

Individual Covariates of Trust across European Citizens: What Do the Data Say?[°]

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Abstract

Using the European Social Survey, the paper documents the endowments and the individual covariates of trust across Europe. Self-declared trust is higher in northern countries, in particular Scandinavia; it is lower in southern countries, in particular Italy, Portugal and Greece. At the EU wide-level, we find that a number of individual factors, such as schooling, family background, labor market status, and a recent history of traumatic experiences, are associated with trust. We also find evidence of heterogeneity for some the covariates across European countries. For instance, religious attitudes are associated with higher trust everywhere but southern Europe, while being unemployed does not predict a reduced trust in northern countries.

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1. Introduction

Country-level measures of trust are related to important economic variables, such as GDP growth, trade, and financial market expansion (see, for instance, Knack and Keefer, 1997; La Porta et al, 1997; and Guiso et al, 2008 and 2009). Country-level trust reflects both nationwide attributes – related, for instance, to history, institutions or geography – and individual factors, such as the level of education received, religious beliefs, family background, and the own experience in life.

This paper analyses the individual factors associated with the personal endowments of trust. It does so by using data from the European Social Survey (ESS) and focusing on the EU-15 countries – Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, the Netherlands, Portugal, Spain, Sweden and the United Kingdom. To concentrate on individual factors, the paper differentiates away from the analysis countrywide determinants. Quite surprising, given the huge interest in trust in social sciences, little is known about the individual characteristics of those who trust the others. This is particularly true for Europe, notwithstanding the progress towards political integration has spurred the comparisons in socio-economic behaviors of the European citizens.¹ As for the US, previous analysis of individual covariates of trust (or trust-related outcomes) includes Alesina and La Ferrara (2002), Glaeser et al (2002), and Rupasingha et al (2006).²

This paper studies the responses to the ESS question *Generally speaking, would you say that most people can be trusted or that you need to be very careful in dealing with people?* At the EU 15-wide level, the paper documents that a number of covariates – such as schooling, family background, labor market status, and a recent history of traumatic experiences – helps to predict (self-declared) trust. By using the ESS questions on individual beliefs about other people trustworthiness, we find also that the role of the covariates is rather insensitive to using a definition of trust more shielded from risk considerations (Fehr, 2009). Responses to the ESS trust question are heterogeneous across EU-15 countries. For instance, the average trust across Greek citizens is only half of that recorded in Denmark. We find that some covariates differ across countries too. For example, northern countries are the only ones for the which the unemployment status and rightwing political opinions are not significantly associated to less trust, while only in southern countries the importance of belonging to minority groups or that of having religious attitudes is reduced.

Beyond documenting the role of individual factors associated with trust, the results of the paper might be deemed interesting also from a policy perspective. The increasing awareness of the importance of trust among EU policy circles is pushing towards trust-enhancing social policies. To the extent that the covariates of trust differ across countries, it could be the case that country-tailored interventions display greater payoffs than common EU-wide policies. For instance, a positive correlation of education and trust in some countries but not in others, would suggest that subsidizing schooling to promote trust should be seen as a suitable intervention only for the former group of countries.

¹ de Blasio and Nuzzo (2010) present an analysis of individual covariates limited to the case of Italy for a number of proxies of social behavior, which do not include trust.

² On the other hand, the literature on cross-countries comparisons – which include Europe – on the covariates of trust at the macro level is quite developed (see, for instance, La Porta et al, 1997; Knack and Zak, 2003; and Bjørnskov, 2006).

Having said so, it is also important to make clear the important limitations of the analysis we present. First, our proxy for trust is taken from survey responses. A growing literature disputes the accuracy of these responses. For instance, Bertrand and Mullainathan (2001) argue that subjective survey data suffer from cognitive problems (the order of questions, the wording, and the mental effort required to answer might bias the responses) and social desirability issues (which arise when respondents want to avoid looking bad in front of interviewers). As for the measures of trust, Glaeser et al (2000) show that the answers to the trust question are not correlated with actual trusting behaviour, as measured in experiments; recent literature, however, find more supportive results (see Bellemare and Kroeger, 2007, and Sapienza et al, 2007). Notwithstanding the limitations of survey data, no superior alternative seems to be available, as the option of measuring trust through experiments also suffers from shortcomings (for instance, limited representativeness, experimental biases, cost-effectiveness etc.; see Morrone et al 2009). Second, our results do not have to be interpreted in any casual meaning. For instance, the correlation between education and trust does not mean that schooling cause trust: it could be both education and trust are simultaneously pushed up by a third variable (omitted variable bias), or that trust increases schooling (endogeneity bias), rather than the other way around. By the same token, the absence of correlations between education and trust can be driven by measurement error.³

The paper is structured as follows. The next section explains the data and shows the correlation between trust and the covariates at the EU-wide level. Section 3 illustrates cross-area differences. The last section concludes.

