Who to Help?
Trust and Preferences over Redistribution in Russia

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Does generalized trust in society influence individual preferences over target groups for government redistribution? Existing research shows that trust affects government redistribution. In this paper we demonstrate that trust is important not only for demand for redistribution in general, but also for the preferred design of redistribution policy. Using a set of surveys of about 34,000 individuals across 68 Russian regions that were conducted in 2007, 2009 and 2011 we show that in high trust environment people demonstrate higher levels of support in favour of those who have performed services on behalf of the society, or can't work because of health problems or age; lower support is found for people in difficult life situations who are still able to work. To explain the observed relation we propose two possible mechanisms: substitution hypothesis, when people may expect help from others that substitutes support from the government, and civicness hypothesis, when people want to reward those who have done something noticeable for their country or to help those who are in great trouble and need special assistance which could be provided by the government. A novel instrumentation strategy is used to account for endogeneity. The results are robust to alternative calculations of the redistribution index, trust levels derived from 2007 and 2009 survey waves, and inclusion and exclusion of a rich set of control variables.

JEL classification: Z13, H23

Key words: redistribution, redistribution target groups, preferences over redistribution, social capital, trust

1. Introduction

Interpersonal (or generalized) trust is a key component of social capital which determines a society's capacity for collective action. A huge body of empirical and theoretical research shows its importance for the economic and institutional development of nations: their economic outcomes, the quality of governance and political accountability, teaching practices and educational achievements, physical and mental health, happiness (see Algan, Cahuc, 2013 for a comprehensive overview of the classic and recent studies). However several problems need to be mentioned.

The first and most important issue is that a lot of areas and specific mechanisms of the potential influence of trust remain unexplored. For example, a number of studies argue that trust affects economic outcomes (e.g. Knack, Keefer, 1997 and Algan, Cahuc, 2010), but what are the precise channels of influence? These can be entrepreneurial activity, preferences for different types of economic activities or the demand for some particular government policy (such as redistribution policy).

Second, many results are based upon datasets provided by World Values Survey (WVS), European Values Study (EVS) or General Social Survey (GSS) and thereby reflect relationships for the whole world or for a limited set of developed countries. There is a dearth of such research for transitional and developing countries. It is especially true for Russia which has only few studies on social capital and trust (see e.g. Marsh, 2000, Rose, 2000, Kennedy et al., 1998). As a result there is little understanding of what is going on. The relationship between social capital and economic outcomes may be highly specific and completely different from what is obtained for developed countries [2].

Finally, huge efforts were devoted to the evaluation of the positive outcomes of social capital and trust. It is still the main strand of research (see Algan, Cahuc, 2013). However this view on social and economic outcomes of social capital is quite one-sided. It would be worthwhile to pay attention to the potential darker sides of social capital. Bonding social capital could hamper economic growth and undermine economic activity, the same could be true for antisocial norms that are widespread in developing and transition countries.

In this paper we study the connection between generalized trust and preferences over redistribution to different groups of people. It has already been shown that such preferences are driven by a large set of different parameters such as fairness and altruism (Alesina, Angeletos, 2005, Luttens, Valfort, 2012, Fong et al., 2006), cultural values (Luttmer, Singhal, 2011), public

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[2] Similar argument mentioned in (Yamamura, 2012), who emphasizes that "existing literature on redistribution preferences has focused largely on Western countries". But according to him it's worthwhile to study Asian countries as they have different type of culture.

values (Corneo, Gruner, 2002), historic experience (Alesina, Giuliano, 2011), political views (Alesina, Giuliano, 2011). The role of trust and social norms seems to be underexplored.

Several papers show importance of interpersonal trust (Bergh, Bjørnskov, 2014, Bjørnskov, Svendsen, 2013), trust and civicness (Algan et al., 2014), social norms (Sabatini et al., 2014), and community participation (Yamamura, 2012) for redistribution preferences. All these variables have a significant impact on the size of the welfare state (measured e.g. as total government expenditure as in Bjørnskov, Svendsen, 2013) or preferences over redistribution (measured by public opinion surveys). But different groups of people who the government should help are overlooked.

Overall the literature provides an answer to the important question of how much to redistribute (or whether redistribute or not) but does not ask how to redistribute. On the other hand, the relationship between social capital indicators and redistribution preferences could be more nuanced, in particular with more precise questions about redistribution policies such as questions about the groups of people who should actually be supported by the state. Higher levels of trust could lead to more support for one group of people and less for others, thus helping the former and hampering the latter. Overall it could provide unpredictable outcomes for economic growth and growth promoting policies should account for it.

We use data for Russia provided by its Public Opinion Fund. Within country surveys have an important advantage over international data as the variability of formal institutions is lower. Moreover, omitted variables, if present, seem to be quite the same for all regions because of the identical historical and institutional background for the regions of one country. Measurement error also should be smaller and the same for all regions as all questions are in one language and there is no problem of translation and different meanings of words in different cultures. Overall these facts could lead to higher quality of results. Although the problem of external validity arises. A separate survey is needed to understand whether the results are country specific.

The rest of the paper is organized as follows. Section 2 discusses preferences over redistribution and formulates the hypotheses. Section 3 gives a general background on Russian inequality and redistribution policies. Section 4 explains our data and empirical strategy, and section 5 continues with the results. Section 6 concludes.

