

KAZIMIERZ M. SŁOMCZYŃSKI  
The Ohio State University and the Polish Academy of Sciences

KRYSTYNA JANICKA  
Polish Academy of Sciences and University of Zielona Góra

## **Polarized Social-Class Structure: On the Matthew Effect and Increasing Inequality\***

“For unto every one that hath shall be given, and he shall have abundance: but from him that hath not shall be taken away even that which he hath.  
And cast ye the unprofitable servant into outer darkness: there shall be weeping and gnashing of teeth.”

Gospel of St. Matthew; Mt. 25: 29 and 30 (*King James Version*)

*Abstract:* The *Matthew effect*, considered in the broad context of a whole society, implies that increasing social inequality results from the accumulation of advantages provided by wealth and by the amassing of disadvantages associated with poverty. We formulate a hypothesis according to which the Matthew effect manifests itself in the polarization of opposite social classes even if the adaptive abilities of people belonging to different classes are controlled. The test of this hypothesis is primarily based on data drawn from the Polish Panel Survey (POLPAN), a survey in which respondents from a national sample were interviewed in 1988, 1993, 1998, and 2003. Additional data were obtained from surveys conducted in 1978 and 2006. All these data show that (a) during the last decade of the communist regime in Poland, the level of income inequality was relatively low and stable; (b) the change in the class structure occurring between 1989 and 1993 resulted in the rapid growth of social inequality, and (c) inequality increased up to 2006. The hypothesis stating that income inequality is rooted in the class structure, independently of people's adaptive abilities, is fully supported. Theoretical and practical implications of results supporting our hypothesis are also discussed.

*Keywords:* Matthew effect, distribution of income, class structure, Polish society, Polish Panel Survey (POLPAN).

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### Introduction

Various theoretical schemes pertaining to the social structure of real socialism and the nascent capitalism of post-communist Europe use a polarized approach to mapping social classes. Referring to this approach, we concentrate our attention on a dynamic analysis of structured social inequality in Poland in the period from 1978 to 2006. The representative survey data allow us to answer three key questions:

(1) What was the distance between the “nomenklatura” (communist elite) and the poor (disadvantaged) in the last decade of communist rule, 1978 to 1988?

(2) Did the change in class structure occurring between 1989 and 1993—an important initial period for the post-communist transformation—result in the growth of social inequality?

(3) What pattern of social inequality occurred during the next decade, 1994 to 2003, and beyond up to 2006?

We answer these questions by analyzing the *Matthew effect* comprised in a biblical quote, provided here in a modern phrase: “For to everyone who has, more shall be given, and he will have abundance; but from the one who does not have, even what he does have shall be taken away” (*New American Standard Bible* 1995).<sup>1</sup> It is a synonym for the well-known colloquialism, “the rich get richer and the poor get poorer.” According to this popular interpretation, increasing social inequality is manifested by the accumulation of advantages provided by wealth and by the amassing of disadvantages associated with poverty. Although wealth and poverty can be characterized in various ways, in illustrating the scope of social inequalities in Poland we focus on household income and individual earnings. However, we note that a considerable distance between the socially defined “top” and “bottom” is also reflected in the psychological sphere, opinions on the former social system of the centrally planned economy (evaluation of “real socialism”) and the newly built capitalism (pro-market *versus* state-paternalism attitudes).

We consider changes occurring in the distribution of income in terms of a polarization process, as imbedded in the quoted biblical principle of St. Matthew. It was Robert Merton who introduced the notion of the *Matthew effect* (Merton 1968) into sociology. According to Merton, the *Matthew effect* well describes reward accumulation in science: during their scientific careers more productive scientists are more rewarded (see Goldstone 1979 on an interesting attempt at a deductive explanation of this effect in the context of scientific organizations). However, an application of the notion of the *Matthew effect* goes much beyond its original usage. It is applied, for example, in such diversified disciplines as psychology (Stanovich 1986), pedagogy (Walbert and Tsai 1983), sociology (Dannefer 1987), epidemiology (Joseph 1989; Dzakpasu *et al.* 2000), and economics (Juwei 2006, Wade 2005, McMahon 2004).

<sup>1</sup> Three other Evangelists—Mark, Luke, and John—presented a similar thought. It is shown in the following quotations. Mark 4: 25: “For whoever has, to him more shall be given; and whoever does not have, even what he has shall be taken away from him.” Luke 8: 18: “So take care how you listen; for whoever has, to him more shall be given; and whoever does not have, even what he thinks he has shall be taken away from him.” John 15: 2 “Every branch in Me that does not bear fruit, He takes away; and every branch that bears fruit, He prunes it so that it may bear more fruit.” (King James Version).

