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### Social capital and political participation

Juan D Montoro pons

*Departamento de Economía Aplicada, Universitat de València*

Miguel Puchades navarro

*Departamento de Economía Aplicada, Universitat de València*

#### Abstract

This paper analyzes the determinants of social capital, as generalized trust, from a microeconomic perspective. We review previous results at the aggregate level and test their significance in our setup. Specifically we aim at testing the role of political participation and the quality of institutions. The empirical work relies on microeconomic data from the 2008 wave of the European Social Survey, including 21 European countries and roughly 41,000 observations on a wide set of socio-economic and political variables. Preliminary results underline the role of political participation in the accumulation of generalized trust, while data are consistent with institutional quality being a consequence and not a cause of trust.

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# 1 Introduction

Social capital has gathered momentum in the economic agenda. This interest stems from its potentially positive effects on many socio-economic and political phenomena. Some authors have found a positive impact of social capital on economic growth (Knack and Keefer, 1997), life satisfaction (Bjornskov, 2003), government performance (La-Porta et al., 1997) and the quality of institutions (Bjornskov, 2006), to mention just a few. These findings raise the interesting question of whether the determinants of social capital can be potential policy instruments.

While part of the literature has dealt with the determinants of volunteerism as a proxy of social capital—or *Putnam's instrument*—, this approach may focus more on a byproduct rather than on social capital itself. Different motivations, some unrelated to excess cooperation, drive associational activity as a recent paper by Owen and Videras (2009) shows.<sup>1</sup>

As an alternative, the trust literature has focused on the emergence and growth of generalized trust—the degree to which people believe they can in general trust other people—as the defining feature of social capital. In a recent paper Bjornskov (2007) reviews the main determinants of trust in the literature and tests them. Findings show that inequality and diversity or polarization, hierarchical religions and being a post-communist country are factors that decrease trust. More interesting is the non-significance of institutional quality, a result that supports Uslaner (2002) views about the non institutional foundations of trust. Other works consider it either to be determined by trust—Knack and Keefer (1997) and Berggren and Jordahl (2006)— or to determine trust—La-Porta et al. (1997)—, while Bjornskov's paper considers it endogenous to the model.

Based on the previous evidence, this paper aims at analyzing the determinants of generalized trust. We use a microeconomic approach, focusing on traits at the individual level that can explain the emergence of trust. Central to our work is the role of political participation and institutional quality in the building of trust. The former as an expression of commitment with socio-political issues and of the intensity of individual exchanges in the public choice arena; the latter as a feature that helps to measure the protection of property rights and the probability of incurring losses for failed exchanges. We consider the potential endogeneity of both variables by using a simultaneous equations framework.

The paper contributes in two ways to the literature. First by linking generalized trust with political participation. Second by undertaking a microeconomic standpoint. Much of the empirical literature deals with the effects or determinants of social capital at the macro level, neglecting individual features that may help explaining trust.

The paper is organized as follows. First we introduce some considerations on the connections between social capital, institutions and political participation. Section 3 deals with the empirical analysis. We start by describing the data, measuring institutional quality at the micro level and summarizing political participation as a binary variable. Finally we estimate a multivariate probit model and sketch some preliminary results. Section 4 closes with some conclusions.

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<sup>1</sup>Unobserved latent variables that determine associational activity define the “type” of social capital individuals choose to accumulate. The authors aim at finding the determinants of the individual choice of social capital.

## 2 Trust and collective action

Our empirical work aims at testing the link between trust and collective action. We start by hypothesizing the connection between politically active individuals and trust levels. Two main arguments apply in this context. First we acknowledge that people learn to trust and share norms when they participate in organizations. As Berggren and Jordahl (2006) note, even though individuals do not know whether they can trust a new player they exchange with, particularized trust—that may arise because of cooperating with known others—can build up generalized trust. In other words we hypothesize that participation—either in markets or in the political arena—fosters generalized trust.

Second, political participation increases knowledge of politics and checks on politicians and officials leading to preferred political outcomes and less rent extraction by bureaucrats and/or special interests. This, in turn, can increase trust as individuals are free to choose in the collective action and not subject to hierarchical bonds of authority. Hence

**Hypothesis 1.** Political participation increases generalized trust.

It should be noted that political involvement can potentially be predetermined. As Sonderskov (2010) notes there might be a positive effect of trust on collective action, via increased membership of associations producing public goods. Nevertheless, our empirical setup accounts for the potential joint determination of generalized trust and participation.

