Inequality, Poverty, and Material Deprivation in New and Old Members of European Union

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Department of Social Work, Zagreb University School of Law, Zagreb, Croatia Aim To analyze the main indicators of income inequality, objective and subjective poverty, material deprivation, and the role of public social transfers in the reduction of poverty in 15 old and 10 new member states of the European Union (EU), undergoing post-communist socio-economic transition, as well as in Croatia, a candidate EU country.

Method Objective poverty rates, poverty reduction rates, poverty thresholds in purchasing power standards (PPS), total social expenditure, inequality indicators, and risks of poverty according to demographics were calculated using the data from the Eurostat databases, in particular, Household Budget Survey. For Croatia, Central Bureau of Statistics first releases on poverty indicators were used, as well as database of the Ministry of Finance (social expenditure). Subjective poverty rates and non-monetary deprivation index were calculated using the European Quality of Life Survey, which was carried out in 2003 in EU countries and in 2006 in Croatia.

Results According to the indicators of income inequality and objective poverty, there was a divide among old EU member states (EU15), with UK, Ireland and South European countries having higher and Continental and Nordic countries lower indicators of inequality and poverty. Among new member states (NMS10), Baltic countries and Poland had the highest and Slovenia and the Czech Republic the lowest indicators of inequality and poverty. In all EU15 countries, except Greece, subjective poverty rates were lower than objective ones, whereas in all NMS10 countries the levels of subjective poverty were much higher than those of objective poverty. With some exceptions, NMS10 countries had low or even decreasing social expenditures. The share of respondents who were deprived of more than 50% of items was 6 times higher in the NMS10 than in the EU15 countries. When standard of living was measured by income inequality, relative poverty rates, poverty reduction rates, total social protection expenditures, and non-monetary deprivation, only Slovenia, the Czech Republic, and Hungary, out of the NMS10, were in the upper half of the distribution, while Croatia had a medium position among NMS10 states.

Conclusion Our analysis demonstrated that poverty in countries undergoing post-socialist socioeconomic transition is widespread and could seriously limit human development. Continual research and monitoring of different aspects of poverty is needed for setting appropriate policies across the EU to effectively combat poverty and social exclusion and to promote convergence process.

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Poverty exists in all societies, but its magnitude and depth are very different in different countries. There is also a lack of agreement on the scope of poverty within society, which is influenced by the fact that poverty itself is an ambiguous and controversial notion. Poverty is a "social construct" (1,2) and may be defined in an absolute or relative sense. The absolute poverty is commonly defined as the lack of material or financial resources necessary for survival or meeting basic needs, while the relative poverty implies exclusion from a way of life deemed to be minimally decent or acceptable in a society in which someone lives (3-7). Also, we should differentiate between objective and subjective approaches in measuring poverty. The objective poverty approach refers to objective aspects of one's well-being, most often measured in terms of available resources, such as income and consumption (8). Subjective poverty is the result of people's views, perceptions, or feelings about their situation or well-being. As many politicians have argued that absolute poverty has been eliminated in affluent western countries, it is not surprising that the European Union (EU) and Eurostat (Statistical Office of the EU) embraced the concept of relative poverty. Relative poverty is closely connected with the issue of income inequalities. As a matter of fact, relative poverty is a consequence of the distribution of income.

There are many different indicators of poverty. Most research studies on poverty provide information about a poverty profile (9), which allows an insight into the scope of poverty, groups exposed to the risk of poverty, and the dynamics of poverty during a certain period of time. In most developed EU countries poverty has been studied for more than a century. In contrast to this, poverty research in Croatia and former communist countries, many of them now EU member states, started much later, in the 1980s. The first national research on poverty in Croatia was carried out only in the late 1990s (10,11).

The scope of poverty is correlated with the level of economic prosperity in a society, but it does not depend only on the level of national wealth. Research studies have shown that tax and public social transfer systems have influenced considerably the reduction of poverty and inequality (12,13). Thus, countries with higher social protection expenditures have, as a rule, lower poverty rates and less severe inequalities (14,15).

Poverty is a multidimensional phenomenon. Being poor is not only associated with lack of resources, but also with unsatisfied housing conditions, poor education, or illhealth. However, the connection between poverty and health is complex in terms of causal relationships. However, our analysis was restricted only to poverty and inequality indicators.

This paper aims to analyze main indicators of income inequalities, objective and subjective poverty rates, the composition of the poor, material deprivation, social protection expenditures, and the role of public social transfers in combating poverty in EU countries and Croatia. We aimed to identify the dynamics of poverty and inequality in the 5year period after 2000 and identify country groups with similar characteristics with regard to the above-mentioned dimensions. In identifying country groups, our aim was also to assess the position of Croatia and new EU member states with regard to the theory of welfare states model, which on the one hand still heavily influences the research on welfare state changes in Western European countries, but on the other hand demonstrates the inability to fully capture all different welfare trends (16-18). In addition, the history and particular post-communist experience, coupled with large differences among different countries, have shown that it is necessary to analyze new emerging social-policy strategies, and not simply to extend Western welfare state models to the new EU member states (19).

