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Can We Define the Warsaw Poor as an ‘Underclass’?

Among numerous other consequences, the political and economic transformation in post-communist countries created a distinctive category of poor people. As Ivan Szelenyi points out, not only has the share of impoverished citizens increased but also the nature of this group has changed. Under communism, poverty was related to the lifecycle and affected chiefly families with many children, people with disabilities and the elderly. Effects of poverty were mitigated within the system by a variety of preferences for the poor, such as access to housing, preferential access to higher education and a system of scholarships for children from impoverished families, nearly gratuitous package holidays etc. These measures prevented poverty from setting in. Moreover, despite the generally very low living standard in the society, the country had no unemployment, considered to be one of the essential poverty determinants. The ‘new poverty’, which ensued after the introduction of market-driven economy, has a permanent nature and facilitates the spatial separation of the poor (Szelenyi 2003). The problem I wish to address here can be defined as follows: did the market mechanisms, similar to those in the USA and Western Europe, create a similar underclass in Poland’s capital city, Warsaw?

The emergence of the underclass in post-communist countries has been already discussed by Henryk Domański (2001, 2003). He analysed the place of the poor not working people in the class structure and proved that they did not form a separate category outside of the basic class structure.

The analyses presented in this article are confined to Warsaw, the largest Polish city. It is widely known that in Western countries poverty is predominantly an urban phenomenon (Wilson 1987).

Two major approaches can be identified in the studies and reflection on underclass. The first one, the structural approach, focuses on economic deprivation resulting from poverty or unemployment. They are a function of low or non-existent work skills and low education and lead to spatial segregation and exclusion from the civil society. In the other approach, called cultural or behavioural approach, the main factor which distinguishes underclass is a system of values and approved behaviours different from that of the mainstream society. Above all, this encompasses socially-incompatible or deviant behaviours and values (Marshall et al. 1996, Buckingham 1999, Domański 2001). Regardless of approach, definitions of underclass, beginning with the first definition formulated by Myrdal (1963), stress the marginalisation or exclusion from the mainstream society. In this analysis I will look at the underclass in Poland in the context of three dimensions proposed by Serge Paugam (2000), i.e. social status of the poor, their social involvement and subjective sense of marginalisation. Those dimensions comprise elements from both approaches mentioned earlier.

My analysis is based on the survey entitled ‘Warsaw inhabitants talk about themselves and their city’ (*Mieszkańcy Warszawy o sobie i swoim mieście*) conducted in November 2001¹ by the Institute for Social Studies (ISS) at Warsaw University. The survey was based on a

random sample of individuals designed to represent the entire Warsaw population over 18 years of age. The effective sample size was 1,004.

The poor and other social categories

The category of poor was distinguished by means of using the household income data, the most commonly applied poverty indicator (see Nolan and Whelan 1996). The poverty threshold was defined as the bottom fifty percent of mean family income per capita. Domański's analyses (2003) have demonstrated that this threshold is most useful in separating the poor from higher income groups. In the survey in question the threshold was PLN 627.64 per month, which is equivalent to approx. US\$ 157. Three groups of citizens was distinguished with a higher family income per capita, which will be used as a point of reference. Those groups are: (i). income between the bottom fifty percent of mean and the mean, i.e. between PLN 627.64 and PLN 1,255.28; (ii). income above the mean but not higher than the upper fifty percent, i.e. between PLN 1,255.28 and 1,882.92; and (iii). income above the upper fifty percent of mean, i.e. over PLN 1,882.92.

The decision to adopt household income as the basic indicator used to distinguish the poor and other income categories may raise some methodological questions. Firstly, it is a known fact that revenues and household incomes disclosed in surveys are generally understated. However, Sztabiński's analyses indicate that the correlation ratio between income disclosed in a survey interview and actual income was close to one (0.92). This leads us to conclusion that despite all the understatements the structure of disclosed income closely overlaps with the actual income structure (Daniłowicz & Sztabiński 1986).

The second methodological reservation is related to the substantial refusal rate in the income question. The refusal rate in the survey discussed here was 29.5%. Refusals were more likely among owners, respondents holding managerial positions, university students and respondents who were not working for other reasons (housewives). It is difficult to tell how this may have affected the results of analyses presented below. In order to check whether or not the considerable percentage of non-responses challenges the subdivision into income categories I considered two poverty identifiers, i.e. questions about shortage of money to buy food and clothing, and to pay house bills. Significantly higher percentages of 'yes' among the poor will indicate that the adopted subdivision aptly identifies the category despite the high non-response rate in income questions. Distributions of answers by income categories are given in Table 1.

Table 1

Indeed, shortage of money to buy food and clothing and to pay the housing-related bills occurs mainly among respondents classified into the lowest income category and, clearly less frequently, in the third category. Therefore, despite the significant non-response rate in income questions the identified categories aptly distinguish actual income groups.