Market and collective exchanges do not take place in a vacuum: individual choices shape and are shaped by specific institutions. Hence the need to consider the relations between social capital and institutions. Here the direction of causality is not clear and evidence, as mentioned, has been ambiguous. Therefore we test for both causal links: from institutions to trust and from trust to institutions.

**Hypothesis 2** The quality of institutions that protect property rights determines the level of trust.

**Hypothesis 3** Trust determines the quality of institutions that protect property rights.

To illustrate Hypothesis 2, think of the working of the legal system as an enforcer of property rights in market exchanges. The likelihood of an individual trusting any unknown individual, *ceteris paribus*, depends on the quality of the institutions that protect and enforce property rights. This is so as expected losses of trusting individuals can be diminished if the enforcement of contracts and rules punishes opportunistic behavior. Thus better institutions enhance trust as individuals know that if their counterpart fails to perform in an exchange the resort to the legal system will very likely right the wrong.

Nevertheless, the reverse—Hypothesis 3—is also true: trust can boost the quality of the legal system as informal institutions, i.e. those that lead to the fulfillment of commitments and non written contracts, emerge more easily in a trusting environment. In short, institutions are improved in more trusting environments.

By an large, and in line with previous works, we expect both participation and the institutional setting to determine and be jointly determined. Hence the need for a simultaneous setup that takes into account the potential endogeneity of the determinants of trust.

## 3 Empirical analysis

### 3.1 Description of the data

Our analysis deals with the determinants of generalized trust from a micro perspective. Our dataset comes from the *European Social Survey* (ESS).<sup>2</sup> The ESS is biennial and multi-country, covering over 30 nations. In our case we use the 2008-09 wave which, at the moment, includes 21 countries. These are: Belgium, Bulgaria, Cyprus, Germany, Denmark, Estonia, Finland, France, Hungary, Israel, Netherlands, Norway, Poland, Portugal, Russia, Sweden, Switzerland, Slovakia, Slovenia, Spain and United Kingdom.

The dataset includes roughly 41,000 observations on a wide range of socio-economic and political variables. For our purposes we used:

1. Data on trust. We generate a binary **Trust** variable. We have coded the ten points answer to the question “You can’t be too careful—Most people can be trusted” into a {0/1} variable. Following previous research, we map the top three categories into 1.
2. Data on institutional quality (variable **Legal**). Here we use the variable “Trust in the legal system” coded into 10 ordered categories. Again we use the top three categories as a 1.
3. In order to proxy for political participation we use information on whether the respondent was involved for the last 12 months in any of the following activities: contacted a politician or government official; worked in political party or action group; worked in another organization or association; wore or displayed campaign badge or sticker; signed a petition; took part in lawful public demonstration; boycotted certain products.
4. Finally we used other controls in our explanatory models. These include: geographical, demographic and socio-economic variables, values and attitudes among others. A complete list of these and their definitions is in table IV.

Table I shows the main descriptive statistics —mean, standard deviation and number of non-missing observations— for **Trust**, institutional quality and political participation variables.

### 3.2 Institutional quality and governance

Several authors have pointed to social capital and its accumulation both as a condition and a consequence of governance. The World Bank defines governance as a democratic system of laws and social institutions that define how authority in a country is exercised. The *Worldwide Governance Indicators Project* (WGI) produces aggregate and individual governance indicators for 212 countries over the period 1996–2008.<sup>3</sup> These are survey-based and measure the perception on six dimensions: voice and accountability, political stability

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<sup>2</sup>This is a project funded jointly by the European Commission, the European Science Foundation and academic funding bodies in each participating country. For more details on its methodology, questionnaires and the dataset see <http://ess.nsd.uib.no/>.

<sup>3</sup>See <http://info.worldbank.org/governance/wgi/>

and the absence of violence, government effectiveness, regulatory quality, rule of law, and control of corruption.

In our work we resort to perceptions of institutional quality by using the set of variables “trust in” as presented in Table I. In order to check their consistency with the World Bank indicators, we compute the correlation of the WGI point estimates and the country means for ESS trust in specific institutions. Table II shows the results. Two features stand out:

1. Trust in the legal system ( $\text{Trust}_2$ ) has the strongest correlation with all the items in WGI.
2. Trust in the legal system —and to a lesser extent trust in parliament ( $\text{Trust}_1$ )— have a positive and strong correlation with the following items: government effectiveness ( $\text{Gov}_3$ ), rule of law ( $\text{Gov}_5$ ) and control of corruption ( $\text{Gov}_6$ ).

