Should Income Inequality Be Reduced and Who Should Benefit?

Redistributive Preferences in Europe and Central Asia

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Abstract

This paper examines support for reducing inequality and for income redistribution to specific groups in Europe and Central Asia. The paper uses the Life in Transition Survey to analyze cross-country differences in redistributive preferences and the determinants of individual-level differences in such preferences. The analysis tests for various possible motivations, such as self-interest, beliefs about the fairness of the income-generating process, past social mobility experience, or expectations of future social mobility. Fewer people wanted to reduce the gap between the rich and the poor in 2010 than in 2006 in transition countries. Support for redistribution toward specific groups is highest for the disabled and the elderly, but there is high heterogeneity across countries in support for various redistributive

policies, as well as in the alignment between average beliefs and actual policies. The empirical analysis confirms the importance of beliefs about fairness in influencing redistributive preferences, together with self-interest and past and expected social mobility in European Union member states (Western European and new member states), but only to a limited extent in the non-European Union member state group of transition countries. Regarding redistribution to specific groups, self-interest appears to be an important motivation for support for the elderly and families with children, whereas values and beliefs are important drivers of support for the working poor and the unemployed. Although framing matters, the results are broadly robust to alternative measures of support for reducing inequality.

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Should Income Inequality Be Reduced and Who Should Benefit? Redistributive Preferences in Europe and Central Asia

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1. Introduction

High income inequality can affect individual welfare in multiple ways, including by influencing tax rates, investment in human and physical capital and economic growth (Alesina and Rodrik, 1994; Persson and Tabellini, 1991) or through its effects on collective action and the provision of public goods (Bardhan, Ghatak and Karaivanov, 2007), or crime (Ehrlich, 1973). It can also directly affect reported happiness: Alesina, Di Tella and MacCulloch (2003) find, for example, a large negative effect of inequality on happiness in Europe, but not in the US (where social mobility is perceived to be higher).

It is therefore to be expected that individuals may have preferences over the distribution of income in society. Such preferences (based on perceptions of inequality – and beliefs on what governments should do about it) may translate into actual policies depending on the political model that applies in any given country, whether the median voter theorem holds, or whether economic elites or interest groups drive policy outcomes.² To the extent that individual redistributive preferences have an influence on redistributive policies, differences in who supports income redistribution, for whom and why can lead to different equilibrium levels of inequality and redistribution in society.

This paper examines redistributive preferences across transition countries of Europe and Central Asia, and contrasts transition countries with a number of countries in Western Europe. It assesses the degree of inequality aversion and support for various redistributive policies across transition countries, and examines the characteristics of those supporting a reduction in inequality and greater assistance to the poor. In addition, the paper tests various explanations for redistributive preferences (including past mobility, aspirations for future mobility, beliefs about fairness, the impact of the recent financial crisis, and the degree of risk aversion of the respondents) in Europe and Central Asia, using a single survey instrument (the Life in Transition Survey). It also analyzes preferences for redistribution to specific population groups, which also sheds light on the motives of individual support for redistribution.

The paper is structured as follows. Section 2 reviews various explanations for redistributive preferences in economic theory and literature, and presents the empirical approach for testing these hypotheses in this paper. Section 3 presents the data and descriptive statistics at the country level. Section 4 discusses the results of the empirical analysis of individual support for reducing inequality and preferences for redistribution to specific groups. Section 5 concludes.

2. Explaining preferences for redistribution: Theory and empirical approach

² For example, in the U.S., Gilens and Page (2014) reject the hypothesis that ordinary citizens have unique, substantial power over policy decisions and finds that they have little or no independent influence on policy. Instead, to the extent their preferences are reflected in policy, it is because they are positively correlated with those of economic elites.

Empirical studies show that preferences for redistribution vary according to socio-demographic characteristics such as age, gender, education and employment status. Alesina and Giuliano (2009) find, based on US data from the General Social Survey, but also based on international data from the World Values Survey, that preferences for redistribution increase concavely with age, are higher among women, and among the unemployed. At the same time, being married, and a higher level of education have a negative association with preferences for redistribution. Broadly similar findings are reported by Corneo and Gruner (2002) and by Bernasconi (2006) based on data from the International Social Survey Programme (ISSP), and by Luttmer and Singhal (2011) based on data from the European Social Survey (ESS). On the other hand, Gaviria, Graham and Braido (2007), analyzing data from the Latinobarometro survey, find that preferences for redistribution do not vary substantially according to age or marital status, although they also find a lower preference for redistribution among women.

A detailed review of theoretical approaches to modelling redistributive preferences is provided by Alesina and Giuliano (2009). In particular they highlight four types of models: (i) static models such as the one put forth by Meltzer and Richard (1981) where individuals only care about their consumption and differ in their productivity levels; the equilibrium tax rate then depends on the difference between the productivities of the average and median voters; (ii) dynamic models such as the one proposed by Benabou and Ok (2001) in which expected future mobility has an effect on current preferences for redistribution; (iii) models in which inequality enters indirectly into the utility function, because of various factors such as, for instance, crime, incentive effects, or externalities in education; and (iv) models in which inequality enters directly into the utility function, i.e. individuals may have particular concepts of social justice (e.g. libertarian, Rawlsian) which determine the degree of their intrinsic aversion to inequality. Some other models have also highlighted the importance of past mobility, because of reasons of dynastic learning (Piketty, 1995), as well as that of social competition and beliefs about the fairness of the distribution of fortunes on society (Alesina and Angeletos, 2005).

A number of recent empirical studies confirm these predictions from theoretical models. In particular, redistributive preferences have been found to be influenced by factors such as beliefs about hard work and luck, perceptions of fairness, past mobility, religion, political ideology, attitudes toward markets, cultural norms, or attitudes toward risk (Corneo and Gruner 2001; Fong 2001; Alesina and La Ferrara 2005; Alesina and Giuliano 2009; Luttmer and Singhal 2011; Cojocaru 2014a,b). Although some of these studies include a few Eastern European countries, there is little evidence on the demand for redistribution in transition countries.³

In this paper, we use the Life in Transition survey allows to empirically test all of the above theoretical propositions based on comparable data from a large set of countries. The paper

³ The ESS data used by Luttmer and Singhal (2011) includes 11 countries (of which all except Russia and Ukraine are currently EU members), but their analysis does not focus on the specificity of transition Economies. Cojocaru (2014b) also analyzes data from the Life in Transition Survey, but focuses primarily on the prospects of upward mobility (POUM) hypothesis.

assesses the extent to which the variation in the attitudes toward income inequality and assistance to the poor can be attributed to differences in core socio-demographic characteristics such as age, sex, level of education and employment status, but also to a number of beliefs about the institutional environment in the respondents' country of residence. In particular, we examine:

- *Past social mobility*, based on the respondent's reported location on the society's social ladder today, and four years ago⁴;
- *Expectations of future social mobility*, based on the respondent's reported location on the society's social ladder today, and expected location on the ladder 4 years into the future;
- *Beliefs about the determinants of need and success in society*:
 - Respondents were asked to indicate the most important factor for success in life (effort and hard work, intelligence and skills, political connections, or breaking the law);
 - Respondents were asked to indicate the most important determinant of need in society (bad luck, laziness, injustice, inevitable part of modern life);
- *Degree of risk aversion*, based on a hypothetical scenario.⁵

Finally, to further explore the drivers of redistributive preferences, we also consider preferences for redistribution to specific groups, such as the disabled, families with children, the elderly, the working poor, the unemployed, and war veterans.