2. The covariates of trust for the *average* European

The ESS is a biennial cross-sectional survey that covers a large sample of European nations. The project has been inspired and initiated in the 1990s by the European Science Foundation, and is funded by the European Commission and national Research Councils throughout Europe.⁴ The questionnaire aims to monitor values, attitudes, behaviour patterns and opinions on a wide range of social items. Also, it includes demographics and socio-economics characteristics of the respondents. Four waves of the survey were conducted from 2002 to 2008, while fieldwork for Round 5 is currently underway in many countries. As we focus on the EU-15 countries,⁵ we consider only waves 1 and 2 (the only ones in which all the EU-15 countries took part).

Trust is taken from responses to the question *Generally speaking, would you say that most people can be trusted or that you need to be very careful in dealing with people?*, which are recorded over a 11-point scale from "not at all" (coded as 0) to "complete trust" (coded as 10).⁶ The descriptive statistics depicted in Table 1 (the description of the variables is in

³ Obviously, *correlation is not causality* is a warning that applies even more dramatically for the literature at the macro level (see: Angrist and Pischke, 2009).

⁴ Furthermore, national academic bodies provide funding for their own country's fieldwork and coordination.

⁵ These countries - which gradually joined the European Union from 1958 to 1995 - exhibit a high degree of economic and social integration.

⁶ Therefore, our trust variable should not be affected by the Miller and Mitamura (2003)'s difficulty, which only arises with responses recorded in a binary way. When the respondent can answer to the question by agreeing either with "Most people can be trusted" or with "Can't be too careful," the difficulty is that it is possible for the respondent to agree with both categories: a person can in fact

the Appendix) show that the average trust for our sample of 43,002 respondents is equal to 5.27 (with a s.d. = 2.38). The interviewed are females for the 52% of the cases; their average age is 47. Average schooling is equal to 12 years, representing slightly less than a high school achievement. 1/3 of the sample live in a big city; having been a victim of an assault or burglary in the last five is a somewhat frequent experience (22% of the sample) while being unemployed is rather uncommon (3.5% of the sample). As reported in Table 2 and Fig. 1, ESS data show significant differences in trust endowments across EU-15: trust is higher in northern countries, in particular Scandinavia. It is lower in the southern countries, in particular Italy, Portugal and Greece. Compared with the country with highest trust (Denmark), the one with lowest trust (Greece) show a gap of almost 50%.

We start by documenting the covariates of individual responses at the trust question for the average European citizen. This allows us to set a benchmark for the individual covariates of trust, which next will be analysed from a cross-area perspective. The results for the average European will be discussed mainly by comparing them with those obtained by previous literature for the case of the U.S.

OLS estimations are depicted in Table 3. Before analysing the contribution of individual covariates, we evaluate the role of country level effects. In our empirical work, these effects are control variables. However, ahead of dismissing them, it is interesting to assess their practical predictive power. We find (Column 1) that country fixed effects explain 5.6% of the individual variation in trust. In our full-fledged specification below, the inclusion of individual covariates increases the R² statistic to 10.2%. Therefore, the role of individual covariates seems to be similar to that of country specific factors.

In Column 2, we regress trust on a minimal set of individual covariates: age, gender, and education. We fail to find any effect for age, which is interesting as the impact found for the U.S. citizens is positive and significant (Alesina and La Ferrara, 2002). This result runs against the view that European younger generations trust less than the older cohorts. The coefficient for gender, which is equal to one for males, enters positively but insignificantly; however, it will gain statistical significance when additional controls are included. Women seem to trust less also in the U.S.. Alesina and La Ferrara (2002) interpret this finding as reflecting the fact that women have historically been discriminated. This does not have to be the only explanation, as recent psychiatric research (Maddux and Brewer, 2005) shows that females have a smaller circle of trusted people since they are more inclined to trust on interpersonal basis (while males are more likely to embrace people from a large, symbolic group, even if they don't have close personal relationships with them).⁷ Education is a long-celebrated covariate of trust. For instance, Goldin and Katz (1999), Knack and Keefer (1997), Knack and Zak (2003), and Bjørnskov (2006) argue that trust is created in the educational system by making individuals better informed and able to interpret perceived information and the consequences of actions taken by themselves and others. The importance of education is confirmed in our estimates: the coefficient for schooling enters positively with high statistical significance. Its magnitude is considerable -- the impact of 5 additional years of education (say, the difference

share the view that "most people can be trusted" but at the same time risk-aversion might induce the person to say "can't be too careful". On the respective roles of risk-aversion and beliefs for responses to the trust question, see below.

