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TRUST, REGULATION AND REDISTRIBUTION

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WORKING PAPER SERIES 2019:3

QOG THE QUALITY OF GOVERNMENT INSTITUTE

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Box 711, SE 405 30 GÖTEBORG

May 2019

ISSN 1653-8919

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QoG Working Paper Series 2019:3
May 2019
ISSN 1653-8919

ABSTRACT

For many social scientists government intervention is linked to low levels of social trust and corruption, while, on the contrary, for others government intervention is associated with high trust and low corruption. We aim to reconcile these contrasting findings by distinguishing the opposing effects of trust over two alternative types of government intervention: regulation and redistribution. We argue that low-trust individuals demand more governmental regulation (H1) but less government redistribution (H2). And the effects of trust over policy preferences are conditional on the quality of institutions. The higher the level of quality of government in a particular region, the more high-trusting individuals will like government redistribution and will dislike government regulation that restricts the operations of free markets (H3). We test these hypotheses with data from the latest round of the European Quality of Government Index survey, which covers 77,000 individuals from 185 regions of 21 EU Member States.

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Introduction

Both political scientists (Rothstein and Uslaner 2005; Rothstein 2011) and economists (Alesina and Angeletos 2005b; Aghion et al. 2010; Pinotti 2012) have revisited the relationship between culture and institutions explored in many classical sociological studies from Banfield (1958) to Putnam (1993). That is, they have explored the extent that values prevailing in a society are related to its political institutions. And, in particular, they examine if the levels of social trust lead to a smaller or bigger government. Yet the responses point in contrasting directions. For some scholars, government intervention is linked to low trust and corruption. Others claim the opposite.

On the one hand, some researchers argue that a society where individuals trust each other is correlated with low levels of corruption and, in turn, with citizens who are more willing to support a highly redistributive welfare state (Rothstein and Uslaner 2005). Irrespective of whether the causal arrow goes from redistributive institutions to high social trust (Rothstein 2011; Dinesen 2013) or the other way around (Bergh and Bjørnskov 2011, 2014; Daniele and Geys 2015), this strand of thought underlines the idea of societies entering virtuous (or vicious) cycles of high (low) trust, low (high) corruption, and high (low) government redistribution (Rothstein and Uslaner 2005). Along similar lines, experiments using public goods games show more cooperative behavior—that is, higher support for social welfare—among high-trust individuals (Fehr and Leibbrandt 2011; Thöni, Tyran, and Wengström 2012).

On the other hand, another line of scholarship conversely considers that it is actually high levels of corruption that impulse citizens to ask for more government intervention. If a society believes that “[...] corruption determine[s] wealth, it will levy high taxes” (Alesina and Angeletos 2005a, 960). This generates feedback mechanisms, because, in turn, “bigger governments raise the possibilities for corruption” (Alesina and Angeletos 2005b, 1227). If, on the contrary, “a society believes that individual effort determines income ..., it will choose low redistribution and low taxes” (Alesina and Angeletos 2005a, 960). Similarly, if a society perceives most of its agents as untrustworthy, it will also demand more government regulation. For instance, if citizens believe most individuals will free ride and generate negative externalities such as environmental pollution, they will prefer command-and-control solutions—such as strict regulation—over less restrictive alternatives (Harring 2016).

Consequently, we have two types of societies or “two equilibria: a good one with a large share of civic individuals and no regulation, and a bad one, where a large share of uncivic individuals support heavy regulation” (Aghion et al. 2010, 1016).

This paper aims to reconcile the findings of those scholars linking state intervention to civic behavior (or high trust) with those linking it to uncivic behavior (or low trust). In this sense, we follow recent work that has noted either the opposing effects of social trust on attitudes toward government intervention (Harring 2016; Pitlik and Kouba 2015) or the conditional effects of trust depending on the perceived quality of public institutions (Daniele and Geys 2015). Unlike the latter approach, which disentangles the effects of two different types of trust (social and institutional trust), the contribution of this paper is distinguishing between two types of state intervention—regulation and redistribution,

which act as partial substitutes of each other.

Our view echoes empirical developments in comparative political economy that point out two distinct dimensions of government intervention (Hopkin and Blyth 2012; Hopkin, Lapuente, and Möller 2013). On the one hand, countries that heavily regulate an economic sector (e.g., finance) also tend to heavily regulate others (e.g., labor and product markets). On the other, and quite puzzlingly, the intensity of government regulation is not correlated with levels of taxation and redistribution among advanced democracies. With the exception of Anglo-Saxon countries—that both regulate and redistribute relatively little—some countries seem to resort more to government regulation while others seem to resort more to taxation and redistribution. Take Denmark or Sweden, for example. They are low-regulated economies with high taxation; at the other extreme of the OECD, Spain and Japan are highly regulated economies with low taxation (Hopkin, Lapuente, and Möller 2013). Our paper aims to provide micro-foundations for these distinct types of intervention: why some governments do tend to regulate more while others do tend to redistribute more? We argue that why some societies marginally prefer regulatory solutions over tax-based ones may depend on the prevailing trust levels among their citizens, as well as the perceived quality of the institutions in their area of residence.

The paper is organized as follows. The next section presents three hypotheses on, on the one hand, the opposing effects of social trust on preferences for government intervention; and, on the other hand, on how the quality of government reinforces this relationship between trust and demand for government intervention. Our first hypothesis is that there should be *a positive effect of social trust over citizens' demands for redistributive policies*. Our second hypothesis is that there should be *a negative effect of social trust over citizens' demand for government regulation*. And our third hypothesis is that the (perceived) level of quality of government in a region conditions the link between social trust and demands for governmental intervention. In particular, we hypothesize that, *the higher the level of quality of government in a region, the more its high-trusting individuals will demand more redistributive policies and less regulatory policies*.

Subsequently, we test these hypotheses using hierarchical regression models with the latest round of the European Quality of Government Index (EQI) survey, which questioned 77,000 individuals from regions of 21 EU Member States. Results show that, controlling for a large series of aggregate and individual factors – such as income, education, ideology, age, gender –, those individuals who trust others tend to demand, *ceteris paribus*, less governmental regulation, and, at the same time, more government redistribution.