Status dimension

As mentioned earlier, the poverty threshold adopted for this analysis, i.e. the bottom fifty percent of mean family income per capita, amounts to PLN 627.64 in Warsaw. In order to check whether or not poverty is concentrated in urban centres it is interesting to compare this threshold against the respective value for Poland. In a study conducted by the same institute in

the same period on a national sample, the bottom fifty percent of mean family income per capita was PLN 301.05, i.e. less than a half of the Warsaw threshold. Thus, poverty in Poland is not an urban phenomenon or at least it is not concentrated in Warsaw, the largest Polish city. Other studies have demonstrated that poverty in Poland concentrates in rural areas, especially among former workers of state farms and small peasants (see Halamska 1998, Domański 2001).

In Warsaw the poor represent nearly one third of the population, 29.2%, which is a significant share. For the sake of comparison, Category 1 (the most affluent inhabitants) makes up 11.3%, Category 2 – 15.1%, and Category 3 (between poverty threshold and the mean) – 44.4%.

The social composition of people living in poverty and other income categories is shown in Table 2.

Table 2

The social composition of poor people in Warsaw deviates considerably from the core of underclass in western societies. Notably, there is a very significant percentage of employed people in this group. Importantly, this category includes respondents with a permanent job because the percentage of those performing odd jobs was under 4%. Presumably, the working poor people are employed in low-skilled, low-paid jobs where wages are not much higher than unemployment benefits. Notably, a regular job does not imply belonging to one of the higher segments of the society, other than the poor. Poor people make up as many as 23.1% of all employees.

Interestingly enough, the share of unemployed in the poor people category is relatively low. In contrast, in western countries long-lasting unemployment is one of the essential reasons why people are classified as underclass. However, in Warsaw at the end of 2001 unemployment turned out to be a marginal phenomenon representing a mere 5.0% of all inhabitants according to official data (Central Statistical Office in Warsaw). Furthermore, only 50% of the unemployed were classified as poor, which means that a loss of job does not necessarily entail social marginalisation. In his analyses Domański (2003) shows that this regularity is common to all post-communist countries.

If the 'new poverty' is an aftermath of market economy, one would expect people from villages and small towns to migrate to cities which offer greater chance of survival and job opportunities (even if jobs are temporary). This trend should be particularly strong in Poland as Warsaw has a very insignificant unemployment rate. However, since 1989, marking the beginning of the transformation, only 12% of citizens belonging to the poor category came to live in Warsaw and only 4.3% did so in the last 5 years. For the sake of comparison, out of citizens classified into Category 1 (most affluent), as many as 27.5% lived in Warsaw for 12 or fewer years, with 17.5% living there for less than 5 years. Therefore, Warsaw seems to attract highly skilled professionals rather than the poor. However, these findings may be misleading given the sampling methodology: the sample did not include respondents who were not officially registered for permanent residence in Warsaw.

It is commonly agreed that education level is one of the crucial status indicators. In the structural approach, education is an important underclass determinant. Education improves chances for occupational advancement and unemployment is highest among poorly educated

people. In order to check whether or not the poor actually differ from other groups with regard to education three indicators were considered: average years of schooling, percentage of respondents with primary or basic vocational education and percentage of respondents with higher education.

Table 3

In the first two income categories the number of years of schooling is clearly higher than in the third group, especially among the poor. However, the distinctiveness of the poor becomes more clear if we consider the percentage of respondents with primary or basic vocational education versus higher education. Nearly a half of poor citizens have max. basic vocational education which prepares students for manual jobs and less than 5% have a university degree. Thus, it does not only differ from the two top categories but also from the neighbouring Category 3.

Spatial segregation is another defining attribute of underclass, i.e. members of this class often live in ghettos, located in city centres. In order to check if this trend occurs in Warsaw - income categories with regard to place of residence were compared. In 2001 *gminas* were the basic administrative districts in Warsaw and the largest district, Centrum, was additionally subdivided into seven boroughs. Given the small subsample numbers only 4 out of Warsaw's 13 administrative districts and only 4 out of Centrum boroughs were included. The place of residence for income categories by administrative districts is presented in Table 3 and the respective breakdown by boroughs is shown in Table 4.

Table 4

Data in this table show that concentration of poverty does not occur in any of the analysed administrative districts. On the contrary, the Centrum district, located in the centre of Warsaw, has the largest share of affluent residents.

Table 5

If we consider the Centrum district only, the Wola borough, traditionally perceived as a working class area, has a slight prevalence of the poor. Thus, spatial segregation of poverty across administrative units does not occur in Warsaw. This conclusion is in line with my previous analyses where I compared administrative districts and boroughs of Warsaw with regard to consumption, housing standards and ownership of durable consumer goods (Sztabiński 2001). However, the summary of my work contained a hypothesis that administrative districts and boroughs might be too large for analysis and that poverty areas should be sought in respondents' neighbourhoods. Data from the study discussed here allow to verify that hypothesis.