⁷ On the relationship between trust and gender there seems to be little agreement also in the literature on experimental games (see Croson and Buchan, 1999).

between a junior high school achievement to an high-school diploma) is equal to 1/5 of a standard deviation of trust in the sample; yet, in line with the estimates for the U.S. case (see also Helliwell and Putnam, 1999).

Column 3 adds a number of covariates to capture family background and social exclusion. Both the coefficient for father's education and mother's education are significantly correlated with trust. Their magnitude is of about one third of that related to the education acquired by the individual himself, suggesting an important role for intergeneration transmission; however, mothers seems to have a slight bigger impact on trust attitudes than fathers, a result coherent with previous evidence by Dohmen et al. (2008)⁸. Belonging to a minority ethnic group strongly predicts a reduced trust. According to the estimates, the trust of a citizen from a minority ethnicity with a high-school diploma compares with that of non-minority citizen with only a junior high-school achievement (i.e., with five years of education less). Having both parents born in the country of residence is strongly correlated with trust, while the fact that the respondent was born in the country of residence has no impact. As long as international migration is considered (the data do not allow to study within-country migration), this last piece of evidence does not lend support to the argument that mobility reduces trust (Di Pasquale and Glaeser, 1999).

Column 4 includes additional individual characteristics, which according to previous literature may impact on trust. We find that having been a victim of a burglary or an assault in the last 5 years is strongly associated with a reduced trust. Interestingly, Alesina and La Ferrara (2002) find that in the U.S. a traumatic experience negatively predicts trust only when it is a recent occurrence: the effect of trauma, which is negative and significant for one year old events, disappears in a five year span. According to our estimates, people who declare to be religious are more trusting, as already reported by Guiso et al., (2003).

We also study the effect of urban residence. The dummy urban takes on the value of one for the respondents that reside in a big city. As observed by Putnam (2000), people appear to be more trusting and more likely to think that others are fair outside big cities. We find some support for this argument, as the dummy urban is negatively correlated with trust, even though the level of statistical significance is somewhat lower than that conventionally acceptable. The variable Right measures the political view of the respondent as recorded on a 11-point scale, from 0 to 10 where right is equal to 10. We find that having left-wing political views increases trust (see de Blasio and Nuzzo, 2010). Finally, being unemployed negatively predicts trust, with a magnitude that approximates that of a 5 year reduction in human capital accumulation. Note that the unemployed status only partially captures the effect of income on trust. We add the income of the respondents (because of many missing, this inclusion reduces the number of observations of almost 10.000 respondents; results not reported but available from request) we find that it results positively correlated with trust while unemployment continues to be negatively and significantly correlated with trust. Finally, in Column 5 we replicate the specification of Column 4 by replacing country fixed effects with region fixed effects (at the NUTS1 level), which should

⁸ By distinguishing respondents by gender (results not reported but available from request), we find another result in line with Dohmen et al., 2008: in the case of woman, the point estimates for the education of mothers is larger than of fathers, and vice versa in the case of man, consistent with a greater impact of parents on children of the same gender.

be able to differentiate out territorial-level confounding factors at a more detailed level of geographic stratification.⁹ While the R2 increases from 10 to 11 percent, we find that the results for the individual covariates remain basically the same.

Our measure of trust is an ordered discrete response variable. Therefore, by using OLS we can run into inefficiency issues (see Cameron and Trivedi, 2005).¹⁰ While inefficiency can be reduced by using robust standard errors (as we do), to validate the robustness of the previous findings, we present in Table 4 Ordered Probit estimation results. These results overwhelmingly confirm those obtained by OLS.