2. Redistribution Preferences: Who to Help and Why?

The idea that not only the size of the redistribution matters but its targets as well as the overall philosophy of the welfare state was pioneered by Esping-Andersen (1990) who coined the term "welfare state regime". He classified modern welfare states according to their level of

decommodification, that is, allowing citizens to maintain their livelihood independent from the market, and degree of stratification (equalization vs. preserving of status differences). He laid out three welfare state regimes: liberal, conservative (or corporatist-statist), and social-democratic (Esping-Andersen, 1990, p.26-29). A liberal regime is characterized by modest social benefits, strict entitlement rules, government encouragement of private welfare schemes and often a social stigma on benefit receivers. An example of such welfare state regime is the USA. The conservative, or corporatist-statist regime is committed to maintaining social stratification through nets of status-attached benefits provided by the state; the redistributive impact of the welfare state is minor. Conservative regimes also forego providing welfare to individuals while support capacities of their families are not exhausted. This regime is found primarily in continental Europe. Social-democratic regimes, in turn, promote social solidarity and individual independence from market fluctuations. The traditional family is not encouraged; conversely, the government makes an effort to externalize the costs of familyhood through transfers and in-kind benefits targeting children, the aged or disabled. This welfare state regime is typical for Nordic countries.

Although no nation has any single type of welfare state regime, and noticeable problems with the classification of individual countries were discovered (Scruggs, Allan, 2008), Esping-Andersen's typology had a significant impact on later research. There were attempts to include additional regime types into the classification, such as post-socialist, characterized by holdovers of a centrally planned economy like subsidized housing and energy prices (Kääriäinen, Lehtonen, 2006; Oorschot, Arts, 2005).

Different philosophies of the welfare state imply different views on more general aspects of society: what are limits of personal responsibility, how great is the moral hazard related to social security, how strong are family and community ties. Several scholars tried to find out relationship between welfare state regimes and social capital, with the former as the dependent variable (Kääriäinen, Lehtonen, 2006; Oorschot, Arts, 2005). These studies were carried out on cross-country samples of European nations, and typically treated welfare state regimes as exogenous. One possible hypothesis assumes that there is the possibility of crowding out private pro-social behaviour and civic values by government actions which make social capital redundant. On the other hand, the universalism of welfare states creates social homogeneity and solidarity, which is beneficial for interpersonal trust (Kumlin, Rothstein, 2005).

In this study, we take advantage of the similarity, if not identity, of welfare state regimes across Russian regions because of the federal social policy and Soviet-era inertia. This allows us to employ cross-regional variation in social capital to explain differences not in welfare state

regimes but in popular preferences for social policies, which under democracy translate into an actual choice of welfare state regime.

We see two possible mechanisms that may explain any possible correlation between trust and preferences to redistribute to one group of people or another. In the presence of bonding social capital (which is common for Russia) higher interpersonal trust could lead to lesser demand for government support in favour of the poor, the homeless, those having many children and others who are in difficult situations. The underlying assumption for this is straightforward. People may expect help from other people which substitutes support from the government. So they do not want the government to help those who are in need. Hypothesis 1 is the following:

Hypothesis 1: Substitution hypothesis. In an environment with higher trust people prefer less government redistribution to the poor, the homeless and others in difficult situations.

But living in a region with higher trust may push people to reward those who have done something noticeable for their country or to help those who are in great trouble and need special assistance which could be provided by the government. Higher norms of pro-social behaviour in a place with higher level of generalized trust could lead to the demand for support in favour of distinguished teachers and doctors, war veterans as well as the disabled.

Hypothesis 2: Civicness hypothesis. In an environment with higher trust people want more government support for distinguished society members and the disabled.

3. Inequality and Redistribution Policy in Russia

The existing design of public redistribution systems explains much in the preferences for redistribution. People want more or less redistribution depending on the share of wealth being redistributed and the existing support of different groups of people. The current level of inequality can also play a significant role.

For Russia significant economic inequality is a major concern. Russia's Gini index was 41.7 in 2011[3]. The income gap in Russia is wider than in most European countries, including those of Central and Eastern Europe. In contrast to many developed countries, in Russia there are also great differences in incomes between regions[4]. Therefore our work requires careful control for wealth inequality.

The Russian welfare system has relatively low funding. The Independent Social Policy Institute estimates show that the share of social expenditure of GDP in 2010 was only 14.2 per

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[3] https://www.cia.gov/library/publications/the-world-factbook/geos/rs.html
[4] See (Zubarevich, Safronov, 2011)

cent. This is significantly lower than OECD average in the same year (22 per cent), although it is still higher than in middle-income OECD countries like Chile, Mexico and Republic of Korea[5].

In addition to relatively scarce funding, the Russian social welfare system has difficulties in targeting resources towards those who are actually in need. According to Ovtcharova (2001), the Soviet welfare system had two main objectives: to reward meritorious citizens (such as WWII veterans, Chernobyl nuclear disaster responders) and to provide basic social insurance like pensions and free healthcare. In the 1990s, this merit-oriented bias of social welfare was deepened when the Communist-oriented Duma alongside with regional governments introduced dozens of in-kind privileges based on relatively simple, easily-monitored formal criteria such as being veteran, retiree, disabled person or having many children. In 2005, these in-kind privileges were largely replaced with lump sum transfers; however, this brought no changes to the overall redistribution pattern. According to Independent Social Policy Institute transfers to the poor accounted for only 3.5 per cent of social expenditures in 2010[6]. When it comes to increasing welfare spending, the government typically chooses to raise pensions.

