



## The Journal of Sociology & Social Welfare

Volume 41  
Issue 4 *December*

Article 3

2014

### Individual and Country-level Institutional Trust and Public Attitude to Welfare Expenditures in 24 Transitional Countries

Nazim Habibov  
*University of Windsor*, [nnh@uwindsor.ca](mailto:nnh@uwindsor.ca)

Follow this and additional works at: <https://scholarworks.wmich.edu/jssw>

 Part of the Social Work Commons

#### Recommended Citation

Habibov, Nazim (2014) "Individual and Country-level Institutional Trust and Public Attitude to Welfare Expenditures in 24 Transitional Countries," *The Journal of Sociology & Social Welfare*: Vol. 41 : Iss. 4 , Article 3.

Available at: <https://scholarworks.wmich.edu/jssw/vol41/iss4/3>

This Article is brought to you for free and open access by the Social Work at ScholarWorks at WMU. For more information, please contact [maira.bundza@wmich.edu](mailto:maira.bundza@wmich.edu).



# Individual and Country-level Institutional Trust and Public Attitude to Welfare Expenditures in 24 Transitional Countries

NAZIM HABIBOV

*Does institutional trust on the individual and on the country-level influence public attitudes to state social welfare expenditures in transitional countries of Central and Eastern Europe, the Caucasus and Central Asia? To answer this question, this study draws on a comparative survey conducted in 24 countries. Multilevel binomial logit regression was used to allow for the simultaneous inclusion of variables at the individual- and country-levels of analysis. Institutional trust is associated with positive attitudes to welfare expenditures on the individual level, but not on the country level. Women, older individuals, those who are less educated, and those of low-income are associated with more positive attitudes to social welfare investments. Ideology is another important factor influencing public attitudes to welfare expenditures. By contrast, no significant effect of country-level poverty, inequality, and gross domestic product was found.*

*Key words: public redistribution, social capital, poverty, inequality, public opinion*

There has been a recent surge in interest the study of the beneficial effects of institutional trust on attitudes towards welfare state expenditures. This promising line of inquiry is guided by institutional theory (Edlund, 2006; March & Olsen, 1984; Rothstein & Steinmo, 2002). According to institutional theory, trust in institutions reflects the degree of trust in the political system (Baron-Epel, Weinstein, Haviv-Mesika, Garty-Sandalon, & Green, 2008). Institutional trust represents the level of confidence in members of the society that the system of institutions which exists in the society is able to deliver favorable outcomes, even in the absence of continuous scrutiny by individuals (Miller & Listhaug, 1990).

Journal of Sociology & Social Welfare, December 2014, Volume XLI, Number 4

Sociologically, the concept of trust in institutions is closely related to Putnam's notion of 'cooperation norms' which serve as a specific form of trust, and are related to the general functions of society (Voicu & Voicu, 2011). This concept stresses attitude of the individual to formal institutions within the society and highlights the quality of interaction between individuals and institutions (Rainer & Siedler, 2009). The concept of trust in institutions is also associated with Coleman's (1988) understanding of social capital as an interplay of norms of behaviors of individuals in the society and their obligation to each other and to the society at large.

As such, institutional trust indicates a vertical dimension of social capital in society and it creates connections to its formal institutions (Lindström & Mohseni, 2009). It also represents a dimension of bridging social capital, which reflects perceived levels of social justice, solidarity, and mutual support in society.

The positive effect of trust is well described in the literature. Thus, individuals in countries with higher levels of trust interact more effectively with their society's formal institutions, have more power and control over their lives, and consequently have a better welfare status (Blakely, Kennedy, & Kawachi, 2001; Szreter & Woolcock, 2004). Similarly, higher levels of trust are associated with greater levels of political participation and enhanced opportunities for creating more generous policy and administration for individuals and communities in need (Lindström & Mohseni, 2009). Consequently, Levi (1997) concluded that "the more trustworthy citizens perceive government to be, the more likely they are to contingently consent to its policies" (p. 21).

In addition to theoretical contributions, there is now empirical evidence suggesting that institutional trust could be a significant determinant of public attitudes toward welfare expenditures. Trust in institutions played a critical role in the development of the welfare state in Germany and Sweden (Edlund, 2006; Gabriel & Trüdinger, 2011), and was also instrumental in defining attitudes towards welfare expenditures in the U.S. (Rudolph, 2009). Trust is also an important factor in explaining differences in public attitudes to welfare spending between Europe and the U.S. (Edlund, 1999). Finally, drawing on the data from 18 OECD countries, Rothstein, Samanni, &

Teorell (2009) found that trustworthy institutions are a vital prerequisite for peoples' willingness to support expenditure for social welfare.

Important as they are, the above-mentioned studies have three main limitations. First, most of the previously-mentioned studies were conducted at the individual level. Hence, only individual-level indicators of institutional trust were considered, and no attempt was made to include contextual indicators. This approach assumes that the beneficial properties of institutional trust are associated with individuals and their social relationships, instead of being a collective attribute of communities or societies. However, the traditional concept of social capital is a societal construct rather than a specific characteristic of an individual. Social capital, including institutional trust, is a feature of the social organization of a society whereby civic participation, reciprocity, or trust in others assists in facilitating individual cooperation for mutual benefit (Putnam, 1993, 2000). Hence, social capital would function as a resource for a group of individuals if they work together towards a collective goal which could not be achieved by each individual separately (Macinko & Starfield, 2001). As a resource for a group of people, social capital could belong both to the smaller and most basic level of a group, for instance, the family, and, at the same time, to the larger and broader group, such as the country (Fukuyama, 1995). The studies of individual levels of institutional trust do not explicitly take account of the possibility of institutional trust being a collective attribute of society, and thus may obscure its possible contextual effect.

To overcome the above-discussed limitation, this study explores institutional trust on both the individual and the country aggregated (contextual) levels at the same time. It makes the assumption that institutional trust at the individual and country-level may not necessary be in conflict. Rather, institutional trust at the individual and contextual levels could simultaneously contribute to defining attitudes towards welfare state expenditures. Since the effect of institutional trust at the contextual level may be confounded with its effect at the individual level, this study employs multilevel regression modeling, which allows for the simultaneous examination of the two levels of effects.