Fehr (2009) shows that responses to the trust question might capture two distinct aspects: preferences (both risk and social preferences, i.e. social aversion) and beliefs about people's trustworthiness. It is highly debatable whether the right measure of trust should include the risk attitude of the individual or should be free from risk aversion consideration. For instance, it is the measure of trust (that is, the one that we have used so far) that correlates positively with a number of socio-economic outcomes, while the evidence on the role of belief-based measures is still to come. However, when it comes to policy, as pointed out by Fehr himself, "preferences are not easily malleable (...). Nor it is clear whether implementing policies that deliberately aim at shaping people's preference is desirable" (Fehr, 2009, p. 260). To analyse the extent to which differences in preferences drive the correlations described, we focus on a different trust-related outcome. Namely, responses to the question *Do you think that most people would try to take advantage of you if they got the chance, or would they try to be fair?*, which are recorded over a 11-point scale from "Most people would try to take advantage of me" (coded as 0) to "Most people would try to be fair" (coded as 10). This outcome should be more connected to the individual beliefs about others' trustworthiness; that is, should be less sensitive to risk aversion. As matter of fact, while mean and standard error of the two outcomes are broadly comparable, we find that the correlation between responses to the two questions is far from perfect (it is equal to 0.48), suggesting that each one has some independent information. Table 5 replicates the specifications described in Table 3, by using as outcome the measure of expected fairness instead of trust. Overall, the results confirm previous findings. However, we find some support that this outcome is less contaminated by risk considerations. For instance, the effect for males is now negative and significant, so to suggest that previous findings on gender differences in trust mainly reflect the higher female risk aversion (Borghans et al 2009); the coefficient for age is now positive and significant, whereas previous literature shows that willingness to take risks is negatively related to age (see Dohmen et al., 2006); finally, the role of education is also reduced (again, previous studies document that risk aversion is negatively related to schooling; see Belzil and Leonardi, 2007).

⁹ Moving from country to region fixed effects provides also an important robustness test for our findings. As explained by Ciccone (2002) using more detailed spatial fixed effects corrects for bias induced by omitted territorial variable, insofar they are spatially correlated.

¹⁰ In the case of an ordered discrete response variable OLS estimates might also be inconsistent if the outcome is a generic ranking (see Cameron and Trivedi, 2005). As in our case the scale is numerical and equidistant, inconsistency argument does not apply.

3. Cross-areas differences

So far we have focused on the average European citizen. As ESS data show that there exist differences in trust endowments across EU-15,¹¹ an interesting question concerns whether the effect of the individual covariates changes across Europe. To verify this, we split our sample of respondents into three groups, according to their geographical residence: North (Denmark, Finland, Ireland, Sweden and UK), Central (Austria, Belgium, France, Netherland, Germany and Luxembourg) and South (Greece, Italy, Portugal and Spain). Beyond their proximity, the three groups are also featured by countries similar to each other by history or culture.

Table 6 reports for each sub-sample the OLS estimates for trust. There is a set of characteristics that enters significantly in all the regressions. In particular, the positive contribution of schooling holds across countries. In addition, everywhere traumatic experiences (victimization) impact negatively on trust (also the negative but insignificant effect of urbanicity holds everywhere).

Other individual covariates have different effects across areas. A positive male effect is significant only in North Europe. The role of mother's education seems to be reduced in the South sample, highlighting a prevailing role of males in the transmission of values to the descendents. Belonging to a minority ethnic group reduces trust in the Central and the North sample, but not in the South sample. This suggests that in southern Europe minorities felt less discriminated. By the same token, having both parents stayer positively predicts trust only in North Europe. Religious attitudes appear not to be relevant in South Europe. Because in those countries most of the people are Catholic (Italy, Portugal and Spain) or Orthodox (Greece), this is not unexpected as other researchers (La Porta et al, 1997) have found that some religious attitudes (those related to Catholic, Easter Orthodox and Muslim faiths) might impact negatively on trust. On the other hand, trust is not associated with political opinions in the North sample. This might signal a stronger sharing of common values, irrespective of the individual political stances. Lastly, the unemployment status is not significantly associated to less trust in the North sample. This could be related to the greater labour market flexibility coupled with more effective unemployment insurance systems in this group of countries.

4. Conclusions

Using the European Social Survey, this paper investigates the endowments and individual covariates of trust across the EU-15 countries. The results show that individual covariates are important as much as country-level variables. In particular, education, parental background, victimization and labor market status seem to be key factors. By distinguishing among different areas within Europe, we show the role of some of the covariates is not equal everywhere. In particular, while the incidence of education and victimization holds across countries, parental background, social exclusion, religion, political opinions, and unemployment status have different effects in different areas. On

¹¹ This survey evidence is in line with the results of a trust game reported by Bornhorst et al., (2006) showing that northern Europeans trust more than southern Europeans.

methodological grounds, we also find evidence that the proxy for trust is likely to be contaminated by risk considerations, even though the bulk of the correlations between the covariates and a risk-free measure of trust resembles those obtained with the contaminated one. Anyhow, considering risk attitudes seems to be crucial to explaining differences in trust by age and gender.

Overall, the findings suggest that EU policy promoting accumulation of social capital should take into account groups/demographics characteristics that influence the level of trust in each single country. Country-tailored interventions might have greater payoff than common EU-wide policies.