Methodology

Indicators and variables (dimensions)

The analysis in this paper was based on six variables or dimensions, as follows: income inequality, objective and subjective poverty, total social protection expenditures, poverty reduction due to public social transfers, and nonmonetary deprivation.

Two basic income inequality indicators were used: the Gini coefficient and the ratio between the highest and lowest income quintile (S80/S20 quintile share ratio). The Gini coefficient measures inequality across the whole income distribution and can score values between 0 and 1, where the value 0 presents absolute or perfect equality (everyone has the same income), while the value 1 presents the maximum possible inequality (one person has all income, and all other have nothing). The closer the Gini coefficient gets to 1, the grater are the inequalities in society. S80/ S20 quintile share ratio is the ratio of total income received by the 20% of the population with the highest income to that received by the 20% of the population with the lowest income.

Objective poverty was defined in a relative sense and based on the concept of income (income poverty). We opted for the relative concept of poverty because it allowed us to analyze poverty rates in time perspective. Also, the data on absolute poverty were not available for most EU countries, in particular the "old" EU members. Relative poverty rate (or headcount rate) is the percentage of persons whose equivalized net income is below the poverty threshold. In the case of so called Laeken indicators (18 indicators of poverty and social exclusion adopted at the 2001 EU Council in Laeken, Belgium), this cut-off point is, according to the EU official poverty line, at 60% of the median equivalized income after social transfers (http://www.poverty.org.uk/summary/eu.htm). The household equivalized income was calculated as the ratio of the total net household income and the number of equivalent adults using the modified Organization for Economic Cooperation and Development (OECD) equivalence scale (this scale assigns the coefficient 1 to the first adult household member, 0.5 to other adults in the household, and 0.3 to children under 15). In this way, the same equivalent income was assigned to each household member, but taking into account the composition of the household and economies of scale.

As a part of Laeken indicators, the poverty rates were calculated for both sexes, various age groups, the most frequent activity of the respondent, and household type. A subset of those categories was used for this study. Besides, the values of the poverty thresholds expressed in purchasing power standards (PPS) were analyzed. PPS are a fictitious currency exchange rate, which eliminate the impact of price level differences across countries. Thus 1 PPS will buy a comparable basket of goods and services in each country.

Poverty reduction rate was calculated by comparing the poverty rates before and after social transfers. Poverty rates were calculated in relation to the threshold defined as 60% of the median equivalized income. All public cash social transfers were divided in two categories, as follows: pensions (old-age and survivors' pensions) and other cash transfers (eg, disability benefits, sick-leave benefits, child allowances, maternity benefits, unemployment benefits, and social assistance).

Although we chose the relative poverty line as key poverty measurement, other poverty indicators (subjective poverty rates and deprivation indices) were also used. Subjective poverty and deprivation indicators were available for only certain years. They served as an additional source of information about poverty in the analyzed countries.

According to the subjective method, it is assumed that people themselves can best assess their welfare. The subjective poverty lines can be based on an absolute or relative concept of poverty. It depends on approaches to subjective welfare. However, the subjective method has many disadvantages in terms of methodology and international comparisons (20,21). Subjective poverty rates depend to a large degree on social reference groups, previous standards of living, or future aspirations. There are wide variations in socio-economic circumstances between countries, meaning that the subjective poverty lines are less suitable for comparisons across time and space. As a rule, the subjective method results in higher poverty rates than the objective one. The strength of association between objective and subjective welfare indicators seems to be different in different studies (3,21-23) and far from being stable. In this article, to measure subjective poverty, respondents from the European Quality of Life Survey (EQLS) were asked to answer the question "Is your household able to make ends meet?" Subjectively poor were considered those answered "with difficulties" or "with great difficulties." This question is very similar to the Minimum Income Question (MIQ), which tends to identify what income is needed to "make ends meet," and the concept of absolute poverty.

To determine the non-monetary deprivation index, 9 items from the EQLS were arbitrarily selected. These 9 items referred to 3 dimensions of the living standard, as follows: housing facilities (having an indoor flushing toilet), durable goods (having car, having washing machine), and basic requirements and necessities (keeping home adequately warm; paying for a week's annual holiday; replacing any worn-out furniture; having a meal with meat/fish every second day if wanted; buying new, rather than second-hand clothes; having friends or family for a drink or meal at least once a month). For each item (except indoor flushing toilet) respondents were asked to answer if their household possessed a certain item, and if not, whether it was because they were not able to afford it or they did not want it. In doing so, preferences were separated from an inability to afford the item at issue. Thus, respondents were considered to be deprived of an item only if they responded that they were not able to afford it (enforced lack of items). Finally, shares (percentages) of people deprived of none, 1-2, 3-4, and 5-9 items were identified in each country. There always remains the issue how to construct the deprivation index. We accepted the simplest way which ascribes the same weight to each item or dimension. This method has its drawbacks because all items are not equally important. It would be better to assign different weights to different items depending on how many people in certain country possess an item (24,25). In this way, if an item is common in a particular country, a person not possessing that item would be assigned high weight, and vice versa. However, the issue of weights is not so simple and easy. Some items, eg, relating to housing dimension, may be treated equally, regardless of how many people in the country have the access to them (26). In addition, when we have the distribution which assigns different weights to different items, it remains the issue where to draw a cut-off point in the distribution below which persons are deemed to be at high risk of deprivation.