All in all, trust in the legal system seems to be a rather good approximation at the macro level to institutional quality indicators. Therefore, we use it as our central variable **Legal** to measure individual perception of institutional quality.

### 3.3 Political participation

ESS measures active political involvement by using seven different dimensions. Given that our aim is to analyze the link between trust and political participation, a single metric to capture the latter would make the analysis more parsimonious. First we check whether the different dimensions measure an underlying latent characteristic, i.e. political involvement. We use Cronbach’s alpha which is 0.769 for the seven items, and is therefore an acceptable measure of reliability.

Second, and in order to reduce the dimensionality of the problem, we run a cluster analysis on political participation variables. It will allow us to classify the sample in different categories or clusters such that observations in the same cluster will be similar but dissimilar to observations in different clusters.

We use partition clustering methods — $k$ -means— setting different numbers of categories and choosing those that maximize some “goodness of fit” criterion. In our case we resort to the Calinski/Harabasz pseudo- $F$  index stopping rule. As these methods can be very sensitive to —randomly chosen— initial partitions, we repeat the procedure 100 times with different random seeds, for  $k$  clusters with  $k = \{2, 3, 4, 5\}$ . The partitions that maximize the pseudo- $F$  index are selected. This procedure yielded robust results with a maximum index for 2 partitions.

Table III shows the means for the seven participation variables in the 2 cluster solution. Comparing both groups, the second one is composed of a limited set of individuals —roughly 24% of the sample— that are very active in all the political participation variables. For instance, 13% of the sample contacted a politician or government official; however this percentage was higher in the second group (29.2%) than the first group (8.1%).

Based on the previous analysis, we define the dummy **Participation** for individuals in group 2 —very active in the political arena— in the two clusters solution.

### 3.4 Estimation results

Assume the variables of interest  $\mathbf{Y}^* = \{\mathbf{Trust}^*, \mathbf{Legal}^*, \mathbf{Participation}^*\}$  to be simultaneously determined by the model:

$$\mathbf{Y}_i^* = \mathbf{X}_i \mathbf{B} + \epsilon_i \quad (1)$$

with  $\mathbf{B}' = (\beta'_1, \beta'_2, \beta'_3)$  an unknown vector of parameters,  $\mathbf{X}'$  a set of controls, and  $\epsilon_i$  an error term vector that follows a  $N(0, \Sigma)$  distribution. Let the measures  $\mathbf{Y}^*$  be unobserved. Instead for each individual  $j$  we observe a collection of dichotomous 0/1 variables such that

$$y_{ij} = \begin{cases} 1 & y_{ij}^* > 0 \\ 0 & \text{otherwise} \end{cases} \quad (2)$$

Then the model (1)–(2) is a multivariate probit that involves the estimation of the coefficient matrix  $\mathbf{B}$  and the correlation coefficients  $\rho_{ij}$  between the error terms.

The model is estimated using the method of simulated maximum likelihood (SML), that allows to evaluate the M-dimensional Normal integrals in the likelihood function. Under standard conditions, the SML estimator is consistent and asymptotically equivalent to the true maximum likelihood estimator.<sup>4</sup>

Estimation results are in Tables V and VI. In it we regress the set of binary response variables  $\mathbf{Y} = \{\mathbf{Trust}, \mathbf{Legal}, \mathbf{Participation}\}$ , as a function of a set of controls. The main difference between both specifications is that Table V includes **Legal** as a determinant of **Trust**, while in Table VI the causal link is reversed. As previously mentioned, we put forward our hypotheses assuming that all the variables of interest are jointly determined.<sup>5</sup> Both tables show estimated coefficients, the value of the  $t$  statistic (under the coefficient) and the significance level. The correlation between error terms and an overall significance test are displayed at the bottom of both tables. Finally, refer to Table IV for a detailed description of all the covariates.

#### 3.4.1 The impact of political participation and institutional quality

To test Hypothesis 1 and 2 we enter **Legal** and **Participation** in the **Trust** equation. Although the model includes endogenous variables on the right hand side they do not pose specific problems. As Greene (2007) notes, the recursive structure of the specification avoids any endogeneity problem when maximizing the likelihood function.

Preliminary results show that data strongly support Hypothesis 2, as it is both significant and positive in both specifications. In short, after accounting for the endogeneity of the three variables, political participation increases the levels of generalized trust. Moreover it is the individual factor with the strongest influence on trust in our setup.