References

- Alesina, A. and E. La Ferrara (2002), "Who trusts others?", *Journal of Public Economics*, vol. 85(2), pp. 207-234.
- Angrist, J. D., and J. Pischke (2009), *Mostly Harmless Econometrics: An Empiricists Companion*, Princeton: Princeton University Press.
- Bellemare, C. and S. Kroger (2007), "On representative social capital", *European Economic Review*, vol. 51(1), pp. 183-202.
- Belzil, C. and M. Leonardi, (2007), "Risk Aversion and Schooling Decisions", IZA Discussion Papers n. 2994.
- Bertrand M. and S. Mullainathan (2001), "Do People Mean What They Say? Implications for Subjective Survey Data", *American Economic Review*, vol. 91(2), pp. 67-72.
- Bjørnskov, C. (2006), "Determinants of generalized trust: A cross-country comparison", *Public Choice*, vol. 130(1), pp. 1-21.
- de Blasio, G. and G. Nuzzo (2010), "Individual Determinants of Social Behavior", *Journal of Socio-Economics*, vol. 39(4), pp. 466-473.
- Borghans, L., B. H. Golsteyn, J. J. Heckman and H. Meijers (2009), "Gender Differences in Risk Aversion and Ambiguity Aversion", *Journal of the European Economic Association*, vol. 7(2-3), pp. 649-658.
- Bornhorst, F., A. Ichino, K. Schlag and E. Winter (2004), "Trust and Trustworthiness Among Europeans: South-North Comparison", CEPR Discussion Papers n. 4378.
- Cameron, A. C. and P. K. Trivedi (2005), *Microeconometrics: Methods and Applications* Cambridge: Cambridge University Press.
- Crosan R. and N. Buchan (1999), "Gender and Culture: International Experimental Evidence from Trust Games", *American Economic Review*, vol. 89(2), pp. 386-391.
- Di Pasquale, D. and E.L. Glaeser (1999), "Incentives and social capital: Are homeowners better citizens?", *Journal of Urban Economics*, vol. 45(2), pp. 354-384.
- Dohmen, T. J., A. Falk, D. Huffman, J. Schupp, U. Sunde and G. G. Wagner (2006), "Individual Risk Attitudes: New Evidence from a Large, Representative, Experimentally-Validated Survey", CEPR Discussion Papers n. 5517.
- Dohmen, T. J., A. Falk, D. Huffman and U. Sunde (2008), "The Intergenerational Transmission of Risk and Trust Attitudes", CEPR Discussion Papers n. 6844.
- Fehr, E. (2009), "On The Economics and Biology of Trust", *Journal of the European Economic Association*, vol. 7(2-3), pp. 235-26.
- Glaeser E., I. D. Laibson, J.A. Scheinkman and C.L. Soutter (2000), "Measuring Trust", *Quarterly Journal of Economics*, vol. 115(3), pp. 811-46.
- Glaeser E., I.D. Laibson and B. Sacerdote (2002), "An Economic Approach to Social Capital", *Economic Journal*, vol. 112(483), pp. 437-58.
- Goldin, C. and L. F. Katz (1999), "Human Capital and Social Capital: The Rise of Secondary Schooling in America, 1910-1940", *Journal of Interdisciplinary History*, vol. 29(4), pp. 683-723.
- Guiso, L., P. Sapienza and L. Zingales (2003), "People's opium? Religion and economic attitudes", *Journal of Monetary Economics*, vol. 50(1), pp. 225-282.

- Guiso, L., P. Sapienza and L. Zingales (2008), "Trusting the Stock Market", *Journal of Finance*, vol. 63(6), pp. 2557-2600.
- Guiso L., P. Sapienza and L. Zingales (2009), "Cultural Biases in Economic Exchange?", *Quarterly Journal of Economics*, vol. 124(3), pp. 1095-1131.
- Helliwell, J. and R. Putnam (1999), "Education and social capital", NBER Working paper n. 7121.
- Knack, S. and P. Kiefer (1997), "Does Social Capital Have an Economic Payoff? A cross-country Investigation", *Quarterly Journal of Economics*, vol. 112(4), pp.1251-88.
- Knack, S. and P. J. Zak (2003), "Building trust: public policy, interpersonal trust, and economic development", *Supreme Court Economic Review*, vol. 10, 91–107.
- La Porta, R., F. Lopez-de-Silanes, A. Shleifer and R. W. Vishny (1997), "Trust in Large Organizations", *American Economic Review*, vol. 87(2), pp. 333-38.
- Maddux, W. and M. Brewer, "Gender Differences in the Relational and Collective Bases for Trust", *Group Processes Intergroup Relations*, vol. 8(2), pp. 159-171.
- Miller A. S. and Mitamura T. (2003), "Are surveys on trust trustworthy?", *Social Psychology Quarterly*, vol. 66(1), pp. 62-70.
- Morrone, A., N. Tontoranelli and G. Ranuzzi (2009), "How good is trust? Measuring trust and its role for the progress of societies", OECD Statistics Working Paper n. 2009/3.
- Putnam, R. (2000), *Bowling alone: The Collapse and Revival of American Community*, New York: Simon and Schuster.
- Rupasingha, A., S. J. Goetz and D. Freshwater (2006), "The production of social capital in US counties", *The Journal of Socio-Economics*, vol. 35(1), pp. 83-101.
- Sapienza, P., A. Toldra and L. Zingales (2007), "Understanding Trust", NBER Working Papers n.13387.