### The Empirical Context: Measuring the Extent of Social Inequality

In historical and cross-national comparative studies, the Gini index is the most popular measure of social inequality. It is based on cumulative distribution (the Lorenz curve) and belongs to a category of concentration measures since it shows how far a given distribution is from the distribution of equal shares. This index ranges from 0 (complete equality) to 1 (complete inequality).<sup>2</sup>

*WIDER: World Income Inequality Database* (WIID 2008) contains information on income distribution in more than 100 countries, providing values of the Gini index for about 3,500 “country-year” units. In the case of Poland, it gives 85 values of the Gini index for the period 1956–2003, primarily for the years from 1989 to 2000. According to these data, the most comparable Gini index values for Poland are as follows:

- in the 1970s from 0.230 to 0.270
- in the mid-1980 0.250
- in 1995 0.322
- in 2000 0.342
- in 2003 0.352

These values are in agreement with other estimates (e.g., Kaasa 2003; Milanovic 1998).<sup>3</sup> For 2005 and 2006, data from sociological surveys of the Public Opinion Research Center (CBOS 2006) and studies of the Central Statistical Office (GUS 2007) also show a relatively high degree of social inequality, with the tendency of an increase over time. According to our computation of the CBOS data for 2005 (N = 4,000), the Gini index was 0.358.<sup>4</sup> If we look at the tails of the income distribution according to CBOS and GUS data, we realize that the proportion of rich and poor people increases and the distance between them increases as well. The GUS data from October of 2006 show that 19.9% of employees receive earnings lower than half of the average. This is 1.7% more than in 2004 and 2.5% more than in 2002. Simultaneously, the proportion of those earning 250% of the average grew from 3.4% in 2002 to 3.7%

<sup>2</sup> For an explanation of the Gini index and its comparison with other measures of income inequality, see e.g., Campano and Salvatore 2006: 58–71; Cowell 2000: 87–128; Lambert 2001: Chapters 2 and 5.

<sup>3</sup> Rising income inequality in Central and East European countries is a well documented fact (Milanovic 1998; Dessens, Jansen, and Nelissen 1998; Flemming and Micklewright 1999; Kaasa 2003; Paci, Sasin, and Verbeek 2004; Simai 2006; for the communist period, see Atkinson and Micklewright 1992). In this paper we do not deal with an economic mechanism of the changes in income distribution typical for Central and East European countries. However, it is worthwhile to note that in post-communist countries the relationship between economic development and inequality is not represented by a curvilinear trend of an inverted-U, as originally proposed by Kuznets (1955) and typical for the capitalist development. On the basis of an intensive statistical analysis, Bandelj and Mahutga (2005: 18) conclude: “Our results prompt us to rethink the traditional theory that links development and inequality through the purported inverse U-shaped relationship. Testing the internal development and foreign investment dependence models, we find that inequality in Central and Eastern Europe depends on sector dualism, the amount of foreign direct investment stock, and the levels of population decline and labor bargaining power in a country. The finding about the positive effect of foreign capital penetration and inequality confirms the dependency and world-system perspective concerning investment dependence but the effects of the sectoral composition and demographic transition go against the traditional theory proposed by Kuznets.”

<sup>4</sup> For this analysis, data came from a large scale CBOS survey, conducted in March 2005 on a national representative sample of adults in Poland. This survey contained a standard question on household income. The survey was designed jointly by Polish and Norwegian researchers; see CBOS 2006.

in 2004 and 3.8% in 2006. Since “the rich become richer much faster than do the poor,” we observe the increasing differentials of earnings (Cieślak 2007, A1). Thus, the data confirm the *Matthew effect*.

### The Main Thesis

Is the *Matthew effect* reflected in the increasing distance between opposite social classes? To answer this question we study Poland during 1978–2006, assuming that the *Matthew effect* is particularly strong during systemic transformation. There are two conditions supporting our assumption:

(a) structural (implementation of the economic model favors the privileged rather than marginalized classes), and

(b) psychosocial (people from opposite social classes have different adaptation abilities to radical social change).

We claim that condition (a) occurs independently of condition (b), which means that structural factors explain the occurrence of the *Matthew effect* simultaneously with individual factors such as adaptation abilities. In consequence, we formulate a hypothesis, according to which the *Matthew effect manifests itself in the polarization of opposite social classes even if the adaptive abilities of people belonging to different classes are controlled*.

