influence the extent of approval for the systemic change: (a) age-dependent location of the individual on the job market, (b) the individual's economic status involving a subjective evaluation of income attainment, (c) social and cultural capital consisting of, but not limited to, educational resources, and (d) personality characteristics. Generally, persons who were younger and better located in the job market, were economically advantaged, had cultural and social capital, and expressed more support for the systemic change than did the persons who were older and worse located on the job market, materially disadvantaged, and less educated. In addition, the persons who scored highly on the scales of authoritarianism and anxiety, and those with low self-esteem expressed strong disapproval of the systemic change.

Subsequent studies revealed that the rise in economic status resulted in reducing negative attitudes toward the systemic transformation when other factors remained controlled. These studies also demonstrated the role of personality factors – combined with structural factors – in shaping the approval of the post-communist transition in Poland. Thus, we are well prepared to identify and to analyze a relatively extensive set of variables influencing the support for a market economy.

6. The impact of the location in social structure on political attitudes and behavior. In recent studies, we focus our attention on political biographies, party preferences and voting, and support for democracy. The one of the most interesting results is that both personal economic hardship and macroeconomic conditions determine *protest voting*, defined as switching one's vote to an opposition party.

This result is interesting since it bridges variables defined on micro level (personal economic hardship) and macro level (unemployment by regional units, voivodships). The unemployment rate in the voivodship of residence directly increases the probability that an individual will engage in protest voting, showing some interaction with individual income. The effect of this interaction differs across social classes. We will explore it not only with respect to protest voting but also with respect to support for democracy and other political attitudes. We also intend to examine whether the hardship plays a key role in "throwing the rascals out."

7. Perception of social conflicts. In previous research, we examined the perception of conflicts between rich *vs.* poor, non-manual workers *vs.* manual workers, supervisors (managers) *vs.* supervisees (ordinary employees), and rulers (authority) *vs.* the ruled (the rest of the society).

We plan to extend the list of possible sources of conflict, including political orientations and ethnic groups. The latter should be studied in the context of generational cohorts, and the attitudes toward the past (e.g., an assessment of the impact of minorities on Polish culture) and the future (e.g., orientation toward immigrants).

In 1989, compared to the initial phase of the transformation, normally important stratification variables, such as education, or occupation, lost their impact on conflict perception. The impact of

psychological variables – the evaluation of the pre-1989 period, in particular – increased. Does this trend continue even 25 years after the fall of communism?

8. Winners, losers, and the European integration. Some social groups gain from the postcommunist transformation while others stand to lose. Winners are more likely than losers to be supportive of further political changes. Insofar as individuals are made aware that there are winners and losers in the European integration process, support for Poland's joining the European Union is based primarily on utilitarian calculations of costs and benefits. We plan to analyze the economic bases for gains and losses in the context of the European integration.

9. Health issues. Our original sample, the one from 1988, is aging: in 2013 the youngest respondents will be 46 years old and the oldest 90 years old, respectively. Since 1998 we collect the data on the subjective evaluation of physical and mental health. In 2008 we applied the Nottingham Health Profile test. This provides an opportunity to study the relationship between the locations of individuals in the social structure in a dynamic manner. Do the effects of education, occupation, and income on health increase over the life course? In what segments of the social structure these effects are particularly strong?

10. Emigration. As Kaczmarczyk and Okólski (2008) noted "post-2004 labor migration from Poland turned out to be one of the most spectacular migratory movements in contemporary European history. This outflow on a massive scale is surmised to impact on demographic, economic, and social phenomena both in Poland and in the receiving countries." POLPAN gives unique opportunity to examine to what extent the emigration selectivity patterns in the postaccession period differ significantly from those noted in the pre-accession phase. The main hypothesis is that a strong propensity to migrate is observed among relatively well-educated people who, at the same time, originate from economically backward areas characterized by limited employment. We have data on people's characteristics for the pre- and post-accession times and we register who emigrated and when. As we explain in the Methodology section, special attempts will be made to contact those of our former respondents who emigrated in the period 1988-2013.