In contrast, the evidence is weak with regards to institutional quality. In Model V the variable **Legal** is not statistically significant. To check whether causality could be from

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<sup>4</sup>See Greene (2007) for a brief description of the Geweke-Hajivassiliou-Keane (GHK) smooth recursive simulator used in the estimation procedure. As SML works by simulating a likelihood and then averaging over the simulated likelihoods, one needs to take draws from a multivariate normal density. Here we used the approach in Cappellari and Jenkins (2006), with 200 draws taken in each estimation.

<sup>5</sup>Simultaneous determination could be rejected by individually and jointly testing the significance of correlation coefficients. More on this later.

**Trust** to institutional quality we resort to the estimation results in Model VI. Remarkably, results are robust to the specification. And even more interestingly, **Trust** enters the **Legal** equation in a positive and significant way. This result is consistent with Bjornskov (2007) findings at the aggregate level that institutional quality does not affect generalized trust. In other words better institutions do not seem to enhance social capital —as suggested by Berggren and Jordahl (2006). On the contrary, the causality link supported by our micro dataset suggests an impact of trust on institutional quality.

Second, apart from the direct causal link **Participation** and **Legal** can affect **Trust** through the correlation between unobserved components. Here we measure the linear relationship between outcomes after the influence of the covariates is taken into account. The significance of the coefficients in the correlation matrix implies that we cannot consistently estimate the individual probit equations, suggesting a simultaneity in the determination of the three variables, as we originally hypothesized.

Interestingly, the correlation between **Participation** and **Trust** sheds some light on the relationship between these variables. First, it can be interpreted as a test for rejecting exogeneity: being significant means that political participation and trust are jointly determined. Therefore the causal link in our finding does not exclude trust affecting participation through indirect means. Second, its negative sign means that unobserved traits that enhance **Participation** decrease **Trust**, and thus politically involved individuals are different from those that exhibit high trust levels. This difference can somehow compensate for the face-to-face interaction that Sonderskov (2010) explicitly rules out of his work but that is present in our participation variable.

### 3.4.2 Other determinants of trust

Now we turn to other determinants of **Trust** and their role in the simultaneous model. First, note that a set of geographical dummies are included —although not shown— to account for heterogeneity that stems at country level.

Socio-demographic characteristics are quite robust in tables V and VI. Being female decreases the probability of trusting the legal system, and increases the probability of political participation while being part of an ethnic minority increases trust in the legal system and decreases political participation. Neither affects generalized trust directly although being in an ethnic minority affects it indirectly through its negative effect on participation. On the other hand belonging to a discriminated minority decreases **Trust** and **Legal** without affecting participation. Finally age does not have any significant effect on **Trust** or **Legal**, while its net effect on **Participation** is negative. Population size does not affect **Trust** while fostering **Legal** and **Participation** in the case of those living in big cities.

With regards to the economic environment, one consistent macro finding is that per capita income increases trust, while income inequality decreases it. Obviously we cannot account for the latter that at best can be captured by the country intercept. We measure income indirectly. First by using the main source household income. In this case neither of the variables has a positive effect on generalized trust; variable Wage improves institutional quality perception in both models, while Savings does consistently foster political participation. As an alternative, we measure an individual's economic environment by using the variable CreditAccess that measures the ease of financial borrowing. We assume it is a

proxy for income as worse off individuals will face tougher credit restrictions. In this case the outcome seems to be consistent with other findings: easy access to credit increases trust, institutional quality perception and political participation.

Education levels have been positively related to generalized trust. In our case we include six dummies to account for the maximum level of education an individual attained. We also include two dummies —UniFather and UniMother— that capture the effect of parent’s education. We should note that as we lack a quantitative measure of income, education may partially capture its effect on the dependent variables. Nevertheless we find, as expected, a positive effect of higher education on trust —in fact on all three dependent variables. Furthermore all education levels have a positive and increasing effect on political participation. In other words, political involvement increases with education.

With respect to the set of religious variables, our results are consistent with previous findings. Overall religiousness significantly increases **Trust**, **Legal** and **Participation**. As Paldam (2001) notes, moral and religious reasons can explain excess cooperation. However there are some differences worth mentioning.