The most general profile of the neighbourhood is provided in answers to the following question: 'What, if anything, bothers you in your neighbourhood?'. Bothersome factors in the neighbourhood were mentioned by 38.8% of the most affluent respondents (Category 1), 51.1% of the respondents from Category 2, 47.5% of those from Category 3 and 56.0% of the poor respondents (Category 4). Although poor are significantly more likely to live in 'worse-off' and more bothersome neighbourhoods than the most affluent citizens (Category 1), yet the two middle categories do not differ much in this respect ($\chi^2 = 8.0$ $df=3$ $p<0.05$).

Two groups of indicators for further analysis were selected: degradation of the neighbourhood and infrastructure. One could reasonably expect that areas inhabited by underclass will be characterised by higher alcoholism and drug addiction rates, littering and dirt and low sense of personal safety and, on the other hand, underperforming public services. Degradation in respondents' neighbourhoods is presented in Tables 6 and 7.

Table 6

Table 7

The survey data do not suggest that poor live in degraded neighbourhoods. Likewise, those neighbourhoods do not differ with regard to infrastructure.

Table 8

To sum up, Warsaw has no spatial segregation of the poor across administrative units or neighbourhoods. Thus, it comes as no surprise that the place where poor are living is not stigmatising. Only 3% of the total sample said they were ashamed of their neighbourhood or the vicinity of their homes.

Despite the absence of spatial segregation one would expect that the housing standards in the underclass are inferior with respect to furnishings and density (i.e. number of residents per one room). Purchase or rental of a house or flat in Warsaw, especially one with a bathroom and central heating, is a very substantial expenditure which the poor certainly cannot afford. As regards utilities, our analysis proved to be irrelevant as 97.6% of flats in Warsaw have a bathroom and 94.5% have central heating.

Density brackets were defined in the same way as income brackets, i.e. the average density per room was adopted as a point of reference. It was assumed that the highest density was found in flats/houses where the average number of people per room exceeded the upper fifty percent of mean, i.e. 1.97. The following bracket comprised density ratios between the mean and the upper fifty percent of mean (1.32-1.97), and the next one was located between the bottom fifty percent of the mean and the mean (0.66-1.31). A ratio under 0.66 marked the lowest density of living space.

Table 9

Results of this analysis show that the number of people per room in flats and houses occupied by the poor is, indeed, considerably higher than in all other income categories. Approx. 2/3 of the people that belong to the poor live in flats/houses with a higher-than-average density and circa 1/3 live in flats/houses with 1.97 or more people per room.

And, finally, the last status indicator (going away on holidays within the last 12 months) is more of a consumption indicator. However, each year before summer the media report the growing number of Poles who do not make any holiday trips and present it as a token of increasing poverty in the Polish society. This may create a sense of deprivation among citizens who cannot relax away from their home, especially in view of the fact that holiday trips were very common in communist Poland in every income category. In the most affluent group (Category 1) 25.0% of respondents did not go away on holiday over the last year. 43.9% is the respective percentage for Category 2, 47.1% for Category 3 and 56.3% for the

poorest category ($\text{Chi}^2 = 23.1$ $\text{df}=3$ $p=0.000$). Although there is a link between affluence and holidaying, the only category that clearly differs from other categories are the most affluent people (Category 1). The difference between the poor and the two adjacent income categories is not very significant.

Social involvement

The analysis of social involvement of the poor refers to the cultural approach in the underclass studies. Broken or limited social bonds may result of a different value system, dysfunctions etc. within the underclass etc. Family and neighbourhood bonds or participation in various organisations make up social capital which individuals can rely on. However, the capital may be lost when one falls into poverty (e.g. long-lasting unemployment may lead to a loss of friends or job-related relationships). Sometimes the lost social capital cannot be regained if e.g. poverty prevents an individual from starting a family (see Wilson 1987).

The social involvement of the poor was analysed in relation to three spheres. The family is the first of them, the closest social network of neighbours and friends is the second one and participation in societies and organisations characteristic for civil society was the third aspect I considered (see INED 2001). I broadened this sphere by including socio-political activities. It can be expected that the different value system of the underclass will be reflected in its rejection to participate in socio-political life.

Marriage or cohabitation was adopted as a sign of social involvement through family ties. The percentage of married people or nonmarital cohabitants among the poor amounts to 58.7%. Among the most affluent this percentage amounts to 52.5% and in two other categories to 58.9% and 62.2% respectively ($\text{Chi}^2 = 2.6$ $\text{df}=3$ n.s.). Thus, considering the percentage of the divorced and those who do not live with a partner, for various reasons, the Warsaw poor are no different from the mainstream society.

As regards the second sphere of social involvement i.e. neighbours and friends the picture is ambiguous.

Table 10

The frequency of contacts with neighbours among the poor does not differ from the frequency observed in other categories. However, there is a difference between the categories with regard to the number of friends i.e. people in less formal relationships who can be relied on in difficult situations.

Table 11

Although most respondents from all the categories have many friends, poor people are slightly more likely than other categories to have no friends and are slightly less likely to have several friends. It is understandable if we acknowledge that friendships are usually created on the basis of job-related relationships: more than the half of the poor are not working people.