Social welfare responsibilities in Russia are shared between the Federation and the regional governments. Federal-level social protection is uniform across regions although some policies may target special regions like northern ones. Regional-level welfare policies may vary across jurisdictions although they should comply with federal regulations. However, there is significant variation among regions in per capita social spending. In 2011, the minimum was 947 rubles in Nenetskiy autonomous okrug and the maximum was 233,000 rubles in Moscow. These disparities can only be partly explained by regional differences in demography and public finance capacities and make it necessary to control for social expenditures.

4. Data and Methodology

4.1. Empirical information

Data for the study comes from several sources. The most important and unique are surveys of about 34,000 individuals that were conducted in 2007, 2008, 2009 and 2011. These surveys were provided by the Russian Public Opinion Fund and are designed to be regionally representative. They contain information about people's preferences for redistribution, their interpersonal trust, norms of behaviour and a rich set of individual level control variables such as gender, age, wealth, occupation, religion, nationality. Although it is not panel data and not all waves contain information about trust and redistribution our empirical strategy is designed to take the best of it.

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[5] http://stats.oecd.org/Index.aspx?DataSetCode=SOCX_AGG
[6] www.econorus.org/c2013/files/1f59.docx

The 2007, 2008 and 2009 surveys were conducted in the same 68 regions of Russia with about 500 respondents in each region. The 2011 survey was done in all 83 Russian regions with 400 respondents in each. So we restrict the 2011 dataset to the 68 regions which were covered by all four surveys. Most of the regions have a dominant Russian population; the North Caucasian Republics are not in the sample.

The 2011 survey contains information about preferences over redistribution to different groups of people. It is the most important for us, and we provide a brief description of its sample restricted to 68 regions of Russia. Respondents who participated in the 2011 survey were from 18 to 82 years old, the median age in the subsample is 44 years. The share of women is a bit higher than the share of men (55% and 45% respectively). 87% represent themselves as Russians. 51% of the respondents are factory and office workers, 6% are entrepreneurs, bosses or directors, and 41% of the respondents are currently unemployed. 33% have secondary education or lower; 18% have higher education.

Respondents are not wealthy. Almost 10% of households lack money even for food, 42% of households can get enough food and clothes but cannot afford to buy domestic appliances. 45% of the respondents reported that social benefits and allowances are very important for their budget. Middle class families comprise about 23% of the sample. More detailed characteristics of the sample could be found in Table A1 of the Appendix.

Official statistics are used as our second source mainly to provide proper regional level controls. They are GRP per capita, social expenditure, the share of people below subsistence level, the Gini index, the ethnic fractionalization index, and the level of urbanization. A detailed description and summary of the statistics for the main variables are in Tables A2, A3.1 and A3.2 of the Appendix.

4.2. Empirical strategy

The 2011 survey forms the basis of our research as it is the only one that contains information about preferences over redistribution to different categories of people. It also provides a set of personal characteristics such as gender, age, education, occupation, religion, but unfortunately does not contain any information about the social capital of the respondents. On the contrary the 2007-2009 surveys have some details about interpersonal trust and social norms. So we study the effect of regional level trust (obtained from 2007-2009 surveys) on individual's preferences to help one group of people or another (obtained from 2011 survey).

The 2008 survey also sheds light on the respondent's support of redistribution. It provides information not about preferences over redistribution to different categories of people, but about

overall support of redistribution. This data provides the additional empirical evidence for the findings based on the 2011 survey.

In our empirical strategy, individual level preferences for redistribution in 2008 and 2011 serve as dependent variables. We start from a general question about inequality and redistribution[7] which allows us to have a link with previous studies: "What type of society is in your opinion more fair: one where income of people is nearly equal or one where income differ significantly depending on individual professional skills and enterprise?" This is for the 2008 survey only. Then we continue with our main question of interest which comes from the 2011 survey: "Who, in your opinion, should the government help first: the poor, the homeless, labour and war veterans, active duty soldiers, distinguished teachers, doctors or other distinguished workers, families with children, one-parent families and families with many children, the disabled, retirees, the unemployed?" Up to three answer choices for this question could be made. The distribution of answers is presented at Figure 1.
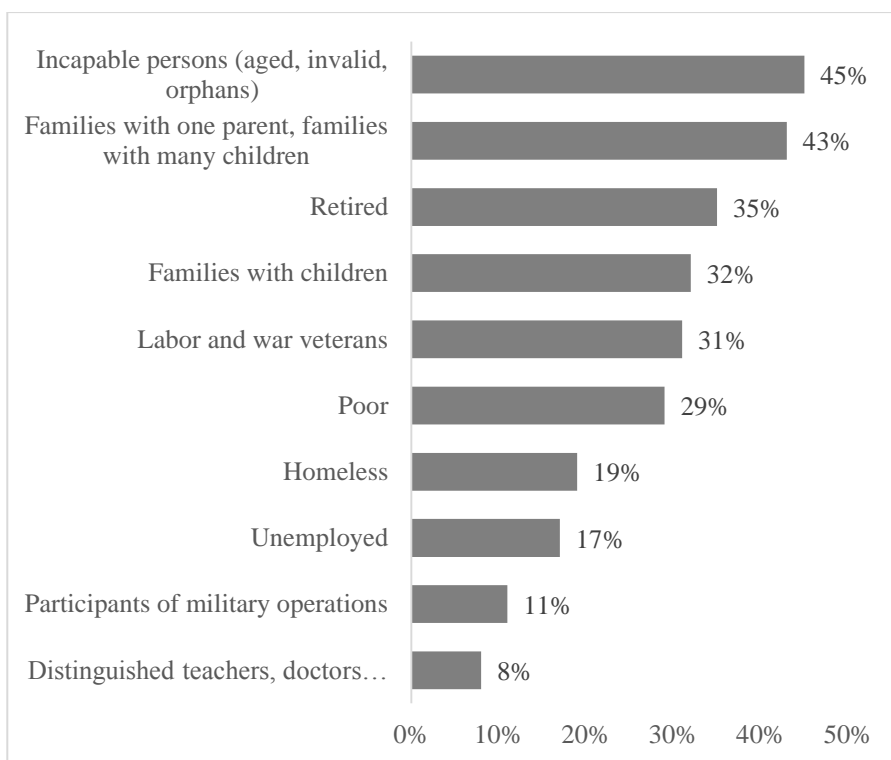
Fig. 1. Share of respondents mentioned different groups of people to support