Our results also show that this positive relationship between, on the one hand, high trust, and, on the other, high redistribution and low regulation, is weak in European regions with poor quality of government – e.g. Campania (Italy), Athens (Greece) or Bucharest (Romania). High-trusting individuals in these regions do not have very strong preferences either for redistributive policies or for a free market devoid of stringent regulations. Conversely, the link between social trust and demand for government intervention is very strong in regions with high quality of government. It is in places with high-perceived levels of quality of government, like Copenhagen (Denmark), Amsterdam

(Netherlands) or Åland (Finland), where social trust has a more significant both positive effect on the demand for redistribution and negative on the demand for regulation. It is in well-governed regions where high-trusting individuals develop both strong preferences for both a redistributive state and a free market that operates with minimal regulation.

Theory

The literature has noted the opposing effects of social trust attitudes toward state intervention (Pitlik and Kouba 2015). On the one hand, high social trust has been associated with a “stronger propensity to support government action” (Pitlik and Kouba 2015, 359). If you think others will use the welfare system appropriately, then you are more likely to contribute to it through paying high taxes (Daniele and Geys 2015). Similarly, people need to trust their fellow citizens in order to accept the individual costs of taxation, since paying taxes is a collective dilemma in itself (Scholz and Lubell 1998). People will not pay if they do not perceive that others pay their fair share of taxes. This could explain why historical levels of trust are correlated to current levels of social spending (Bergh and Bjørnskov 2011). In addition, the level of institutional trust—measured by the confidence of citizens in the impartiality of public institutions—has also been argued to positively affect people’s attitude toward government intervention (Hetherington 1998; Rothstein, Samanni, and Teorell 2012; Svallfors 2013; Daniele and Geys 2015). The support for high taxation spending should thus rise when citizens trust public institutions will manage tax revenues in an impartial and non-corrupt way (Svallfors 2013).

On the other hand, high social trust has been linked to lower levels of *other* government intervention: the regulation of economic activities. For this “variety of government intervention” (Hopkin, Lapuente, and Möller 2013) that consists of economic regulation (instead of taxation), the effect of trust seems to be reverse. A society with high-trusting individuals may need less regulation. A mechanism would be that *civiness* replaces regulation: “higher generalized trust reduces requirements for economic regulation as it goes hand in hand with greater confidence in civiness of anonymous private market actors” (Pitlik and Kouba 2015, 359). If an individual thinks most other individuals are not trustworthy (i.e., if the social trust is low), they will want to punish them with stringent regulations. Empirically, Aghion et al. (2010) link low social trust to high government regulation by finding, using World Values Survey data, that less trustful individuals demand more business regulation because they expect entrepreneurs to be uncivic. Low-trust individuals demand would-be entrepreneurs to be subject to a more stringent set of administrative procedures, with restrictive limitations on when and how a business can be open and under which strict conditions employees may be hired and fired. Excessive regulation is not only economically inefficient (Djankov et al. 2002; Blanchard and Giavazzi 2003), but it also leads to more corruption opportunities: A vicious cycle emerges going from regulation to corruption, to mistrust, and, again, to more regulation. Likewise, Pinotti (2012) finds that low trust is associated with more market entry regulations.

These findings are in line with the “unpleasant capitalist” hypothesis (Di Tella and MacCulloch 2009, p 294; Pitlik and Kouba 2015). Through stringent regulations, distrustful individuals want to punish

the people (capitalists) whom they regard as “bad” – even if that means that the strict regulations strangle the flourishing of a market. Put simply, when you do not trust others, you want a highly interventionist government (cf. Aghion et al. 2010; Pinotti 2012). Or, in other words, if you believe other players – with whom you are playing a game – will not play fairly, you may prefer the game not to take place to start with.

Yet this relationship between, on the one hand, social trust, and, on the other, citizens’ preferences for a type of government intervention (redistribution or regulation) can also be conditioned by the quality of the institutions. Following a strand in the literature that has found the quality of public institutions – or the “quality of government” – as a core factor for understanding social well-being in a community (Holmberg, Rothstein and Nasiritousi 2009, Rothstein 2011), we define the quality of institutions as the ability a government has to treat its citizens equally. That is, quality of government is the impartiality in the exercise of power (Rothstein and Teorell 2008).

From the literature on public policies, we know that impartial public institutions are important for creating large-scale collective projects, such as the design of welfare policies (Rothstein, 2001). And, from the experimental research, we know that, order to be willing to cooperate individuals need to possess both high social trust, but also a high level of trust in their institutions (Fehr and Leibbrandt 2011; Thöni, Tyran, and Wengström 2012).

We hypothesize that the context of the quality of institutions will influence the link between individuals’ levels of social trust and their preferences for more government intervention. In particular, one should expect that the effects social trust has over government intervention – i.e. that social trust fosters the demands for redistribution and reduces the demands for regulation – to be stronger in polities with high quality of government. For both redistributive policies and a market relatively free of regulations require impartial public institutions that aim at keeping the fairness of both the operations of a redistributive state and the operations of a free market.

Let’s imagine two individuals, A and B, who have an equally high trust in other citizens – i.e. they have high levels of social trust. Therefore, both A and B tend to prefer a relatively low governmental regulation of the economy – i.e. they don’t think it is necessary the state to control the economic activities of other citizens and interfere with the workings of free market – and a relatively high levels of taxation – for they desire to redistribute resources to people they trust. Hence, that they do not think that poor or sick people are “cheaters” using the system. Yet A lives in a polity with high-quality institutions, where policies are well-known to be impartial and thus do not benefit entrenched interests. While, on the contrary, B is resident in a community with low quality of government, where citizens are aware policies are designed and implemented in a partial way that favors particular business interests, political friends and cronies at the expense of social welfare. One should expect that A will have a stronger preference for redistributive policies than B, for the latter cannot trust public institutions to use the collective resources in a wise way. B would like to redistribute resources to other fellow citizens, but does not strongly demand redistributive policies to a public administration she does not trust to impartially provide public goods. This interactive effect of the quality of

institutions and social trust for understanding the development of preferences for redistributive public goods has also been noted in the literature. In order to get the acceptance of individuals to pay taxes, we need what Fehr, Fischbacher, and Gächter (2008, 3) refer to as a social structure of both relatively high social trust and relatively high institutional trust (cf. Rothstein and Uslaner 2005; Scholz and Lubell 1998).