The inclination to get involved in other people's problems i.e. to offer help to friends, neighbours and relatives, does not clearly distinguish the poor from other categories. They are neither particularly willing nor reluctant to help others.

Table 12

The involvement of poor in the civil society is equally ambiguous. The poor devote neither more nor less time than other categories to participation in trade unions, associations and other organisations. Notably, over a half of the poor are unemployed or not working for other reasons, which means that they usually have a lot of time to spare.

Table 13

Also as regards the tendency to participate in local government (town or gmina municipality), the poor do not differ considerably from other categories.

Table 14

Unwillingness to participate in organisations or municipal government stems from the more general crisis of confidence in democratic institutions and organisations in Poland. This reluctance is observed among the majority of Polish citizens. It is connected with the long-lasting economic crisis and the corruption among politicians of various ranks and leaders of various organisations disclosed by the mass media.

On the other hand, there are significant differences between the categories with regard to participation in the parliamentary elections that took place approx. two months before the survey. A significantly higher percentage of more affluent citizens (Category 1 and 2) – 78.8% and 76.6% respectively, participated in the elections, compared with the participation rate among the poor – 57.1%. As regards Category 3, i.e. people with lower-than-average income but above the poverty line, 66.5% of them participated in the elections, which is less than in Categories 1 and 2 but more than among the poor (Category 4) ($\chi^2 = 18.5$ df=3 p=0.000). Apparently, the poor tend to be more sceptical about potential improvements in their situation that could be implemented by a new parliament and government. It seems that the crisis of confidence in institutions and leaders is deepest among the poor, as it includes the parliament as well. However, the poor do not differ considerably from the neighbouring Category 3 in this respect.

To sum up, there is no considerable disruption of the social bonds among the poor in Warsaw compared to the mainstream society. The society shares the common family values connected with Roman Catholicism predominating in Poland (the percentage of people living in a nonmarital cohabitation in Warsaw is just 3.2%), the tendency to maintain friendships rather than neighbour relations and common frustrations that stem from the country's difficult economic situation.

Perceived marginalisation and self-confidence

As it is known, in market economies an economic success is the essential value whereas poverty is a symbol of social failure, a certain social anomaly. As a result, life in poverty greatly affects the psyche leading to the sense of marginalisation and low self-confidence. As in other post-communist countries, this feeling should be even stronger in Poland as in communist times the key elements of prestige included, apart from education, a productive and socially useful job rather than affluence. For this reason a coal miner was very close to a university professor (top position) and other skilled manual jobs closely followed.

Does poverty in Warsaw affect psychological aspects? The data gathered in Table 15 show that, indeed, the poor tend to situate themselves low on the social ladder.

Table 15

Almost one in three poor respondents situated themselves at one of the three lowest levels, while only one in eight respondents from Category 3 did the same. However, the data presented in this table do not allow us to conclude to what extent this depends on the perceived financial deprivation versus the above-mentioned low education of the poor. The studies on job prestige undertaken in communist Poland revealed that jobs which required the lowest skills were also rated very low in terms of prestige.

The assumption that poverty only slightly affects the psychological sphere is reflected in data on self-confidence

Table 16

Although the poor tend to be considerably less self-confident than affluent citizens i.e. those from Categories 1 and 2, they are only slightly less self-confident than those from the neighbouring Category 3.

The poor in Warsaw – is that underclass?

A discriminatory analysis was applied in order to answer the question contained in the title of this article. This analysis shows the extent to which the analysed groups (income categories in this case) differ one from another in terms of a set of discriminating variables (Klecka 1980). Several discriminating variables for each previously identified dimension were used. The status dimension included the following variables: education measured as a number of years of schooling, perception of the neighbourhood (elements which bother respondents in the nearest vicinity of their homes), the number of people per room in a flat / house and holidays trips taken in the last 12 months. The variables determining the social involvement include: marital status (married, living in a nonmarital cohabitation or single), frequency of contacts with neighbours, the number of friends, time devoted to help friends and neighbours, time devoted to active involvement in organisations, parliamentary elections and willingness to participate in municipal government of a town or a *gmina*. The sense of marginalisation was measured with the following variables: perception of one's social position and two self-confidence variables.

The plot of income categories, in two-dimensional space, defined by two first discriminatory functions, is shown on *Figure 1*. Vertical axis corresponds to the first discriminatory function and horizontal axis corresponds to the second one. The scores for the second function were scaled proportionately to the ratio between second and first canonical correlation.

Figure 1

The discriminatory analysis proves that in Warsaw the distances between categories based on the family income per capita are conspicuous. The categories form a clear hierarchy, where the most affluent occupy the highest place and the poorest are situated at the bottom. Notably, the distances between subsequent categories are similar. Therefore, it cannot be said that the poor make up a marginalised underclass, separated from the rest of the society by a clear cleavage. Although they do form a separate category, they are not 'socially excluded' who would be situated clearly outside the mainstream society in terms of status, social

involvement, perceived marginalisation or social disadvantage. It is worth looking at Domański's analyses (2001, 2003) again. Although his analyses concerned the place of the underclass in the class structure and used a different definition of poverty and different indicators to identify the place of the underclass. Still, our conclusions are identical. There is no clear-cut gap between the underclass and the rest of the society.