We construct an index on a scale from -3 to +3 where positive points are given for the preferences in favour of distinguished or disabled people (labour and war veterans, combat operations participants, distinguished teachers and doctors, pensioners, the disabled) and negative points for those who are in difficult situation but to our belief could still work harder

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[7] It can be also treated as tolerance of inequality. We are grateful to Daniel Treisman for this notion.

(the poor, the homeless, families with children, one-parent families and families with many children, the unemployed).[8] We also use a modified version of this index, without the disabled, and construct a separate dummy for the disabled. All these versions are described in Table A2 of the Appendix.

Trust in 2007, 2008 or 2009 aggregated for Russian regions is the main independent variable of interest. It is in a traditional or close to traditional form of World Values Survey: "Generally speaking, would you say that most people can be trusted or that you need to be very careful in dealing with people?" with 1 for "Most people can be trusted" and 0 for "Can't be too careful". Trust is used in a crude form or calculated as a fixed effect for the regions of an OLS regression of trust on individual characteristics (age, gender, education, wealth, etc.)[9]:

$$Trust = \alpha Gender + \beta Age + \gamma Age^2 + \delta Education + \phi Wealth + \eta Nationality + \lambda CityType + {} + \mu RegionalDummies + \varepsilon$$

where *RegionalDummies* stand for regional fixed effects. Further we appeal for these fixed effects as measures of regions' pure trust[10]. This approach makes sense because we cannot control for the individual determinants of trust in the main regression as its dependent variables go for 2008 and 2011. This approach with non-individual regionally aggregated trust also helps us to account for endogeneity. It is highly unlikely that individual's preferences over redistribution could affect regional level of trust that is free from the component determined by individual characteristics. Thus trust serves as an instrument for itself.

Finally we include a set of individual and regional control variables. Earlier studies (see e.g. Alesina et al., 2001, Alesina, Giuliano, 2011 and Algan et al., 2014) have shown that individual preferences for redistribution strongly depend on gender, nationality, income, education, employment status, family structure, settlement size. We include the corresponding control variables that are available from our dataset. We also include some characteristics of Russian regions which could possibly influence preferences over redistribution (such as GRP per capita, social expenditures, poverty, fractionalization)

Overall the baseline model is:

$$RedistributionPreferences_{ij} = \alpha + \beta Trust_j + \gamma IndividualControls_{ij} + \delta RegionalControls_j + \varepsilon_{ij}$$

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[8] This classification of different categories of people is driven not only by our hypotheses. Regional trust appears to be positively correlated with support of redistribution in favor of most categories that we classify as distinguished or disabled people and negatively correlated with support of redistribution in favor of most categories are classified as being in a difficult situation but could still work harder. It's supported by a set of regressions (see table A4 in the appendix) and the results of factor analysis.

[9] Control for nationality is for 2007 only

[10] Overall strategy of getting pure trust is similar to that used by Algan et al. (2014).

where *RedistributionPreferences$_{ij}$* reflect preferences over redistribution of an individual *i* living in region *j* in 2008 or 2011; *Trust$_j$* is for trust in region *j* in a crude or pure form in 2007, 2008 or 2009; *IndividualControls$_{ij}$* include age, age squared, gender, wealth, education, occupation, nationality, religion, importance of social benefits for the respondent's family, and city size dummies[11]; *RegionalControls$_j$* are for GRP per capita, social expenditures, share of people below subsistence minimum/ Gini index, the ethnic fractionalization index, the level of urbanization, and the perceived level of corruption.

5. Explaining Preferences over Redistribution

5.1. Trust and Preferences over Redistribution

Results for the general question on inequality and redistribution are presented in Table 1. All estimations include the basic set of individual and regional level control variables described in a previous section.

Table 1. Trust and tolerance of inequality

	Tolerance of inequality		
	(1)	(2)	(4)
Trust	-0.764***	-0.826***	-0.866***
	(0.187)	(0.187)	(0.200)
Log GRP per capita	-0.029	0.019	0.012
	(0.031)	(0.048)	(0.050)
Urbanization			0.087
			(0.107)
Poverty		0.006	0.006
		(0.004)	(0.004)
Corruption	-0.176**	-0.159**	-0.153**
	(0.068)	(0.066)	(0.067)
Controls	Yes	Yes	Yes
Observations	31068	31068	31068
R-squared	0.069	0.070	0.070

Note. Robust standard errors in parentheses. Trust is for 2007. All estimations include controls for gender, age, age squared, wealth, education, occupation, ethnolinguistic fractionalization, social expenditures, city size.
* Indicate significance at resp 10% level.
** Indicate significance at resp 5% level.
*** Indicate significance at resp 1% level.