Table 1. Descriptive statistics

	OBS.	MEAN	S.D.	MIN	MAX
DEPENDENT VARIABLES					
Trust	43,002	5.274	2.380	0	10
Expected fairness	42,919	5.795	2.276	0	10
COVARIATES					
Age	43,002	47.103	17.898	14	110
Male	43,002	0.485	0.500	0	1
Schooling	43,002	12.041	4.214	0	40
Father's education	43,002	8.583	4.926	2	19
Mother's education	43,002	7.658	4.390	2	19
Parents both stayer	43,002	0.876	0.329	0	1
Minority group	43,002	0.028	0.166	0	1
Respondent stayer	43,002	0.926	0.262	0	1
Victim	43,002	0.225	0.418	0	1
Religious	43,002	4.922	2.914	0	10
Urban	43,002	0.328	0.469	0	1
Right	43,002	5.062	2.090	0	10
Unemployed	43,002	0.035	0.184	0	1

Notes. EES waves 1 and 2. The description of the variables is in the Appendix.

Table 2. Trust and Expected fairness in European countries

COUNTRY	TRUST		EXPECTED FAIRNESS	
	MEAN	S.D.	MEAN	S.D.
Denmark	6.87	2.08	7.32	1.87
Finland	6.49	1.89	6.85	1.82
Sweden	6.07	2.23	6.59	2.02
Netherland	5.75	2.10	6.20	1.85
Ireland	5.69	2.45	6.04	2.32
Luxembourg	5.11	2.38	5.64	2.52
United Kingdom	5.09	2.20	5.55	2.09
Austria	5.09	2.43	5.67	2.33
Spain	4.88	2.25	5.20	2.21
Belgium	4.80	2.35	5.61	2.18
Germany	4.68	2.32	5.75	2.17
France	4.50	2.25	5.62	2.22
Italy	4.41	2.32	4.56	2.30
Portugal	3.93	2.22	4.97	2.09
Greece	3.77	2.48	3.71	2.34
EU15	5.12	2.43	5.67	2.33

Notes. ESS waves 1 and 2 (observations equal to 58,419 for Trust and 58,230 for Expected fairness).

Table 3. The covariates of Trust for the average European: OLS

	(1)	(2)	(3)	(4)	(5)
Age		.003 (.002)	.005* (.003)	.003 (.003)	.003 (.002)
Male		.037 (.033)	.038 (.033)	.091* (.044)	.093** (.040)
Schooling		.087*** (.009)	.073*** (.009)	.074*** (.009)	.074*** (.009)
Father's education			.019*** (.003)	.021*** (.003)	.021*** (.004)
Mother's education			.024** (.009)	.025** (.009)	.024** (.008)
Parents both stayer			.143** (.059)	.149** (.062)	.153** (.055)
Minority group			-.387*** (.112)	-.411*** (.102)	-.407*** (.102)
Respondent stayer			-.077 (.048)	-.055 (.047)	-.041 (.046)
Victim				-.193*** (.025)	-.182*** (.022)
Religious				.051*** (.017)	.052*** (.013)
Urban				-.099 (.062)	-.095 (.060)
Right				-.041** (.015)	-.043** (.015)
Unemployed				-.363*** (.082)	-.311*** (.065)
R2	0.056	0.083	0.093	0.102	0.111
Country FE	yes	yes	yes	yes	no
NUTS1 FE	no	no	no	no	yes
Observations	43,002	43,002	43,002	43,002	43,002

Notes. Regressions are weighted to design and population proportions. Robust standard errors reported in parentheses are corrected for the potential clustering of the residuals at the country level. *, **, *** denote significance at the 10%, 5%, and 1% levels.