### On Social-Class Polarization

#### Social Classes in Poland before and after 1989

Since in our analysis social class is an independent variable, it is important to consider an appropriate theoretical framework of class analysis. In his fundamental study, Ossowski (1963) argues that social classes are frequently defined by complex criteria that blur their location in the social structure. In our view, ownership of the means of production, the share in political power, control over production and distribution of goods, and skills relevant on the labor market provide the basis for distinguishing social classes. According to these criteria, social classes constitute entities which are only *partially* ordered by their definitional criteria. For example, in the dimension of power, managers are obviously “higher” than office workers and technicians; however, it is less clear what managers’ positions are in comparison to those of business owners or the self-employed. Business owners are at the top according to their “ownership of the means of production” criterion but how they compare with professionals on the “skill” dimension depends on many specific factors. The placement of farmers and factory workers on one dimension could be different on another dimension. Therefore, social classes should be treated as a *nominal* rather than an *ordinal* variable.

We relied on theoretical premises, which are present in sociological discussion concerning the class structure of contemporary societies since at least the mid-twentieth century (Wright 1978; Marshall *et al.* 1992). According to these premises, in the course

of macro-social changes, some class indicators increase while others lose their importance (see Robinson and Kelley 1979). We use specific class typologies for describing the changing social reality in Poland before 1989 and during the post-1989 social transformation. They are presented in Table 1.

Table 1  
Social Classes in Poland Before and After 1989

Before 1989	After 1989
<b>Nomenklatura</b> Socialist executives Experts (small proportion)	<b>Privileged Classes (Winners)</b> Employers Managers Experts (professionals)
<b>Core of the socialist economy</b> Experts (large proportion) First-line supervisors Office workers Factory workers	<b>Ordinary classes</b> Supervisors Self-employed Office workers
<b>Non-socialist segment</b> Self-employed	<b>Disadvantaged classes (Losers)</b> Skilled workers Unskilled workers Farmers
<b>Marginalized classes</b> Non-industrial manual workers Peasantry	

The class structure of a centrally planned society under state socialism was well characterized by the following categories: managers of the nationalized and centralized means of production, first-line supervisors, non-supervisory nonmanual workers, production workers, nonproduction workers, the self-employed, and peasants. For an extended description of these classes, see Słomczyński and Kohn (1988), Kohn and Słomczyński (1990), Słomczyński, Janicka, Mach, and Zaborowski (1996) and Słomczyński and Shabad (1997).

In Poland, in the new post-1989 political regime, ownership and control of the means of production became a constitutive criterion for class membership as it was in the capitalist systems of the West. The immediate control over labor, as well as skills relevant for the labor market, also increased in importance since the meritocratic rules became more apparent. Taking into account these criteria, as well as the skill level and nonmanual *vs.* manual types of work, the class structure of post-communist society underwent a change. Among non-manual categories, we distinguish employers (who are treated as a separate category from the self-employed), managers (executive officers with a high level of autonomy), and experts (professionals whose role in the market economy differs from that in the communist system). Manual workers, without regard to the type of workplace, are now considered as one group since, as a result of abandoning central planning, the division into production- *vs.* nonproduction-manual workers lost its former importance. Instead of traditional peasants, a new class is emerging, that of farmers. For a detailed description of this class division, see Słomczyński *et al.* (1996) and Słomczyński, Janicka, Shabad, and Tomescu-Dubrow (2007).

### Do Social Classes Matter?

Can these social classes be considered essential categories of social structure in contemporary Poland? For us, this is an empirical question. In our opinion, there are two conditions that can be thought of as both necessary and sufficient for a reasonable claim that social classes matter. They can be formulated as follows:

Condition 1. The distribution of statistical averages and mean values : social classes differ considerably with respect to the average values of essential characteristics of social position, forming a hierarchy (a partial ordering).

Condition 2. The distribution of variance: the differentiation of essential characteristics of social position is substantially larger between classes than is their differentiation within classes.

Without considering these two conditions it would be difficult to demonstrate the class nature of a society. Kohn and Słomczyński (1990: 31–54) proposed to consider social classes in socialist Poland in the context of the social stratification position defined as a linear combination of education, occupational status, and income. They noted that in 1978 social classes formed a hierarchy and the variation of the social stratification position was greater between classes than within classes. Mokrzycki (2001), recognizing the existence of important divisions in communist Poland, contrasted the *nomenklatura* with the remaining segments of society. Although he refrained from using the term class for these segments, he stressed that each of them was subject to specific mechanisms for attaining and keeping their social position (Mokrzycki 2001: 102). Using terminology presented in Table 1, we place the *nomenklatura* at the top of the hierarchy of communist society and contrast it with manual workers and farmers.