Conversely, individual A will, *ceteris paribus*, have a stronger preference for a free market – i.e. free of stringent regulations – than B. For A can trust both her fellow citizens to use market freedom in an honest way, and her public institutions not to opportunistically interfere in it to cater some competitors over others. B, being a high-trusting individual, will naturally prefer low limits to private entrepreneurship. Yet, since she cannot trust public institutions not to favor some favorite players in a given market, she may prefer to restrict the market itself. In other words, if you trust other players with whom you are playing a game, but you do not trust the referee will guarantee a fair play, you may not want to play the game to start with.

In sum, we will test, on the one hand, two opposing hypotheses on the relationship between trust and government intervention, depending on the nature of such intervention. Regarding redistribution, individuals will have a stronger willingness to pay taxes and accept redistributive policies if they think other individuals will pay their fair share (i.e., if social trust is high). Yet, regarding government regulation, the relationship reverses. Low social trust lead to a higher demand for government regulation.

Hypothesis 1: The more individuals trust their fellow citizens (i.e., social trust), the more positive their attitude toward government redistribution.

Hypothesis 2: The less individuals trust their fellow citizens (i.e., social trust), the more positive their attitude toward strict government regulation that restricts the operations of free markets.

On the other hand, we will also test a third hypothesis on how the effect of social trust is conditioned by the quality of institutions. We hypothesize that good governments increase both the positive effect that social trust has over individual preferences for a redistributive state and the positive effect that social trust has over individual preferences for a free market (i.e. for low regulation).

Hypothesis 3a: The higher the quality of government in a polity, the more positive the effect of social trust over attitudes toward government redistribution.

Hypothesis 3b: The higher the quality of government in a polity, the more positive the effect of social trust over attitudes toward free market and against government regulation.

Method and Data

Research Design, Data, Measurement and Estimation

As our hypotheses regard how micro level trust and macro-level institutions affect individual level attitudes of redistribution and regulation, we employ a comparative, observational design, with data from the latest round of the European Quality of Government Index (EQI) survey. The survey includes approximately 77,000 individuals from 185 regions in 21 EU Member States and was fielded

during the summer of 2017. The survey included several questions that capture the political values of the respondents, among them are two items that are of particular interest to this study. Our first dependent variable proxies for preferences for redistribution.

‘How much do you agree with the following: 1-10, 1=strongly disagree, 10=strongly agree

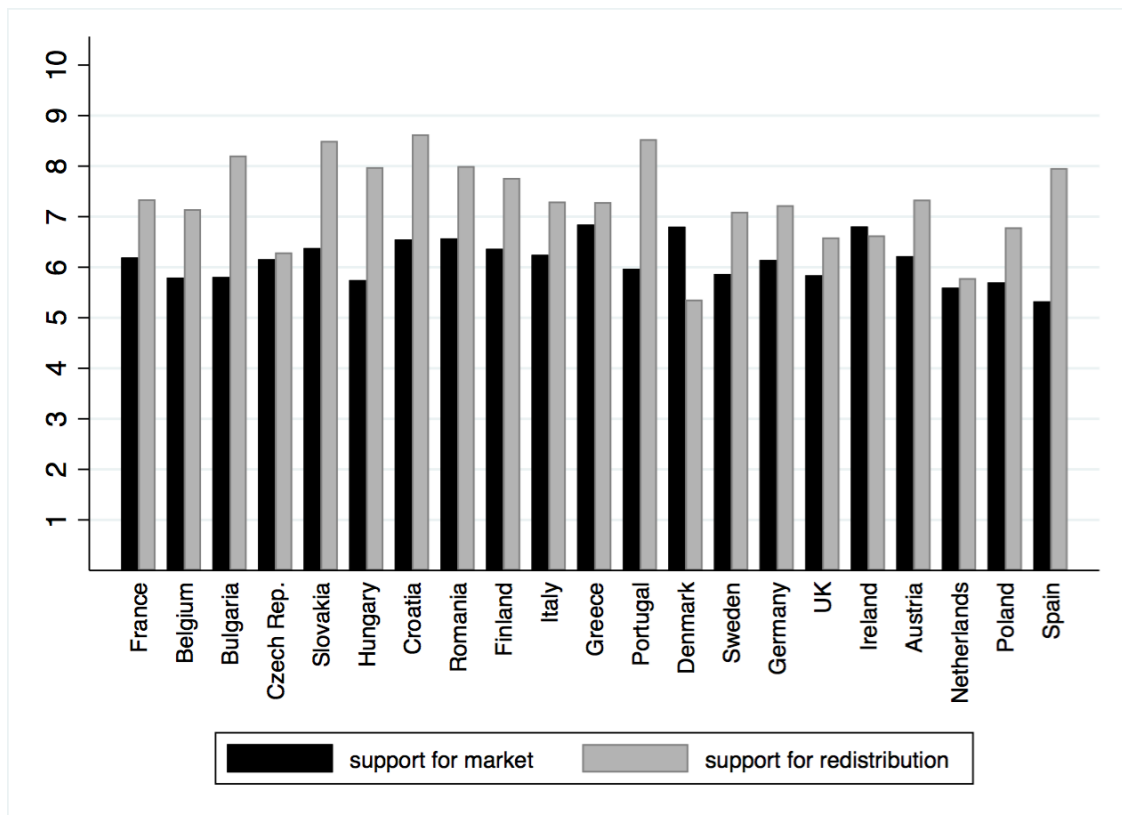
The government in [COUNTRY] should take measures to reduce differences in income

Our second dependent variable pertains to preferences for regulation to what extent the respondents prefer state intervention in the free market. We argue that this question is in fact more valid than a direct question on regulatory preferences as the word ‘regulation’ itself is technical and would likely lead to uninformed guessing in the responses. At the same time as redistribution can come through for example regulation (Castles, 2001):

You prefer private ownership of business and industry over government ownership

The variables are scaled in the direction that higher levels of the first and second dependent variable implies greater preferences for taxation and market (less regulation), respectively. Figure 3 presents the weighted mean averages by country to highlight the macro-level variation in the data on our two dependent variables. We see that countries such as Ireland and Denmark express rather liberal views (more government intervention and regulation) while respondents from countries such as Spain, Portugal and Slovakia prefer more active state intervention and redistribution.