The findings obtained in the analyses seem to prove that there was no significant shift in the structure of the Polish society over the 12 years of market economy compared to the communist times. Twelve years may be too short for underclass to develop the way it did in western societies. Our additional analyses indicate that this, indeed, may be the case.

Table 17

The data included in Table 17 reveal that poor citizens are much more likely to claim that their financial situation has deteriorated over the last 5 years. Thus, poverty seems to be a relatively new phenomenon in Warsaw. The poor are not a category which has hit the bottom. As a result, low income has not translated into disrupted social bonds, sense of marginalisation, nor has it forced the impoverished citizens to move to degraded neighbourhoods.

However, also in Warsaw we see the first symptoms of poverty consolidation, which is one of the key characteristics of the underclass. Although 12 years is too short for poverty to be inherited from one generation to another, poor families are much more likely to have at least one unemployed family member (not the respondent). If we leave single-member households out, the percentage of families with at least one unemployed member is 32.4% in the poor families, while the respective percentage in the neighbouring Category 3 is just 12.1% (and 3.8% and 3.9% in the more affluent categories). It is worth pointing out that at the time of the survey the unemployment rate in Warsaw was just 5%. This shows that unemployment in poor families is disproportionately high.

Final comments

In this article I attempted to answer whether the poor in Warsaw make up a separate, marginalised category, a Polish counterpart for the underclass in western societies. In my analyses I used the indicators which define the underclass in western societies. The research revealed that there is no clear cleavage between the poor and other categories in Warsaw. Therefore, the underclass in Warsaw does not seem to exist. Although the poor in general tend to have a considerably lower education, they live in more crowded flats/houses, and are less active civil society participants, are slightly less self-confident and rate their social position lower, they cannot be classified as the underclass for a number of reasons. Neither spatial segregation of the poor nor disruption of social bonds occur in Poland. The current position of the poor segment of the society does not differ considerably from its position in the communist times.

However, it seems that the above-mentioned characteristics typical of the poor have become much more important now, in the market economy. Under the previous political system full employment and the welfare state effectively prevented the poor from becoming the underclass. On the other hand, in the market economy poor education, low self-esteem and lack of self-confidence create a much greater risk of unemployment, which, in turn, is beginning to be more and more permanent in poor families. As a result, we can reasonably

expect that the underclass with all its attributes observed in western countries will emerge in Warsaw as well. The government's further withdrawal from its protective functions, price regulations on some products and services, and the further development of the market-driven economy (mainly due to privatisation), will facilitate and accelerate this process.

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References

- Buckingham A 1999 'Is there an underclass in Britain?' *British Journal of Sociology*, 50/1, 49-75
- Daniłowicz P. & P. B. Sztabiński 1986, *Zmienne osobowe w badaniach socjologicznych. Analizy weryfikacyjne* [Personal variables in sociological research. Verification analysis], *Analizy i próby technik badawczych w socjologii*, [Analysis and samples for research techniques applied in sociology] t. VI, K. Lutyńska i J. Lutyński (eds.) Wrocław: Ossolineum
- Halamska M. 1998 *Spoleczne problemy osiedli popegeerowskich* [Social problems of former state-owned farms] (mimeo).
- INED 2001 Sante, Inegalites et Ruptures Sociales (SIRS). Programme de recherche comparative dans plusieurs metropoles internationales (typescript)
- Domański H. 2001 'Social determinants of poverty in post-communist societies'. *Review of Sociology*, 7/2, 37-60
- Domański H. 2003 *Ubóstwo w strukturze społecznej*. [Poverty in social structure] In Szelenyi I. (ed.) *Bieda a nierówności płci i podziały etniczne w społeczeństwach postkomunistycznych* [Poverty vs. gender inequality and ethnic divisions in post-communist societies] Warszawa: Wydawnictwo IFiS PAN, 16-43
- Klecka W. R. 1980 *Discriminante Analysis*. London: Sage Publication
- Marshall G., S. Roberts and C. Burgoyne 1996 Social class and underclass in Britain and the USA. *British Journal of Sociology*, 47/1, 22-44
- Myrdal G. 1963 *Challenge to influence*. New York: Pantheon
- Nolan B. and Ch. Whelan 1996 *Resources, Deprivation and Poverty*. Oxford: Clarendon Press
- Paugam S. 2000 *La disqualification sociale*. Paris: Presses Universitaires de France
- Szelenyi I. 2003 *Wstęp. Bieda a nierówności płci i podziały etniczne w społeczeństwach postkomunistycznych. Zagadnienia teoretyczne*. [Introduction. Poverty vs. gender inequality and ethnic divisions in post-communist societies. Theoretical issues] In Szelenyi I. (ed.) *Bieda a nierówności płci i podziały etniczne w społeczeństwach postkomunistycznych* [Poverty vs. gender inequality and ethnic divisions in post-communist societies] Warszawa: Wydawnictwo IFiS PAN, 8-15
- Sztabiński P. B. 2001 *Les quartiers de pauvrete, existent-ils a Varsovie?* A speech delivered at the Hexapolis II Colloquium, San Paulo 2001 (typescript)
- Wilson W. J. 1987 *The Truly Disadvantages. The Inner City, The Underclass, and Public Policy*. Chicago: University of Chicago Press