Secondly, most of the previously-conducted studies have

analyzed the effects of institutional trust without explicitly taking into account well-documented alternative factors which may influence attitudes towards welfare expenditures. Among these alternative factors is the so-called self-interest hypothesis (Andreß & Heien, 2001; Svallfors, 1997). According to this hypothesis, the group of individuals who has been, or who is expected to be, the recipient of welfare programs tends to hold a more positive attitude to social welfare expenditures than are groups of individuals who are less likely to be recipients of social welfare. Testing the self-interest hypothesis on a sample of 14 transitional countries, Habibov (2012) found that wealthier individuals, as well as younger people with high levels of educational attainments, held negative attitudes to government expenditures on social welfare, while those who were less educated, women and older individuals held much more positive attitudes to social welfare.

The ideology hypothesis could provide another important explanation of differences in attitudes to welfare expenditures (Jæger, 2008; Lipset, 1963). According to this hypothesis, attitudes to welfare are determined by one's view on the proper relationships between individuals and society (Derks, 2004; Jæger, 2006a, 2006b). People who support economic individualism believe that each person should be responsible for his or her own welfare through active participation in the market economy, and as such do not support high levels of government intervention. In contrast, people who support social equality expect basic rights for all citizens so that the full population can live according to prevailing standards, and they also defend welfare expenditures to a much greater degree than the previously mentioned group. Personal beliefs provide yet another important explanation (Osgood, 1960). Previous studies reported that a belief in the structural root of injustices in society is associated with increased support for welfare state expenditures (Blekesaune & Quandango, 2003; Voicu & Voicu, 2011).

Previous studies also suggest that public attitudes towards the redistribution of income and wealth are the result of a country's economic and welfare conditions. Cutright (1965) has suggested that the creation of a welfare state is a government response to the intensity of social problems. Wilensky (1975) has argued that governments extend or curtail social

welfare programs in response to social risks associated with levels of poverty and inequality. High levels of poverty and inequality can thus lead to demands for greater levels of redistribution and hence a more positive attitude toward redistribution (Dallinger, 2010; Dion & Birchfield, 2010; Voicu & Voicu, 2011). In contrast, during times of economic prosperity associated with growth of gross domestic product, support for redistribution may fall, since the citizenship may feel less need for welfare state protection (Dion & Birchfield, 2010; Voicu & Voicu, 2011).

To overcome the above-discussed limitations, this study simultaneously explores the effects of institutional trust and self-interest, ideology, beliefs, and country-level economic conditions. In this way, we are able to estimate the impact of institutional trust vis-à-vis the above-described and well-documented explanations.

Finally, previous studies have focused primarily on developed countries. In contrast, this study examines the situations in 24 former socialist countries of Central and Eastern Europe, the Caucasus and Central Asia. Having such a diverse sample of countries allows us to robustly test the effect of institutional trust on attitudes towards social welfare in transitional countries. In addition, this is one of the first studies to examine the under-researched regions of the Caucasus, Central Asia and the Balkans. The transitional processes in these regions have been associated with civil unrest, ethnic clashes, and full-scale wars, and were set against a background of profound economic recession and political instability. The countries of these regions experienced longer periods of economic recession, which were more severe than those in high and middle income transitional countries (Habibov, 2011a, b).

In the light of the above-mentioned evidence, the main objective of this study is to investigate the relationship between individual- and country-level institutional trust and public attitude to social welfare expenditures, while controlling for self-interest, ideology, personal beliefs, and economic and welfare conditions in 24 transitional countries of Central and Eastern Europe, the Caucasus and the Central Asia.

## Data and Method

*Data Source*

This study uses micro data from the Life-in-Transition (LIT) survey, which was conducted by the European Bank of Reconstruction and Development (EBRD) and the World Bank

Table 1a. Descriptive Statistics for Outcome, Individual-level of Institutional Trust

Country	Pro-social Welfare Expenditure (%) <sup>1</sup>	Individual-level Social Capital <sup>1</sup>			
		M	SD	Min.	Max.
Albania	72.9	27.40	8.938	10	50
Armenia	91.4	26.23	8.953	10	50
Azerbaijan	88.9	33.39	9.252	10	50
Belarus	93.4	31.60	8.285	10	50
Bosnia	82.3	25.00	10.08	10	50
Bulgaria	93.3	23.95	8.598	10	50
Estonia	90.6	31.20	6.018	10	49
FRY Macedonia	74.5	23.79	9.607	10	50
Georgia	86.2	30.13	8.145	10	50
Hungary	86.5	27.69	7.809	10	50
Kazakhstan	89.3	31.06	7.639	10	50
Kyrgyzstan	88.9	28.78	8.947	10	50
Latvia	91.9	27.83	5.900	10	49
Lithuania	96.6	26.75	6.398	10	49
Moldova	87.5	26.66	9.023	10	50
Montenegro	80.8	29.07	9.036	10	50
Poland	93.1	27.46	7.444	10	50
Romania	93.9	27.06	8.137	10	50
Russia	93.8	25.44	8.125	10	50
Serbia	81.8	24.07	8.896	10	50
Tajikistan	86.6	37.48	8.562	10	50
Turkey	91.3	31.87	10.64	10	50
Ukraine	88.4	23.25	8.295	10	50
Uzbekistan	92.4	36.59	7.892	10	50

in 2006. Since the detailed description of the LIT's methodology, including a report on observations and a discussion of the experiences with data collection is available elsewhere (EBRD, 2007; Synovate, 2006), we will limit ourselves