FIGURE 3, COUNTRY AVERAGES OF ECONOMIC PREFERENCES IN 21 EUROPEAN COUNTRIES



Our main intended variable at the micro level is a respondent’s level of social trust. In this case, respondents are asked if they ‘trust other people in the in area’ from 1 (completely distrust) to 10 (completely trust).

Other micro-level control variables include a measure of respondents' ideological position broadly speaking, where we would anticipate that left-leaning people would on average support less market and more redistribution. We capture this with the respondents' preferred political party ('if the election were held today, who would you vote for'). Using coding from Nordsieck (2018), we code respondents as '1' for left-support if their preferred party is a far-left, center-left or green party. We also account for an individual's socio-economic status with two variables – education and income. As per income, respondents are coded in three ordered groups – low, middle and high, according to the income distributions in their own home country. Next, we also account for the respondent's level of education. The EQI survey provides a variable for the highest level of schooling each respondent has completed. Finally, we control for gender and age.

On the macro-level, we account for two contextual factors that might confound the relationship between trust and preferences for state intervention – the level of economic development and the quality of institutions. As regards the quality of institutions, we elect to measure institutions at the sub-national level rather than national. First, several studies have shown that the quality of institutions not only varies significantly across EU countries, but within them as well at the regional level (Charron et al., 2015). This allows us to capture the sub-national variation of these two indicators within countries; thus the sub-national level provides a more precision and stronger evidence our theory.ⁱ We proxy institutional quality with the 2013 version of the *European Quality of Government Index* (EQI) (Charron et al., 2015), which to date is the best available proxy for the level of impartiality and corruption in regional public institutions. For the level of economic development, we take a measure of GDP per capita, (PPP) from Eurostat for 2013 (logged), also at the sub-national level to capture within-country differences.

With respect to our estimation methods, we elect to use 'random intercept, random slope' hierarchical estimation with random intercepts at the national level and random slopes for political trust¹. To test the conditional hypotheses, we present cross-level interaction models with random country intercepts. In later checks of robustness, we also present the results from the country fixed effect models, where survey weights are employed. We estimate the following model:

$$\begin{aligned}
 Y_{ij}(\text{economic preferences}) \\
 &= \alpha_{0j} + \beta_{ij}(\text{trust}) + \varphi_{ij}(\text{micro controls}) + \delta_{kj}(\text{regional controls}) + u_{0j} \\
 &+ u_{1j} + e_{ij}
 \end{aligned}$$

Y_{ij} represents the two outcomes – preferences for state intervention into the economy. α_{0j} is the country level intercept and u_{0j} represents the random intercept component. β_{ij} is the estimate of the main independent variable, social trust, for which we also include a random slope component (u_{1j}) to account for the effects of trust that vary across countries. φ_{ij} and δ_{kj} represent the battery of micro and regional level controls, while e_{ij} is the random error at the individual level.

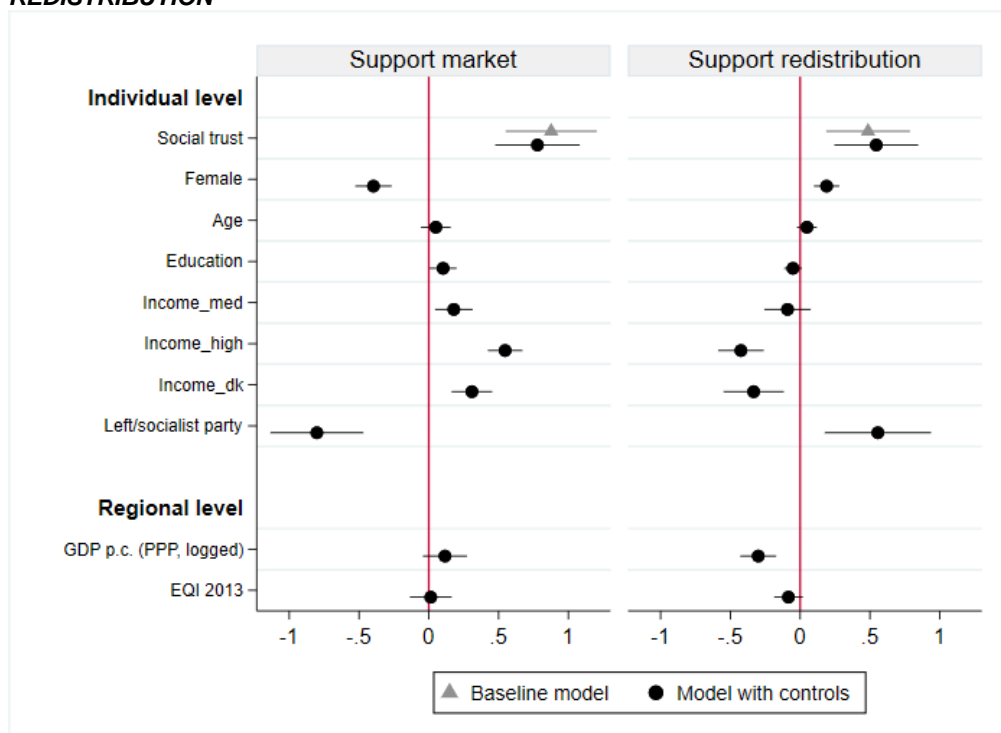
¹ The variance of slopes for social trust were significant ($p < 0.001$) in all models. In addition, we tested for fixed effects and found that differences in estimates were negligible. A Hausman tests confirms this. We elect random effects therefore for efficiency and precision in terms of modelling the random slope effect of trust across countries.