Note that the effects on the dependent variables stemming from the comparison of hierarchical and non-hierarchical religions are significant. Variables Catholic and Orthodox affect **Trust** negatively in both specifications. Conversely being Protestant increases **Legal** in both specifications. Finally, being Jewish robustly increases **Trust**. Consistent with previous results on religion and trust at the macro level, hierarchical denominations prevent the arousal of social capital.

Last we turn to ideological preferences —LeftRight. Here we do not find evidence of ideology affecting trust or the perception of institutional quality. However it does affect political participation: individuals are less likely to engage in political exchange the more to the right they are on the political scale.

## 4 Conclusions

This paper sketches a microeconomic setup in which to assess the determinants of generalized trust. We have analyzed the role of market and political exchanges on trust by means of the perceived quality of the institutional setup and of political participation.

Preliminary results point to two main conclusions. First, political participation is by itself the most important contribution to generalized trust in our model. If political participation induces more exchanges within a community it can increase ties between individuals through the internalization of particularized trust into generalized trust. Nevertheless this result may be consistent with alternative explanations, such as political participation being a measure of the degree of political freedom which makes up part of the institutional setup of a free society as suggested by Berggren and Jordahl (2006).

Second, institutional quality as captured by **Legal** is affected by, rather than affects, trust. This is an interesting result as it sheds some light on the discussion of governance and trust. If institutional quality is the result of social capital accumulation, then any institutional improvement design should preferably target, the determinants of trust. And this leads, again, to political participation and the quality of public policies for their role in building up trust.



Finally, note that our results at the individual level agree, with the obvious limitations, with aggregate results found in the literature. There is negative —direct or indirect— impact on trust of being part of a minority and belonging to a hierarchical religion. On the other hand economic well-being and education —which possibly accounts, at least partially, for income— have a positive impact on trust.

## References

- Berggren, N. and H. Jordahl (2006) “Free to Trust: Economic Freedom and Social Capital” *Kyklos* **59**, 141-169.
- Bjornskov, C. (2003) “The Happy Few: Cross-country Evidence on Social Capital and Life Satisfaction” *Kyklos* **56**, 3-16.
- Bjornskov, C. (2006) “The Multiple Facets of Social Capital” *European Journal of Political Economy* **22**, 22-40.
- Bjornskov, C. (2007) “Determinants of Generalized Trust: a Cross-country Comparison” *Public Choice* **130**, 1-21.
- Cappellari, L. and S. P. Jenkins (2006) “Calculation of Multivariate Normal Probabilities by Simulation, with Applications to Maximum Simulated Likelihood Estimation” *The Stata Journal* **6**, 156-189.
- Cuxart, A. and C. Riba (2004) “The European Social Survey. Methodological Aspects” Economics Working Papers, Department of Economics and Business, Universitat Pompeu Fabra.
- Fisman, R. and T. Khanna (1999) “Is Trust a Historical Residue? Information Flows and Trust Levels” *Journal of Economic Behavior and Organization* **38**, 79-92.
- Glaeser, E. L., D. Laibson, J. A. Scheinkman and C. L. Soutter (2000) “Measuring Trust” *Quarterly Journal of Economics* **115**, 811-846.
- Greene, W. H. (2007) *Econometric Analysis*, Prentice-Hall International: New Jersey.
- Knack, S. and P. Keefer (1997) “Does Social Capital Have an Economic Payoff? a Cross-country Investigation” *Quarterly Journal of Economics* **112**, 1251-1288.
- La-Porta, R., F. L. de Silanes, A. Shleifer and R. W. Vishny (1997) “Trust in Large Organizations” *American Economic Review* **87**, 333-338.
- Leeson, P. T. (2008) “Media Freedom, Political Knowledge, and Participation” *Journal of Economic Perspectives* **22**, 155-169.
- Owen, A. L. and J. Videras (2009) “Reconsidering Social Capital: a Latent Class Approach” *Empirical Economics* **37**, 555-582.
- Paldam, M. (2001) “Social Capital: One or Many? Definition and Measurement” *Journal of Economic Surveys* **14**, 629-653.
- Paldam, M. and G. T. Svendsen (2000) “An Essay on Social Capital: Looking for the Fire Behind the Smoke” *European Journal of Political Economy* **16**, 339-366.
- Sonderskov, K. M. (2009) “Different Goods, Different Effects: Exploring the Effects of Generalized Social Trust in Large-N Collective Action” *Public Choice* **140**, 145-160.

Sonderskov, K. M. (2010) “Does Generalized Social Trust Lead to Associational Membership? Unravelling a Bowl of Well-Tossed Spaghetti” *European Sociological Review*, D.O.I. **10.1093/esr/jcq017**.