Table 1b. Descriptive Statistics for Outcome, Country-level Variables

Country	Pro-Social Welfare	Country-level Variables		
	Expenditure (%) <sup>1</sup>	Poverty Rate (%) <sup>2</sup>	Gini (%) <sup>2,3</sup>	GDP <sup>4</sup>
Albania	72.9	24	31	6102
Armenia	91.4	50	32	4096
Azerbaijan	88.9	4	18	4496
Belarus	93.4	2	29	8541
Bosnia	82.3	4	29	6341
Bulgaria	93.3	4	33	9809
Estonia	90.6	5	33	16548
FRY Macedonia	74.5	4	37	8760
Georgia	86.2	52	39	3611
Hungary	86.5	1	24	16975
Kazakhstan	89.3	21	31	8699
Kyrgyzstan	88.9	70	28	1721
Latvia	91.9	3	35	13040
Lithuania	96.6	4	32	14197
Moldova	87.5	43	32	2362
Montenegro	80.8	6	29	8238
Poland	93.1	3	32	13784
Romania	93.9	12	28	9361
Russia	93.8	9	34	11853
Serbia	81.8	6	29	8517
Tajikistan	86.6	74	33	1500
Turkey	91.3	20	40	11465
Ukraine	88.4	1	26	5583
Uzbekistan	92.4	47	36	2001

Source: <sup>1</sup>Synovate (2006, LITS) for share of population supporting pro-social welfare expenditure and measures of individual level of social capital; <sup>2</sup>Alam et al. (2005) for poverty rate and Gini; <sup>3</sup>Gini coefficient fluctuates between value of 0, that indicates perfect income equality in the country, and value of 1, that indicates perfect inequality. We converted Gini coefficient to Gini index in (%) to make it more comparable with other variables in the model; <sup>4</sup>World Development Indicators (World Bank, 2013) for GDP per capita in international USD adjusted for Purchasing power parity (PPP).

Note: Figures are rounded up.

to a brief discussion of the data. The objective of the LIT was to gather directly comparable information about individuals' and households' experiences and attitudes in transitional countries. The LIT covered Central Europe (including the Balkans



and Turkey), Eastern Europe, the Caucasus, and Central Asia (excluding Turkmenistan). The LIT is a cross-sectional survey, and its questionnaire incorporates a wide range of topics including: the socio-demographic characteristics of respondents, household expenditures, and attitudes and values. In each participating country, 1,000 individuals were selected for face-to-face interviews with trained interviewers. Hence, our sample consisted of approximately 24,000 respondents in 24 countries. Because of its high levels of quality, the LIT has already been used for international comparative studies (Habibov, 2011a, 2012).

#### *Outcome Variable*

The outcome variable of interest is a respondent's attitude towards prioritizing government expenditure in social welfare. This outcome variable is measured in the LIT by asking respondents the question "In your opinion, which of these fields should be the first priority for extra government investment?" A wide range of possible alternatives—from education and pensions to public infrastructure and price control—are provided for the respondent. For the purposes of our study, we recoded these responses to a new binary variable. The new variable takes the value of 1 if a respondent identified one of the major domains of social welfare such as: old-age pension, unemployment insurance, social assistance benefits, education, and healthcare, as the first priority for extra government investments. This variable takes the value of 0 if a respondent identified responses which are not in the major domain of social welfare, such as building factories, army, agriculture, corruption, and the like, as the first priority for extra government investments. Consequently, this variable is used to assess whether government social welfare is viewed by the population as the priority for extra government expenditures. The distribution of outcome variables by countries and across samples of countries under investigation is reported in the first column of Table 1.

#### *Independent Variables - Individual Level*

*Institutional trust.* As suggested by the recent article by Voicu & Voicu (2011), we measure multiple dimensions of

institutional trust at the individual level by computing an additive index. For the all countries included in this study, the LITS provides information about the population's trust in: (1) the government; (2) the Parliament; (3) courts; (4) political parties; (5) armed forces; (6) the police; (7) the financial system; (8) foreign investors; (9) non-governmental organizations; and (10) trade-unions. The response for each question is provided in a Likert-type scale and coded as *Complete distrust* = 1, *Some distrust* = 2, *Neither trust nor distrust* = 3, *Some trust* = 4, *Complete trust* = 5. The additive index is computed by adding the scales for all ten dimensions. For instance, if a respondent answers 'complete mistrust' in all ten institutions, then the respondent's index of trust is equal to 10. Conversely, if a respondent has complete trust in all ten institutions, then the respondent's index of trust is equal to 50. The distribution of the index by countries and across the sample of countries under investigation is reported in the second, third, fourth, and fifth columns of Table 1.

*Self-interest.* Age, gender, education, and household expenditure level were selected, since the previous study by Habibov (2012) reported that these variables are strong predictors of self-interest in transitional countries. For the purposes of consistency, we used a recoding system similar to that used in Habibov (2012). Hence, age was coded into two categories: *17-39 years* and *40-59 years, otherwise* = 0. Gender was coded *female* = 1, *otherwise* = 0. Education was coded into a binary variable based on the highest level of academic qualification attained: *bachelor level or higher* = 1, *otherwise* = 0.

All households in each country of investigation were ranked into 5 quintiles based on the households' total per capita expenditures. The first quintile represents the poorest 25 percent of the country's population, while the fifth quintile represents the wealthiest 25 percent of the country's population. The direct cross-country comparison of the households' total per capita expenditures without using quintiles would not be valid, due to the high variation in expenditure between countries. For instance, expenditure of poorest households in Eastern Europe is equal to or higher than expenditure of middle strata households in Central Asia. By contrast, using quintiles allowed us to compare effects of the poorest 25

percent in Eastern Europe and Central Asia.

Overall, according to the self-interest theory, we expect that being younger, having a higher level of educational attainment, and living in a wealthier household will be associated with negative attitudes towards government expenditures to social welfare, while being a female will be associated with positive attitudes.

*Ideology.* To gauge the effect of ideology, as suggested by Habibov (2011a), two binomial variables, market economy and government involvement in reducing inequality, were created. A stated support of the market economy is expected to be associated with lower levels of support for welfare expenditures, while government involvement in reducing inequality is expected to have an opposite effect.

*Beliefs.* To gauge the effects of belief, a binomial variable, structural injustice, was created. This variable indicates whether an individual strongly believes that the main reason that people are currently in need is the result of societal injustice rather than bad luck or individual fault. We hypothesize that belief in structural injustice could be associated with support for social welfare expenditures.