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[11] As 2008 and 2011 surveys provide a bit different personal information the set of individual controls slightly varies for 2008 and 2011 dependent variable estimations. These details are mentioned in the notes for specific tables. This set of individual control variables is quite common for studies of redistribution preferences (see e.g. Alesina, Giuliano, 2011, Yamamura, 2012 and Algan et al, 2014)

Generalized trust matters both statistically and economically suggesting that people with higher levels of trust have lower tolerance of inequality[12]. The results are robust for different sets of control variables, including the Gini coefficient, poverty, urbanization. The effect of trust is twice as large as the effect of gender and as strong as the effect of social expenditure in a region. This provides us with a link to previous research by Algan et al. (2014), where there is a positive and economically significant influence of trust on preferences over redistribution.

Although we cannot claim a causal link between trust and preferences over redistribution we have some evidence that it could be the case. First, by definition higher generalized trust leads to higher levels of support for unknown people. Thus a more equal society could be perceived as fairer and more redistribution could be supported. Second, the regional level of trust reflecting the overall atmosphere and not individual trust helps us alleviate the reverse causality problem. But of course reverse causality is still possible and preferences over redistribution could shape generalized trust.

More redistribution is preferred by younger and older persons, females, people with lower levels of education and income, and those living in more corrupt regions and regions with lower social expenditures[13]. Unemployment is positively associated with the demand for more state redistribution. More corrupt regions are associated with preferences to redistribute. As shown in Aghion et al. (2010), high corruption under certain circumstances, like those in post-socialist countries, may make people more supporting government intervention into economy because of their lack of trust in business. Also, the prevalence of uncivic individuals could have such an outcome (as the theoretical model of Algan et al. (2014) predicts). For now we do not have a reliable proof of causation, further careful examination of this topic needed.

5.2. *Redistribution to Different Groups of People*

First we present the results for the general index described in section 3. Column (1) of Table 2 presents our baseline regression. Controls for poverty, inequality, corruption and regional social spending are included separately in columns (2)–(5) and provide a robustness check of our base finding.

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[12] Table 1 shows estimations for 2007 trust but results are robust to trust in 2008 and 2009. Tables with 2008 and 2009 trust could be obtained from the authors.
[13] Results could be requested from the authors.

Table 2. Trust and preferences over redistribution (Redistribution index)

	Redistribution index				
	(1)	(2)	(3)	(4)	(5)
Trust	1.995***	2.082***	1.921***	2.028***	1.958***
	[0.704]	[0.688]	[0.691]	[0.680]	[0.718]
Poverty		-0.010			
		[0.010]			
Gini coefficient			-1.107		
			[1.578]		
Corruption				0.368	
				[0.235]	
Social spending					-0.001
					[-0.001]
Individual controls	Yes	Yes	Yes	Yes	Yes
Regional controls	Yes	Yes	Yes	Yes	Yes
Observations	26130	26130	26130	26130	2630
R-squared	0.048	0.048	0.048	0.048	0.048

Note. Robust standard errors in parentheses. Trust is for 2007. All estimations include individual controls for gender, age, age squared, nationality, religion, wealth, education, occupation, importance of social benefits for household budget, city size, and regional controls for ethnolinguistic fractionalization and GRP per capita.
* Indicate significance at resp 10% level.
** Indicate significance at resp 5% level.
*** Indicate significance at resp 1% level.

These results show that higher trust is connected with higher levels of support for redistribution in favour of those who perform services for their homeland or can't work because of health problems or age. Less support is found for people in difficult life situations who still are able to work. In order to examine mechanisms of relationship between trust and preferences over redistribution carefully we provide the following robustness check. First we do regressions for the disabled dummy as a dependent variable because this group is different from the rest of people who gain positive points in index: the others may be classified as those who did a service for their homeland while the disabled people might not have done it. So we tried another version of the redistribution index which is our initial redistribution index modified by exclusion of the "disabled" category. The estimation for the alternative index and for "disabled" category is provided in tables 3 and 4.

Table 3. Trust and preferences over redistribution (Redistribution index2)

	Redistribution index2				
Trust	2.064***	2.099***	2.030***	2.091***	2.007***
	[0.646]	[0.635]	[0.638]	[0.631]	[0.661]
Poverty		-0.004			
		[0.009]			
Gini coefficient			-0.505		
			[1.410]		
Corruption				0.296	
				[0.214]	
Social spending					-0.001
					[0.001]
Individual controls	Yes	Yes	Yes	Yes	Yes
Regional controls	Yes	Yes	Yes	Yes	Yes
Observations	26130	26130	26130	26130	26130
R-squared	0.047	0.047	0.047	0.047	0.047

Note. Robust standard errors in parentheses. Trust is for 2007. All estimations include individual controls for gender, age, age squared, nationality, religion, wealth, education, occupation, importance of social benefits for household budget, city size, and regional controls for ethnolinguistic fractionalization and GRP per capita.
* Indicate significance at resp 10% level.
** Indicate significance at resp 5% level.
*** Indicate significance at resp 1% level.