Comparisons between countries were made on single variables or dimensions. In addition, there was an attempt to compare and rank countries according to more dimensions taken together. For this purpose, five out of

Dimensions	Relative poverty rate	Gini coefficient	Social protection expenditure	Poverty rate reduction	Non-monetary deprivation
Relative poverty rate		0.89 (<i>P</i> <0.001)	-0.54 (<i>P</i> ≤0.009) -0.52 (<i>P</i> <0.011)	-0.96 (<i>P</i> <0.001)	0.52 (<i>P</i> ≤0.012) 0.61 (<i>P</i> <0.002)
Social protection expenditure			0.02 (I <u>30.011)</u>	0.55 (<i>P</i> ≤0.006)	-0.81 (<i>P</i> <0.001) -0.45 (<i>P</i> <0.032)

six dimensions were selected: income inequality (measured by the Gini coefficient), relative poverty rates, poverty reduction rates, total social protection expenditures, and nonmonetary deprivation (indicator of which was the share of respondents deprived of 5 or more items). The same weight was assigned to each dimension. A range of data values on each dimension was divided in quartiles based on data for EU countries plus Croatia. Each country could score from 0-2 points on each dimension. Concerning dimensions such as poverty reduction rates and total social protection expenditures, countries in the first quartile scored 0 and those in the fourth quartile 2 points. The distribution of scores on other three dimensions (income inequality, relative poverty rates, and non-monetary deprivation) was in reverse order - countries in the first quartile scored 2 and those in the fourth quartile 0 points. On all dimensions countries in the middle quartiles scored 1 point. Thus, each country could score maximally 10 and minimally 0 points. Significantly strong correlation was found between relative poverty rates and inequality (r = 0.89, P < 0.001), what was expected because the relative poverty rate can be taken as a measure of income inequality (Table 1). However, correlation between social protection expenditure and poverty rate reduction was weaker than expected. We assumed that excluding certain dimensions would influence the ranking of countries.

Databases

This paper draws heavily on the Eurostat data. Objective poverty rates, poverty thresholds in PPS, poverty reduction rates, inequality indicators, and risks of poverty according to gender, age, activity status or household type were all taken from the Eurostat databases (first of all, Household Budget Survey – HBS) and calculated as a part of European statistical indicators on poverty and social exclusion (Laeken indicators). Indicators for Croatia were as well based upon HBS data and calculated according to Laeken methodology, but due to delay in publication, Croatian Central Bureau of Statistics first releases on poverty indicators (27,28) were used instead of the Eurostat database.

Total expenditure on social protection was calculated using the European System of integrated Social Protection Statistics (ESSPROS) methodology. It was retrieved from Eurostat for EU 25 countries and from the Ministry of Finance for Croatia.

Subjective poverty rates and non-monetary deprivation index were calculated using EQLS database. The EQLS was carried out in 2003 in EU countries (29) and in 2006 in Croatia, thanks to the United Nations Development Program (UNDP) Croatia.

Statistical analysis

Comparisons with regard to income inequality, objective and subjective poverty rates, social protection expenditure, poverty reduction rates, and non-monetary deprivation were made between Croatia and EU countries individually. Due to data limitations, we have excluded new EU entrants Bulgaria and Romania, as well as small EU countries Luxembourg, Cyprus, and Malta. EU25 countries were divided in two groups: 1) 15 so called old member states (Austria, Germany, Italy, the Netherlands, United Kingdom, Sweden, Finland, Denmark, Luxembourg, Belgium, Spain, Greece, Portugal, Ireland, and France) which were EU members before May 2004 (EU15) and 2) 10 new member states (Malta, Cyprus, Slovenia, the Czech Republic, Slovakia, Hungary, Poland, Lithuania, Latvia, Estonia) which joined the European Union in May 2004 (NMS10). When comparisons referred to these two EU country groups, Cyprus, Malta, and Luxembourg were included in the analysis. The averages for the EU15 and NMS10 are weighted according to the size of the population across countries. Descriptive and correlation statistics was performed using Statistical Package for the Social Sciences - SPSS version 13.0 for Windows (SPSS Inc., Chicago, IL, USA).

Results

Income inequalities

When considering the Gini coefficient, both in 2001 and 2005, there was considerable variation within, but not much difference between the EU15 and the NMS10 (Figure 1). Among EU15 there were broadly speaking two groups of countries, those from Continental and Northern Europe with lower inequalities (less than 0.30), and South European and UK/Ireland countries with higher values (above 0.30). A significant rise in inequalities happened in the period 2001-2005 in Germany, Ireland, Italy, and particularly in Portugal. Yet, growth of inequality measured by the Gini coefficient was especially pronounced in the NMS10 countries. Although in 2001 both (EU15 and NMS10) had equal average Gini value, during the observed five year period inequalities in the NMS 10 rapidly overtook EU15 level, thus becoming the part of Europe with most pronounced inequalities. Despite the presence of inequality growth in all the accession countries, there was a lot of variation in inequality levels among the transition countries, with



Figure 1. The Gini coefficients in selected European countries, 2001-2005. Dash stands for the Gini value in 2001, while open circle stands for the Gini value in 2005. White and black bar mark the extent of increase or decrease in the Gini for a given entity during the observed period, respectively. *Latvia – 2000 and 2005.