Results

Figure 4 shows the visual summary of the four models – two baseline with trust only and two with controls. The findings reveal that an increase in social trust results in an increase for preferences for the market over state intervention (less regulation), and higher support for redistribution (more taxation).

The control variables are largely in the expected directions. People who support left-leaning parties are also inclined to support more state intervention and more redistribution, while the opposite is the case for high income earners on average. Women prefer slightly more state action on both outcome variables, while people living in higher areas of higher economic development prefer lower levels of redistribution on average.

FIGURE 4, RANDOM EFFECTS MODELS – LEVEL OF SOCIAL TRUST & SUPPORT FOR MARKET AND REDISTRIBUTION



Note: marginal effects with 95% confidence intervals. Fixed effects part shown only.

To examine the relative impact of the variables, we report both marginal effects and standardized coefficients in Table 1, along with random and model components. The variable with the largest effect in the model is ideology – left support, closely followed by social trust, and then by income. As social trust is measured 0-1, the marginal effect represent the total effects of the variable, which constitute a standard deviation change of 0.20 and 0.27 of the redistribution and market variables respectively. Finally, we observe that the random intercept and slope component in the model are statistically significant, indicating the average levels of dependent variables and the effect of trust vary significantly by country.

TABLE 1, COMPARING THE RELATIVE EFFECTS: RANDOM INTERCEPT, RANDOM SLOPE MODELS

Variable	Support for Redistribution		Support for Market over State	
	change in dep. var.	p-value	change in dep. var.	p-value
<i>fixed effects</i>				
<i>social trust</i>				
+1 S.D.	0.125	0.000	0.166	0.000
Marginal	0.546	0.000	0.728	0.000
<i>Female</i>				
+1 S.D.	0.095	0.000	-0.197	0.000
Marginal	0.192	0.000	-0.394	0.000
<i>Age</i>				
+1 S.D.	0.05	0.181	0.05	0.366
Marginal	0.049	0.181	0.049	0.366
<i>Education</i>				
+1 S.D.	-0.052	0.109	0.098	0.042
Marginal	-0.049	0.109	0.099	0.042
<i>Income (med)</i>				
+1 S.D.	-0.042	0.288	0.085	0.006
Marginal	-0.09	0.288	0.186	0.006
<i>Income (high)</i>				
+1 S.D.	-0.197	0.000	0.225	0.000
Marginal	-0.425	0.000	0.547	0.000
<i>Left-socialist party</i>				
+1 S.D.	0.218	0.004	-0.313	0.000
Marginal	0.557	0.004	-0.801	0.000
<i>PPP (logged)</i>				
+1 S.D.	-0.119	0.000	0.047	0.000
Marginal	-0.30	0.000	0.119	0.000
<i>EQI 2013</i>				
+1 S.D.	-0.08	0.112	0.018	0.015
Marginal	-0.083	0.112	0.019	0.015
<i>constant</i>				
	9.711	0.000	4.605	0.000
<i>Average prediction</i>				
	7.30		6.13	
<i>random effects</i>				
country intercept	0.781	0.000	0.667	0.000
social trust	0.552	0.000	0.632	0.000
Wald Chi2	434.6	0.000	313.7	0.000
Observations	77,387		76,670	

Note: results from random intercept, random slope (social trust) models. P-values calculated from country-clustered standard errors. Both marginal effects and standardized coefficient (+1 S.D.) reported for purposes of comparison. Reference category for income is 'low'.

Next, we test whether the findings in Table 1 for social trust are in fact conditioned by the

institutional context in which one resides. To do so, we construct a cross-level interaction terms between our measure of regional level institutions (EQI) and social trust. We re-ran the full models presented in Table 1 including the interaction term. Figures 5 and 6 below elucidate the conditional relationship tested.

We find quite similar results in both cases. On the one hand, the effect of social trust on preferences for more or less state intervention is particularly pronounced for citizens living in regions with high levels of quality of government. For example, for citizens living in regions one standard deviation above the mean in terms of QoG, the marginal (total) effect of a 0-1 increase in social trust is 0.8 and 1.0 for redistribution and market preferences respectively. On the other hand, the link between social trust and preferences for state intervention is essentially negligible at low levels of QoG within Europe, and for citizens living in regions at one standard deviation below the EQI mean, the effect of social trust on the outcomes is roughly half that compared to the effect at one standard deviation above the EQI mean.