Uslaner, E. M. (2002) *The Moral Foundations of Trust*, Cambridge University Press: New York.

Vemuri, A. W. and R. Costanza (2006) “The Role of Human, Social, Built, and Natural Capital in Explaining Life Satisfaction at the Country Level: Toward a National Well-Being Index (NWI)” *Ecological Economics* **58**, 119-133.

Table I: Summary statistics of main variables.

<b>Variable</b>	<b>Mean</b>	<b>Std. Dev.</b>	<b>N</b>
Trust	0.172	0.377	40892
Trust parliament	0.122	0.327	39710
Trust legal	0.217	0.412	39803
Trust police	0.301	0.459	40485
Trust politicians	0.043	0.203	40051
Trust parties	0.041	0.198	39768
Contacted politician	0.126	0.332	40903
Worked in political party	0.036	0.186	40916
Worn or displayed campaign badge	0.070	0.255	40893
Worked in another organization	0.131	0.337	40887
Signed a petition	0.213	0.409	40820
Boycotted products	0.059	0.236	40887

Table II: Comparison of trust in institutions (ESS) and governance indices (WGI). Correlation matrix of country means.

	<b>Gov<sub>1</sub></b>	<b>Gov<sub>2</sub></b>	<b>Gov<sub>3</sub></b>	<b>Gov<sub>4</sub></b>	<b>Gov<sub>5</sub></b>	<b>Gov<sub>6</sub></b>
<b>Trust<sub>1</sub></b>	0.311	0.416	0.791	0.533	0.719	0.761
<b>Trust<sub>2</sub></b>	0.456	0.538	0.839	0.601	0.764	0.795
<b>Trust<sub>3</sub></b>	0.432	0.491	0.571	0.369	0.564	0.577
<b>Trust<sub>4</sub></b>	0.333	0.411	0.641	0.418	0.586	0.634
<b>Trust<sub>5</sub></b>	0.204	0.251	0.661	0.530	0.595	0.633

**Key:** Trust<sub>1</sub>: trust in parliament; Trust<sub>2</sub>: trust in the legal system;  
Trust<sub>3</sub>: trust in the police; Trust<sub>4</sub>: trust in politicians;  
Trust<sub>5</sub>: trust in political parties ; Gov<sub>1</sub>: voice and accountability;  
Gov<sub>2</sub>: political stability and absence of violence;  
Gov<sub>3</sub>: government effectiveness; Gov<sub>4</sub>: regulatory quality;  
Gov<sub>5</sub>: rule of law; Gov<sub>6</sub>: control of corruption.

Table III: Political participation (I): classification of the sample in two clusters

<b>Group</b>	<b>P<sub>1</sub></b>	<b>P<sub>2</sub></b>	<b>P<sub>3</sub></b>	<b>P<sub>4</sub></b>	<b>P<sub>5</sub></b>	<b>P<sub>6</sub></b>	<b>P<sub>7</sub></b>
1	0.081	0.017	0.030	0.074	0.000	0.023	0.080
2	0.292	0.100	0.224	0.338	0.944	0.191	0.416
Total	0.132	0.037	0.077	0.138	0.227	0.064	0.161

**Key:**

P<sub>1</sub>: contacted a politician or government official last year.  
P<sub>2</sub>: worked in political party or action group.  
P<sub>3</sub>:worn or displayed campaign badge.  
P<sub>4</sub>: worked in organization or association.  
P<sub>5</sub>: signed a petition.  
P<sub>6</sub>: participated in public demonstration.  
P<sub>7</sub>: boycotted products.

Table IV: Description of the variables.