Table 1. Distribution of answers to poverty-identifying questions by income categories

| Income categories (Family income per capita) | Over the last 12 months, has your household experienced a shortage of money to spend on: | | | |
|---|--|------|---|------|
| | food or clothing | | house bills (regular charges, rent etc.)? | |
| | Yes | No | Yes | No |
| 1 (+471 USD) | 7.6 | 92.4 | 7.6 | 92.4 |
| 2 (315-471 USD) | 8.5 | 91.5 | 8.5 | 91.5 |
| 3 (157-314 USD) | 21.6 | 78.4 | 23.5 | 76.5 |
| 4 (-157 USD) | 49.7 | 50.3 | 51.8 | 48.2 |
| | Chi ² =91.6 df=3 p=0.000 | | Chi ² =96.2 df=3 p=0.000 | |

Table 2. Social composition of income categories

| Income categories (Family income per capita) | Employed citizens | Unemployed | Pensioners | Students | Not working for other reasons (housewives) |
|---|-------------------|------------|------------|----------|--|
| 1 (+471 USD) | 73.8 | 1.3 | 7.5 | 12.5 | 5.0 |
| 2 (315-471 USD) | 70.8 | 2.8 | 21.7 | 2.8 | 1.9 |
| 3 (157-314 USD) | 52.6 | 4.9 | 28.6 | 11.7 | 2.3 |
| 4 (-157 USD) | 44.3 | 9.5 | 34.3 | 10.0 | 2.0 |

Table 3. Education across defined income categories

| Income categories (Family income per capita) | Years of schooling | % of citizens with primary or basic vocational education | % of citizens with college education |
|---|--------------------|--|--------------------------------------|
| 1 (+471 USD) | 14.6 | 6.3 | 50.6 |
| 2 (315-471 USD) | 14.2 | 4.7 | 38.3 |
| 3 (157-314 USD) | 12.9 | 23.7 | 17.9 |
| 4 (-157 USD) | 11.7 | 43.5 | 4.3 |

Table 4. Place of residence across income categories, broken down by Warsaw administrative districts

| Income categories (Family income per capita) | Centrum | Bielany | Targowek | Ursynow |
|---|---------|---------|----------|---------|
|---|---------|---------|----------|---------|

| | | | | |
|-----------------|------|------|------|-----|
| 1 (+471 USD) | 65.0 | 5.0 | 7.5 | 7.5 |
| 2 (315-471 USD) | 64.2 | 10.4 | 2.8 | 8.5 |
| 3 (157-314 USD) | 53.8 | 12.1 | 10.8 | 3.5 |
| 4 (-157 USD) | 44.7 | 13.6 | 9.7 | 9.2 |

Table 5. Place of residence across defined income categories, broken down by boroughs (within the Centrum administrative district)

| Income categories (Family income per capita) | Mokotow | Praga Poludnie | Srodmiescie | Wola |
|---|---------|----------------|-------------|------|
| 1 (+471 USD) | 37.7 | 15.1 | 9.4 | 9.4 |
| 2 (315-471 USD) | 49.3 | 11.0 | 11.0 | 11.0 |
| 3 (157-314 USD) | 32.6 | 6.0 | 14.7 | 15.2 |
| 4 (-157 USD) | 32.7 | 8.2 | 12.2 | 23.5 |

Table 6. Neighbourhood characteristics – degradation

| Income categories (Family income per capita) | How bothersome are the following phenomena in your neighbourhood? | | | |
|---|---|---------------------|------------|-----------------|
| | A. Too many drunkards, drug addicts, hooligans | | | |
| | not a problem | not very bothersome | bothersome | very bothersome |
| 1 (+471 USD) | 35.5 | 16.1 | 29.0 | 19.4 |
| 2 (315-471 USD) | 34.5 | 12.7 | 32.7 | 20.0 |
| 3 (157-314 USD) | 23.8 | 19.0 | 26.5 | 30.6 |
| 4 (-157 USD) | 33.3 | 17.5 | 30.7 | 18.4 |
| | Chi ² =9.5 df=9 n.s. | | | |
| | B. Dirty houses, littered courtyards etc. | | | |
| | not a problem | not very bothersome | bothersome | very bothersome |
| 1 (+471 USD) | 36.7 | 20.0 | 16.7 | 26.7 |
| 2 (315-471 USD) | 34.5 | 25.5 | 27.3 | 12.7 |
| 3 (157-314 USD) | 30.8 | 22.6 | 21.9 | 24.7 |
| 4 (-157 USD) | 36.3 | 17.7 | 23.9 | 22.1 |
| | Chi ² =5.9 df=9 n.s. | | | |