For comparative purposes, we present results for the pooled sample as well as three groups of countries: Western Europe, transition economies that have joined the European Union ("new" EU member states), and transition economies that are not part of the European Union.

3. Data and summary statistics

The analysis is based on the 2006 and 2010 rounds of the Life in Transition Survey (LITS). The LiTS provides harmonized data based on a single survey instrument for 30 transition countries. In addition, 5 countries in Western Europe were added in the second round of the survey in 2010 (France, Germany, Great Britain, Italy and Sweden). The sample was drawn to make the survey

⁴ The question is phrased as follows: "Please imagine a ten-step ladder where on the bottom, the first step, stand the poorest 10% people in our country, and on the highest step, the tenth, stand the richest 10% of people in our country. On which step of the ten is your household today?" This is followed by the question: "Now imagine the same ten-step ladder 4 years ago. On which step was your household at that time?"

⁵ "I will now ask you another hypothetical question. Imagine that you are a farmer. If all goes well, you expect to sell your harvest for [INSERT COUNTRY SPECIFIC AMOUNT] in a few more months. However, there is a risk: If there is a drought the harvest will be lost --this has happened to your neighbors in half of the recent years. You consider installing an irrigation system which would protect your crop in case of a drought, but it costs [INSERT COUNTRY SPECIFIC AMOUNT] and you would need to sell your car to buy it. Which of the following is more likely to be your decision?" *I would take the risk and hope there is no drought or I would sell my car and buy an irrigation system.*

representative of the adult population in each country.⁶ A net sample size of approximately 1,000 households was selected in each of the countries, although in several countries this net sample size was boosted to 1,500 in 2010 (Serbia, Poland, Russia, Ukraine, Uzbekistan and Great Britain).

In addition to information on opinions and attitudes in Europe and Central Asia, the LiTS also contains data on household welfare and individual characteristics. We construct, for the pooled sample and separately for each country, an asset index as a measure of household welfare (see Cojocaru and Diagne, 2014). The asset index is based on household ownership of the following items: a car, a secondary residence, a bank account, a debit card, a credit card, a mobile phone, a computer, access to internet at home, and household access to water, electricity, a fixed telephone line, central heating, public (piped) heating, and pipeline gas. The asset index is based on a linear combination of household asset ownership and housing characteristics. Principal components analysis (PCA) is used to derive weights (Filmer and Pritchett, 2001).

Table 1 shows summary statistics for the main variables considered in this paper.

⁶ The sample design for the two surveys was a two-stage cluster sample design within each country. In the first stage, primary sampling units (PSUs) were randomly selected systematically according to a probability proportionate to their size (population 18 and older). In the second stage, 20 households were randomly selected from each of the selected PSUs.

Table 1. Summary statistics

Variable	Obs	Mean	St. dev.	Min	Max
<i>The gap between the rich and the poor should be reduced</i>					
strongly disagree	35364	0.024	0.153	0	1
disagree	35364	0.061	0.239	0	1
neither agree nor disagree	35364	0.136	0.342	0	1
agree	35364	0.430	0.495	0	1
strongly agree	35364	0.350	0.477	0	1
Inequality preference (1-10)	35417	6.638	2.717	1	10
Assisting the poor (1st or 2nd priority of Government)	36796	0.258	0.437	0	1
<i>Age</i>					
18-24	36796	0.068	0.252	0	1
25-34	36796	0.183	0.386	0	1
35-44	36796	0.199	0.400	0	1
45-54	36796	0.179	0.383	0	1
55-64	36796	0.139	0.346	0	1
65+	36796	0.232	0.422	0	1
<i>Education</i>					
Primary or less	36786	0.101	0.302	0	1
Secondary	36786	0.464	0.499	0	1
Post-secondary	36786	0.435	0.496	0	1
Employed	36796	0.534	0.499	0	1
Married	36796	0.552	0.497	0	1
Not religious	36796	0.129	0.335	0	1
Household with no children	36796	0.679	0.467	0	1
Rural	36796	0.355	0.478	0	1
HH has a business	36796	0.136	0.343	0	1
Self-employed	36796	0.081	0.273	0	1
Main income: pensions or state benefits	36796	0.337	0.473	0	1
<i>Key determinant of success</i>					
Effort and hard work	36796	0.456	0.498	0	1
Intelligence and skills	36796	0.282	0.450	0	1
Political connections	36796	0.129	0.335	0	1
Breaking the law	36796	0.063	0.242	0	1
Other (specify)	36796	0.070	0.255	0	1
<i>Key determinant of need in society</i>					
Unlucky	36796	0.090	0.287	0	1
Laziness and lack of willpower	36796	0.225	0.418	0	1
Injustice in our society	36796	0.428	0.495	0	1
Inevitable part of modern life	36796	0.181	0.385	0	1
Other	36796	0.076	0.264	0	1
Welfare ladder (past)	34974	4.747	1.795	1	10
Welfare ladder (present)	35230	4.485	1.696	1	10
Welfare ladder (future)	30300	4.839	1.994	1	10
Not affected by crisis	34542	0.348	0.476	0	1
<i>Degree of risk aversion</i>					
Risk-loving (would take risk of drought)	36796	0.319	0.466	0	1
Risk-averse (would sell car and buy irrigation equipment)	36796	0.524	0.499	0	1
Do not know	36796	0.158	0.364	0	1
Markets always preferable	36796	0.340	0.474	0	1

Source: LiTS II. Notes: Weighted estimates

Subjective preferences for redistribution

The analysis focuses on a set of questions in the LiTS survey aimed at eliciting the respondent's views on economic inequality, government's policy priorities, and on the importance of support (both personal and by the government) to the poor and various groups. Taken together, responses to these questions can be viewed as a proxy for unobserved preferences over redistributive policy in the region. Two questions elicit the degree of inequality aversion of the respondent:

- (i) Respondents were asked to what extent they agreed or disagreed with the statement: *The gap between the rich and the poor in our country should be reduced.*
- (ii) Respondents were asked to indicate whether they thought that *"Incomes should be made more equal"* or that *"We need larger income differences as incentives for individual effort"*.

The analysis of the above measures is supplemented by the following measures eliciting the respondent's views on government support to the poor:

- (iii) Respondents were asked to identify what should be the first and second priorities for extra government spending (choosing between education, healthcare, housing, pensions, assisting the poor, the environment, public infrastructure, etc.).
- (iv) Respondents were asked whether they would be willing to give part of their income or pay more taxes for various public policy objectives, including to "help the needy".
- (v) Finally, support for redistribution for specific groups was elicited by asking "which groups of citizens deserve support from the government", possible answers including: elderly, disabled, families with children, war veterans, working poor, unemployed, or nobody.

While the literature refers to both questions (i) and (ii) as measures of inequality aversion (mostly without distinguishing between them), they may reflect and be driven by very different factors. The correlation between responses to question (i) and (ii) is weak. On average, the individual correlation coefficient between the 1-10 step inequality measure and the 5-step inequality measure is about 13 percent, with the highest correlation in the countries of Western Europe.⁷ Quite likely, the important difference between the two questions is the fact that the former is framed in terms of helping the poor catch up and the latter suggests that higher inequalities can have beneficial effects by incentivizing effort, and also refers to "making

⁷ The countries with highest correlation are Germany (42%), Czech Republic (35%), France (31%), Sweden (31%) and the UK (30%).

incomes more equal”, which is a more neutral statement than “bridging the gap between the rich and the poor.”⁸ In section 4, we examine inequality aversion as measured by the two questions.