Table 4. Trust and preferences over redistribution to disabled persons

	Redistribution to disabled people				
Trust	-0.050	-0.027	-0.083	-0.046	-0.024
	[0.183]	[0.189]	[0.164]	[0.180]	[0.186]
Poverty		-0.003			
		[0.003]			
Gini coefficient			-0.477		
			[0.543]		
Corruption				0.059	
				[0.049]	
Social spending					0.0004**
					[0.0002]
Individual controls	Yes	Yes	Yes	Yes	Yes
Regional controls	Yes	Yes	Yes	Yes	Yes
Observations	27119	27119	27119	27119	27119
R-squared	0.017	0.017	0.017	0.017	0.017

Note. Robust standard errors in parentheses. Trust is for 2007. All estimations include individual controls for gender, age, age squared, nationality, religion, wealth, education, occupation, importance of social benefits for household budget, city size, and regional controls for ethnolinguistic fractionalization and GRP per capita.
* Indicate significance at resp 10% level.
** Indicate significance at resp 5% level.
*** Indicate significance at resp 1% level.

The trust coefficient in the specifications in Tables 3 is quite similar to the coefficients in Table 2. Table 4 reveals an insignificance of trust for redistribution to disabled persons. Overall our hypotheses is supported by the data, although a more careful examination of this topic is needed.

6. Concluding Comments

Preferences over redistribution are driven by a large set of factors representing individual characteristics, experience and region or country of residence. Lots of them are well described in a literature although the influence of social norms and trust is underexplored. Those closest to our papers show that generalized trust and civicness is important for the size of the welfare state and people's preferences over redistribution. But the support of different groups of people is overlooked.

Our paper shows the multidirectional impact of interpersonal trust on preferences over redistribution to different groups of people. At first glance more trust is surprisingly connected with less desire to redistribute in favour of the poor, the homeless, families with children and others in difficult life situations. This could appear because people consider mutual help as a substitute for government support, and we call it substitution hypothesis. At the same time trusting people want the government to reward distinguished persons and help those who need special assistance: the civicness hypothesis. To account for endogeneity we use a novel instrumentation strategy with regionally aggregated responses on trust questions that are free from individual characteristics. Overall we find strong empirical evidence for the proposed hypothesis which is robust to alternative calculations of redistribution index, trust in 2007 and 2009, inclusion and exclusion of a rich set of control variables.

Our results suggest that the consequences of interpersonal trust are ambiguous and should be examined in greater detail because they can have important implications for economic growth. Relation between generalized trust and preferences over redistribution target groups could be seen as an important channel through which trust affects economic growth.

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Appendix

Table A1. Sample characteristics

Occupation	
Entrepreneurs, farmers	2,1%
Top managers	0,7%
Managers	2,9%
Specialists	15,0%
Office workers	10,7%
Factory workers	25,5%
Retirees	26,0%
Unemployed (seeking for job)	3,8%
Not employed (not seeking for job)	6,5%
Students	4,5%
Other	1,9%
No response	0,2%

Education	
Primary education or less	8,8%
Secondary education	24,7%
Basic professional education	7,6%
Professional education (College)	38,5%
Incomplete higher education	2,8%
Higher education	17,5%

Welfare	
Lacks money even for food	9,7%
Can buy food but cannot buy enough clothes	25,9%
Can buy clothes but cannot buy domestic appliances	41,5%
Can buy domestic appliances but cannot buy a vehicle	16,2%
Can buy vehicle but cannot buy a house or apartments	5,0%
Can buy even a house or apartments	1,6%

Table A2. Definitions and derivation of variables

Variable name	Year of the survey	Level	Formulation of the survey question	Definition of the variable
Tolerance of inequality	2008	Individual	What type of society is in your opinion more fair: one where incomes of people are nearly equal or one where incomes differ significantly depending on individual professional skills and enterprise? 1. Surely one where incomes are nearly equal 2. Rather one where incomes are nearly equal 3. Rather one where incomes differ significantly 4. Surely one where incomes differ significantly	1 – Rather one where incomes differ significantly / Surely one where incomes differ significantly 0 - Surely one where incomes are nearly equal / Rather one where incomes are nearly equal
Redistribution index Redistribution to disabled persons Redistribution index2	2011	Individual	In your opinion, from the groups listed below whom should the state help to in the first order? (choose up to three answers): 1. Poor 2. Homeless 3. Labor and war veterans 4. Distinguished teachers, distinguished doctors, and other distinguished workers 5. Families with one parent and families with many children 6. Disabled persons (aged, invalid, orphans) 7. Retired 8. Unemployed 9. Families with children 10. Participants of military operations 11. None 12. Other groups of people	Three derivations used. I. Redistribution index: [war and labor veterans] + [distinguished teachers, distinguished doctors, and other distinguished workers]+ [disabled persons (aged, invalid, orphans)] + [retired] + [participants of military operations] - [poor] - [homeless] - [families with one parent and families with many children] – [persons who lost job] – [families with children] II. Redistribution index2: [war and labor veterans] + [distinguished teachers, distinguished doctors, and other distinguished workers]+ [retired] + [participants of military operations] - [poor] - [homeless] - [families with one parent and families with many children] – [persons who lost job] – [families with children] III. Dummy for disabled persons
Trust	2007	Regional	Generally speaking, would you say that most people can be trusted or that you need to be very careful in dealing with people? 1. Most people can be trusted 2. Can't be too careful	1 – Most people can be trusted 0 – Can't be too careful

Variable name	Year of the survey	Level	Formulation of the survey question	Definition of the variable
Gender	2011	Individual	Gender of the respondent	1 – Male 0 – Female
Age	2011	Individual	How old are you?	