Table 7. Neighbourhood characteristics – degradation

| Income categories (Family income per capita) | We are interested in how people feel about this neighbourhood. | |
|---|--|------|
| | Yes | No |
| 1 (+471 USD) | 11.3 | 88.8 |
| 2 (315-471 USD) | 8.4 | 91.6 |
| 3 (157-314 USD) | 13.1 | 86.9 |
| 4 (-157 USD) | 13.0 | 87.0 |
| | Chi ² =1.9 df=3 n.s. | |

Table 8. Neighbourhood characteristics – infrastructure

| Income categories (Family income per capita) | Please rate the following services in your neighbourhood on a scale from 1 (bad) to 5 (excellent) | | | | |
|---|---|------|------|------|------|
| | A. Post offices | | | | |
| | 1 | 2 | 3 | 4 | 5 |
| 1 (+471 USD) | 7.9 | 17.1 | 28.9 | 28.9 | 17.1 |
| 2 (315-471 USD) | 5.8 | 5.8 | 21.4 | 40.8 | 26.2 |
| 3 (157-314 USD) | 8.1 | 7.8 | 24.1 | 41.7 | 18.2 |
| 4 (-157 USD) | 6.0 | 9.5 | 21.4 | 36.8 | 26.4 |
| | Chi ² =18.2 df=12 n.s. | | | | |
| | B. Public health service | | | | |
| | 1 | 2 | 3 | 4 | 5 |
| 1 (+471 USD) | 14.3 | 17.1 | 27.1 | 27.1 | 14.3 |
| 2 (315-471 USD) | 11.1 | 15.2 | 28.3 | 31.3 | 14.1 |
| 3 (157-314 USD) | 17.3 | 19.0 | 27.5 | 24.7 | 11.5 |
| 4 (-157 USD) | 18.1 | 19.6 | 31.2 | 23.6 | 7.5 |
| | Chi ² =9.4 df=12 n.s. | | | | |

Table 9. Housing density (no. of people per room) by income categories

| Income categories (Family income per capita) | - 0.66 | 0.66 – 1.31 | 1.32 – 1.97 | + 1.97 |
|---|--------|-------------|-------------|--------|
| 1 (+471 USD) | 32.5 | 50.0 | 10.0 | 7.5 |
| 2 (315-471 USD) | 18.7 | 50.5 | 23.4 | 7.5 |
| 3 (157-314 USD) | 12.4 | 46.2 | 22.3 | 19.1 |

| | | | | |
|--------------|--------------------------------------|------|------|------|
| 4 (-157 USD) | 4.9 | 28.6 | 34.0 | 32.5 |
| | Chi ² =94.5 df=9 p=0.000. | | | |

Table 10. Contacts with neighbours by income categories

| Income categories (Family income per capita) | How often do you talk with your neighbours: | | | | | |
|---|---|------------|--------------------|---------------------|------------|-------|
| | a few times a day | once a day | once in a few days | once in a few weeks | less often | never |
| 1 (+471 USD) | 6.3 | 22.5 | 46.3 | 15.0 | 3.8 | 6.3 |
| 2 (315-471 USD) | 14.0 | 29.0 | 31.8 | 11.2 | 8.4 | 5.6 |
| 3 (157-314 USD) | 10.2 | 34.1 | 38.9 | 6.7 | 5.7 | 4.5 |
| 4 (-157 USD) | 14.5 | 33.8 | 35.3 | 7.2 | 3.4 | 5.8 |
| | Chi ² =21.9 df=15 n.s. | | | | | |

Table 11. Number of close friends by income categories

| Income categories (Family income per capita) | Are there any people you would call close friends? | | |
|---|--|----------|-----------|
| | No | Yes, one | Yes, more |
| 1 (+471 USD) | 0.0 | 7.5 | 92.5 |
| 2 (315-471 USD) | 5.6 | 17.8 | 76.6 |
| 3 (157-314 USD) | 6.1 | 9.6 | 84.4 |
| 4 (-157 USD) | 10.7 | 9.7 | 79.6 |
| | Chi ² =18.8 df=6 p=0.04. | | |

Table 12. Helping others, by income categories

| Income categories (Family income per capita) | How much time do you spend in daily life to help friends, neighbours, relatives, cousins, other people? | | | | |
|---|---|--------|------|-------|-----------|
| | None | Little | Some | A lot | Very much |
| 1 (+471 USD) | 3.8 | 43.8 | 33.8 | 17.5 | 1.3 |
| 2 (315-471 USD) | 15.1 | 28.3 | 40.6 | 14.2 | 1.9 |
| 3 (157-314 USD) | 9.1 | 32.7 | 44.3 | 10.7 | 3.2 |
| 4 (-157 USD) | 11.7 | 31.6 | 39.8 | 14.6 | 2.4 |
| | Chi ² =14.5 df=12 n.s. | | | | |