Research issues of this proposal should be treated as interrelated. We intend to analyze them together in order to answer the basic question: How do both the allocative and distributional effectiveness change in Poland in comparison with other countries. Generally, all indicators of allocative effectiveness deal with lowering the level of ascription – that is with lowering the impact of demographic and social-origin characteristics. In analyzing research issues about old and new elements of social structure, changes of social classes, social mobility, or differentiation of standard of living we will focus on the impact of ascription. We will examine also the impact of IQ – at least its relatively stable components (por. Firkowska-Mankiewicz 2002).

Indicators of distributional effectiveness refer to the relationships between individual investments and rewards. Our analyses indicate that during the post-communist transition the level of meritocracy has increased. Political attitudes and behavior, perception of social conflicts, and attitudes toward European integration form a new context for meritocracy – the main dimension of distributional effectiveness. We will examine this context in detail.

Since the seminal work of Amartya Sen, *Development and Freedom* (1999), all research on social structure should include freedom as an important dimension of human existence. Sen demonstrates that a large portion of social inequality stems from conditions limiting economic decisions of individuals. Our analyses of a political context of social inequality – presented in *Social Patterns of Being Political* (2000) – form a solid basis for considering allocative and distributional effectiveness together with political and economic liberties. We intend to extend these analyses to be able to discuss Sen's problem of the relationship between social structure and broadly understood freedom.

Interdisciplinary aspects of the proposed research

The proposed research project POLPAN 1988-2013 links different social science disciplines. The core belongs to sociology but the project is also related to demography (e.g., family composition, retention of marital status, number of children in the family), economics (e.g., household income and its components, income elasticity of expenditure for food and culture), psychology (e.g., measurement of IQ by Raven test, measurement of authoritarianism and self-image), and political science (e.g., voting behavior, opinions about political parties, democratic values). Among POLPAN authors – those who declare their interest in the 2013 study – all these disciplines are represented. As it is indicated in the section Effects (results), the data file from the POLPAN 1988-2013 survey will be publically available; we will encourage demographers, economists, psychologists, and political scientists to use this file. We hope that the data will be also of interest to those historians who specialize in analyzing the fall of communism and the first phase of the post-communist transition.

Plan of the study

The data for a comprehensive description of social structure and its changes will be drawn from a survey. In the main part the survey will include the POLPAN panel, approached in 1988, 1993, 1998, 2003, and 2008. We plan our new survey for Spring 2013. This survey will cover the entire 25-year period as a panel study but it could also be treated as a cross-sectional survey for 2013 since we intend to add a sample of younger people as well. A cross-sectional survey will be representative for the adult population aged 21 and older; however, the core of the sample will be the panel sample of the POLPAN study. During the same year, 2013, we also plan to return to all respondents who were interviewed at any point in the POLPAN study. We explain this strategy in the Methodology section.

The 2013 POLPAN study requires a year of preparation. We have to verify addresses of all our respondents, obtain their consent to be interviewed, and prepare for the fieldwork. The questionnaire schedule will consist of mainly those items that have been extensively used in our previous research. However, the entire questionnaire must be pre-tested on a relatively large preliminary pilot sample. Our team pays considerable attention to methodological quality of the field work.

We plan to reserve 2014 and 2015 for monitoring of the distribution of data (they will be in public domain), analyses of data (for publications in the major social science journals), and opening a forum for discussion on panel data in social sciences (www page, connected to social media). We describe these activities in the Effects (results) section.

In addition, through the entire project, we will organize three workshops and a course for doctoral students on collecting panel data and panel-data analyses. The main activities during the 48 months are scheduled as follows:

First Year: Preparatory work for the POLPAN study: samples (a) and (b) – survey I, samples (c) and (d) – survey II (see, Methodology section); Preparation and carrying out the research workshop – session I; Initial verification of addresses from samples (a) and (c), N = 7,026 (see, Methodology section); Preparation of research instruments – the questionnaires and additional materials; Preparation of the bases of random sampling for sample (b) (see, Methodology section); Internet webpage of POLPAN 1988-2013.