<b>Variable</b>	<b>Description</b>
Age	Age of the respondent
Female	Dummy variable: 1 if female
DiscriMinority	Dummy variable: 1 if answer to the question “Member of a group discriminated against in this country” is yes
EthnicMinority	Dummy variable: 1 if answer to the question “Belong to minority group in country” is yes
Habitat1	Dummy variable: 1 if respondent lives in big city
Habitat2	Dummy variable: 1 if respondent lives in suburbs of big city
Habitat3	Dummy variable: 1 if respondent lives in town or small city
Habitat4	Dummy variable: 1 if respondent lives in country village
Wage	Dummy variable: 1 if main source of household income is a salary
SocialBenefit	Dummy variable: 1 if main source of household income is unemployment or any other social benefit
Savings	Dummy variable: 1 if main source of household income is savings
CreditAccess	Dummy variable: 1 if respondent answer to the question “Borrow money to make ends meet, difficult or easy” is quite easy or very easy
Edulevel2	Dummy variable: 1 if respondent’s highest level of education is primary
Edulevel3	Dummy variable: 1 if respondent’s highest level of education is lower (?) secondary
Edulevel4	Dummy variable: 1 if respondent’s highest level of education is upper secondary
Edulevel5	Dummy variable: 1 if respondent’s highest level of education is post secondary (non-tertiary)
Edulevel6	Dummy variable: 1 if respondent’s highest level of education is tertiary (first or second stage)
UniFather	Dummy variable: 1 if respondent’s father highest level of education is tertiary
UniMother	Dummy variable: 1 if respondent’s mother highest level of education is tertiary
ReligiousDegree	“Answer to the question How religious are you?” Measured a 1(Not at all)–10(Very) scale
Protestant	Dummy variable: 1 if respondent is protestant
Catholic	Dummy variable: 1 if religious denomination of respondent is catholic

*Continued on next page*

... table IV– continued from previous page

<b>Variable</b>	<b>Description</b>
Orthodox	Dummy variable: 1 if religious denomination of respondent is orthodox
Jewish	Dummy variable: 1 if religious denomination of respondent is jewish
Muslim	Dummy variable: 1 if religious denomination of respondent is muslim
LeftRight	Respondent's position in a left to right scale: Far Left (0)–Far right (10)

Table V: Recursive multivariate probit model estimation results (1).

	<b>Trust</b>	<b>Legal</b>	<b>Participation</b>
Legal	-0.1289		
	-0.5633		
Participation	0.6334***		
	5.6194		
Female	-0.0183	-0.1327***	0.0801***
	-0.9154	-8.0251	4.9246
EthnicMinority	-0.0040	0.1143***	-0.2024***
	-0.0930	2.9477	-4.8731
DiscrMinority	-0.2048***	-0.2609***	0.2968***
	-5.2046	-7.4584	9.4207
Age	0.0434	-0.0560	-0.1885
	0.2600	-0.3465	-1.0936
Age <sup>2</sup>	-0.0482	-0.0146	0.7862**
	-0.1387	-0.0432	2.1367
Age <sup>3</sup>	0.1086	0.0826	-0.7205***
	0.5759	0.4460	-3.5082
Habitat1	-0.0276	0.0781**	0.0954**
	-0.6852	1.9955	2.4419
Habitat2	-0.0214	0.0982**	0.0442
	-0.5060	2.4014	1.0899
Habitat3	-0.0390	0.0083	0.0592
	-1.0456	0.2252	1.6075
Habitat4	0.0003	0.0319	0.0111
	0.0072	0.8522	0.2986
Wage	0.0238	0.0432*	-0.0039
	1.0295	1.8982	-0.1742
SocialBenefit	-0.0411	-0.0688	-0.0542
	-0.8737	-1.5226	-1.2359
Savings	-0.0040	0.0527	0.1969**
	-0.0415	0.5458	2.1244
CreditAccess	0.1215***	0.1457***	0.0719***
	5.7075	7.7935	3.9394
Edulevel2	0.0344	-0.0395	0.1552*
	0.4800	-0.5790	1.8130
Edulevel3	0.0419	-0.0805	0.3891***
	0.5911	-1.1977	4.7023
Edulevel4	0.0723	-0.0469	0.6032***
	1.0205	-0.7008	7.3261
Edulevel5	0.1130	0.0384	0.7082***

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	<b>Trust</b>	<b>Legal</b>	<b>Participation</b>
	1.4566	0.5245	8.0564
Edulevel6	0.2716***	0.1428**	0.8751***
	3.6707	2.1053	10.5497
Edulevel7	0.3316***	0.3182***	0.9637***
	3.3735	3.4876	9.3964
uniFather	0.0594**	0.1627***	0.1212***
	2.0224	6.3885	4.9238
uniMother	0.0367	0.0207	0.1225***
	1.2194	0.7134	4.3857
ReligiousDegree	0.0252***	0.0173***	0.0115***
	7.2547	5.2814	3.5209
Protestant	-0.0076	0.0972***	0.0086
	-0.2831	3.8867	0.3490
Catholic	-0.1284***	0.0152	-0.0875***
	-4.3219	0.5423	-3.3413
Orthodox	-0.0955*	0.1343**	0.0141
	-1.6997	2.4033	0.2414
Muslim	0.0137	0.4428***	-0.3221***
	0.1729	7.0108	-4.5278
Jewish	0.3400***	0.0450	-0.0560
	3.4219	0.5209	-0.5376
LeftRight	-0.0036	-0.0015	-0.0399***
	-0.8784	-0.3993	-10.4472
<b>Correlation between error terms</b>			
<b>Participation</b>	-0.3032***	0.0286**	
<b>Legal</b>	0.3264**		
Wald	3250.71		
$P(Wald > \chi_{51}^2)$	0.0000		
Log Likelihood	-46014.90		
N	33460		