FIGURE 5, THE EFFECT OF SOCIAL TRUST ON PREFERENCES FOR REDISTRIBUTION OVER INSTITUTIONAL QUALITY

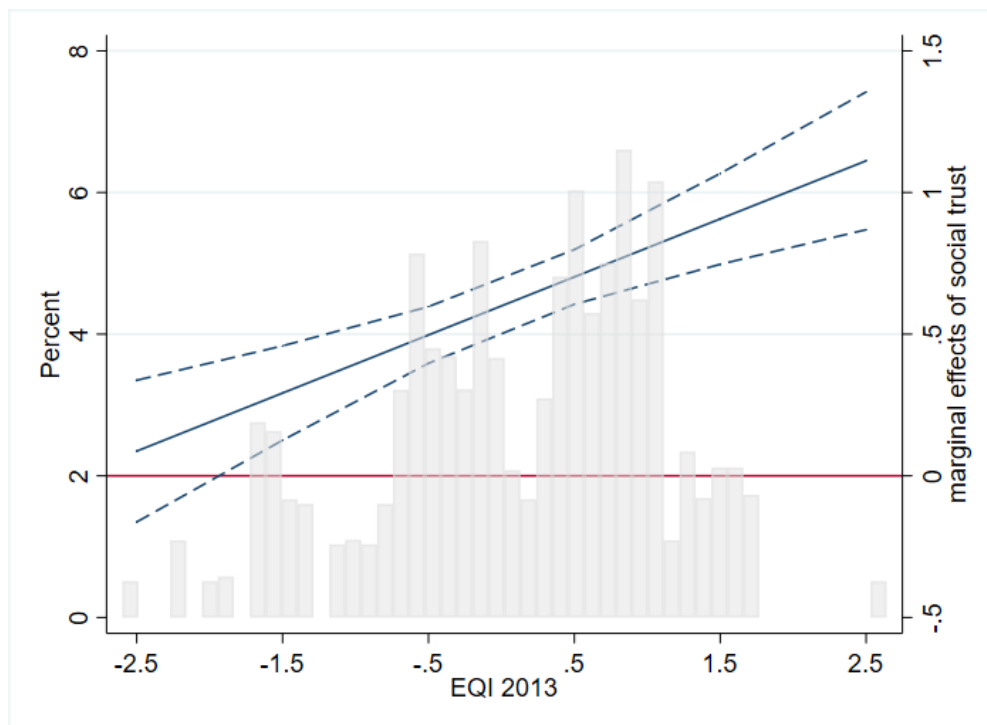
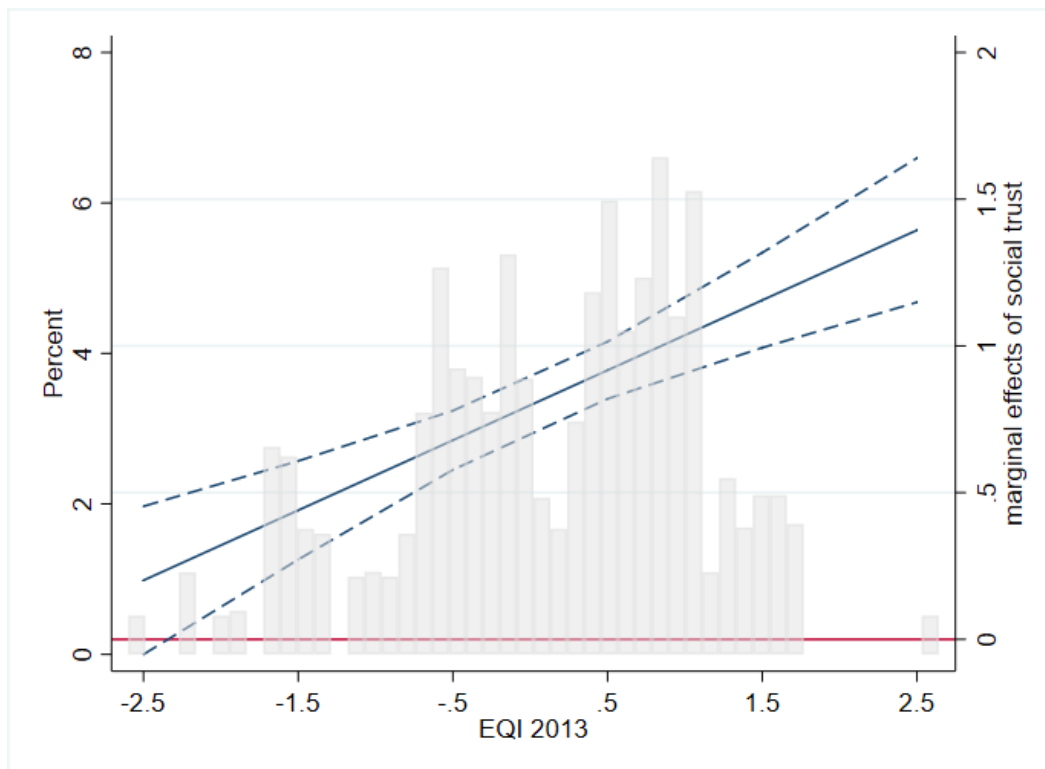


FIGURE 6, THE EFFECT OF SOCIAL TRUST ON PREFERENCES FOR FREE MARKET OVER INSTITUTIONAL QUALITY



In sum, both Hypothesis 1—the more individuals trust their fellow citizens, the more positive their attitude toward government taxation, measured by support for redistribution—and Hypothesis 2—the less individuals trust their fellow citizens, the more positive their attitude toward government regulation—are supported by the data. Finally, a line with Hypothesis 3, the positive effect of (social and institutional) trust on individual preferences for taxation and the negative effect on individual preferences for regulation are found both when looking at individual trust as well as a contextual effect when looking at the aggregate level of trust in the country. Whether you as an individual trust institutions and your fellow citizens matters for your policy preferences, and furthermore, whether you as an individual live in a society where there is a prevailing trust norm or not also matters for your policy preferences. The higher one’s level of trust, the more likely you are willing to support more state intervention in terms of taxes and economic redistribution, at the same time, the less likely you are to support more government regulation.

In addition, we find that the link between social trust and economic preferences are most pronounced in areas where institutional quality is highest.

Robustness Checks

We begin by re-running the models using a country fixed effects estimation in lieu of the random intercept random slope approach. Next, we check whether respondents from one country in particular are driving any of our findings. To do so, we re-run the estimate using a country-level

bootstrap, whereby each country is removed one at a time and the results are compared to the original models presented in the previous section. Third, we check whether the effect of social trust on economic preferences are consistent when including a control measure for political trust.

Conclusions

This paper has aimed to explore, at the micro-level, the contradictory relationship that we observe, at the macro-level, between the average levels of trust in a country and two different types of government intervention: regulation and redistribution. Why do governments in high-trust countries (e.g., Sweden and Denmark) tend to regulate relatively little in their economies while, at the same time, they impose high taxes and redistribution? Equally, why do relatively low-trust societies (e.g., Greece and Turkey) tend to have governments that regulate a lot but tax little?