The descriptive statistics for the above-described variables are presented in Table 2.

#### *Independent Variables—Country-Level*

*Institutional trust.* Country-level institutional trust was assessed by aggregating individual institutional trust at the country-level (Blekesaune, 2007; Blekesaune & Quandango, 2003; Habibov & Afandi, 2011; Poortinga, 2006a, b). The procedure for aggregating individual-level institutional trust to the country-level institutional trust detailed below. First of all, recall that institutional trust at individual level is represented by the additive index which varied from 10 to 50 for each individual. Hence, about 1000 respondents in each country under investigation has an additive index with values from 10 to 50. Next, we computed the mean of individual-level institutional trust by country. Consequently, for each participating country, the mean of the additive index of institutional trust was computed. Therefore, this mean represents the average level of trust for each of the participating countries.

*Economic conditions.* We used Gross Domestic Product

(GDP), since it is the most widely used indicator of economic development employed by the studies on attitude to social welfare (Dion & Birchfield, 2010; Voicu & Voicu, 2011). GDP data referred to the same period of 2005 for all countries, which means a lag by one year, as compared with the LIT data collected in 2006. This permits us to reveal the impact (if any) of variation in country GDP to subsequent public attitudes towards social welfare expenditures. GDP measures for each country were taken from the World Development Indicators database maintained by the World Bank (2013) and reflected country GDP per capita in international U.S. dollars adjusted by Purchasing Power Parity.

Table 2. Descriptive Statistics of Individual-level Independent Variables

Variable	Definition	M	SD	Min.	Max.	Yes (%)	No (%)
Age 17-39	Respondent age 17-39 = 1, otherwise = 0			0	1	39.4	60.6
Age 40-59	Respondent age 40-59 = 1, otherwise = 0			0	1	34.6	65.3
Female	Respondent is female = 1, otherwise = 0			0	1	58.5	41.5
University Education	Bachelor education or higher = 1, otherwise = 0			0	1	19.3	80.7
Households Expenditure	Quintiles of total household expenditure per capita	2.50	1.12	1	4		
Market Preferable	Market economy preferable = 1, otherwise = 0			0	1	42.5	57.4
State Involvement	Strongly agree that the state should be actively involved in reducing inequality in society = 1, otherwise = 0			0	1	69.5	30.4
Structural Injustice	The main reason for people in need today is injustice in society = 1, otherwise = 0			0	1	44.4	55.5

Source: Synovate (2006, LITS). Note: Figures are rounded up.

*Welfare conditions.* Poverty and inequality are used to capture each country's welfare conditions. Both measures are taken from the World Bank report (Alam et al., 2005).

The authors of the report used nationally-representative household surveys to estimate poverty and inequality levels in each of the participating countries. Poverty is measured by the international poverty line of 2.15 U.S. dollars per day, adjusted by Purchasing Poverty Parity, while inequality is measured by the Gini coefficient. The advantage of using the statistics from Alam et al. (2005) is that the poverty and inequality indices were created from nationally-representative data using the same methodology for each participating country, thus ensuring the validity and comparability of the statistics. Another advantage is that the indices referred to the same period of 2002-2003 for all countries. In addition, the poverty and inequality indices of 2002-2003 lag by 3-4 years as compared with the LIT data collected in 2006. This allows us to uncover the effect (if any) of variation in country-levels of poverty and inequality to subsequent public attitudes towards social welfare expenditures. Finally, poverty and inequality reflect ultimate outcome and *raison d'être* of welfare state institutions, while indicators such as GDP per capita represent economic output only (Habibov, 2011a). Even in the country with high GDP per capita, inequality in GDP distribution would lead to higher level of poverty, since a relatively smaller share of the resources are available to those at the bottom of the income distribution (Dagdeviren, Hoeven, & Weeks, 2004; Wodon & Yitzhaki, 2003).

### *Method*

We estimate a two-level binomial logistic regression model, modeling individual and country variations in a respondent's attitude towards government expenditures in social welfare. These tests were conducted using the GLLAMM module to the STATA 10 software package (Rabe-Hesketh & Skrondal, 2008). The selected multilevel modeling strategy accounted for the hierarchical structure of the LIT data set, which includes individuals (level 1) nested within countries (level 2). The selected multilevel model allows for the estimation of two important parameters: fixed and random effects. Fixed effect is defined as the overall relationships between individual-level independent variables and outcome variable across all countries under investigation. The random effect, in the form of correlation coefficients  $\rho$ , is defined as the variation between countries in respondents' attitudes towards the priority of government

expenditures in social welfare, which cannot be accounted for by the individual-level independent variables. The illustrations of such an unobserved variation between countries could be cultural differences, such as customs and traditions, historical experience, for example, ethnic conflicts and political instability, and different pace of transition, for instance, countries which were early reformers versus countries which were late reformers. A statistically significant rho signals that a considerable share of total variance in attitude originates from country-level differences. In addition, the higher the value of rho, the higher share of the total variance in attitude originates from community-level differences. Although the data set contains only 24 clusters (countries), the recent studies concur that having more than 10 clusters is enough to estimate a multi-level logistic regression (Austin 2010; Habibov, 2013; Snijders & Boskers, 1999).

## Results

All together, a series of nine two-level logistic regression models was estimated sequentially (Snelgrove, Pikhart, & Stafford, 2009). The models report the likelihood of identifying expenditures for social welfare as a priority for government. Table 3 presents the results of the first four models (Models 1, 2, 3 and 4).

Model 1, the empty model with no predictors, provides a baseline estimate of the correlation coefficient rho. In this model, variation in the attitude is partitioned between individuals within countries and between countries. The purpose of this model is to estimate a benchmark for the size of country-level variation in all subsequent models. The value of the correlation coefficients rho in Model 1 indicates that 8.1% of total variance resides at the country-level.

Country-level aggregated institutional trust is added in Model 2. This model estimates the unadjusted contribution of trust at the country-level to the attitude towards social welfare expenditure. The purpose of this model is to reveal how much variance, on the country-level, can be explained by trust. Model 2 provides no evidence of an association between institutional trust at the country-level and the attitude towards priority of government expenditures for social welfare. However, the model does show that 8.1% percent of total variance in the attitude still resides at the country-level.