Education	2011	Individual	What education do you have?
			   1. Uncompleted secondary or less
			   2. Secondary general (school)
			   3. Primary professional
			   4. Secondary special
			   5. Uncompleted higher
			   6. Higher
			   7. PhD
				Dummy variables for:
				   - Uncompleted secondary education or less
				   - Secondary general
				   - Primary professional
				   - Secondary special
				   - Uncompleted higher / higher / PhD

Type of employment	2011	Individual	What is the type of your employment currently?
			   1. Businessmen, entrepreneur, farmer
			   2. Top manager of enterprise, organization, firm
			   3. Department manager
			   4. Specialist, master
			   5. White collar worker
			   6. Blue collar worker
			   7. (Not working) retired
			   8. Do not work and do not plan to look for job
			   9. Do not work and look for job
			   10. Student
			   11. Other
				Dummy for every type of employment

Believer	2011	Individual	Do you consider yourself a believer? If yes, what religion / denomination do you belong to?
			   1. Orthodox
			   2. other Christian confessions
			   3. Moslem
			   4. Buddhist
			   5. Jew
			   6. Other
			   7. Do not consider myself a believer
				1 – Orthodox / other Christian confessions / Moslem / Buddhist / Jew / Other
				0 – Do not consider myself a believer

Variable name	Year of the survey	Level	Formulation of the survey question	Definition of the variable

Wealth	2011	Individual	Which statement describes the material conditions of your family best of all?
			1. Our family doesn't have enough money even for food
			2. Our family has enough money for food, but not enough for clothes, shoes
			3. Our family has enough money for clothes and shoes, but not enough for home appliances
			4. Our family has enough money for home appliances, but not enough for a car
			5. Our family has enough money for a car, but not enough for an apartment, house
			6. Our family has enough money for an apartment, house
				Dummy variables for:
				    - Having not enough money even for food
				    - Having enough money for food, but not enough for clothes, shoes
				    - Having enough money for clothes and shoes, but not enough for home appliances
				    - Having enough money for home appliances, but not enough for a car
				    - Having enough money for a car

Importance of social benefits	2011	Individual	For some families social benefits, payments, remunerations are a significant part of family budget, while for other families this is not the case. How important are social benefits, payments, remunerations for your budget? 1. Very important: all social benefits, payments, remunerations comprise a significant part of the budget of my family 2. Slightly important: only free education and medical care are important 3. Not important: my family can pay for everything including education and medical care	1 – Very important: all social benefits, payments, remunerations comprise a significant part of the budget of my family 0 – Slightly important: only free education and medical care are important / not important: my family can pay for everything including education and medical care
Type of settlement	2011	Individual	Type of settlement, respondent lives in: 1. City with the population 1 mln and more 2. City with the population from 500 thousands to 1 mln 3. City with the population from 250 to 500 thousands 4. City with the population from 100 to 250 thousands 5. Town with the population from 50 to 100 thousands 6. Town with the population less that 50 thousands 7. Settlement of the town type 8. Village	Dummy for every type of settlement
Ethnolinguistic	2010	Regional	Herfindahl—Hirschman index measures ethnic diversity	Continuous variable with theoretical maximum of 1 (all

Variable name	Year of the survey	Level	Formulation of the survey question	Definition of the variable
fractionalization			within a region. Data on ethnic groups' shares obtained from 2010 Russian census.	regional inhabitants belong to the same ethnic group)
Log GRP per capita	2008, 2011	Regional	Logarithm of gross regional product per capita, adjusted for regional cost of living with regional average price for fixed commodity bundle, number of commodity bundles per year, by Rosstat	Continuous variable
Gini index	2008, 2011	Regional	Regional Gini index for income distribution by 20 percent groups, by Rosstat	Continuous variable with theoretical minimum 0 and maximum 100
Poverty	2008, 2011	Regional	Share of population whose income is smaller than regional poverty threshold, per cent, by Rosstat	Continuous variable with theoretical minimum 0 and maximum 100
Social spending	2005-2012	Regional	Spending per capita on social welfare by regional and local governments, thousand rubles, by Russian Treasury	Continuous variable
Corruption	2010	Regional	Regional corruption index provided by INDEM foundation and FOM	Continuous variable between 0 and 1

Table A3.1. Summary statistics for the main variables (individual level)

Variable	Obs	Mean	Std. dev.	Min	Max
Tolerance of inequality	31209	0.46	0.50	0	1
Preference for redistribution in favor of: poor	27200	0.29	0.45	0	1
Preference for redistribution in favor of: homeless	27200	0.19	0.39	0	1
Preference for redistribution in favor of: war and labor veterans	27200	0.31	0.46	0	1
Preference for redistribution in favor of: distinguished teachers, distinguished doctors, and other distinguished workers	27200	0.08	0.26	0	1
Preference for redistribution in favor of: families with one parent and families with many children	27200	0.43	0.50	0	1
Preference for redistribution in favor of: incapable persons (aged, invalid, orphans)	27200	0.45	0.50	0	1
Preference for redistribution in favor of: retired	27200	0.35	0.48	0	1
Preference for redistribution in favor of: persons who lost jobs	27200	0.17	0.37	0	1
Preference for redistribution in favor of: families with children	27200	0.32	0.47	0	1
Preference for redistribution in favor of: participants of military operations	27200	0.11	0.32	0	1
Gender: female	27200	0.55	0.50	0	1
Age	27200	44.6	17.2	18	95
Education: uncompleted secondary or less	27188	0.09	0.28	0	1
Education: secondary general	27188	0.25	0.43	0	1
Education: primary professional	27188	0.08	0.27	0	1
Education: secondary special	27188	0.39	0.49	0	1
Education: uncompleted higher	27188	0.03	0.16	0	1
Education: higher / PhD	27188	0.18	0.38	0	1
Type of employment: businessmen, entrepreneur, farmer	27130	0.02	0.14	0	1
Type of employment: top manager of enterprise, organization, firm	27130	0.01	0.08	0	1
Type of employment: department manager	27130	0.03	0.17	0	1
Type of employment: specialist, master	27130	0.15	0.36	0	1
Type of employment: white collar worker	27130	0.11	0.31	0	1
Type of employment: blue collar worker	27130	0.26	0.44	0	1
Type of employment: (not working) retired	27130	0.26	0.44	0	1
Type of employment: do not work and do not plan to look for job	27130	0.04	0.19	0	1
Type of employment: do not work and look for job	27130	0.07	0.25	0	1
Type of employment: student	27130	0.05	0.21	0	1
Type of employment: other	27130	0.02	0.14	0	1