Table 4. The covariates of Trust for the average European: Ordered Probit

	(1)	(2)	(3)	(4)	(5)
Age		.002* (.001)	.003** (.001)	.002* (.001)	.002* (.001)
Male		.015 (.016)	.016 (.016)	.040* (.021)	.041** (.019)
Schooling		.040*** (.004)	.033*** (.004)	.034*** (.004)	.034*** (.004)
Father's education			.009*** (.001)	.010*** (.001)	.010*** (.002)
Mother's education			.011*** (.004)	.011*** (.004)	.011*** (.004)
Parents both stayer			.063** (.032)	.067** (.028)	.069*** (.025)
Minority group			-.166*** (.052)	-.179*** (.047)	-.178*** (.047)
Respondent stayer			-.033 (.022)	-.023 (.022)	-.017 (.022)
Victim				-.086*** (.011)	-.081*** (.010)
Religious				.024*** (.008)	.024*** (.006)
Urban				-.045 (.029)	-.042 (.028)
Right				-.020*** (.006)	-.021*** (.006)
Unemployed				-.165*** (.036)	-.143*** (.029)
Pseudo R2	0.014	0.020	0.022	0.027	0.030
Country FE	yes	yes	yes	yes	no
NUTS1 FE	no	no	no	no	yes
Observations	43,002	43,002	43,002	43,002	43,002

Notes. Regressions are weighted to design and population proportions. Robust standard errors reported in parentheses are corrected for the potential clustering of the residuals at the country level. *, **, *** denote significance at the 10%, 5%, and 1% levels.

Table 5. The covariates of Expected fairness for the average European: OLS

	(1)	(2)	(3)	(4)	(5)
Age		.007** (.003)	.008*** (.003)	.007** (.002)	.006** (.002)
Male		-.111*** (.035)	-.111*** (.035)	-.072** (.033)	-.070** (.032)
Schooling		.056*** (.004)	.046*** (.003)	.047*** (.004)	.047*** (.003)
Father's education			.015*** (.003)	.016*** (.003)	.016*** (.003)
Mother's education			.017** (.008)	.018** (.008)	.017** (.008)
Parents both stayer			.212*** (.053)	.210*** (.051)	.208*** (.052)
Minority group			-.167** (.063)	-.175** (.059)	-.165** (.063)
Respondent stayer			-.007 (.095)	.008 (.099)	.025 (.097)
Victim				-.210*** (.028)	-.204*** (.027)
Religious				.036*** (.008)	.039*** (.007)
Urban				-.077 (.056)	-.074 (.065)
Right				-.028* (.014)	-.028* (.013)
Unemployed				-.411*** (.059)	-.389*** (.067)
R2	0.069	0.091	0.095	0.109	0.115
Country FE	yes	yes	yes	yes	no
NUTS1 FE	no	no	no	no	yes
Observations	42,919	42,919	42,919	42,919	42,919

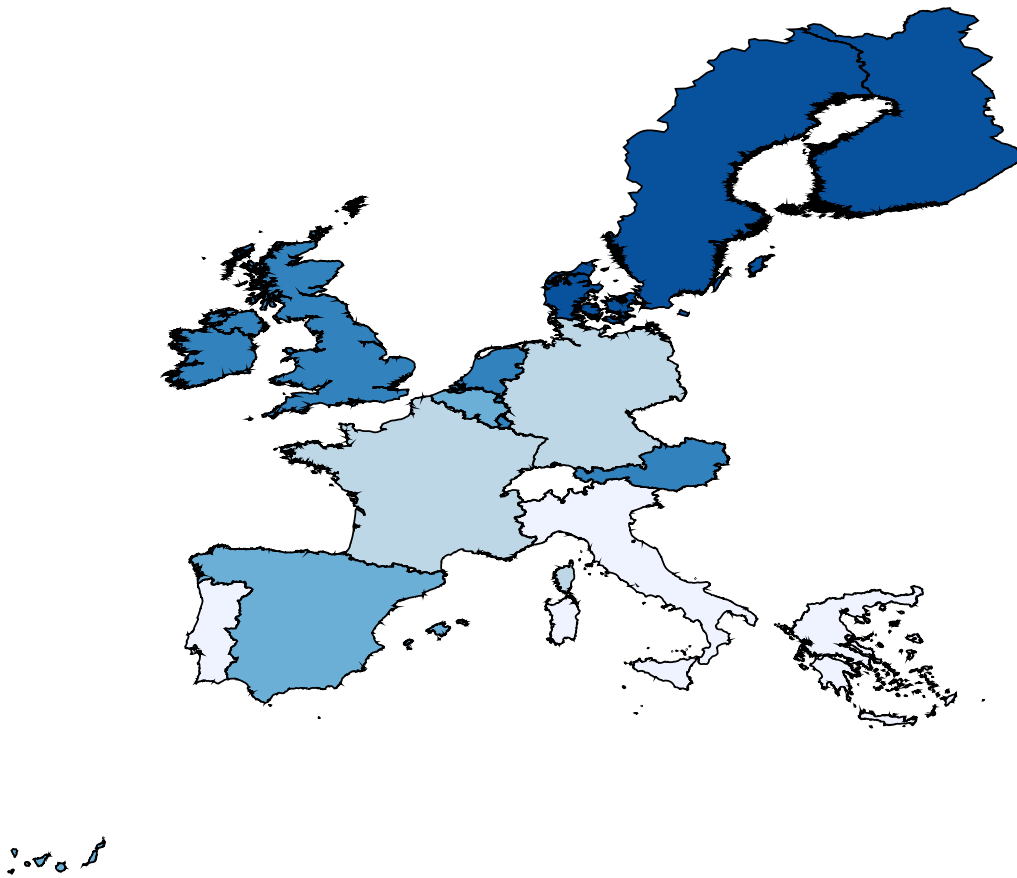
Notes. Regressions are weighted to design and population proportions. Robust standard errors reported in parentheses are corrected for the potential clustering of the residuals at the country level. *, **, *** denote significance at the 10%, 5%, and 1% levels.