Table 3. Multilevel Regression for Public Support for Social Welfare Expenditure

	Model 1		Model 2		Model 3		Model 4		
	OR	SE	p-value	OR	SE	p-value	OR	SE	p-value
<i>Fixed Effect</i>									
Individual (level 1)									
Age 17-39									
Age 40-59									
Female									
University education									
Households expenditure									
Market preferable									
State involvement									
Structural injustice									
Institutional trust of respondent									
Country (level 2)									
Poverty				0.994	0.006	0.320			
Inequality				1.014	0.025	0.557			
GDP							1.001	0.001	0.060
Institutional trust aggregated				1.019	0.030	0.525	1.034	0.033	0.308
<i>Random Effect</i>									
rho	0.081			0.081			0.077		0.070
p-value for rho	0.000			0.000			0.000		0.000
Log likelihood	-8405			-8405			-8404		-10073

Source: Synovate (2006, LIIS).

Note: Figures are rounded up.

Model 3 expands the second model by incorporating country-level poverty and inequality. Adjusting for country-level poverty and inequality levels did not substantially change the overall picture. All three country-level predictors are non-significant, although the percent of total variance in the attitude residing at the country-level slightly was reduced to 7.7%. Adjustment for GDP in Model 4 demonstrated similar results. In addition, we separately regressed country-level indicators, namely poverty, inequality, and GDP on the attitude toward social welfare expenditure. In all cases, our country-level indicators do not have statistically significant association with attitude towards social welfare expenditure. The results of these regressions are not shown here in order to conserve space, but are available from the authors upon request.

The results of estimations for Models 5, 6, 7, 8 and 9 are reported in Table 4. In contrast with previous models, Model 5 includes only individual-level trust variables to estimate the unadjusted contribution of respondents' trust. Model 5 shows that an increase in social trust at the individual level is a significant predictor of attitudes towards social welfare expenditure.

Model 6 expands the fifth model by including all the individual-level variables of the model. This model is designed to estimate the simultaneous effect of all individual-level independent variables without taking into account country-level variations. The results demonstrate that an increase in trust at the individual level continues to be associated with positive attitudes to social welfare expenditure, after adjusting for the simultaneous effect of all individual-level independent variables. In addition to trust, all other individual-level variables also have predicted directions. Being younger, having higher levels of educational attainment, living in wealthier households, and showing preferences for a market economy are associated with negative attitudes towards government expenditures on social welfare. In contrast, being female and strongly supporting the state involvement in reducing inequality in society is associated with positive attitudes towards government expenditures on social welfare. Finally, after controlling for the simultaneous effect of all individual-level independent variables, approximately 7.6% of total variance in the attitude originates in country-level differences, which is fairly similar to the results obtained in the previous models.



Table 4a. Multilevel Regression for Public Support for Social Welfare Expenditure

	Model 5			Model 6			Model 7		
	OR	SE	p-value	OR	SE	p-value	OR	SE	p-value
Fixed effect									
<i>Individual (level 1)</i>									
Age 17-39				0.565	0.035	0.000	0.570	0.035	0.000
Age 40-59				0.592	0.037	0.000	0.592	0.037	0.000
Female				1.481	0.061	0.000	1.475	0.061	0.000
University education				0.835	0.044	0.001	0.835	0.043	0.001
Households expenditure				0.960	0.019	0.037	0.959	0.019	0.031
Market preferable				0.856	0.036	0.000	0.864	0.036	0.001
State involvement				1.190	0.056	0.000	1.181	0.055	0.000
Structural injustice				0.994	0.044	0.894	0.974	0.042	0.574
Institutional trust of respondent	1.007	0.002	0.002	1.008	0.002	0.000			
<i>Country (level 2)</i>									
Poverty							1.004	0.008	0.609
Inequality							0.999	0.024	0.964
GDP							1.001	0.001	0.141
Institutional trust aggregated							1.032	0.032	0.345
Random effect									
rho	0.079			0.076			0.067		
p-value for rho	0.000			0.000			0.000		
Log likelihood	-8290			-8210			-8257		

Source: Synovate (2006, LITS).

Note: Figures are rounded up.

Model 7 contains all of the independent variables on the individual- and country-levels, with the exception of trust at the individual level. This model allows us to begin answering the question of whether the contribution of country-level trust to the attitude towards social welfare expenditures is caused by compositional differences in the social-demographic

characteristics of individuals versus aggregated country social trust. As shown by Model 7, the country effects remain non-significant after controlling for the individual- and country-level differences, while the effects of social-demographic characteristics of individuals is similar to those in sixth model.

Table 4b. Multilevel Regression for Public Support for Social Welfare Expenditure

	Model 8			Model 9		
	OR	SE	p-value	OR	SE	p-value
Fixed effect						
<i>Individual (level 1)</i>						
Age 17-39				0.565	0.035	0.000
Age 40-59				0.591	0.036	0.000
Female				1.480	0.061	0.000
University education				0.835	0.043	0.001
Households expenditure				0.960	0.018	0.037
Market preferable				0.856	0.036	0.000
State involvement				1.190	0.055	0.000
Structural injustice				0.994	0.043	0.905
Institutional trust of respondent	1.007	0.002	0.001	1.008	0.002	0.001
<i>Country (level 2)</i>						
Poverty				1.004	0.009	0.618
Inequality				0.999	0.026	0.961
GDP				1.001	0.001	0.143
Institutional trust aggregated	1.009	0.029	0.759	1.023	0.033	0.473
Random effect						
rho	0.079			0.068		
p-value for rho	0.000			0.000		
Log likelihood	-10020			-8208		

Source: Synovate (2006, LITS).

Note: Figures are rounded up.

Model 8 only considers the contribution of trust variables, both at the individual level and at the country level. The aim of this model is to estimate and compare the effect of individual and aggregated country trust. Therefore, this model can further uncover the degree to which country-level differences in trust can be explained by individual-level trust versus country-level trust. By directly comparing the effects of the individual- and country-levels in Model 8, we can confirm that country-level differences in the attitude towards social welfare expenditure can better be explained by individual-level trust than by the country-level.