In our recent papers, we presented multidimensional analyses of the class structure, concentrating on a comparison of the 1980s with the beginning of the current decade (see Janicka 2000; Słomczyński and Janicka 2005; Słomczyński, Janicka *et al.* 2007). The distribution of stratification positions satisfies conditions 1 and 2 therefore confirming the vertical character of our assumed class typologies.<sup>5</sup> According to the overall index of stratification position, employers, managers, and experts are located at the top, while manual workers and farmers are at the bottom.

### Data and Basic Variables

#### Data

Since the class nature of Polish society is sufficiently well documented, we proceed now to the hypothesis stating that the *Matthew effect* manifests itself in the opposite classes

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<sup>5</sup> Commenting on the measurement models of stratification position for Poland in 1988–2003, Słomczyński, Janicka *et al.* (2007) report that the factor loadings for education and occupation are relatively high, ranging from 0.854 to 0.914. While the factor loading for income is lower (ranging from 0.449 to 0.601), its correlation with social status is still substantially and statistically significant.

independently of their adaptive abilities. In the process of verifying this hypothesis we use two kinds of data. These are:

(a) Panel data, collected for the Polish Panel Survey (POLPAN 1988–2003) in which respondents were interviewed in 1988, 1993, 1998, and 2003;<sup>6</sup>

(b) Cross-sectional data of (i) the 1978 study (Słomczyński and Kohn 1988 and Kohn and Słomczyński 1990), (ii) separate waves for POLPAN that include new cohorts to make the sample representative for the adult population, and (iii) the Polish edition of the European Social Survey 2006 ([www.europeansocialsurvey.org](http://www.europeansocialsurvey.org)).

### Basic variables

Since we focus on an increase of inequality in the social structure, social classes are (values of) the independent variable, while the dependent variables consist of household income (*per capita*), individual earnings (salary), and opinions regarding the social system and social inequalities. With respect to the operationalization of social classes, following earlier works of ours (Słomczyński and Janicka 2005; Słomczyński, Janicka *et al.* 2007), we assume that:

(1) employers, managers, and experts belong to the winners of the post-communist transformation since they own more resources and generally are better situated on the labor market than are all other categories;

(2) manual workers, farmers, and farm laborers, having fewer resources and facing negative consequences of the reorganization of the economy are losers in the transformation.

We contrast these categories, naming them “classes at the top” and “classes at the bottom,” respectively. For all studies analyzed in this paper these categories are constructed on the basis of the *Social Classification of Occupations* (Pohoski and Słomczyński 1978; Domański, Sawiński, and Słomczyński 2007).

## Results

In the economic dimension, differences between classes at the top and bottom of the social hierarchy are significant. As an illustration, we present, in Table 2, the means of household income *per capita* in the years 1978, 1988, 1993, 1998, 2003, and 2006 with respect to these years' averages.<sup>7</sup> The data unambiguously show that changes

<sup>6</sup> Beginning in 1988 and until 2003, the Team of Comparative Social Inequalities at the Institute of Philosophy and Sociology of the Polish Academy of Sciences conducted a panel study, every five years, on the adult population of Poland. To ensure the representation of all segments of the population, since 1998 researchers supplemented the panel sample with a subsample of younger respondents—persons aged 21–30 in 1998 and 21–25 in 2003. For a recent description of the POLPAN, see Słomczyński and Marquart-Pyatt (2007: 10–12).

<sup>7</sup> In all these surveys the question about household income was almost the same. Here is the wording used in the POLPAN wave four: *What is the average monthly income in your household? Please take into account all persons in the household and all sources of their income in the last three months.* A household was defined as any person or group of persons living in a particular house/apartment and having a common budget.

in the relative material position, recorded for the period of the post-communist transformation, progress in opposite directions for classes at the top and bottom. Classes at the top of the hierarchy are getting relatively richer. The situation of classes located at the bottom, measured as a ratio to the year average, tends to worsen, although not very much. However, the widening of differentials can be seen when comparing household material well-being in the highest echelon of the richest *vs.* the lowest echelon of the poorest. In the first case *per capita* household income is three times larger than the average value for 2006, whereas for the poorest of the poor this income is less than half of this average.

Table 2

**Household Income Per Capita at the Top and Bottom of the Hierarchy, Poland, 1978–2006**

Social classes*	Years					
	1978	1988	1993	1998	2003	2006
	Household Income Per Capita as % of the Average in a Given Year					
Classes at the top	112	110	133	171	172	181
Richest 15%	123	124	198	212	279	290
Classes at the bottom	96	96	91	91	92	91
Poorest 15%	84	83	85	64	55	48

\* For 1978 Classes at the top: Nomenklatura, Classes at the bottom: Marginalized classes. For 1988–2003 Classes at the top: Privileged classes, Classes at the bottom: Disadvantaged classes. See, Table 1.