Table 13. Participation in organisations, by income categories

| Income categories | How much time do you spend in daily life to engage in voluntary activities in trade unions, associations, |
|-------------------|---|
|-------------------|---|

| (Family income per capita) | political parties and other organisations? | | | | |
|-----------------------------------|--|--------|------|-------|-----------|
| | None | Little | Some | A lot | Very much |
| 1 (+471 USD) | 76.3 | 16.3 | 6.3 | 0.0 | 1.3 |
| 2 (315-471 USD) | 74.5 | 15.1 | 5.7 | 3.8 | 0.9 |
| 3 (157-314 USD) | 81.4 | 12.4 | 4.6 | 0.3 | 1.3 |
| 4 (-157 USD) | 83.0 | 12.6 | 3.4 | 0.5 | 0.5 |
| Chi ² =16.7 df=12 n.s. | | | | | |

Table 14. Propensity to participate in local / municipal government

| Income categories (Family income per capita) | If you were offered to run for local Warsaw/municipal government you would: | | | |
|---|---|--------------------|----------------|-----------------|
| | never agree | probably not agree | probably agree | certainly agree |
| 1 (+471 USD) | 36.4 | 24.7 | 23.4 | 15.6 |
| 2 (315-471 USD) | 35.0 | 38.0 | 20.0 | 7.0 |
| 3 (157-314 USD) | 35.1 | 30.4 | 21.3 | 13.2 |
| 4 (-157 USD) | 37.1 | 28.9 | 18.8 | 15.2 |
| Chi ² =7.6 df=9 n.s. | | | | |

Table 15. Perception of own social position, by income categories

| Income categories (Family income per capita) | In our society some groups occupy higher positions and other groups occupy lower positions. Where would you see yourself on this scale? | | | | | | | | | |
|---|---|-----|------|------|------|------|------|------|------|-----------|
| | 1 top | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 bottom |
| 1 (+471 USD) | 2.5 | 7.5 | 12.5 | 18.8 | 27.5 | 15.0 | 11.3 | 5.0 | 0.0 | 0.0 |
| 2 (315-471 USD) | 0.0 | 0.0 | 3.8 | 22.6 | 33.0 | 16.0 | 15.1 | 6.6 | 2.8 | 0.0 |
| 3 (157-314 USD) | 0.3 | 0.6 | 3.8 | 13.5 | 31.4 | 20.2 | 16.7 | 7.4 | 5.1 | 1.0 |
| 4 (-157 USD) | 0.0 | 1.0 | 1.0 | 7.4 | 24.0 | 19.6 | 16.7 | 14.2 | 10.3 | 5.9 |
| Chi ² =114.4 df=27 p=0.000 | | | | | | | | | | |

Table 16. Self-confidence by income categories

| Income categories (Family income per capita) | How much do you agree or disagree with each of these statements? | | | | |
|---|---|----------|-------------|-------|----------------|
| | A. When I plan things I'm usually sure I'll be able to make it happen | | | | |
| | strongly disagree | disagree | neither nor | agree | strongly agree |
| 1 (+471 USD) | 2.5 | 5.0 | 10.0 | 57.5 | 25.0 |
| 2 (315-471 USD) | 2.8 | 4.7 | 11.2 | 53.5 | 28.0 |
| 3 (157-314 USD) | 1.9 | 5.4 | 18.2 | 52.2 | 22.3 |
| 4 (-157 USD) | 1.9 | 12.6 | 22.2 | 44.4 | 19.3 |
| Chi ² =24.5 df=12 p<0.05 | | | | | |
| | B. When I really want something, I am usually not able to get it | | | | |
| | strongly disagree | disagree | neither nor | agree | strongly agree |
| 1 (+471 USD) | 25.0 | 51.3 | 12.5 | 8.8 | 2.5 |
| 2 (315-471 USD) | 21.0 | 47.7 | 19.6 | 10.3 | 0.9 |
| 3 (157-314 USD) | 17.2 | 43.0 | 25.8 | 11.1 | 2.9 |
| 4 (-157 USD) | 13.5 | 37.2 | 33.3 | 14.5 | 1.4 |
| Chi ² =24.8 df=12 p<0.05 | | | | | |

Table 17. Perceived financial situation over the last 5 years

| Income categories (Family income per capita) | Think of the financial situation in your household and compare it to 5 years ago (in 1996). Is your current situation: | | | | |
|---|---|-----------------|----------|----------------|------------|
| | much better | a little better | the same | a little worse | much worse |
| 1 (+471 USD) | 23.7 | 28.9 | 22.4 | 21.1 | 3.9 |
| 2 (315-471 USD) | 10.8 | 33.3 | 30.4 | 14.7 | 10.8 |
| 3 (157-314 USD) | 5.9 | 20.7 | 26.0 | 28.3 | 19.1 |
| 4 (-157 USD) | 4.0 | 11.0 | 23.5 | 25.5 | 36.0 |
| Chi ² =94.4 df=12 p=0.000 | | | | | |

Figure 1. Income categories in 2-dimensional space. Results of discriminatory analysis