Finally, Model 9 contains all of the independent variables on the individual and community levels. This model serves to estimate whether trust has a contextual effect after controlling for all socio-demographic and trust variables at the individual level. After controlling for all individual-level independent variables in Model 9, the effects of all country-level variables, including aggregated institutional trust, continue to be non-significant. The effects of the individual-level independent variables, including institutional trust, remain about the same as in Models 6 and 7. At the same time, approximately 6.8% of total variance in the attitude was still found to originate from country-level differences.

## Conclusion

The objective of the current study is to assess the importance of institutional trust on public attitudes towards government expenditure for social welfare in the former socialist countries of Central and Eastern Europe, the Caucasus, and Central Asia. Using comparable data from 24 countries, this study employed multilevel regression modeling, which allows for the simultaneous inclusion of variables at the individual and country levels of analysis. The empirical analysis presented in this paper provides several interesting insights.

First, with regard to the main aim of this study, the indicator of institutional trust was considered a predictor at both the individual and country-levels simultaneously. The findings suggest that the beneficial properties of institutional trust are attributable to the individual level only. Individual

level institutional trust is associated, although rather weakly, with positive attitudes to social welfare expenditure in all estimated models. Individuals with higher levels of trust were more likely to support social welfare as a priority for government expenditure. Therefore, the lack of institutional trust at the individual level has translated into strong anti-welfare sentiment. In contrast, country-level institutional trust is not associated with positive attitudes to social welfare according to all the estimated models. There seems to be no evidence that a lack of institutional trust at the country-level leads to the erosion of support for social welfare expenditure.

At the same time, between about 7 and 8 percent of total variance in attitude still resides at the country level. Taken together, these results seem to support the conclusion that institutional trust is not a key factor with regard to an understanding of differences in attitudes to social welfare expenditure between transitional countries. Rather than having a contextual influence on attitude, the beneficial properties of institutional trust can only be found at the individual level. It must be highlighted that relatively low levels of cross-country variation in the attitude to welfare institutions in transitional countries is in line with previous findings. The recent study of Habibov (2013) focused on multilevel analysis of factors affecting attitude to welfare state efforts to reduce inequality in 14 transitional countries of the Baltic, Central Asia, the Caucasus, Moldova and the Slavic countries of the former Soviet Union. The study reported significant but relatively low variance in the attitude at the country level. Only 10(?) to 0.3 percent of total variance in attitude to social welfare efforts to reduce income inequality originated at the country level, depending on the variables and regression model specification.

These findings imply that high levels of institutional trust within a country do not automatically lead to more positive attitudes towards redistribution. Even if a country has a large stock of institutional trust, not all citizens will benefit from it uniformly. Rather, the beneficial effects of institutional trust apply mainly to more trusting individuals. As such, the benefits of institutional trust seem to be generated through an interaction between individuals and their social environment. This finding also supports the conceptualization of institutional

trust as a social resource. Like a natural resource, institutional trust may primarily benefit only those individuals who are able to access it. Individuals who are not able access it do not seem to profit directly from the available resources.

This finding may also highlight a darker side of social capital. Putnam (2000) noted that tightly knit societies may be less tolerant towards certain groups of individuals based, for instance, on their ethnicity or religious beliefs. In this way, people belonging to these groups may be ignored or discriminated against by their fellow citizens. As a result, these individuals may experience much less support from government actions, including welfare expenditure. The recent study by Stern (2013) seems to support Putnam's warning. The study found higher levels of social capital are associated with lower diversity, since high social capital helps to maintain racial homogeneity through the reduction in the costs of excluding minorities such as immigrants or non-dominant races. Higher trust and closer social networks assist community organizing aimed at promoting social exclusion based on racial, class, or immigration status criteria through various formal and informal mechanisms.

The evidence of the negative effect of social capital can also be found beyond the U.S. and other industrialized countries in developing and transitional countries. Roßteutscher (2010) studied a sample of 70 countries covered by the World Values Survey worldwide. The author reported that in non-democratic countries, social capital serves to cement authoritarian rule inasmuch as the higher level of social capital is negatively associated with countries' prospects for democratic development. The negative effect of social trust, as a dimension of social capital, on democratic development is especially negative. Describing the mechanisms of negative effects of social trust on democratization, Roßteutscher (2010) stated that:

In nondemocratic contexts, ... it [social trust] appears to throw a spanner in the works of democratization. Trust increases the stability of nondemocratic leaderships by generating popular support, by suppressing regime-threatening forms of protest activity, and by nourishing undemocratic ideals concerning governance. (p. 752)

The negative effect of social capital can be particularly strong in transitional countries (Kaminska, 2010). Considering the role of social capital in transitional countries, the author concludes that social capital hinders development of truly cooperative behavior, facilitates the growth in shadow economy, and is a significant factor preventing adaptation of the market economy.

Second, this study found various significant relationships at the individual level. Most of these relationships have a predicted direction. Being women, in the older age category, less educated, and low-income is associated with a more positive attitude to social welfare investments. This finding supports the self-interest theory of attitudes to welfare investments in transitional countries. We found that positive attitudes towards the state's involvement in reducing inequality are associated with positive attitudes towards social welfare expenditure. It seems that people in transitional countries consider social welfare to be a primary instrument for reducing the existing gap between poor and rich. This finding shows that ideology is an important factor in explaining variation in public attitude towards social welfare.