Figure 2. Income quintile share ratio – S80/S20 (ratio between the national equivalized income of the top 20 per cent of the income distribution to the bottom 20 per cent) in the selected European countries, 2001-2005. Dash stands for income quintile share ratio in 2001, while open circle stands for income quintile share ratio in 2005. White and black bar mark the extent of increase or decrease in income quintile share ratio for given entity during the observed period, respectively. *Latvia – 2000 and 2005.

Baltic countries and Poland exhibiting greater inequalities. Croatia has had only moderate level of inequality and rather slow inequality growth during the past five years.

Similar results were obtained from the data on income quintile share ratio (Figure 2). When measured in such a way, inequalities have generally increased in the EU15, most prominently in Ireland, Italy, and particularly in Portugal, which reached the highest value in Europe (8.2 in 2005). Again, the NMS10 experienced much higher growth, ie, from 4.3 to 5.5. This ratio was particularly high in Baltic countries and Poland (between 6 and 7). Croatia is still the country with moderate income quintile share ratio, which rose only from 4.3 to 4.5 in the observed period.

Objective and subjective poverty

Using 60% of median national income as poverty threshold, relative poverty rates in EU countries ranged from 9% (Sweden) to 21%



Figure 3. Differentials between objective and subjective poverty rates in selected European countries, 2003. Dash stands for subjective poverty rate, while open circle stands for standardized objective poverty rate. White and black bar mark the extent to which subjective poverty rate is lower than or higher than the objective poverty rate in a given entity, respectively. *Objective poverty data for 2004. *Objective poverty indicator for 2005. *Objective poverty indicator for 2005, subjective poverty databased upon 2006 study.

(Portugal, Poland, and Lithuania) (Figure 3). Average poverty rates for the EU15 and NMS10 were almost identical (the differential was one percentage point). There were some variations in relative poverty rates both in the EU15 and NMS10. Within the EU15 we can differentiate between South European countries and UK/Ireland (in which headcount rates were between 18% and 21%) and other countries having lower poverty rates (below 15%). Among post-socialist EU countries two country groups may be also identified with respect to the level of relative poverty. The first group was consisted of countries with poverty rates between 18% and 21% (Baltic countries and Poland), while other countries made up the second group (poverty rates between 10% and 13%). Croatia had the poverty rate (18%) which was a little higher than the EU15 or NMS10 averages.

Relative poverty rates remained pretty stable in most EU countries during the 2001-2005 period. They increased maximally by 1-2 percentage points, except in Poland (5 percentage points) and Lithuania (4 percentage points). However, as population of Poland makes up a great deal of NMS10 population, this influenced the poverty rate in the NMS10 to rise by 3 percentage points. In most countries poverty rates remained unchanged (only in Ireland the poverty rate decreased by one percentage point).

The relative poverty rates are only some of the indicators of the standard of life. It is important to examine the levels of the national poverty thresholds because a lower level of threshold reflects poorer living conditions. In 2004, the average poverty rate of the EU15 was only 2 percentage points lower than that of the NMS10, but the average PPS threshold for a household comprising 2 adults and 2 children in EU15 countries was 2.8 times the average threshold in the NMS10 (Figure 4). The poverty threshold in Croatia amounted to 49% of the EU15 average. It was 37% higher than the NMS10 average. Out of the NMS10, the poverty thresholds in Slovenia and the Czech Republic were higher than the poverty threshold in Croatia. In principle, countries with lower poverty rates tend to have higher poverty thresholds and vice versa (the UK and Ireland were the exceptions).

There was much more variations in subjective than in objective poverty among the EU countries (Figure 3). Thus, there was a huge difference in subjective poverty rates between the EU15 and NMS10 (it amounted to even 29 percentage points). In all EU15 countries, except Greece, subjective poverty rates were lower than the objective ones. Contrary to that, the levels of subjective poverty were much higher than the levels of objective poverty in all the observed transitional countries. Poland and Latvia had the highest absolute differentials between objective and subjective poverty rates. They were followed by Croatia in which the differential amounted to more than 14 percentage points.

The composition of the poor (high risk groups)

Not all the social groups in any given society are faced with the same risk of poverty. In most EU countries, women were slightly more prone to poverty than men (Figure 5). Only in Poland men had higher poverty risk, while in a few other countries the risk was the same for both genders (Denmark, the Netherlands, and Slovakia). Croatia, and to lesser extent Slovenia, were the exceptions among the transitional countries, having higher difference between poverty risks of men and women and thus were more similar to South European countries, like Italy and Greece.

As far as age is concerned, differences were more pronounced. In most European countries, young and old cohorts carried an additional risk of poverty (Figure 6). Yet, whereas in the majority of EU15 countries old people were exposed to above-average risk, they were well protected from poverty in almost all NMS10 countries. On the other hand, most NMS10 countries suffered from high child poverty – a feature they shared with South Eu-



Figure 4. Poverty thresholds for four-person household (2 adults and 2 dependent children) in purchasing power standards (PPS), 2005. PPS is a fictitious currency exchange rate, which eliminates the impact of price level differences across countries. Thus 1 PPS will buy a comparable basket of goods and services in each country.