The importance of framing the question for eliciting the respondents’ preferences for redistribution is also confirmed by observing the weak correlation of (i) and (ii) with the belief that assisting the poor should be among the top two priorities for extra government spending. Preferences for stronger government involvement in helping the poor appear to be slightly better, but still weakly aligned with the respondents’ own willingness to help either by giving part of their income or to pay higher taxes, and with the belief that the (working) poor deserve government support.

Trends in inequality aversion

Comparing levels of inequality aversion across the two rounds of the survey, these preferences are not stable, which does not suggest a model of preferences determined by stable social norms. While the preference for reducing the gap between the rich and the poor remains widespread in the region, it decreased markedly during the 2006-2010 period. Overall, in 2010, 70 percent of adults agreed that the gap between the rich and the poor should be reduced, versus 79 percent in 2006 for the same sample of countries⁹. The decline in the preference for redistribution can be observed in the majority of the countries in the LiTS sample (see Figure 1).

⁸ This would be in line with the findings of Pirttila and Uusitalo (2010) who find based on household survey data from Finland that two scenarios, one based on comparisons of income distributions, and one based on costly transfers from the rich to the poor, generate rather different estimates of the degree of inequality aversion.

⁹ Five Western European countries (France, Germany, Italy, UK, and Sweden), and, additionally, Kosovo, are included in the 2010 data, but not in the 2006 data.

Figure 1: Evolution of the preference for a smaller gap between the rich and the poor in Europe and Central Asia, 2006-2010

Different possible theories may be offered to explain the observed trends, but none are fully consistent with the observed data. Lower support for reducing inequality could be related to changes in beliefs related to past or recent experience with income shocks, or changes in expectations about future social mobility as a result of the economic context. Between 2006 and 2010, most countries in the region experienced solid economic growth, followed by a deep recession in 2008-2009. However, across countries, there does not seem to be a clear link between the changes in expressed inequality aversion and the crisis.^{10, 11}

Inequality aversion and redistributive preferences across countries

In 2010, the preference for a smaller gap between the rich and the poor was higher in Western Europe as compared with transition countries. Taking the 5 Western European countries in the

¹⁰ Among the countries where support for reducing inequality declined most are countries that experienced large drops in output during the crisis: GDP fell by 6 percent in Moldova, 14 percent in Armenia and 15 percent in Ukraine in 2009. Conversely, Belarus, Azerbaijan, Albania and Kazakhstan, countries that experienced some of the largest reductions in the preference for a smaller gap between the rich and the poor – weren't affected as much by the recent financial crisis (all of these countries experienced positive economic growth in 2009). Similarly, in countries like Latvia and Lithuania, where GDP fell by 18 and 15 percent respectively in 2009, the preference vis-à-vis the size of the gap between the rich and the poor remained largely unchanged during the period.

¹¹ Despite the increased emphasis on inequality in the popular press in the aftermath of the recent financial crisis, only a few studies look explicitly at the link between the crisis and preferences for redistribution, with mixed results. Margalit (2013) finds negative income and employment shocks to be associated with increased support for social safety nets. Fisman, Jakiela and Kariv (2014) experimentally create recessionary conditions in generalized dictator games and find that the economic downturn makes participants put a greater emphasis on efficiency versus equality.

sample (France, Germany, Italy, Sweden and the UK), 84 percent of the adult population in this group either agreed or strongly agreed that the gap between the rich and the poor should be reduced, compared to 72 percent in the new EU Member States and 74 percent in the non-EU Transition Economies. In the western European sample, the preference for equality was strongest in France (where 88 percent of adults agreed or strongly agreed that the gap between the rich and the poor should be reduced) and weakest in Sweden and the United Kingdom (where 79 percent of adults expressed a similar preference).

Among transition economies, the belief that the gap between the rich and the poor should be reduced is more widespread in the Former Yugoslavian states (with the exception of Bosnia and Herzegovina) and in the Baltics. It is also high in Uzbekistan and especially in Georgia, which tops the list of LiTS countries in 2010. Western CIS countries (Belarus, Moldova, Ukraine) are at the other end of the spectrum, with low average preference for redistribution. In three countries (Azerbaijan, Belarus and the Czech Republic) the share of those who agreed or strongly agreed that the gap between the rich and the poor should be reduced was below 60 percent. Differences across countries are only weakly correlated with average beliefs on the determinants of need (luck, laziness or injustice) or on whether effort drives success.

Cross-country differences in support for reducing inequality can be related to existing differences in inequality or to differences in the extent of actual income redistribution across countries. We plot the proportion of people who agree that incomes should be more equal against income inequality in the countries in our sample, measured by the Gini coefficient. Among European countries, agreement that incomes should be made more equal is generally higher in more unequal countries (Figure 2). However, as could be expected, this relationship is not linear. In countries where there is a high degree of inequality aversion, this can have led (through the political process) to high income redistribution through government policies and therefore resulted in low levels of income inequality. At the same time, despite aversion for income inequality, respondents may believe that there is no need for further redistribution or more reduction in income inequality because their preferences have already been incorporated in government policies and they are satisfied with the outcome. This can be seen more clearly by considering beliefs on priorities for future government policy. We plot the proportion of people who think that assisting the poor should be the first priority of the government against the extent of income redistribution achieved by the country. The latter is measured by taking the difference between the income Gini before and after social transfers. This is an imperfect measure of the extent of income redistribution across countries, as it does not include the effect of taxes on income distribution, which is important in many European countries. As can be seen in Figure 3, where current income redistribution through government transfers is highest (for example in Sweden or the Czech Republic), fewer people think assisting the poor should be the first priority of the government.

Figure 2: Income inequality and support for reducing inequality

Source: LITS II, WDI

Figure 3: Extent of income redistribution through public transfers and support for assisting the poor as the first government priority

Source: LITS II, WDI

Support for specific groups

Generally speaking, there is a high degree of agreement that the disabled and the elderly deserve support from government: overall, 75 percent of respondents believe that the disabled deserve government support, and 71 percent that the elderly deserve government support. Support for redistribution for other groups is weaker: 64 percent agree that families with children should be supported, 53 percent for the working poor, 44 percent for the unemployed and 43 percent for war veterans (table 2).

Table 2: Which groups deserve support from the government?