We also consider the relative increase of household income *per capita* in the polar segments of society. Table 3 presents the dynamics of these changes shown as a comparison of income in the period 2003–2006 with the transformation beginning in the year 1988. Table 3 shows that polarization of the material situation of the compared segments of society widens. The richest of those from classes forming the top of the social hierarchy achieve a more than twofold increase in household income compared with their situation in 1988, whereas among the poorest of the poor (15% of the lowest segment) comparable income after 15 to 16 years falls about 40%. Hence, with the passage of time the poor (the entire class at the bottom) become poorer, and the poorest among them (15% of the lowest segment) become impoverished to a particularly high degree.

Table 3

**Relative Increase of Household Income Per Capita**

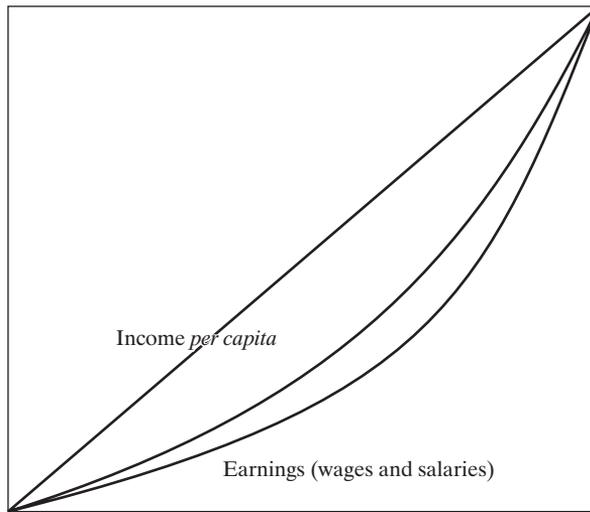
Social Classes*	1988	2003–2006
Classes at the top	100%	156%–164%
Richest 15%	100%	225%–234%
Classes at the bottom	100%	96%– 95%
Poorest 15%	100%	66%– 58%

\* Classes at the top: Privileged classes, Classes at the bottom: Disadvantaged classes. See, Table 1.

To complete the picture of this inequality we need to point out that in Poland differences in income *per capita* are smaller than those in individual earnings.<sup>8</sup> Figure 1 shows a graphic expression of inequality between the distributions of the two variables. The Lorenz curve, in the case of income *per capita*, is situated closer to the diagonal—which expresses the criterion of full equality—than is the case for individual salaries and wages. The amount of income *per capita* is a product of many variables concerning the household, the number of its members and its demographic composition in particular.

Figure 1

**Distribution of income *per capita* and individual earnings**



**The Matthew Effect in the Context of Adaptive Abilities**

In the period 1988–2003 an increase in earnings, measured in constant zlotys, occurred in all social classes.<sup>9</sup> However, this was not an evenly distributed increase. Although

<sup>8</sup> In computing earnings we take into account all monetary forms of remuneration for work as well as profits from owned businesses. In 2003 about 20% of the working adult population declared more than one job; those having more jobs earn more than one-job earners. Earning and wages are components or sources of household income. Lerman and Yitzhaki (1985) show that each source's contribution to the Gini coefficient may be viewed as the product of the source's own Gini, its share of total income, and its correlation with the rank of total income. From their analyses it follows that among one-earner households inequality of income (per capita) can be greater than inequality of earnings only if income from other sources than salaries and wages is particularly unevenly distributed. In the case of multi-earner households the situation is complicated and depends not only on non-earnings income but also on specific patterns of accumulation of earnings of different earners in the family, and on household composition. In post-communist societies the increase of household-income inequality was mainly due to a greater concentration of salaries and wages (Milanovic 1998: Table 4.2). On the relationship of household income inequality and inequality of earnings in cross national perspective, see Gottschalk and Smeeding (1997).

<sup>9</sup> Referring to the first phase of the post-communist transition, Rutkowski (1996:3) found that "The earnings distribution, compressed under central planning, has widened significantly. Changes have taken

manual workers and farmers did benefit from the post-communist transition, earnings of employers, managers, and experts rose substantially more. The difference between the earnings growth of these segments amounted to almost 40 percent. Table 4, presenting individual incomes earned in different social classes, illustrates this issue numerically.