Figure 5. Poverty rates by gender in the selected European countries, 2005. Dash stands for average poverty rate, open circle for the poverty risk for women, and closed circle for poverty risk for men. Black line marks the span from the group with lowest poverty risk to the group with the highest poverty risk for a given entity.



ropean countries and UK/Ireland. In Croatia poverty risk for children was about national

Figure 6. Poverty rates for some age groups in the selected European countries, 2005. Dash stands for average poverty rate, open circle for poverty rate among persons aged 0-15 years, gray circle for poverty rate among persons older than 65 years. Black line marks the span from the group with the lowest poverty risk to the group with the highest poverty risk for a given entity.



Figure 7. Poverty rates for the population aged 16 and more according to activity status in selected European countries, 2005. Dash stands for average poverty rate (means are different from those for gender and age groups since population is limited to 16+), closed circle for poverty rate for employed persons, gray circle for poverty rate among the unemployed, square for poverty rate among the retired people, and open circle for poverty rate for other inactive population groups. Black line marks the span from the group with the lowest poverty risk to the group with highest poverty risk for a given entity. Poverty rate for the employed in Croatia applies not to all employed persons but to employees only. For the Croatian self-employed this rate is substantially higher (20% in 2001 and 14% in 2005).

average, yet growing, while rather high poverty risk for older cohorts had decreased slightly.

Employment was the most effective protection from poverty in all but 3 observed countries, although there was a substantial minority of the working poor in some Mediterranean and transitional countries (Figure 7). On the other hand, in all countries but Denmark poverty risk was the highest for the unemployed population. In 2005, between one quarter and two thirds of unemployed persons, depending on the country, lived in poverty. This risk was particularly high in transition countries, apart from Slovenia and, to a lesser extent, Croatia. In line with age-related poverty risks, in 2005 retired people in most EU15 countries had slightly above-average risk of poverty (the Netherlands, Italy, France, and Austria being the exceptions), whereas retired people in most NMS10 were better protected than an average citizen.

Since household is a basic consumption unit that shares well-being "for better or worse," it is important to analyze risk of poverty in respect to household type (Figure 8). The pattern was rather unanimous; poverty was substantially more prevalent among single parents with dependent children, single elderly households, and large families with 3 or more children, not necessarily in the given order. As well, poverty risk was about or below average among non-elderly nuclear families with two or fewer children.

Non-monetary deprivation

Non-monetary deprivation in the NMS10 was much higher than in the EU15. For example, the proportion of not deprived people in the EU15 was 3 times higher than in the NMS10 (Figure 9). The proportion of people who were deprived of more than 50% items was 6 times higher in the NMS10 than in the EU15. In this respect, Croatia was in between these two country groups. Among EU15 countries, only in Greece and Portugal the proportions of people deprived of more than 50% of items were several times higher than the average. The largest share of non-deprived population was in the Netherlands, Denmark, and Austria.

Among NMS10 countries, Lithuania and Latvia had the highest levels of non-monetary deprivation, followed by Estonia and Poland. The lowest level of deprivation was found in Slovenia and the Czech Republic. Other NMS10 countries were between these two country groups. In comparison with post-socialist countries, Croatia was ranked third (after Slovenia and the Czech Republic); about 1/3 of its citizens were not deprived and 14.5% were deprived of more than 50% of items. Only Slovenia almost caught up with EU15 countries in terms of deprivation.

Differences between the old and new EU countries were much greater in terms of nonmonetary deprivation than relative poverty rates. The ratio of the EU15 to the NMS10 for relative poverty rates was 1.1, and for nonmonetary deprivation it was 3 if measured by the share of people who were not deprived. The correlation between relative poverty and non-monetary deprivation was moderate $(r=0.52, P \le 0.012)$ (Table 1).

Social protection expenditures and the role of public social transfers

According to data on social protection expenditures, in 2004 there was a clear divide between old and new member states, although with some notable exceptions (Figure 10). In general, old member states had social expenditures which were around 26% of the country's GDP. It was highest in Sweden, where the value was even higher than 30%, while Spain and Ireland were the lower outliers with expenditures of less than 20%. In majority of EU15 countries, there was a slow rise of expenditures from 2000 to 2004. On the contrary, new member states had in general



Figure 8. Poverty rates according to household type in selected European countries, 2005. Dash stands for average household poverty rate, closed circle for poverty rate for households with two adults and three or more dependent children, square for poverty rate for households with two adults and two dependent children, rhomb for poverty rate for households with two adults of a dwithout dependent children, square for poverty rate for the elderly (65+) single adult households, and open circle for poverty rate for single parents with dependent children. Black line marks the span from the group with the lowest poverty risk to the group with the highest poverty risk for a given entity.

lower expenditures, which in some of them have even been decreasing for the last years. Exceptions were Slovenia and Croatia with higher social expenditures, although Croatian social expenditures were also decreasing significantly in last years (from 26.7% in 2000 to 23.4% in 2004).