	disabled	elderly	families with children	working poor	unemployed	war veterans	nobody
EU							
France	0.78	0.66	0.44	0.71	0.40	0.20	0.02
Sweden	0.83	0.73	0.52	0.56	0.70	0.29	0.01
Germany	0.67	0.48	0.77	0.55	0.42	0.27	0.02
Italy	0.59	0.68	0.52	0.58	0.61	0.12	0.01
Great Britain	0.70	0.79	0.47	0.60	0.31	0.66	0.01
NEW EU							
Latvia	0.86	0.80	0.87	0.55	0.52	0.43	0.00
Bulgaria	0.82	0.81	0.74	0.51	0.61	0.30	0.00
Czech Rep.	0.81	0.80	0.77	0.40	0.31	0.23	0.02
Slovenia	0.80	0.74	0.76	0.81	0.55	0.31	0.00
Slovakia	0.77	0.80	0.85	0.62	0.42	0.27	0.01
Romania	0.75	0.87	0.65	0.53	0.48	0.45	0.00
Lithuania	0.74	0.74	0.76	0.55	0.51	0.24	0.01
Estonia	0.74	0.64	0.83	0.50	0.59	0.28	0.00
Croatia	0.71	0.70	0.53	0.49	0.64	0.35	0.00
Poland	0.64	0.56	0.48	0.37	0.30	0.22	0.00
Hungary	0.63	0.67	0.78	0.52	0.49	0.30	0.02
NON EU							
Moldova	0.95	0.97	0.94	0.75	0.68	0.92	0.00
Kyrgyzstan	0.93	0.83	0.62	0.32	0.47	0.58	0.00
Montenegro	0.91	0.88	0.57	0.60	0.64	0.46	0.01
Kosovo	0.90	0.82	0.67	0.69	0.91	0.81	0.00
Ukraine	0.89	0.79	0.80	0.46	0.47	0.66	0.01
Tajikistan	0.88	0.78	0.57	0.55	0.36	0.60	0.00
Macedonia	0.87	0.64	0.66	0.73	0.88	0.51	0.01
Mongolia	0.85	0.77	0.49	0.46	0.34	0.39	0.01
Georgia	0.84	0.83	0.59	0.31	0.59	0.52	0.00
Belarus	0.84	0.68	0.78	0.48	0.26	0.60	0.00
Uzbekistan	0.82	0.66	0.65	0.40	0.45	0.45	0.00
Serbia	0.82	0.76	0.70	0.62	0.71	0.54	0.00
Azerbaijan	0.81	0.74	0.66	0.59	0.79	0.63	0.00
Kazakhstan	0.80	0.74	0.60	0.37	0.41	0.57	0.00
Turkey	0.80	0.77	0.65	0.74	0.70	0.67	0.01
Bosnia and Herzegovina	0.79	0.85	0.59	0.55	0.80	0.58	0.00
Russia	0.76	0.75	0.73	0.40	0.29	0.49	0.00
Armenia	0.76	0.82	0.73	0.55	0.61	0.67	0.00
Albania	0.75	0.75	0.45	0.60	0.65	0.27	0.00
Total	0.75	0.71	0.64	0.53	0.44	0.43	0.01

Legend: Between 0 and 0.25 Between 0.25 and 0.5 Between 0.5 and 0.75 More than 0.75

Source: LITS II

Table 3. Which group deserves most support from the government?

	disabled	families with children	elderly	working poor	unemployed	war veterans	nobody
EU							
France	0.31	0.14	0.14	0.31	0.07	0.00	0.02
Sweden	0.30	0.14	0.23	0.10	0.19	0.00	0.01
Germany	0.20	0.52	0.07	0.12	0.06	0.01	0.02
Italy	0.18	0.18	0.24	0.13	0.25	0.00	0.01
Great Britain	0.16	0.15	0.30	0.19	0.05	0.13	0.01
NEW EU							
Poland	0.36	0.22	0.23	0.08	0.06	0.02	0.00
Czech Republic	0.31	0.36	0.24	0.04	0.02	0.01	0.02
Bulgaria	0.26	0.29	0.25	0.05	0.14	0.00	0.00
Romania	0.26	0.22	0.34	0.10	0.06	0.03	0.00
Croatia	0.23	0.20	0.19	0.09	0.22	0.05	0.00
Lithuania	0.22	0.36	0.21	0.08	0.10	0.01	0.01
Latvia	0.21	0.41	0.21	0.03	0.11	0.02	0.00
Estonia	0.18	0.46	0.09	0.09	0.15	0.00	0.00
Slovakia	0.17	0.45	0.19	0.11	0.05	0.00	0.01
Slovenia	0.15	0.29	0.14	0.30	0.10	0.02	0.00
Hungary	0.14	0.45	0.21	0.08	0.08	0.01	0.02
NON EU							
Kyrgyzstan	0.50	0.14	0.16	0.03	0.09	0.09	0.00
Mongolia	0.45	0.11	0.19	0.14	0.09	0.02	0.01
Tajikistan	0.42	0.09	0.21	0.13	0.07	0.05	0.00
Montenegro	0.42	0.10	0.17	0.07	0.21	0.01	0.01
Kazakhstan	0.39	0.19	0.17	0.07	0.07	0.10	0.00
Georgia	0.35	0.13	0.28	0.01	0.19	0.04	0.00
Uzbekistan	0.35	0.23	0.11	0.09	0.15	0.05	0.00
Macedonia	0.35	0.09	0.07	0.08	0.37	0.03	0.01
Belarus	0.34	0.36	0.12	0.07	0.03	0.08	0.00
Ukraine	0.33	0.28	0.19	0.05	0.07	0.07	0.01
Kosovo	0.31	0.06	0.11	0.06	0.33	0.13	0.00
Azerbaijan	0.31	0.13	0.14	0.07	0.27	0.08	0.00
Moldova	0.30	0.14	0.40	0.05	0.06	0.04	0.00
Serbia	0.29	0.23	0.14	0.10	0.20	0.03	0.00
Albania	0.28	0.11	0.19	0.12	0.27	0.02	0.00
Russia	0.27	0.33	0.21	0.07	0.03	0.08	0.00
Armenia	0.25	0.20	0.28	0.04	0.13	0.07	0.00
Bosnia and Herzegovina	0.25	0.09	0.22	0.05	0.34	0.04	0.00
Turkey	0.23	0.09	0.15	0.19	0.20	0.13	0.01
Total	0.26	0.26	0.19	0.12	0.10	0.05	0.01

Legend: Between 0 and 0.1 Between 0.1 and 0.2 Between 0.2 and 0.4 More than 0.4

Source: LITS II

When asked which group of citizens deserves most support from the government, respondents have a preference for the disabled and families with children (26 percent on average), followed by the elderly (19 percent), the working poor (12 percent), the unemployed (10 percent) and war veterans (5 percent) (table 3). There is wide variation across countries in the extent of support for various groups, although there is general agreement that the disabled deserve support.

Support for income redistribution towards specific groups also seems to translate into actual redistributive policies. Spending for social pensions (as a share of total government expenditure) tends to be higher in countries where there is wide agreement that the elderly deserve support from the government (Figure 4). Likewise, within the transition region, there is higher spending on family allowances where there is strong agreement that families with children deserve support from government (Figure 5).

Figure 4: Belief that the elderly deserve public support and spending on social pensions

Source: LITS II, WB ECA social protection database

Figure 5: Belief that families with children deserve public support and spending on social pensions

Source: LITS II, WB ECA social protection database

However, average preferences and actual redistributive policies are not necessarily aligned. For example, budget spending on social assistance is not systematically higher where a greater proportion of people think that assisting the poor should be among the first two government priorities for spending (Figure 6).

Figure 6: Support for assisting the poor as a top priority for Government and Government spending on social assistance

Source: LITS II, WB ECA social protection database

There is thus significant heterogeneity across countries in Europe in the levels and changes in inequality aversion, as well in support for various redistributive policies and the alignment between average beliefs and actual policies. In the sections that follow, we analyze inequality aversion and redistributive preferences at the individual level in the pooled sample, with country fixed effects.

4. Results: Determinants of individual attitudes toward income inequality and redistributive preferences

Support for reducing inequality

We first analyze the baseline multivariate profile of individual support for reducing inequality along key socio-demographic characteristics for the three groups of countries and the pooled sample (Table 4). In all models the estimates are derived from the within country variation in individual characteristics. The dependent variable in panel I (columns (1) to (4)) is a 5-step measure of the preference for a smaller gap between the rich and the poor, ranging from 1 – strongly disagree to 5 – strongly agree. Several results can be noted. First, preference for a smaller gap between the rich and the poor tends to get stronger with age. The preference for reducing inequality is also significantly stronger among women in non-EU transition economies.