**Significance levels: (\*\*\*)1%; (\*\*)5%; (\*)10%**

Table VI: Recursive multivariate probit model estimation results (2).

	<b>Trust</b>	<b>Legal</b>	<b>Participation</b>
Trust		0.7959*** 5.7079	
Participation	0.6984*** 6.8462		
Female	-0.0170 -0.9938	-0.1358*** -8.1670	0.0791*** 4.8652
EthnicMinority	-0.0098 -0.2327	0.1219*** 3.1307	-0.2069*** -4.9760
DiscrMinority	-0.2064*** -5.7011	-0.2329*** -6.5191	0.2965*** 9.4163
Age	0.0458 0.2732	-0.0873 -0.5379	-0.1772 -1.0286
Age <sup>2</sup>	-0.0520 -0.1493	0.0217 0.0638	0.7622** 2.0726
Age <sup>3</sup>	0.1132 0.5981	0.0582 0.3131	-0.7077*** -3.4484
Habitat1	-0.0313 -0.7882	0.0806** 2.0463	0.0965** 2.4712
Habitat2	-0.0230 -0.5544	0.1009** 2.4544	0.0438 1.0798
Habitat3	-0.0403 -1.0767	0.0124 0.3336	0.0591 1.6055
Habitat4	-0.0020 -0.0526	0.0300 0.7991	0.0110 0.2941
Wage	0.0223 0.9671	0.0382* 1.6702	-0.0039 -0.1737
SocialBenefit	-0.0371 -0.7920	-0.0622 -1.3704	-0.0540 -1.2324
Savings	-0.0086 -0.0883	0.0460 0.4731	0.1979** 2.1335
CreditAccess	0.1119*** 5.7766	0.1165*** 5.9013	0.0714*** 3.9144
Edulevel2	0.0262 0.3649	-0.0508 -0.7408	0.1530* 1.7902
Edulevel3	0.0378 0.5343	-0.0974 -1.4433	0.3883*** 4.6989
Edulevel4	0.0703 0.9934	-0.0762 -1.1334	0.6024*** 7.3257
Edulevel5	0.1019	-0.0036	0.7081***

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	<b>Trust</b>	<b>Legal</b>	<b>Participation</b>
	1.3121	-0.0486	8.0654
Edulevel6	0.2569***	0.0555	0.8749***
	3.4937	0.7967	10.5606
Edulevel7	0.3194***	0.2159**	0.9632***
	3.3337	2.3054	9.4001
UniFather	0.0475*	0.1465***	0.1205***
	1.7800	5.6506	4.8988
UniMother	0.0332	0.0070	0.1223***
	1.1013	0.2386	4.3817
ReligiousDegree	0.0235***	0.0114***	0.0114***
	6.8629	3.2956	3.4936
Protestant	-0.0080	0.0987***	0.0098
	-0.3128	3.9246	0.3947
Catholic	-0.1254***	0.0468	-0.0866***
	-4.2574	1.6416	-3.3077
Orthodox	-0.1037*	0.1597***	0.0156
	-1.8801	2.8363	0.2667
Muslim	0.0004	0.4592***	-0.3238***
	0.0060	7.2428	-4.5438
Jewish	0.3586***	-0.0250	-0.0578
	3.5773	-0.2856	-0.5559
LeftRight	-0.0030	0.0010	-0.0401***
	-0.7444	0.2482	-10.4893
<b>Correlation between error terms</b>			
<b>Participation</b>	-0.3422***	0.0125	
<b>Legal</b>	-0.1835**		
Wald	3272.78		
$P(Wald > \chi_{50}^2)$	0.0000		
Log Likelihood	-46005.93		
N	33460		

**Significance levels:** (\*\*\*)1%; (\*\*)5%; (\*)10%