Second year: Conducting the basic survey research – samples (a) and (b) (see, Methodology section); Conducting research on samples (c) and (d) (see, Methodology section); Preparation and carrying out the research workshop – session II; Construction and control of the data file and its placement on the internet page of POLPAN 1988-2013; Transferring the POLPAN 1988-2013 data to the international organizations; Initial statistical analyses from samples (a) and (b), part I.

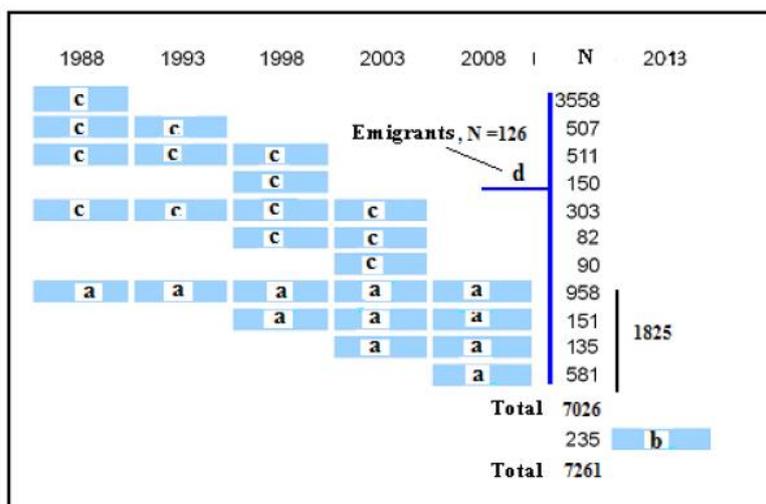
Third year: Initial statistical analyses from samples (a) and (b), part II; Initial statistical analyses from samples (c) and (d); Preparation of papers for the Working Papers series; Preparation and carrying out the research workshop – session III; Conducting a course for doctoral students and early-career researchers on POLPAN 1988-2013; Sending at least 4 articles to the leading JRC journals in the social sciences; Presenting reports and leading discussion on the Internet webpage of POLPAN 1988-2013.

Fourth year: Sending at least 8 articles to the leading JRC journals in the social sciences; Book I: *Dynamics of Social Structure: Poland's Transformative Years, 1988-2013*; Book II: *Social Inequality and Life Course: Poland's Transformative Years, 1988-2013*; Presenting reports and leading discussion on the internet webpage of POLPAN 1988-2013.

Methodology

In the case of POLPAN the data for comprehensive analyses of the dynamics of social structure originate in the 1988 research. (Słomczyński, Białocki, Domański, Janicka, Mach, Sawiński, Sikorska and Zaborowski, 1989; Domański and Słomczyński, 1994). From that time, the total number of respondents who participated in at least one wave of POLPAN is 7,026. Figure 2 presents the full distribution of the POLPAN respondents.

Figure 2: Number of respondents in all waves of POLPAN



In a new POLPAN 1988-2013 we aim at including (a) all respondents who participated in the 1988 wave (N = 1,825), and (b) a youngest cohort, aged 21-25 (N = 235). Both these categories will be approached with face-to-face interviews. From a demographic point of view it would be very useful to get information on POLPAN respondents who were not covered in the 1988 wave. This is a very large category (c), with N = 5,201. Interviewers will go again to the addresses that we have on our files and try to gather information where these former respondents could be reached. In the case of establishing a contact with our former respondents, we will try to interview them by phone or through the Internet.

The purpose of this interview is to gather information on what these people do– do they work, are they on a retirement pension, or still in another situation? In addition, we also expect to ask some questions about their households and health conditions. Note that among people in category (c) over one hundred emigrated mainly to Western Europe (according to our data, 126 or more from our 1998

sample). In Figure 1 this category of emigrants is labeled (d). If we will be able to obtain any information about people in this category, we will contact them by mail, telephone, or Internet.