Table 4: Individual preferences for reducing inequality (baseline estimates)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	I. Gap between rich and poor should be reduced				II. Inequality aversion (1-10 scale)			
	Pooled	Western E.	New EU	Non-EU	Pooled	Western E.	New EU	Non-EU
18-24	-0.076*	-0.037	-0.160*	-0.045	-0.059	-0.056	0.018	-0.075
	(0.043)	(0.130)	(0.087)	(0.053)	(0.043)	(0.119)	(0.074)	(0.055)
25-34	-0.067**	-0.075	-0.070	-0.067	-0.023	0.081	-0.027	-0.021
	(0.034)	(0.101)	(0.062)	(0.044)	(0.033)	(0.084)	(0.062)	(0.043)
35-44 – reference age category								
45-54	0.117***	0.142	0.108*	0.120***	0.111***	0.095	0.082	0.128***
	(0.034)	(0.088)	(0.064)	(0.045)	(0.034)	(0.085)	(0.061)	(0.046)
55-64	0.143***	0.070	0.153**	0.171***	0.034	0.147	0.038	0.002
	(0.041)	(0.098)	(0.075)	(0.057)	(0.039)	(0.092)	(0.072)	(0.055)
65+	0.018	-0.297***	0.067	0.086	-0.027	-0.164	-0.068	0.055
	(0.049)	(0.113)	(0.088)	(0.071)	(0.047)	(0.116)	(0.084)	(0.066)
Male	-0.082***	0.015	-0.068*	-0.113***	-0.027	-0.072	-0.036	-0.014
	(0.022)	(0.051)	(0.041)	(0.030)	(0.023)	(0.053)	(0.041)	(0.031)
Primary or less	-0.138***	-0.150	-0.057	-0.199***	0.084*	-0.024	0.086	0.088
	(0.045)	(0.096)	(0.072)	(0.068)	(0.043)	(0.090)	(0.069)	(0.065)
Secondary – reference category								
Post-secondary	-0.109***	-0.169**	-0.155***	-0.069*	-0.210***	-0.211***	-0.315***	-0.162***
	(0.027)	(0.069)	(0.048)	(0.038)	(0.027)	(0.062)	(0.048)	(0.037)
Employed	0.080***	0.052	0.099*	0.080**	-0.014	0.002	-0.023	-0.020
	(0.029)	(0.076)	(0.053)	(0.039)	(0.028)	(0.074)	(0.051)	(0.038)
Married	0.000	0.004	-0.035	0.032	-0.038	-0.109**	0.062	-0.062*
	(0.025)	(0.065)	(0.045)	(0.034)	(0.023)	(0.053)	(0.045)	(0.032)
No religion	0.009	0.286***	-0.136*	-0.171*	0.024	0.163**	-0.034	-0.097
	(0.046)	(0.078)	(0.071)	(0.097)	(0.040)	(0.074)	(0.065)	(0.100)
Family with no children	-0.066**	-0.083	-0.078	-0.047	-0.011	-0.196***	-0.075	0.052
	(0.028)	(0.071)	(0.052)	(0.037)	(0.028)	(0.071)	(0.052)	(0.037)
Rural	0.023	0.099	0.009	0.029	0.094*	-0.131	0.153*	0.108
	(0.048)	(0.097)	(0.086)	(0.071)	(0.051)	(0.097)	(0.087)	(0.073)
Asset index	-0.038***	-0.068***	-0.020	-0.035**	-0.113***	-0.107***	-0.170***	-0.088***
	(0.011)	(0.019)	(0.022)	(0.015)	(0.011)	(0.022)	(0.020)	(0.015)
Household (HH) has a business	0.006	-0.164**	-0.024	0.081*	-0.251***	-0.220***	-0.368***	-0.186***
	(0.034)	(0.074)	(0.061)	(0.049)	(0.035)	(0.072)	(0.062)	(0.052)
Primary HH income from self-employment	-0.175***	-0.174*	-0.198**	-0.172***	-0.101**	-0.172	-0.162*	-0.069
	(0.045)	(0.097)	(0.088)	(0.057)	(0.044)	(0.112)	(0.086)	(0.052)
Primary HH income from pensions	0.142***	0.386***	0.141**	0.082*	0.052	0.151*	-0.018	0.056
	(0.037)	(0.094)	(0.066)	(0.049)	(0.035)	(0.090)	(0.062)	(0.048)
Pseudo R-squared	0.023	0.022	0.024	0.021	0.028	0.022	0.042	0.023
Observations	35355	5454	10455	19446	35407	5467	10511	19429

Notes: Estimates from ordered logistic regressions reported. Robust standard errors, clustered at PSU level in parentheses. Dependent variable in panel I. is a 5-step measure of the preference for a smaller gap between the rich and the poor, ranging from 1 – strongly disagree to 5 – strongly agree. Dependent variable in panel II is a 1-10 scale measure where 1 corresponds to the belief that larger income differences incentivize effort and 10 corresponds to the belief that incomes should be made more equal. Country dummies included in all models, but not reported. Significance: * 0.10; ** 0.05; *** 0.01.

The relationship between education and preference for equality is not monotonic – relative to the secondary education baseline the preference for a smaller gap between the rich and the poor is weaker among those with primary education or less (in non EU member states) and is especially weak among those with post-secondary education (in all three subsample and the pooled sample). Finally, respondents who are employed are more likely to support a smaller gap between the rich and the poor, while those with no religious affiliation are more likely in Western Europe and less likely, in transition economies (both inside and outside of the EU) to support a smaller gap between the rich and the poor. With this exception, in terms of key individual characteristics the patterns presented in table 1 are broadly stable across groups of countries despite the great diversity of the region.

In terms of the key characteristics of the household in which the respondent resides, support for reducing the gap between the rich and the poor does not differ significantly between urban and rural areas. An important correlate of redistributive preferences is the household's livelihood source. Respondents from households where the main source of income is pensions appear to have stronger redistributive preferences in all groups of countries, while reliance on income from self-employment is negatively associated with a preference for a smaller gap between the rich and the poor in both in the pooled sample and in the regional sub-samples. Similarly to relying on income from self-employment, residing in a household that has a business is negatively associated with a preference for greater equality in Western European countries, but not among transition countries.

One would generally expect poorer households to be more in favor of redistribution, given that they would be direct beneficiaries of it. This is confirmed in the pooled model, and in sub-regional groups with the exception of the new EU member states. Overall, the lower preference for reducing inequality among wealthier households, business owners, those with high education level and those with a smaller household size suggest that self-interest is an important driver of redistributive preferences, something we will further explore below, when we turn to support for specific groups.

We also consider an alternative measure of inequality aversion (Panel II, columns 5-8). This alternative measure does not invoke the poor and contrasts greater equality of incomes against the individual effort incentives of greater income differences. It is based on a 10-step scale with equally spaced intervals, which may be easier to interpret.

Estimates in columns (6)-(8) of Table 3 suggest similar patterns to those described above. In particular, the regressions confirm the negative association between high levels of education, the household's wealth, as well as reliance on income from self-employment (or having a household business) on the one hand and preference for reducing income inequality on the other. Some other results are, however, less robust to the choice of the inequality aversion measure. For instance, there is no longer a positive relationship with age or being employed and a preference for smaller income differences.