As far as the efficiency of social transfers in the reduction of poverty is concerned, the majority of old member states had rather high poverty reduction rates due to both pensions and other social transfers, totaling between 60% and 70% for most countries (Figure 11). In Sweden, poverty reduction is as high as 79%, whereas social transfers in Greece, Ireland, Italy, Portugal, Spain, and the UK were below-average effect in reducing poverty. Pretty high degree of poverty reduction was also observed in the majority of new member states, with lower percentages in three Baltic states and Croatia. Still, even in those countries, poverty reduction rates were similar

Layers	Score (1-10) [†]	Countries (score)		
5	8-10	Sweden (10), Austria (9), Denmark (9), Finland (8)		
4	6-7	the Netherlands (7), France (7), Slovenia (7), the Czech Republic (8), Belgium (6), Germany (6), Hungary (6), Italy (6)		
3	4-5	UK (5), Croatia (5), Spain (4), Slovakia (4)		
2	2-3	Greece (3), Ireland (3), Portugal (3), Poland (2), Estonia(2)		
1	0-1	Latvia (1), Lithuania (0)		

In - Income inequality (measured by Gini coemclents), 2 - relative poverty rates, 3 - poverty reduction rates, 4 - total social protection expenditures, and 5 - non-monetary deprivation (indicator of which was the share of respondents deprived of 5 or more items). TA range of data values on each dimension was divided in quartiles on the basis of data for EU countries plus Croatia. Each country could score from 0-2 points on single dimentary of the social dimension was divided in quartiles on the basis of data for EU countries plus Croatia. Each country could score from 0-2 points on single dimentary of data values on each dimension was divided in quartiles on the basis of data for EU countries plus Croatia. Each country could score from 0-2 points on single dimentary of the social dimension was divided in quartiles on the basis of data for EU countries plus Croatia. Each country could score from 0-2 points on single dimentary of the social dimension was divided in quartiles on the basis of data for EU countries plus Croatia. Each country could score from 0-2 points on single dimentary of the social dimension was divided in quartiles on the basis of the social dimension dimension was divided in quartiles on the basis of the social dimension d

sion. Concerning dimensions such as poverty reduction rates and total social protection expenditures, countries in the first quartile scored 0 and those in the fourth quartile 2 points. The distribution of scores on other three dimensions (income inequality, relative poverty rates and non-monetary deprivation) was in reverse order: countries in the first quartile scored 2 and those in the fourth quartile 0 points. On all dimensions countries in the middle quartiles scored 1 point. Thus, each country could score maximally 10 and minimally 0 points.

(or even higher) to reduction rates in Spain, Greece, and Portugal. The effect of pensions varied due to different pension arrangements in different states, but in cases where pensions did not have significant effect, this was compensated by other social transfers. Thus, Den-



Figure 9. Share of the people affected by different levels of non-monetary deprivation for selected European countries, 2003. Non-monetary deprivation was based on nine items from the EQLS. These 9 items referred to 3 dimensions of the standard of life: housing facilities (having an indoor flushing toilet), durable goods (having a car, having a washing machine) and basic requirements and necessities (keeping home adequately warm; paying for a week's annual holiday; replacing any worn-out furniture; having a meal with meat/fish every second day if wanted; buying new, rather than second-hand clothes; having friends or family for a drink or meal at least once a month).) Respondents were asked whether their household possessed each item (except indoor flushing toilet), and if not, whether it was because they were not able to afford it or they did not want it. Respondents were taken to be deprived of an item only if they responded not to be able to afford it (enforced lack of items). Shares (percentages) of people deprived of none, 1-2, 3-4 and 5-9 items were taken as indicators of different levels of non-monetary deprivation. Dash stands for the proportion of those not deprived, open circle for the proportion of those deprived of 1-2 items, gray circle for the proportion of those deprived of 3-4 items, and black dot for the proportion of those deprived of 5-9 items. Black line links different levels of non-monetary deprivation for a given entity.

mark, Finland, Sweden, and Croatia had significantly higher reduction rates due to other social transfers rather than pension, although Croatia had lower overall reduction rate than the mentioned countries.

Provisional ranking of countries

In previous parts of the article, countries were analyzed on each dimension separately. However, if countries are compared according to the five selected dimensions taken together (the Gini coefficients, relative poverty rates, poverty reduction rates, total social protection expenditures, and non-monetary deprivation), they can be roughly ranked into five groups or layers (Table 2). All countries in the layer with the highest score are so called old member states (three Scandinavian countries and Austria). The fourth layer comprises continental European countries (the Netherlands, Belgium, Germany, France), Italy (as South European country) plus Slovenia, the Czech Republic and Hungary. Only the countries in these two layers scored more than half of the points on the 0-10 scale. The worst situation was in Baltic countries (layer 1) and in the country group consisting of two South European countries (Greece, Portugal) plus Ireland and Poland. Croatia was in the middle of the distribution with Spain, Slovakia, and the UK. Out of the NMS10, only Slovenia, the Czech Republic, and Hungary were in the upper half of the distribution. On the other hand, as

much as five EU15 countries were in the bottom half of the distribution (a mix of South European and UK/Ireland countries).