The questionnaire schedule will consist of mainly those items that have been extensively used in our previous research. However, the entire questionnaire will be pre-tested on a relatively large pilot sample. Our team pays a considerable attention to the quality of field work. We will use our experience to control the work of interviewers.

Usually, research on class structure and social stratification employs advanced mathematical and statistical techniques. We plan to use the covariance analysis, multidimensional scaling, loglinear modeling, multinomial logit regression, linear programming, and analysis of dynamic data. Our team is well versed in SPSS, STATA, and R.

In our project, we plan to perform original cross-national analyses. We will focus not only on Hungary, Slovakia, and the Czech Republic – primarily using data generated by Szelenyi and Treiman (1996), and Szelenyi (2002) – but also on all countries of Eastern Europe which were admitted to the European Union in the first wave – that is (in addition to Hungary, Slovakia, and the Czech Republic) Estonia, Lithuania, Latvia, and Slovenia – as well as those of Western Europe. We will use data generated by the *European Social Survey* and the *International Social Survey Program*. We will have easy access to these data sets since some of the members of POPLAN team collaborate with authors of these projects.

Effects (results)

Measured effects of the proposed POLPAN 1988-2013 are to be of four kinds: First, we will construct and deliver the data file on all people who at any time participated in the POLPAN study; second – we will submit manuscripts of two edited volumes and about 10 articles to the JCR journals; third – we will develop and maintain a webpage (connected with social media) that will supplement all relevant materials for POLPAN and service a discussion forum for researchers interested in panel analyses in general; and fourth – we will prepare a course and a series of workshops on panel data analysis for doctoral students and early-career researchers. Here are the details:

1. Data set. All data from our project – protecting individual records according to the current law – will be publically available through our website and archiving agencies, in addition to ICPSR and ESRC, GESIS where the previous waves of POLPAN have been documented. The master file of our data will be available in ASCII II, SPSS, STATA and other forms. We expect this data file be used by researchers around the world. We will also distribute this data set among selected international organizations, including the World Bank, OECD, and UNESCO.

2. Publications. We plan to publish two edited volumes from the materials of POLPAN 1988-2013, at least one with a leading commercial publisher. We aim also at publishing in leading social science journals, including *American Sociological Review*, *American Journal of Sociology* and *European Sociological Review*. All papers will be available in their pre-publication form in a series of Working Papers.

3. Webpage. Due to the complexity of the POLPAN 1988-2013 data, it would be necessary to provide researchers from the centers around the world with well-organized assistance. For this purpose we will create a special webpage connected to social media. However, the webpage will also serve as a discussion forum for researchers specializing in substantive and methodological issues of panel data and panel analyses.

4. Didactic instruments. We will fulfill the need for training doctoral students and early career researchers in analyzing large data sets using appropriate statistical techniques for POLPAN data. In particular, a course and three workshops (with rigorously prepared syllabi) could well serve the young

scientists from the Graduate School for Social Research, Polish Academy of Sciences, the Institute of Sociology, Warsaw University, and other academic centers. Research on social structure, belonging to the basic research in sociology, is particularly important for two reasons.

First, the theory of social structure – supported by empirical evidence – is necessary for construction of other theories, including a theory of the post-industrial post-modern societies. A comprehensive theory of the transition must address the question how specific segments of the social structure react to the social change and how the social structure influences this change in its way of responding.

Second, empirical research on social structure is needed since a number of sociological subfields use stratification variables – examples being sociology of religion, sociology of medicine, sociology of the family, or sociology of youth. Moreover, research on public opinion needs a reference pertaining to the social structure. We also would like to point out that our project has been prepared after consulting both the governmental (e.g., Ministry of Economy) and non-governmental (e.g., Institute of Public Affairs) organizations with respect to the needs for information about social inequality.

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