Beliefs, expectations and support for reducing inequality

Table 5 presents estimates of extended models¹², in which a number of variables capturing beliefs about fairness, past and expected mobility, the impact of the financial crisis, as well as attitudes toward markets and risk, are added to the baseline models from table 4.

Focusing first on the estimates in columns (1) to (4) where the dependent variable is based on a 5-step measure of the preference for a smaller gap between the rich and the poor, the regressions confirm the importance of beliefs about institutional fairness in redistributive preferences. In the pooled sample the perception of injustice as the main determinant of need in society (relative to the baseline belief that need is an inevitable result of modern life) is positively associated with support for a smaller gap between the rich and the poor, while the opposite is the case when need is perceived to be the result of laziness. Similarly, redistributive preferences are stronger among those who perceive that success in society is driven by political connections or breaking the law (relative to effort and hard work). There are also differences across regions, namely, the influence of beliefs about institutional fairness appears to be strong in countries of Western Europe and to a smaller degree in new EU member states but not in other transition countries. In non-EU transition economies beliefs about the main determinants of need in society are not significantly associated with preferences for reducing the gap between the rich and the poor. However, the belief that success is mostly determined by political connections (relative to effort and hard work) is associated with a higher preference for redistribution, although to a lesser extent than in EU member states.

A higher (subjective) current position on the society's social ladder is negatively associated with the preference for a smaller gap between the rich and the poor in Western European countries and in new EU member states, but not in the non-EU transition economies. Once subjective relative income is included in the regression, the coefficient on our objective measure of household welfare (the asset index) becomes insignificant for all country groups, suggesting that individual perceptions of one's position in the income distribution are what matters for forming preferences over redistribution. The negative association is expected, as those who place themselves at the bottom of the country's welfare ladder today would benefit from redistribution, and would therefore be expected to have a stronger preference for smaller gap between them and the rich. It is also the case in Western Europe and new EU member states that conditional on current placement on the welfare ladder, a higher placement 4 years ago is associated with a stronger redistributive preference. In other words, those who experienced greater upward mobility (or less downward mobility) during the past 4 years are less in favor of redistribution. Again, current subjective relative income, and perceived past mobility are not statistically significantly associated with a greater support for reducing the gap between the rich and the poor in the group of non-EU member states.

¹² The loss of sample size compared to Table 3 is due to primarily to missing values for the 3 ladder questions. The results on other belief variables in Table 4 carry through is the models are re-estimated over the full sample.

Table 5: Individual preferences for reducing inequality – extended models

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	I. Gap between rich and poor should be reduced				II. Inequality aversion (1-10 scale)			
	Pooled	Western E.	New EU	Non-EU	Pooled	Western E.	New EU	Non-EU
<i>Main determinant of success in society (effort and hard work is baseline)</i>								
Intelligence and skills	-0.064* (0.035)	0.038 (0.067)	-0.142** (0.061)	-0.066 (0.054)	-0.114*** (0.036)	-0.013 (0.060)	-0.148** (0.061)	-0.125** (0.058)
Political connections	0.202*** (0.050)	0.439*** (0.144)	0.176** (0.079)	0.143** (0.071)	0.059 (0.049)	0.270** (0.135)	0.011 (0.076)	0.050 (0.069)
Breaking the law	0.234*** (0.065)	0.699*** (0.228)	0.262*** (0.099)	0.113 (0.091)	0.051 (0.063)	0.219 (0.296)	0.001 (0.105)	0.060 (0.081)
Other	0.130* (0.068)	0.438*** (0.132)	-0.000 (0.119)	0.128 (0.095)	0.180*** (0.067)	0.405** (0.161)	0.292** (0.117)	0.030 (0.095)
<i>Main determinant of need in society (inevitable part of modern life is baseline)</i>								
Unlucky	-0.050 (0.049)	-0.011 (0.104)	-0.083 (0.084)	-0.071 (0.077)	0.162*** (0.051)	0.077 (0.110)	0.306*** (0.077)	0.087 (0.084)
Laziness	-0.092** (0.043)	-0.284*** (0.078)	-0.070 (0.075)	-0.067 (0.070)	-0.073* (0.044)	-0.242*** (0.089)	0.026 (0.075)	-0.084 (0.070)
Injustice	0.250*** (0.041)	0.508*** (0.087)	0.314*** (0.068)	0.092 (0.063)	0.245*** (0.041)	0.441*** (0.096)	0.364*** (0.064)	0.109* (0.064)
Other	-0.038 (0.067)	-0.123 (0.114)	0.077 (0.121)	-0.097 (0.103)	-0.138** (0.061)	-0.163 (0.136)	-0.051 (0.102)	-0.200** (0.092)
Ladder position 4 years ago	0.017 (0.012)	0.067*** (0.025)	0.042* (0.022)	-0.013 (0.017)	-0.006 (0.012)	0.027 (0.023)	0.000 (0.022)	-0.018 (0.016)
Ladder position now	-0.066*** (0.016)	-0.089** (0.039)	-0.102*** (0.031)	-0.028 (0.022)	-0.025 (0.016)	-0.045 (0.034)	-0.040 (0.029)	-0.006 (0.022)
Expected ladder position 4 years hence	-0.027** (0.012)	-0.064** (0.030)	-0.051** (0.025)	-0.011 (0.016)	-0.061*** (0.013)	-0.108*** (0.027)	-0.071*** (0.021)	-0.049*** (0.018)
Not affected by the financial crisis	-0.170*** (0.035)	-0.164** (0.070)	-0.173** (0.068)	-0.166*** (0.049)	-0.021 (0.038)	-0.014 (0.071)	-0.103 (0.067)	0.012 (0.055)
<i>Expressed risk preference ("would take the risk" is baseline)</i>								
Would not take the risk	0.057* (0.034)	-0.032 (0.072)	0.041 (0.057)	0.090* (0.051)	-0.091** (0.036)	0.088 (0.070)	-0.002 (0.057)	-0.188*** (0.055)
Could not answer	-0.028 (0.054)	0.159 (0.214)	-0.127 (0.096)	0.040 (0.067)	0.132** (0.057)	0.487*** (0.165)	0.193** (0.097)	0.048 (0.070)
Market economy preferred	-0.135*** (0.033)	-0.366*** (0.073)	-0.210*** (0.056)	-0.000 (0.048)	-0.107*** (0.034)	-0.268*** (0.072)	-0.203*** (0.055)	0.009 (0.050)
Asset index	-0.015 (0.012)	-0.047** (0.022)	0.012 (0.024)	-0.020 (0.017)	-0.094*** (0.012)	-0.094*** (0.025)	-0.146*** (0.022)	-0.070*** (0.016)
Individual / HH controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Pseudo R-squared	0.033	0.051	0.038	0.027	0.035	0.036	0.053	0.027
Observations	27687	5020	8529	14138	27705	5023	8558	14124

Notes: Estimates from ordered logistic regressions reported. Robust standard errors, clustered at CEA level in parentheses. Dependent variable in panel I. is a 5-step measure of the preference for a smaller gap between the rich and the poor, ranging from 1 – strongly disagree to 5 – strongly agree. Dependent variable in panel II is a 1-10 scale measure where 1 corresponds to the belief that larger income differences incentivize effort and 10 corresponds to the belief that incomes should be made more equal. All individual and household characteristics from the baseline model, as well as country dummies included in all models, but not reported. Significance: * 0.10; ** 0.05; *** 0.01.