Though a full account of this puzzle is outside the scope of this paper, we contribute to the literature in three ways. In the first place, by disentangling the effects of trust over regulation and redistribution, the paper helps to reconcile two contradictory views on the role of social trust. On the one hand, those who, like Alesina and Angeletos (2005), Aghion et al. (2010), or Pinotti (2012), link low trust to higher government intervention. On the other, those who, like Rothstein and Uslaner (2005) or Rothstein (2011), link low trust to low government intervention. Redistribution can come through regulation (Castles, 2001) but we argue that the difference between these two approaches is that they refer to two distinct forms of government intervention that, far from being correlated, may act as partial substitutes. Facing a collective problem, for instance a disruptive technological innovation that threatens local business, governments may either restrict the new economic activity, preventing the flourishing of a free market. Or, alternatively, governments may demand taxes to compensate the “losers” and, for instance, fund retraining programs.

Our second contribution is arguing that the fact that some societies marginally prefer one type of government intervention (regulation) over the other (redistribution) may depend on the level of social trust. Partly, our argument follows the lines of Berggren and Bjørnskov (2017), who note how social trust may affect regulation through numerous mechanisms. A country with high social trust can more easily overcome the obstacles in the political process—coming from ideology or from political instability—that prevent governments from deregulating an economy with liberalizing reforms. If you believe others can be trusted, will stick to their word, and will not exploit you, you will be more open to accept the dismantling of economic regulations (Berggren and Bjørnskov 2017). And, at the same time, as it has also been noted in the literature, you will be more willing to pay taxes (Scholz and Lubell 1998). Similar to both lines of research, our results show those high-trust individuals are less willing to support regulation and more willing to support taxation.

Third, while most of the scholarship has focused on the relationship between social trust and government intervention, our findings show the trust citizens have in their institutions —i.e. the perceived level of quality of government – also exerts an important role. In those European regions where individuals perceive that public institutions act in an impartial way, the level of social trust does seem to have a stronger effect on preferences for redistributive and regulatory policies. On the one

hand, this finding is akin to previous results indicating that when individuals have confidence in the impartiality of public institutions, they have a more positive attitude toward taxation (Hetherington 1998; Rothstein, Samanni, and Teorell 2012; Svallfors 2013; Daniele and Geys 2015). On the other, the quality of government also enhances the negative effect that social trust has on the demands for more governmental regulation that has been documented in the literature (e.g. Aghion et al. 2010).

REFERENCES

- Aghion, P., Y. Algan, P. Cahuc, and A. Shleifer. 2010. "Regulation and Distrust." *Quarterly Journal of Economics* 125 (3): 1015–49.
- Alesina, A., and G.-M. Angeletos. 2005a. "Fairness and Redistribution." *American Economic Review* 95 (4): 960–80.
- Alesina, A., and G. M. Angeletos 2005b. "Corruption, inequality, and fairness." *Journal of Monetary Economics* 52 (7): 1227–44.
- Banfield, Edward C. 1958. *The Moral Basis of a Backward Society*. New York: Free Press.
- Bergh, A., and C. Bjørnskov. 2011. "Historical trust levels predict the current size of the welfare state." *Kyklos* 64 (1): 1–19.
- Bergh, Andreas, and Christian Bjørnskov. 2014. "Trust, welfare states and income equality: Sorting out the causality." *European Journal of Political Economy* 35: 183–99.
- Berggren, Niclas and Bjørnskov, Christian. 2017 "The Market-Promoting and Market-Preserving Role of Social Trust in Reforms of Policies and Institutions" Forthcoming in *Southern Economic Journal*; IFN Working Paper No. 1152. Available at SSRN: <https://ssrn.com/abstract=2910271>
- Blanchard, O., and F. Giavazzi. 2003. "Macroeconomic effects of regulation and deregulation in goods and labor markets." *Quarterly Journal of Economics* 118: 879–907
- Castles, F. G. 2001. "A Farewell to Australia's Welfare State." *International Journal of Health Services* 31: 537-44.
- Charron, N., Dijkstra, L., & Lapuente, V. (2015). Mapping the regional divide in Europe: A measure for assessing quality of government in 206 European regions. *Social Indicators Research*, 122(2), 315-346.
- Cinyabuguma, Matthias, Talbot Page, and Louis Putterman. 2006. "Can second-order punishment deter perverse punishment?" *Experimental Economics* 9 (3): 265–79.
- Daniele, Gianmarco, and Benny Geys. 2015. "Social trust and welfare state support." *European Journal of Political Economy* 39: 1–12.
- Denant-Boemont, L., Masclat, D. and Noussair, C.N., 2007. Punishment, counterpunishment and sanction enforcement in a social dilemma experiment. *Economic theory*, 33(1), pp.145-167.
- Di Tella, Rafeal, and Robert MacCulloch. 2009. Why Doesn't Capitalism Flow to Poor Countries?

Brookings Papers on Economic Activity Spring 2009 (285-321).

Diekmann, Andreas, and Axel Franzen. 1999. "The Wealth of Nations and Environmental Concern." *Environment and Behavior* 31 (4): 540–49.

Dinesen, Peter T. 2013. "Where You Come From or Where You Live? Examining the Cultural and Institutional Explanation of Generalized Trust Using Migration as a Natural Experiment." *European Sociological Review* 29 (1): 114–28.

Djankov, S., R. La Porta, F. Lopez-De-Silanes, and A. Shleifer. 2002. "The Regulation of Entry." *Quarterly Journal of Economics* 117 (1): 1–37.

Dunlap, Riley E., and Richard York. 2008. "The Globalization of Environmental Concern and the Limits of the Postmaterialist Values Explanation: Evidence from Four Multinational Surveys." *The Sociological Quarterly* 49 (3): 529–63.

Fehr, E., and A. Leibbrandt. 2011. "A field study on cooperativeness and impatience in the tragedy of the commons." *Journal of Public Economics* 95 (9–10): 1144–55.

Franzen, Axel, and Reto Meyer (2010). "Environmental Attitudes in Cross-National Perspective: A Multilevel Analysis of the ISSP 1993 and 2000." *European Sociological Review* 26(2): 219-234.