Discussion

Our data demonstrated that each country had its specificities and that sometimes not easily observable trends existed. Yet there were some common patterns that enabled us to group the observed countries. Concerning the inequality (the Gini coefficient and quintile share ratio) and poverty data (relative poverty rate) there was a clear divide within the EU15 between UK/Ireland and South European countries on the one hand, and Continental and Nordic countries on the other. Among the new EU countries, Baltic countries emerged as a distinct group, in many cases coupled with Poland. Slovenia and the Czech Republic are usually positioned on the other end, showing more favorable conditions, while other countries are mostly in between, having different values on different indicators. In the period 2001-2005, EU countries experienced very slow rise of relative poverty, and a somewhat more marked rise of inequality, which was rather significant in a few countries, particularly in Portugal, Poland, Latvia, and Lithuania.

The rise of inequality and poverty in new EU member states is mainly connected with the nature of transition which radically changed the communist system of social security, and introduced the market-based inequalities. Transition difficulties, visible in the significant drop of GDP and rising unemployment, particularly in the beginning of the 1990s, contributed to the change in the social structure of society (30,31). The level of inequality in the communist period was low in all countries, although there were also marked differences that, in association with different transition processes, played a role in the variations existing today in the transition countries.

In all NMS10 subjective poverty rates were higher than the objective ones. The reverse situation occurred in all EU15 countries with the



Figure 10. Social protection expenditures as percentage of gross domestic product in selected European countries, 2000-2004. Dash stands for social protection expenditure in 2000, while open circle stands for social protection expenditure in 2004. White and black bar respectively stand for the extent of increase or decrease in social protection expenditures for a given entity during the observed period.



Figure 11. Poverty reduction rates in selected European countries, 2005. Total bar height stands for total poverty reduction due to social transfers, black bar segment stands for poverty reduction due to pensions (other social transfers excluded from income), while grey bar segment stands for additional poverty reduction rate when other social transfers are included.

exception of Greece. Wider differentials between objective and subjective poverty rates in the NMS10 might be influenced by more factors. First, as citizens in the NMS10 live in poorer living conditions, their aspirations to a better material standard of living have been much more pronounced. Second, according to the so called emulation hypothesis, subjective perceptions of material well-being are much more strongly associated with patterns of imitation of the reference group than with real financial capacities (32). Third, all post-socialist countries experienced the rise in inequality and an economic differentiation in a short period of time, which created an impression of sharp inequalities and social injustice. Besides, some elements of socialist legacy, like egalitarianism and paternalism, were still relatively strong (33).

This study showed that the relationship between income poverty and non-monetary deprivation was not clear cut and that income poverty rates themselves can sometimes be confusing or misleading. For example, differences in relative poverty rates between EU countries are small, but deprivation indicators point to much wider gaps. Therefore, it is necessary that income poverty indicators are followed by other indicators of living standard. Many authors argue that most poverty lines (be they absolute or relative, objective, or subjective) are linked to the concept of income poverty. In contrast to this, the approach of deprivation reflects multi-dimensional character of poverty. The deprivation method attempts to measure poverty through non-possession/non-use of certain goods/services and non-participation in certain activities. It is important to point out that non-possession or non-participation is not voluntary ("enforced lack of necessities"). However, the deprivation method is not non-problematic. The first challenge is how to choose "necessities" (goods, services, activities) the lack of which unambiguously indicates poverty. Townsend (3) preferred objective approach (necessities specified by experts), while Mack and Lansley (34) developed the consensual and subjective one (enforced lack of goods/services/activities which at least 50% of the population regard as necessary). Townsend and Gordon (35) argue that "criteria of need therefore to be sought externally to social perception." "Consensual assessment" of the population about standard of living is valuable, but is not enough. Therefore, the main problem of the deprivation method is an arbitrary choice of items and variability of the poverty line. Besides, the analysis of results obtained by using deprivation standards is very complex, as well as international comparisons. Findings from poverty studies suggest that income poverty and deprivation poverty are not identical concepts and that there is a significant mismatch between income approach and life-style deprivation (36-40). All poor people are not deprived in terms of necessities. Therefore, most scientists support an approach which would combine income with deprivation indicators (the poor would be those who have both low income and low standard of consumption).

The efficiency of social transfers in the reduction of poverty is one of the main indicators of any given type of welfare regime. Together with social expenditures, it indicates the willingness and ability of states to increase the well-being of its citizens. Our data on poverty reduction rates in old member states showed that lower reduction rates were noticed in liberal countries such as UK/Ireland and South European countries (Greece, Italy, Portugal, and Spain). It is interesting to note that although Sweden has the highest reduction rate, there are no much differences between other Nordic (Finland, Denmark), and Continental countries (like Germany, France, or Austria). Despite lower social expenditures, with the exception of Baltic states, new member states had pretty high poverty reduction

rates. So far, Croatian pension expenditures have been very inefficient in reducing poverty, but other social transfers, although comprising much lower share in social expenditures, were among the most efficient in Europe in respect of reducing poverty rate (15).