The expected ladder position 4 years into the future is negatively correlated with the preference for redistribution, conditional on the current placement on the ladder in the pooled sample and in the subsamples of Western European countries and new EU states. This negative association is consistent with the framework in Benabou's and Ok (2001) where redistributive preferences are shaped not only by one's current income position, but also by expectations of the evolution of one's income position in the future.¹³ The relationship between expected future position on the social welfare ladder and current redistributive preference is also negative for the group of non-EU transition economies, although it is not statistically significant. As discussed in Cojocaru (2014b), the lack of dynamic considerations in the group of non-EU transition economies may be due to the fact that the greater political and economic uncertainty outside of the EU makes it more difficult to link current preferences with expectations of the future, or to believe in medium-term policy stability, which would be required for expectations of the future to influence policy preferences today.

Political preferences, in particular, the belief that the market economy is always preferable to any other form of economic system is similarly negatively associated with a preference for a smaller gap between the rich and the poor in the pooled sample and in EU countries (both in Western Europe and in new EU members). This preference is likely due to the fact that those who value the efficiency of market allocation may not be as strongly concerned with the equity aspects of the market mechanism, whereas a preference for greater state involvement in the economy is oftentimes driven by concerns about market failures, and especially about their impact on the poor. Again, market preference does not appear to explain the variation in redistributive preferences in the group of non-EU transition economies.

Finally, perceived experience of the recent financial and economic crisis is associated with stronger redistributive preferences in all country groups. Across the board those who report not to have been affected at all by the financial crisis are less likely to prefer a smaller gap between the rich and the poor.

Not all of the above findings are robust to the choice of the variable used to elicit redistributive preferences. Estimates in the second panel of table 4 suggest that beliefs about fairness, such as the attribution of need to injustice (laziness), are still associated with a greater (smaller) preference for equality of incomes. Similarly, preference for the market economy and the expectations of future social mobility remain strong predictors of tolerance for inequality in both specifications. At the same time, attribution of need to bad luck is now also associated with a greater preference for equality, whereas this was not observed with the poor-rich gap measure. Likewise, the current position on the country's welfare ladder, as well as the impact of the financial crisis were strong predictors of the preference for the size of the gap between the rich and the poor, but are insignificant in the alternative specification. Overall, it is still the case,

¹³ For a more formal test of the POUM hypothesis, which considers explicitly the exact current and future positions of the individuals, and how these intersect with the individual's degree of risk aversion, see Cojocaru (2014b).

however, that political preferences, beliefs about institutional fairness, as well as (perceived) own past and future mobility, are significantly associated with redistributive preferences in Western European countries and in the new EU member states, but less so in non-EU transition economies.

Table 6: Assisting the poor should be among the top 2 priorities for extra government spending

	Pooled	Western Europe	New EU states	Non-EU
<i>Main determinant of success in society</i> (Effort and hard work – baseline)				
Intelligence and skills	-0.107** (0.042)	0.140* (0.083)	-0.163** (0.074)	-0.191*** (0.062)
Political connections	0.067 (0.053)	0.011 (0.149)	-0.031 (0.087)	0.105 (0.073)
Breaking the law	-0.034 (0.068)	0.176 (0.230)	0.000 (0.107)	-0.100 (0.094)
Other	0.055 (0.072)	-0.180 (0.191)	0.151 (0.120)	0.035 (0.102)
<i>Main determinant of need in society</i> (Inevitable part of modern life – baseline)				
Unlucky	0.239*** (0.065)	0.282** (0.125)	0.217* (0.111)	0.222** (0.098)
Laziness	-0.149*** (0.055)	-0.140 (0.123)	-0.109 (0.097)	-0.173** (0.078)
Injustice	0.236*** (0.047)	0.379*** (0.107)	0.215** (0.085)	0.187*** (0.067)
Other	-0.033 (0.075)	-0.034 (0.158)	-0.173 (0.133)	0.009 (0.107)
Ladder position 4 years ago	0.013 (0.013)	0.017 (0.027)	0.042* (0.022)	-0.006 (0.018)
Ladder position now	-0.050*** (0.017)	-0.092** (0.039)	-0.046 (0.033)	-0.027 (0.023)
Expected ladder position 4 years hence	-0.004 (0.013)	-0.008 (0.031)	-0.027 (0.022)	0.001 (0.017)
Not affected by the financial crisis	-0.031 (0.040)	-0.053 (0.079)	-0.052 (0.093)	-0.027 (0.052)
<i>Expressed risk preference</i> (Would take the risk – baseline)				
Would not take the risk	-0.067* (0.039)	-0.016 (0.088)	-0.055 (0.064)	-0.077 (0.057)
Could not answer	-0.048 (0.059)	0.045 (0.216)	-0.078 (0.093)	-0.038 (0.077)
Market economy preferred in all circumstances	-0.159*** (0.039)	-0.231*** (0.084)	-0.124* (0.070)	-0.143*** (0.054)
Asset index	-0.109*** (0.012)	-0.088*** (0.021)	-0.145*** (0.023)	-0.110*** (0.018)
Individual and HH characteristics	Yes	Yes	Yes	Yes
Pseudo R-squared	0.067	0.041	0.072	0.060
Obs	28489	5048	8761	14680

Notes: Estimates from logistic regressions reported. Robust standard errors, clustered at CEA level in parentheses. Dependent variable 1 if the respondent believes that extra government spending to assist the poor is among top 2 government priorities, and zero otherwise. All individual and household characteristics from the baseline model, as well as country dummies are included in all models, but not reported. Significance: * 0.10; ** 0.05; *** 0.01.

Finally, recall that the models in tables 4 and 5 explored how beliefs about fairness as well as political preferences and social mobility experience (and expectations) affect the preference for reducing the gap between the rich and the poor. One prominent possibility for bridging that gap would be for the government to spend more of its resources on the poor. This is investigated in table 6, which estimates that same models as those in table 5, except that the dependent variable is an indicator that evaluates to 1 if the respondent believes that assisting the poor should be among the top two priorities for extra government spending and zero otherwise.

Given the emphasis on the poor, the most relevant beliefs about institutional fairness are those with regard to the main determinant of need. Here the preferences are largely consistent – the belief that need is due to injustice is associated both with a preference for reducing the gap between the rich and the poor and with a preference for extra government spending on the poor. Likewise, if need is perceived as a product of laziness, this reduces both the preference for extra spending on the poor and for reducing the gap between them and the rich.

In terms of the determinants of success, while those who attribute it to intelligence and skills are less in favor of both a smaller gap between the rich and the poor, and extra government spending on the poor, perceptions of nepotism/corruption are not significantly associated with a preference for assisting the poor as a top government spending priority in the same way as they were in the case of inequality tolerance, which could be due to nepotism or corruption being more associated with the incomes of those at the top end of the distribution, and, as such, less relevant for policies directed at the bottom end.

Individual preferences for redistribution to specific groups

Lastly, we present multinomial logistic regressions where the dependent variable is the group that, according to the respondent, deserves most government support – the disabled, the elderly, war veterans, families with children, the working poor, the unemployed or other groups (Table 7). Again, self-interest appears to be a key determinant of support for redistributive policies: support for the elderly increases with age. Likewise, support for families with children increases with household size. Beliefs appear as a significant driver of support for redistribution towards the working poor and the unemployed: those who believe that the main determinant of need in society is injustice are about 20% more likely to think that the working poor or the unemployed are most deserving of government support. Similarly, those who believe that success comes mostly from hard work or intelligence and skills are less likely to support these two groups.