Table 4  
Earnings in Poland, 1988 and 2003

Social Classes*	1988	2003	B – A	Increase %%
	A	B		
In constant currency (2006)				
Classes at the top	2042	3138	1096	53.4
Classes at the bottom	1832	2105	273	14.9
Difference	210	1033	823	38.5

\* Classes at the top: Privileged classes; Classes at the bottom: Disadvantaged classes. See, Table 1.

The conclusion stemming from this table is unambiguous: the “top” is much better off than the “bottom,” which is consistent with the *Matthew effect*. Still, one could legitimately consider that this effect is a product of individual adaptive abilities rather than placement in the social structure. To consider this alternative explanation, we introduce a psychological variable, intelligence measured by the Raven test.

In the 2003 POLPAN survey the Raven test (Raven, Raven, and Court 2003) was used for the first time in Poland on a national sample. It was implemented in a rigorous way, following the directives of psychologists for the shortened version that consisted of ten problems (matrices). The test result is expressed as an arithmetic difference between the number of correctly solved problems and the failures, providing a scale in the range from –10 to +10. The results are highly correlated with other psychological variables measuring adaptive abilities.

Despite the criticism of measuring intelligence with the Raven test, the majority of psychologists and social scientists share the opinion that this test is a valid indicator of general cognitive functioning, important for fulfilling life strategies and educational and occupational goals in particular (see Firkowska-Mankiewicz 1993: 35–36).<sup>10</sup> We also share this opinion and ask the following question: Does the impact of social class still hold if the Raven test is taken into account? Table 5 provides an answer to this question.

Regression coefficients show how much income would change depending on belonging to classes at the top and at the bottom as compared with the middle.

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place at both ends of the distribution, but changes at the top have been more pronounced than at the bottom.” This increase in inequality occurs in the situation in which there is a noticeable degree of similarity in wage structures generated by both socialist and capitalist systems; for the main argument and evidence of inter-system similarities in wage determinants, see Rutkowski (1994). For long term changes in earnings, see Orpych (2005).

<sup>10</sup> Of course, this raises a controversial issue of the impact of intelligence on occupational and income attainment. For some interesting results in Poland, see Firkowska-Mankiewicz (2002), Firkowska-Mankiewicz and Zaborowski (2002), and Słomczyński and Mach (1996).

Table 5

**Regression of Increase in Earnings in 1988–2003 on Raven Test and Social Class**

Independent Variables	B	SE
Raven Test	32.0	6.8
Classes at the top	428.8	110.8
Classes at the bottom	−262.7	74.7
<i>Constant</i>	649.5	50.1

They also show the impact of the Raven test. We notice that a person with a poor result in the Raven test (−10 points) but belonging to the top class receives an income increase of 758.30 Polish zloty ( $649.50 - 320.00 + 428.80$ ), while a person with the same result in the test but belonging to the bottom class receives an increase of only 66.80 Polish zloty ( $649.50 - 320.00 - 262.70$ ). A person belonging to the bottom class will not achieve a 758.30 Polish zloty increase even when having the highest result in the Raven test equal +10.00 points; this person will receive an increase of  $649.50 + 320.00 - 262.70 = 706.80$  Polish zloty. Hence, although the Raven test results show that the mental disposition measured by this test has a significant impact on shaping individual earnings, still it cannot overcome class differences.

The graphical representation of the increase in earnings presented in Figure 2 convincingly illustrates the impact of social class on earnings controlled by the results of the Raven test. The relationship between mental acuity/disposition shown in the Raven test and individual earnings is self-evident, yet, it is social class membership that determines the basic income level.

### Additional Analysis

The situation of deprivation is the reason why classes currently located in a disadvantageous position in social structure more often assess the pre-1989 political and economic system in favorable terms. These classes also express support for state paternalism indicating that the state should control distribution of income, provide employment, and help youth from poor families in entering colleges and universities.<sup>11</sup>

Table 6 reveals the contrast between the polar classes in evaluating the former and the desired social order. Before 1989 the top evaluated socialism in positive terms more often than did the bottom: 37.3% as compared to 23.3%. Now these proportions have reversed while the distance between classes increased: only 14.7%

<sup>11</sup> Our variable of state paternalism was created on the basis of factor analysis using the following agree-disagree items: (a) *The state is responsible for reducing differences in people's incomes*, (b) *The state should provide jobs for everyone who wants to work*, and (c) *The state should assist children from poor families in facilitating their access to higher education*. In 1988 and 2003 the factor loadings were above 0.5, and the eigenvalue was above 1.25. Thus, we assume that all three items taken together form a well defined construct.