There is also a lot of discussion in the literature about trends in social expenditures in general, and particularly among the countries which joined the EU in the 1980s, and which later started to develop their public welfare programs. Our data confirmed differences in social expenditures between different countries but we noticed a certain degree of convergence among EU15 countries and even a slow rise in expenditures, which is a continuation of the trend already observed in the 1990s, and described as a catch-up process inside which the former laggards try to catch up and expand public provision (41). Contrary to the catch-up process in old EU member countries, our data showed a decrease in social expenditures in many of countries which joined the EU in 2004. This was particularly the case in Latvia, Lithuania, Croatia, and Slovakia, but happened as well in Slovenia and Estonia, although to a much lower degree. The relative drop of expenditures can be partly explained by a faster rise of the GDP in the majority of new EU states in the last years, but it is important to note that in Baltic states this was happening in the context of generally very low expenditures. Due to different historical reasons, new EU member states had very low social expenditures, with the exception of Croatia and Slovenia, countries with a common legacy of relatively developed social security programs during the communism, particularly in the field of pensions and health care. In the Croatian case, higher social expenditures were partly connected with expenditures for war victims and veterans. Data on expenditures might support criticism by social policy scholars who indicated that during the EU negotiations

too much emphasis was put on the economic reconstruction and the need for lower public and social expenditures in order to boost economy. This was done with little regard to the fact that the EU is also a social model with firm social values, and despite the fact that the transition generated social policy problems (42). There were, however, opinions that the catch-up in a case of old EU members started after joining the EU club, and that the same can be expected with new EU member states (43), although recent data are not so convincing in support of this hypothesis. Still, further data and longer period of time are needed in order to detect possible catch-up process for some of the new EU states.

Although criticized by many scholars as an approach which is too narrow to embrace all the different social policy issues, the literature on social policy still relies heavily on Esping-Andersen welfare state models which differentiate between social-democratic or Nordic countries (like Sweden), liberal countries (UK/Ireland), and Continental or conservative-corporative (like Germany) (16,17). Social-democratic countries exhibit high level of public and social expenditures, considerable state provision in social services, comprehensive protection from social risks, and high level of poverty reduction. In liberal countries public and social expenditures are rather low, the role of state is moderate and, consequently, social security is to greater extent provided from market and family arrangements. These countries also have higher poverty rates. Continental Europe is in between these two groups concerning expenditures and poverty rates, and in these countries social security is based upon stable employment of the breadwinner and contribution based insurance, while the family is also important for security of its members. Although South European countries share many similarities with continental Europe, due to specific historical reasons, they are usually considered a separate model (44). Post-communist countries have still not been researched in terms of welfare models, even though there were some attempts to construct Eastern Europe model. Some countries, particularly those approaching the EU in the 1990s, had been at the same time exposed to European social democrats' and Christian democrats' ideas but also to IMF or World Bank liberal and residualist ideas (19).

Our analysis to a certain degree confirmed the relevancy of the welfare model approach, although considering poverty rates and inequality data there is no much difference between countries belonging to social-democratic and conservative-corporative welfare models. On the other hand, we confirmed the specificities of liberal and South European countries, which still compose distinct groups. Differences among post-communist countries proved to be so deep and consistent that is not justified to speaking generally about the NMS. This is further confirmed by our ranking of countries, which can provide useful additional insights, as welfare model approach concentrates on important features in construction of models and consequently ignores many details. The presented ranking also accounts for recent changes, like those in Portugal, which experienced a dramatic rise in inequality in the last five years. Still, new studies are needed which would combine different indicators in order to detect consistent patterns among EU welfare states, and in particular, among post-communist countries, which have not been researched enough yet.

This study could be relevant for policy makers in the field of combating poverty and social exclusion, because Croatia only started to formulate its policy on poverty. Although due to the transition and war Croatia experienced a large increase in different social problems, there was not a single anti-poverty program during the 1990s. Welfare schemes through which all the common social risks were to be addressed (pensions, health, unemployment, social assistance) were inherited from the socialist regime and barely modified. The first "Program combating poverty and social exclusion" was passed by the Croatian Government in 2002, which was built on data available at that time. It was declaratory in its nature, implemented only partly, and not subjected to any evaluation at all (45). In line with the EU negotiation process, and based on newly acquired and analyzed data, Croatia started to prepare jointly with the European Commission a new so-called Joint inclusion memorandum (JIM), a comprehensive program against poverty and social exclusion. According to the Treaty of Amsterdam, Lisbon agenda, and further EU Council decisions, JIM is obligatory for all member states and is based on the so-called open method of coordination (OMC) (46). This process started in Croatia for the first time in October 2005, and following the massive consultation process with several ministries, regional and local governments, social partners, welfare institutions, and civil society organizations and experts, JIM was signed by the Croatian Government and the European Commission in March 2007 (47). An implementation process has started, and an evaluation based on firm data will subsequently show the success of this process.

The concept of human development is connected with human capabilities, with what people can do and what they can be. However, the development of these capabilities is constrained when people are poor, ill, or discriminated (48). This article demonstrated that poverty in some, particularly post-socialist countries, is widespread and can seriously limit human development. Therefore, it is important to research and monitor different aspects of poverty in order to advance human development.

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