Third, while previous studies have reported significant effects regarding economic and welfare conditions (Blekesaune, 2007; Dallinger, 2010), no effects on country-level variations with regard to poverty, inequality, and GDP were found in this study. This finding may suggest that, in transitional countries, the subjective assessments that people make of their own situations may play a more important role in shaping their attitudes towards social welfare than country-level economic and welfare indicators. Indeed, consider the examples of Armenia, Azerbaijan, and Georgia, three neighboring transitional countries in the Caucasus. Oil-rich Azerbaijan has the lowest absolute poverty rate – 4%, followed by Armenia – 50% and Georgia – 52%. Despite such a profound variation in country-wide economic indicators, the differences found in peoples' self-assessments of their levels of welfare across the three countries was found to be negligible. About 14% of Azerbaijanis consider themselves very poor, which is close to 13% of Armenians and 15% of Georgians (Habibov & Afandi, 2009). Likewise, about 10% of Azerbaijanis consider themselves to be living in the

lowest strata of society, which is close to 12% of Georgians and 17% of Armenians (Habibov, 2011b). It appears that low-income individuals in Azerbaijan still consider themselves poor, even if they are relatively richer than Armenians or Georgians. This evidence may imply that individuals in transitional countries choose to support social welfare by comparing themselves with neighbors, friends, and co-workers, rather than making a cross-country comparison with regard to their relative levels of poverty and inequality. This conclusion is supported by the fact that all together, only about 7 - 8% of variation in attitudes to welfare can be explained at the country level.

An alternative explanation for the lack of the effect of country-level poverty, inequality, and GDP is that countries differ in their social welfare policies, and specific programs. As such, the peoples' perceptions about the fairness and effectiveness of these programs may also impact public attitudes towards social welfare expenditure (Habibov & Afandi, 2011; Svallfors, 2007). Yet another possible explanation is that obtaining only single-year data on poverty and inequality is inadequate for revealing the true effects of country-level economic indicators.

Unfortunately, many transitional countries, especially those in the Caucasus and Central Asia, are currently lacking reliable longitudinal data in general and data about poverty and inequality in particular (Habibov, 2012). Lack of longitudinal data and cross-sectional design do not allow us to establish a cause-effect relationship between trust and attitudes to social welfare expenditures. This constitutes one of the limitations of this paper. Another limitation is that the data set used in the current study was not specifically designed for the purpose of examining institutional trust at the individual and country levels. The same items were used to measure individual- and country-level trust. Although it is common practice in the field of social capital research to aggregate individual measures to higher levels of analyses (Habibov & Afandi, 2011), we would be remiss if we automatically assumed that aggregated measures fully reflect institutional trust at the country-level. Using the additive index of institutional trust could also be considered a potential limitation, although it allows us to create a single aggregated measure of institutional trust at the country level. Future studies could overcome this limitation by

estimating and comparing the effect of trust to each institution on attitudes to social welfare expenditure. In spite of the above-mentioned limitations, this study provides valuable contributions with regard to institutional capital and attitudes towards social welfare expenditure in the transitional countries, and suggests an agenda for future studies on this topic.

## References

- Alam, A., Murthi, M., Yemtsov, R., Murrugarra, E., Dudwick, N., Hamilton, E., & Tionson, E. (2005). *Growth, poverty and inequality. Eastern Europe and the former Soviet Union*. Washington, DC: The World Bank.
- Andrefß, H. J., & Heien, T. (2001). Four worlds of welfare state attitudes? A comparison of Germany, Norway, and the United States. *European Sociological Review*, 17, 337-356.
- Austin, P. (2010). Estimating multilevel logistic regression models when the number of clusters is low: A comparison of different statistical software procedures. *International Journal of Biostatistics*, 6(1), article 16. DOI: 10.2202/1557-4679.1195.
- Baron-Epel, O., Weinstein, R., Haviv-Mesika, A., Garty-Sandalon, N., & Green, M. (2008). Individual-level analysis of social capital and health: A comparison of Arab and Jewish Israelis. *Social Science & Medicine*, 66, 900-910.
- Blakely, T. A., Kennedy, B. P., & Kawachi, I. (2001). Socioeconomic inequality in voting participation and self-rated health. *American Journal of Public Health*, 91(1), 99-104.
- Blekesaune, M. (2007). Economic conditions and public attitudes to welfare policies. *European Sociological Review*, 23(3), 393-403.
- Blekesaune, M., & Quandango, J. (2003). Public attitudes towards welfare state policies: A comparative analysis of 24 nations. *European Sociological Review*, 19(5), 415-427.
- Coleman, J. (1988). Social capital in the creation of human capital. *American Journal of Sociology*, 94, S95-S120.
- Cutright, P. (1965). Political structure, economic development, and national social security programs. *American Journal of Sociology*, 70, 537-550.
- Dagdeviren, H., Hoveen, R., & Weeks, J. (2004). Redistribution does matter: Growth and redistribution for poverty reduction. In A. Shorrocks & R. van der Hoeven (Eds.), *Growth, distribution and poverty* (pp. 125-154). Oxford: Oxford University Press.
- Dallinger, U. (2010). Public support for distribution: What explains cross-national differences? *Journal of European Social Policy*, 20(4), 333-349.
- Derks, A. (2004). Are the underprivileged really that economically "leftist"? Attitudes towards economic redistribution and the welfare state in Flanders. *European Journal of Political Research*, 43, 509-521.