Figure 2

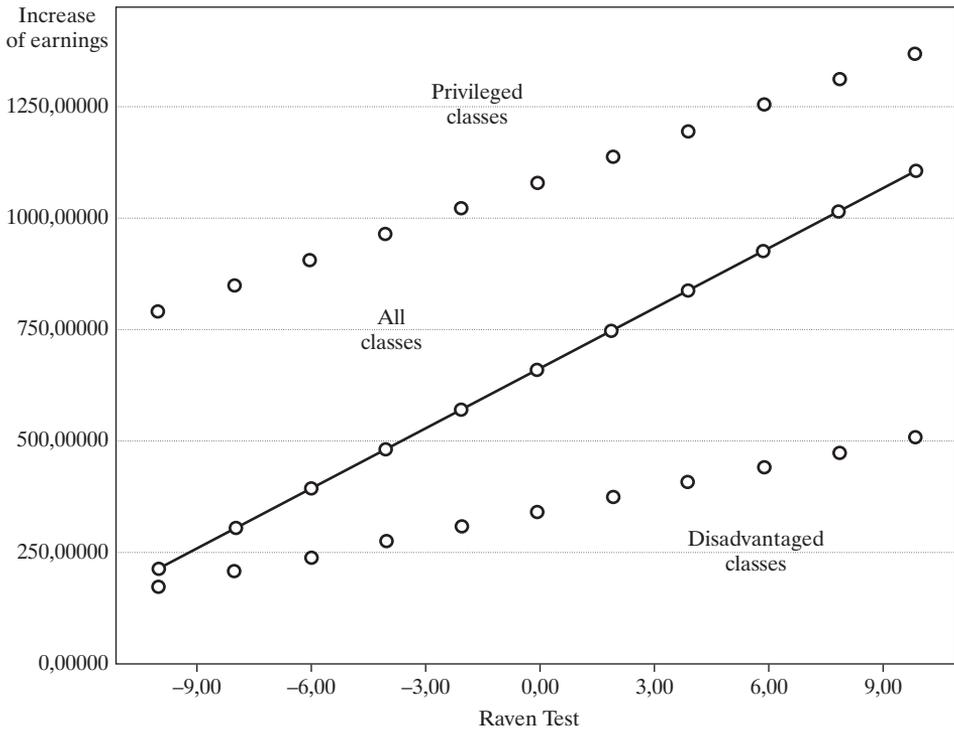
**Predicted Earnings Increase Depending on Results in the Raven Test**

Table 6

**Attitude Towards Socialism and State Paternalism, 1988 and 2003**

Social classes*	Assessment of socialism		Attitude towards state paternalism	
	1988	2003	1988	2003
	Percent of positive assessments		Mean values on the scale**	
Classes of the top	37,3	14,7	-0.438	-0.653
Classes of the bottom	23,3	41,0	+0.100	+0.342

\* Classes at the top: Privileged classes; Classes at the bottom: Disadvantaged classes. See, Table 1.

\*\* Normalized scale with arithmetic mean = 0 and standard deviation = 1.

of the top evaluates the former regime in positive terms, while as much as 40.1% of people at the bottom do so. Let us also acknowledge that at the top aversion toward state paternalism increased (from -0.438 to -0.653) while at the bottom support for state paternalism substantially increased (from +0.100 to +0.342). While in 1988 the interclass distance for this variable was smaller than one half of the standard deviation, in 2003 it was almost equal to one standard deviation.

### Summary and Discussion

Descriptive data of this paper show that (a) during the last decade of the communist regime in Poland, the level of income inequality was relatively low and stable; (b) the change in the class structure occurring between 1989 and 1993 resulted in the growth of social inequality, and (c) inequality increased up to 2006. Taking into account all analyses presented, we are inclined to formulate two conclusions pertaining to our main hypothesis about the nature of increasing social inequality. The first one concerns the *Matthew effect*. Numerical results attest to its occurring in the form predicted by our hypothesis since:

(a) independently of the impact of individual factors, social classes that were relatively better off are even better off now, not only in absolute but also in relative terms—as compared to the average;

(b) independently of the impact of individual factors, social classes that were relatively worse off are even worse off now, not only in absolute but also in relative terms—as compared to the average.

The second conclusion relates to the fact that income differentials are widening more near the top. Obviously, the averages mask the actual differentiation and an improvement, or worsening, of the material well-being of particular groups in time. More detailed analyses indicate that some groups in 2003 were worse off than in 1989, even in the absolute sense. Thus, we claim that the Matthew effect occurs in Poland in a strong form.