Variable	Obs	Mean	Std. dev.	Min	Max
Nationality: Russian	27200	0.87	0.33	0	1
Religion: Orthodox Christian	27200	0.73	0.44	0	1
Religion: Moslem	27200	0.03	0.18	0	1
Religion: Atheist	27200	0.17	0.38	0	1
Religion: Other	27200	0.06	0.24	0	1
Wealth: having not enough money even for food	27200	0.10	0.30	0	1
Wealth: having enough money for food, but not enough for clothes, shoes	27200	0.26	0.44	0	1
Wealth: having enough money for clothes and shoes, but not enough for home appliances	27200	0.42	0.49	0	1
Wealth: having enough money for home appliances, but not enough for a car	27200	0.16	0.37	0	1
Wealth: having enough money for a car, but not enough for an apartment, house	27200	0.05	0.22	0	1
Wealth: having enough money for an apartment, house	27200	0.02	0.13	0	1
Importance of social benefits	27200	0.45	0.50	0	1
Type of settlement: city with population 1 mln and more	27200	0.08	0.26	0	1
Type of settlement: town with population from 500 thousands to 1 mln	27200	0.11	0.32	0	1
Type of settlement: town with population from 250 to 500 thousands	27200	0.13	0.33	0	1
Type of settlement: town with population from 100 to 250 thousands	27200	0.10	0.30	0	1
Type of settlement: town with population from 50 to 100 thousands	27200	0.08	0.27	0	1
Type of settlement: town with population less than 50 thousands	27200	0.14	0.35	0	1
Type of settlement: settlement of the town type	27200	0.09	0.28	0	1
Type of settlement: village	27200	0.28	0.45	0	1

Table A3.2. Summary statistics for the main variables (regional level)

Variable	Obs	Mean	Std. dev.	Min	Max
Trust	68	0.19	0.05	0.11	0.37
Ethnolinguistic fractionalization	68	0.28	0.15	0.10	0.73
GRP, 2008	68	27.86	16.56	12.73	133.27
GRP, 2011	68	29.22	17.05	14.22	129.6
Gini index, 2008	68	0.4	0.03	0.35	0.51
Gini index, 2011	68	0.39	0.03	0.35	0.5
Social spending, 2008	68	10.45	17.86	0.86	14.14
Social spending, 2011	68	16.31	28.74	1.57	23.32
Poverty, 2008	68	15.56	3.83	7.3	25.4
Poverty, 2011	68	14.92	3.46	8.1	24.2
Corruption	68	0.45	0.15	.15	.81

Table A4. Trust and preferences over redistribution to different groups of people

	Poor	Homeless	Labor and war veterans	Distinguished teachers, doctors...	One-parent families, families with many children	Disabled	Retirees	Unemployed	Families with children	Military operations participants
Trust	**-0.361*****	**-0.405*****	**0.428*****	**-0.029**	**-0.231*****	**-0.014**	**0.351*****	**-0.099****	**-0.021**	**0.085****
	[0.054]	**[0.047]**	**[0.058]**	**[0.034]**	**[0.061]**	**[0.062]**	**[0.059]**	**[0.047]**	**[0.056]**	**[0.039]**
Social spending	0.0010***	0.0005***	-0.0001	-0.0002	-0.0008	0.0004	-0.0002	0.0002	0.0000	-0.0001
	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001
GRP per capita	-0.053***	-0.018**	0.056***	-0.007	0.046***	0.074***	0.042***	-0.042***	-0.070***	0.006
	[0.008]	[0.007]	[0.009]	[0.005]	[0.009]	[0.009]	[0.009]	[0.006]	[0.008]	[0.006]
Corruption	-0.046**	-0.045***	-0.044**	-0.001	-0.009	0.049**	0.058***	-0.014	-0.139***	0.033**
	[0.019]	[0.016]	[0.019]	[0.011]	[0.021]	[0.021]	[0.020]	[0.016]	[0.020]	[0.014]
Individual controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	27119	27119	27119	27119	27119	27119	27119	27119	27119	27119
R-squared	0.020	0.014	0.024	0.010	0.014	0.016	0.055	0.021	0.020	0.010

Note. Robust standard errors in parentheses. Trust is for 2007. All estimations include individual controls for gender, age, age squared, nationality, religion, wealth, education, occupation, importance of social benefits for household budget, city size.
* Indicate significance at resp 10% level.
** Indicate significance at resp 5% level.
*** Indicate significance at resp 1% level.