Franzen, Axel, and Dominikus Vogl. 2013. "Two decades of measuring environmental attitudes: A comparative analysis of 33 countries." *Global Environmental Change* 23 (5): 1001–08.

Gächter, Simon, and Benedikt Herrmann. 2009. "Reciprocity, culture and human cooperation: previous insights and a new cross-cultural experiment." *Philosophical Transactions of the Royal Society of London B: Biological Sciences* 364 (1518): 791–806.

Gächter, Simon, and Benedikt Herrmann. 2011. "The limits of self-governance when cooperators get punished: Experimental evidence from urban and rural Russia." *European Economic Review* 55 (2): 193–210.

Gelissen, John. 2007. "Explaining Popular Support for Environmental Protection: A Multilevel Analysis of 50 Nations." *Environment and Behavior* 39 (3): 392–415.

Harring, Niklas. 2014. "Corruption, inequalities and the perceived effectiveness of economic pro-environmental policy instruments: A European cross-national study." *Environmental Science & Policy* 39 (0): 119–28.

Harring, Niklas. 2016. "Reward or Punish? Understanding preferences toward economic or regulatory instruments in a cross-national perspective." *Political Studies* 64 (3): 573-592.

Hauser, Oliver P., Martin A. Nowak, and David G. Rand. 2014. "Punishment does not promote cooperation under exploration dynamics when anti-social punishment is possible." *Journal of theoretical biology* 360: 163–71.

Herrmann, Benedikt, Christian Thöni, and Gächter, Simon. 2008. "Antisocial Punishment Across Societies." *Science* 319 (5868): 1362–7.

- Hetherington, Marc J. 1998. "The Political Relevance of Political Trust." *The American Political Science Review* 92 (4): 791–808.
- Hopkin, Jonathan, and Mark Blyth. 2012. "What can Okun teach Polanyi? Efficiency, regulation and equality in the OECD." *Review of international political economy* 19 (1): 1–33.
- Hopkin, Jonathan, Victor Lapuente and Lovisa Möller, and. 2013. "Varieties of Statism. Economic regulation and Economic redistribution in Southern Europe." Presented at the 20th International Conference of Europeanists-Crisis & Contingency: States of (In) Stability, Ces: Amsterdam.
- Inglehart, Ronald. 1995. "Public Support for Environmental Protection: Objective Problems and Subjective Values in 43 Societies." *PS: Political Science and Politics* 28 (1): 57–72.
- Kemmelmeier, Markus, Grzegorz Krol, and Young Hun Kim. 2002. "Values, Economics, and Proenvironmental Attitudes in 22 Societies." *Cross-Cultural Research* 36 (3): 256–85.
- Levi, Margaret, and Laura Stoker. 2000. "Political trust and trustworthiness." *Annual Review of Political Science* 3 (1): 475–507.
- Lundmark, Sebastian., Mikael Gilljam, and Stefan Dahlberg. 2015. "Measuring Generalized Trust: An Examination of Question Wording and the Number of Scale Points." *Public Opinion Quarterly* 80(1), 26-43.
- Pinotti, Paolo. 2012. "Trust, Regulation and Market Failures." *Review of Economics and Statistics* 94 (3): 650–58.
- Pitlik, Hans, and Ludek Kouba. 2015. "Does social distrust always lead to a stronger support for government intervention?" *Public Choice* 163 (3–4): 355–77.
- Putnam, R. D. 1993. *Making democracy work: civic traditions in modern Italy*. Princeton, N.J.: Princeton University Press.
- Rand, David G., and Martin A. Nowak. 2011. "The evolution of antisocial punishment in optional public goods games." *Nature Communications* 2: 434.
- Rand, David G., Joseph J. Armao IV, Mayuko Nakamaru, and Hisashi Ohtsuki. 2010. "Anti-social punishment can prevent the co-evolution of punishment and cooperation." *Journal of theoretical biology* 265 (4): 624–32.
- Rothstein, Bo. 2011. *The quality of government: Corruption, social trust, and inequality in international perspective*. University of Chicago Press, Chicago.
- Rothstein, B., M. Samanni, and J. Teorell. 2012. "Explaining the welfare state: power resources vs. the Quality of Government." *European Political Science Review* 4 (1): 1–28.
- Rothstein, Bo, and Dietlind Stolle. 2008. "The State and Social Capital: An Institutional Theory of Generalized Trust." *Comparative Politics* 40 (4): 441–59.
- Rothstein, B., and E. M. Uslaner (2005). "All for All: Equality, Corruption, and Social Trust." *World Politics* 58 (01): 41–72.

Sapir, André, et al. 2004. *An Agenda for a Growing Europe. The Sapir Report*. Oxford: Oxford University Press.

Sapir, André. 2006. "Globalization and the Reform of European Social Models." *Journal of Common Market Studies* 44 (2): 369–90.

Scholz, J. T., and M. Lubell. 1998. "Trust and taxpaying: Testing the heuristic approach to collective action." *American Journal of Political Science* 42 (2): 398–417.

Svallfors, Stefan. 2013. "Government quality, egalitarianism, and attitudes to taxes and social spending: a European comparison." *European Political Science Review* 5 (3): 363–80.

Svensson, Jakob. 2005. "Eight Questions about Corruption." *Journal of Economic Perspectives* 19 (3): 19–42.

Teorell, Jan, Nicholas Charron, Marcus Samanni, Sören Holmberg, and Bo Rothstein. 2011. "The Quality of Government Dataset, version 6Apr11." Accessed from The Quality of Government Institute, University of Gothenburg, <http://www.qog.pol.gu.se>.

Thöni, C., J. R. Tyran, and E. Wengström. 2012. "Microfoundations of social capital." *Journal of Public Economics* 96 (7): 635–43.

World Values Survey Association. 2009. "WORLD VALUES SURVEY 2005 OFFICIAL DATA FILE v.20090901." www.worldvaluessurvey.org.

ⁱ Regions here equate to NUTS 1 or NUTS 2 depending on the country. Countries with data for NUTS 1 are Germany, UK, Sweden, Hungary, Belgium