Table 7: Preference for redistribution to specific groups

	Elderly	War veterans	Families with children	Working poor	Unemployed	Other
Main determinant of success in society is self: (hard work and effort, or intelligence and skills)	-0.011 (0.050)	-0.102 (0.082)	-0.092 (0.048)	-0.217*** (0.060)	-0.244*** (0.063)	-0.577*** (0.111)
Main determinant of need in society is injustice	-0.018 (0.044)	-0.047 (0.077)	0.07 (0.043)	0.248*** (0.056)	0.275*** (0.055)	-0.224* (0.104)
Past ladder	0.01 (0.016)	-0.013 (0.027)	0.01 (0.015)	0.021 (0.020)	0.053** (0.018)	0.022 (0.032)
Current ladder	-0.046* (0.023)	-0.008 (0.036)	-0.043 (0.022)	-0.058* (0.027)	-0.049 (0.026)	0.067 (0.042)
Future ladder	-0.005 (0.017)	0.056* (0.025)	0.005 (0.016)	-0.015 (0.020)	-0.014 (0.018)	-0.042 (0.030)
Not affected by the financial crisis	-0.08 (0.049)	-0.054 (0.079)	-0.100* (0.049)	-0.142* (0.062)	-0.226*** (0.062)	0.024 (0.116)
Market economy always preferred	-0.109* (0.045)	0.015 (0.077)	-0.043 (0.045)	-0.129* (0.056)	-0.056 (0.057)	-0.026 (0.102)
Age (baseline 35-44)						
18-24	-0.095 (0.079)	0.219 (0.119)	0.133 (0.069)	0.151 (0.087)	0.144 (0.084)	-0.019 (0.144)
25-34	-0.036 (0.062)	0.005 (0.102)	0.103 (0.056)	0.038 (0.072)	0.151* (0.067)	-0.029 (0.112)
45-54	0.238*** (0.063)	0.096 (0.109)	-0.049 (0.058)	0.155* (0.073)	0.150** (0.070)	-0.017 (0.117)
55-64	0.418*** (0.068)	0.016 (0.122)	0.008 (0.066)	-0.076 (0.086)	-0.039 (0.080)	-0.033 (0.131)
65+	0.633*** (0.080)	0.405** (0.133)	-0.139 (0.081)	-0.164 (0.104)	-0.247* (0.100)	-0.041 (0.161)
Male	-0.031 (0.037)	0.146* (0.069)	-0.102** (0.038)	-0.001 (0.047)	0.104* (0.044)	0.147* (0.068)
Education (baseline: secondary)						
Primary or less	0.252*** (0.063)	0.08 (0.114)	-0.228** (0.071)	-0.048 (0.081)	-0.037 (0.074)	0.197 (0.141)
Post-secondary	0.103* (0.046)	0.146 (0.080)	0.051 (0.046)	-0.035 (0.057)	0.084 (0.053)	0.059 (0.105)
Employed	0.062 (0.047)	-0.188* (0.085)	0.091* (0.046)	0.240*** (0.060)	-0.114* (0.055)	-0.01 (0.106)
Married	-0.078 (0.040)	-0.064 (0.069)	0.054 (0.041)	-0.051 (0.052)	-0.093* (0.047)	-0.074 (0.084)
No-religion	0.033 (0.069)	-0.085 (0.147)	-0.031 (0.067)	0.152 (0.081)	0.02 (0.099)	0.188 (0.105)
Family with no children	0.130** (0.049)	0.038 (0.074)	-0.406*** (0.045)	0.044 (0.055)	0.115* (0.054)	0.1 (0.097)
Rural	-0.048 (0.058)	-0.025 (0.093)	0.014 (0.061)	-0.033 (0.069)	0.102 (0.076)	-0.148 (0.125)
Asset index	-0.048*** (0.014)	0.003 (0.025)	-0.031* (0.015)	-0.101*** (0.019)	-0.107*** (0.018)	-0.039 (0.027)
Family has a business	0.036 (0.056)	0.198* (0.097)	0.018 (0.054)	0.012 (0.069)	0.02 (0.066)	0.233* (0.096)
Primary HH income from self-employment	-0.061 (0.068)	-0.113 (0.101)	-0.048 (0.065)	-0.069 (0.079)	-0.007 (0.072)	-0.003 (0.147)
Primary HH income from pensions	0.017 (0.055)	-0.079 (0.096)	-0.012 (0.057)	-0.261*** (0.072)	-0.035 (0.068)	-0.161 (0.124)
Constant	-0.24 (0.177)	-3.085*** (0.357)	-0.252 (0.303)	-0.508* (0.235)	0.05 (0.241)	-1.789*** (0.365)
Pseudo R squared	0.093					
Observations	30250					

Notes: Estimates from multinomial logit regressions reported. Robust standard errors, clustered at CEA level in parentheses. Dependent variable: reference category – disabled. Country dummies are included in all models, but not reported. Significance: * 0.10; ** 0.05; *** 0.01.

Those who are currently not employed are only marginally statistically significantly more likely to support redistribution towards the unemployed as the most deserving group. But recent experience of income shocks plays a significant role in support: those who say they were

affected by the financial crisis are about 20 percent more likely to say that the unemployed are the group that deserves most government support (relative to the disabled). Recent experience with the crisis is also significantly associated to supporting redistribution to the working poor, albeit to a lesser extent. Those who place themselves higher on their countries' income scale are significantly more likely to elect the disabled as the category most deserving of government support. Finally, ideology (preference for a planned economy rather than the market economy) is only significantly associated with support for the elderly as the most deserving group for government support.

5. Conclusion

There is widespread support in Europe and Central Asia for reducing the existing gap between the rich and the poor. This preference is strongest in the Western Balkans, but it is stronger still in the Western European countries included in the LiTS II sample.

Aversion for inequality and preferences for redistribution are not static: fewer people want to reduce the gap between the rich and the poor in 2010 than in 2006. Although there is some correlation between the perception of recent income shocks and attitudes to inequality and redistribution, the increased tolerance for inequality cannot be fully accounted for by the economic contraction during the crisis. Also, while perceptions of the fairness of the income-generation process also improved somewhat during the period, these improvements appear to be unrelated to the cross-country dynamics of tolerance for inequality in ECA.

Overall, political preferences, beliefs about institutional fairness, as well as (perceived) own personal past and future mobility, are significantly associated with redistributive preferences in Western European countries and in the new EU member states, but less so in non-EU transition economies.

Generally, there is a high degree of agreement that the disabled and the elderly deserve support from government. At the same time, there is a high level of heterogeneity across countries in average beliefs on which group(s) deserve most support from the government. Average support for reducing inequality or for redistribution benefiting certain groups is correlated (but not always) with actual redistributive policies at the country level.

At the individual level, different motives are likely to explain different redistributive preferences. Self-interest (i.e. expectation that one may directly benefit from the policy) appears to be an important motivation for support for the elderly and families with children. By contrast, values and beliefs (such as expectations about one's future mobility, beliefs about the fairness of the income-generating process) are important drivers of support for the working poor and the unemployed.

While differences between responses to various measures of redistributive preferences indicate the importance of framing, our results are quite consistent. The effect of beliefs about fairness,

and of political preferences, is found to be for the most part robust to the choice of the framing of question that elicits the respondent's tolerance for inequality, and also consistent with preferences over policy priorities for extra government spending.

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