Table 6. The covariates of Trust by area: OLS

	SOUTH	CENTRAL	NORTH
Age	.005* (.001)	.000 (.004)	.008*** (.001)
Male	.062 (.065)	.057 (.050)	.191* (.072)
Schooling	.059*** (.010)	.086*** (.012)	.087*** (.007)
Father's education	.030*** (.002)	.020* (.008)	.019** (.005)
Mother's education	.010 (.009)	.031* (.015)	.017** (.007)
Parents both stayer	-.023 (.070)	.145 (.078)	.327*** (.048)
Minority group	.030 (.120)	-.560** (.150)	-.246*** (.023)
Respondent stayer	-.230 (.147)	-.059 (.068)	.032 (.099)
Victim	-.184** (.045)	-.231*** (.018)	-.130** (.051)
Religious	.014 (.028)	.064** (.022)	.065*** (.007)
Urban	-.172 (.094)	-.019 (.050)	-.204 (.115)
Right	-.017** (.005)	-.064** (.023)	-.008 (.009)
Unemployed	-.497** (.111)	-.364*** (.069)	-.059 (.081)
R2	0.065	0.081	0.120
Country FE	yes	yes	yes
Observations	10,382	17,191	15,429

Notes. Regressions are weighted to design and population proportions. Robust standard errors reported in parentheses are corrected for the potential clustering of the residuals at the country level. *, **, *** denote significance at the 10%, 5%, and 1% levels.

Figure 1. Trust in European Countries



Notes: ESS waves 1 and 2. Darker areas correspond to higher level of self-declared trust (see Table 2)

Appendix. Description of the variables

VARIABLE	DESCRIPTION
Trust	Answer to the European Social Survey question " <i>Generally speaking, would you say that most people can be trusted or that you need to be very careful in dealing with people</i> ", recorded in a scale 0-10.
Expected Fairness	Answer to the European Social Survey question " <i>Do you think that most people would try to take advantage of you if they got the chance, or would they try to be fair</i> ", recorded in a scale 0-10.
Age	Age in years.
Male	Dummy variable that equals one if the individual is male.
Schooling	Years of full-time education completed.
Father's education	Father's years of education. The value is obtained by considering the highest level of education completed and imputing the following values: 2 if not completed primary (compulsory) education; 5 if primary education or first stage of basic education; 8 if lower level secondary education or second stage of basic education; 13 if upper secondary education; 14 if post-secondary, non tertiary education; 17 if first stage of tertiary education; 19 if second stage of tertiary education.
Mother's education	Mother's years of education. The value is obtained by considering the highest level of education completed and imputing the following values: 2 if not completed primary (compulsory) education; 5 if primary education or first stage of basic education; 8 if lower level secondary education or second stage of basic education; 13 if upper secondary education; 14 if post-secondary, non tertiary education; 17 if first stage of tertiary education; 19 if second stage of tertiary education.
Parents both stayer	Dummy variable that equals one if parents are both born in country.
Minority group	Dummy variable that equals one if the individual belong to a minority ethnic group.
Respondent stayer	Dummy variable that equals one if the individual is born in country.
Victim	Dummy variable that equals one if the individual or a household member has been the victim of a burglary or assault in the last five years.
Religious	Religious degree, recorded in a scale 0-10.
Urban	Dummy variable that equals one if the individual lives in a big city.
Right	Placement on left-right scale, recorded in a scale 0-10.
Unemployed	Dummy variable that equals one if the individual is unemployed.