### Implications of Inequality

Consequences of the *Matthew effect*, in the context of income inequality, may be particularly harmful in two instances: (a) if they lead to an increase in social inequality, which is so high that this becomes an obstacle to economic development; (b) if they lead to the marginalization and exclusion of the poorest—those at the very bottom of the social hierarchy.

The odds in favor of economic growth in the context of a given level of social inequality constitute an issue, which is interesting not only for sociologists. Working on it are also economists who have discussed models optimizing the achievement of a suitable level of economic growth, controlling for the level of income inequality (Persson and Tabellini 1994; Cornia and Count 2001; Wade 2007). The growth of inequality above a certain optimum level becomes dysfunctional for the further growth of the gross domestic product. The reason is that at certain level of income inequality motivation to undertake economic activities decreases while the likelihood for social conflict is on the rise, the latter in itself constituting a serious obstacle to constructive activity promoting further economic growth.

The concepts of marginalization and exclusion are related to social isolation: lack of meaningful ties to the family, local or national community, various associations and organizations. They also evoke the deficit of resources and the inability to defend one's rights. The marginalization and exclusion of the poorest has many consequences

already recognized and studied in Poland (for review, see Golinowska, Tarkowska, and Topińska 2005). One aspect that is not investigated enough pertains to social psychology: the alienation of the poor as an obstacle for building a civil society. With the high level on alienation of the most deprived group, it is difficult to develop a strategy to overcome marginalization and exclusion. The poor need to have a voice in formulating strategies that would decrease their alienation from society.

Summarizing various studies, Wade (2007: 115) notes the following: “There is fairly good evidence that higher income inequality within countries goes with: (1) higher poverty and specifically, a lower contribution of economic growth to poverty reduction (...); (2) higher unemployment; (3) higher crime; (4) lower average health; (5) weaker property rights; (6) more skewed access to public services...; and (7) slower transition to democratic regimes, and more fragile democracies.” It is obvious that not all seven variables specified in this quote are the one-way effects of high income inequality. As Wade (2007: 116) points out, “the causation in all these cases is probably two-way. But it is plausible that a strong causality does run from income inequality to the other variables.” We share this view.

### Concluding Remark

In this paper we do not elaborate on the consequences of poverty and the complexity of living conditions for extremely poor people. Neither do we discuss the treatment of this segment of the population in contemporary Poland. However, we note that some winners of the post-communist transformation attach to the poorest of the poor, and the least resourceful, the pejorative label “useless servants of capitalism.” And those who impose this label would be eager to employ the second part of the Matthew pronouncement: *And cast ye the unprofitable servant into outer darkness: there shall be weeping and gnashing of teeth* (Mt. 25, 30). Let us not allow this to happen.

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*Biographical Note:* Kazimierz M. Słomczyński is Professor of Sociology and Political Science at the Ohio State University. He is also Chair of the Research Group on Comparative Social Inequality at the Institute of Philosophy and Sociology, Polish Academy of Sciences. Recently he co-founded the Cross-National Studies: Interdisciplinary Research and Training Program, a joint initiative of the Ohio State University and the Polish Academy of Sciences. He is a principal investigator of the Polish Panel Survey (POLPAN), conducted among representative sample of the adult population every five years since 1988. Based on this

data set he edited three volumes: *Social Patterns of Being Political* (2000), *Social Structure: Changes and Linkages* (2002), and *Continuity and Change in Social Life: Structural and Psychological Adjustment in Poland* (co-editor Sandra T. Marquart-Pyatt, 2006). His recent publications in the *European Sociological Review* and *International Journal of Sociology*, devoted to meritocratic attitudes and protest behavior, involve cross-national analyses and multi-level modeling.

*Address:* e-mail: slomczynski.1@osu.edu

*Biographical Note:* Krystyna Janicka, Professor of Sociology at the Institute of Philosophy and Sociology, Polish Academy of Sciences and at the University in Zielona Góra. Her research interests include social mobility and stratification, social change and social psychology. She authored *Intergenerational Mobility and its Correlates* (in Polish, 1976) and *Work Situation and Social Structure* (in Polish, 1997). She also co-authored *Mental Adjustment to the Post-Communist System in Poland* (1999) with K. M. Słomczyński, B. W. Mach and W. Zaborowski and edited *Social Differentiation and its Perception, 1965–1980* (in Polish, 1987). Author of articles on the perception of social inequality and the role of gender in the process of stratification. She was principal and co-principal investigator in several nationwide and cross-national projects on the Polish social structure changes and evolution over decades. Since 2002 she has served as the Executive Secretary of the Polish Sociological Association.

*Address:* e-mail: kjanicka@ifispan.waw.pl