- Dion, M., & Birchfield, V. (2010). Economic development, income inequality, and preferences for redistribution. *International Studies Quarterly*, 54, 315-334.
- Edlund, J. (1999). Trust in government and welfare regimes: Attitudes to redistribution and financial cheating in U.S. and Norway. *European Journal of Political Research*, 35, 341-370.
- Edlund, J. (2006). Trust in the capability of the welfare state and general welfare state support: Sweden 1997-2002. *Acta Sociologica*, 49(4), 395-417.
- European Bank of Reconstruction and Development (EBRD). (2007). *Life in Transition. A survey of people's experiences and attitudes*. London: European Bank of Reconstruction and Development.
- Fukuyama, F. (1995). *Trust: The social virtues and the creation of prosperity*. New York: Free Press.
- Gabriel, O., & Trüding, E.-M. (2011). Embellishing welfare state reforms? Institutional trust and the support for welfare state reforms in Germany. *German Politics*, 20(2), 273-292.
- Habibov, N. (2011a). Public beliefs regarding the causes of poverty during transition: Evidence from the Caucasus, Central Asia, Russia, and Ukraine. *International Journal of Sociology and Social Policy*, 31(1/2), 53-74.
- Habibov, N. (2011b). Self-perceived social stratification in low-income transitional countries: Micro-data evidence from Armenia, Azerbaijan and Georgia. *International Journal of Social Economics*, 38(1), 5-22.
- Habibov, N. (2012). Income inequality and its driving forces in Armenia, Azerbaijan and Georgia. *Journal of Comparative Social Welfare*, 28(3), 209-221.
- Habibov, N. (2013). Who wants to redistribute? An Analysis of 14 Post-Soviet Nations. *Social Policy & Administration*, 47(3), 262-286.
- Habibov, N., & Afandi, E. (2009). Analysis of subjective well-being in low-income transitional countries: Evidence from Armenia, Azerbaijan and Georgia. *Journal of Comparative Social Welfare*, 25(3), 203-219.
- Habibov, N., & Afandi, E. (2011). Self-rated health and social capital in transitional countries: Multilevel analysis of comparative surveys in Armenia, Azerbaijan, and Georgia. *Social Science & Medicine*, 72(7), 1193-1204.
- Jæger, M. M. (2006a). Welfare regimes and attitudes towards redistribution: The regime hypothesis revisited. *European Sociological Review*, 22, 157-170.
- Jæger, M. M. (2006b). What makes people support public responsibility for welfare provision: Self-interest or political ideology? *Acta Sociologica*, 49(3), 321-338.
- Jæger, M. M. (2008). Does left-right orientation have a casual effect on support for redistribution? Casual analysis with cross-sectional data using instrumental variables. *International Journal of Public Opinion Research*, 20(3), 363-374.

- Kaminska, M. (2010). Bonding social capital in a postcommunist region. *American Behavioral Scientist*, 53(5), 758-777.
- Levi, M. (1997). The contingencies of consent. In M. Levi (Ed.), *Consent, dissent, and patriotism* (pp. 16-37). Cambridge: Cambridge University Press.
- Lindström, M., & Mohseni, M. (2009). Social capital, institutional trust and self-reported psychological health: A population-based study. *Social Science and Medicine*, 68, 436-443.
- Lipset, S. M. (1963). *Political man*. London: Heinemann.
- Macinko, J., & Starfield, B. (2001). The utility of social capital in research on health determinants. *The Milbank Quarterly*, 79(3), 387-427.
- March, J. G., & Olsen, J. P. (1984). The new institutionalism: Organizational factors in political life. *American Political Science Review*, 78, 734-749.
- Miller, A. H., & Lijsthaug, O. (1990). Political parties and confidence in government: A comparison of Norway, Sweden and the United States. *British Journal of Political Science*, 20(3), 357-386.
- Osgood, C. E. (1960). Cognitive dynamics in the conduct of human affairs. *Public Opinion Quarterly*, 24, 341-365.
- Poortinga, W. (2006a). Social relations or social capital? Individual and community health effects of bonding social capital. *Social Science and Medicine*, 63, 255-270.
- Poortinga, W. (2006b). Social capital: An individual or collective resource for health? *Social Science and Medicine*, 62, 292-302.
- Putnam, R. D. (1993). *Making democracy work: Civic traditions in modern Italy*. Princeton, NJ: Princeton University Press.
- Putnam, R. (2000). *Bowling alone: The collapse and revival of American community*. New York, NY: Simon & Schuster.5
- Rabe-Hesketh, S., & Skrondal, A. (2008). *Multilevel and longitudinal modeling using Stata* (2nd ed.). College Station, TX: Stata Press.
- Rainer, H., & Siedler, T. (2009). Does democracy foster trust? *Journal of Comparative Economics*, 37, 251-269.
- Roßteutscher, S. (2010). Social capital worldwide: Potential for democratization or stabilizer of authoritarian rule? *American Behavioral Scientist*, 53(5), 737-757.
- Rothstein, B., & Steinmo, S. (Eds). (2002). *Restructuring the welfare state: political institutions and policy change*. New York, NY: Palgrave.
- Rothstein, B., Samanni, M., & Teorell, J. (2009). *Social risks, institutional trust and the welfare state contract: Quality of government versus the power resource theory* [Working paper]. The Quality of Government Institute, Department of Political Science, University of Gothenburg, Sweden.
- Rudolph, T. (2009). Institutional trust, ideology, and public support for tax cuts. *Public Opinion Quarterly*, 73(1), 144-158.
- Snelgrove, J. W., Pikhart, H., & Stafford, M. (2009). A multilevel analysis of social capital and self-rated health: Evidence from the British Household Panel Survey. *Social Science & Medicine*, 68, 1993-2001.

- Snijders, T., & Boskers, R. (1999). *Multilevel analysis: An introduction to basic and advanced multilevel modeling*. Thousand Oaks, CA: Sage Publications.
- Stern, S. M. (2013). The dark side of town: The social capital revolution in residential property. *Virginia Law Review*, 99(4), 811-877.
- Synovate (2006). *Life in Transition Survey (LITS) 2006. A brief report on observations, experiences and methodology from the survey*. Nicosia, Cyprus: Synovate.
- Svallfors, S. (1997). Words of welfare and attitudes to redistribution: A comparison of eight Western Nations. *European Sociological Review*, 13, 283-304.
- Svallfors, S. (Ed.). (2007). *The political sociology of the welfare state: institutions, social cleavages and orientations*. Stanford, CA: Stanford University Press.
- Szreter, S., & Woolcock, M. (2004). Health by association? Social capital, social theory and the political economy of public health. *International Journal of Epidemiology*, 33(4), 650-667.
- Voicu, B., & Voicu, M. (2011). How sociability and trust impact on welfare attitudes. A cross-European analysis. *Review of Research and Social Intervention*, 33, 72-90.
- Wilensky, H. L. (1975). *The welfare state and equality: structural and ideological roots of public expenditures*. Berkeley, CA: University of California Press.
- Wodon, Q., & Yitzhaki, S. (2003). Distribution and social welfare. In J. Klugman (Ed.), *A sourcebook for poverty reduction strategies*, (pp. 77-91). Washington, DC: World Bank.
- World Bank. (2013). *World development indicators*. Retrieved from <http://data.worldbank.org/data-catalog>