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Trust and Democracy

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Abstract

This paper examines the effect of trust on democracy. To account for potential endogeneity, and

to identify a causal effect of trust on democracy, the paper uses new instrumental variables. The

instruments used for trust are the mean elevation and the terrain ruggedness. The paper uses the

World Values Survey to examine the effect of trust in people from another nationality, trust in people

from another religion, trust in people you know personally, trust in people you meet for the first time,

trust in your family, trust in your neighborhood, and whether most people can be trusted. The Ordinary

Least Squares results show that the trust variables have a statistically significant positive association

with democracy. These results are robust after the inclusion of several control variables, with the

exception of income per capita and educational attainment. The paper also conducts two stage least

squares regressions. The results show that trust, instrumented by these geographic variables, explain

cross country variations in democracy. These results are also robust after the inclusion of control

variables, with the exception of income per capita and educational attainment. These results imply

that trust affects democracy indirectly through the channels of economic development and human

capital accumulation.

Keywords: geography, trust, democracy.

JEL Classification: O1; P5; Z1.

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1 Introduction

This paper examines the effect of interpersonal trust on democracy. There is a growing literature that argues that trust is one of the critical determinants of economic performance, the support for welfare state, the demand for government regulations, and the extent of central bank independence. Nevertheless, the literature does not examine the effect of trust on democracy. Trust, or the lack thereof, can create conducive conditions for the establishment of a democratic system. For a democratic system to succeed, citizens have to trust in elected officials to act on their behalf, in policy makers to enact policies to their benefit, in politicians and political parties to represent their interests, and in other people's willingness and ability to support policies that are likely to improve their living standards. On the other hand, the democratic institutions are founded on the lack of trust in the powerful clique for fear they might act to promote their own interests on the expense of the entire populace. The lack of trust is what instigates the support for a democratic system in which ordinary people's demands are more likely to be fulfilled. Therefore, it is possible that trust or distrust can create conducive conditions for democratic governance.

However, we cannot determine easily the causal effect of trust on democracy. The key difficulty is that trust is endogenous to democracy. As much as trust can affect the level of democracy, the latter can have an effect on the level of trust in a country as well. This is because the core features of a democratic system is the transparency of the actions of policy makers and their accountability for their actions before the electorate. These features of a democratic system can enhance the sentiments of trust. The former allows the citizens to scrutinize the behavior of the public officials, while the latter ensures that these officials know that they can not act with impunity. Both can ensure the citizenry that they can trust the system of governance and the behavior of their elected officials compared to other systems of governance. In addition, a democratic environment allows differences in opinion to be tolerated and conflicts of interest to be resolved in a peaceful manner. This atmosphere allows trust in others to flourish as well.

Therefore, to identify a causal effect from trust to economic development we have to find some exogenous source of variation in trust. In other words, when we estimate the effect of trust on democracy we have to use instrumental variables. The instruments used are the geographic characteristics pertinent to the topographic features of the terrain in a country. Specifically, the mean elevation and the terrain ruggedness are used as instrumental variables for trust. Elevation and terrain ruggedness reflect natural barriers that impede different groups from communicating and interacting with each other. The uneven terrain can hinder the feeling of trust and possibly exacerbate the sense of suspicion toward others who are kept at a distance. Rugged terrain also hinders trade and commercial transactions between communities. This

does not allow these communities an opportunity for interaction that allows trust to flourish. Rugged terrain is also costly to traverse, which does not facilitate travel from one area to another. This serves as an impediment to communication between groups of people who are separated from each other by the irregular features of the terrain.

The paper focuses on trust variables that are extracted from the World Values Survey, such as trust in people from another nationality, trust in people from another religion, trust in people you know personally, trust in people you meet for the first time, trust in your family, trust in your neighborhood, and whether most people can be trusted. The Ordinary Least Squares results show that all the trust variables have a statistically significant positive association with democracy. These results are robust after the inclusion of control variables such as ethnic and linguistic fractionalization, the colonial origin, and indicators for irrigation agriculture. However, the coefficients of trust are not significant with the inclusion of real Gross Domestic Product per capita or educational attainment. The paper also conducts two stage least squares estimations where elevation and terrain ruggedness are used as instrumental variables. The results show that trust, instrumented by these topographic variables, explain cross country variations in democratic governance. These results are also robust after the inclusion of control variables with the exception of real Gross Domestic Product per capita or educational attainment. These results imply that trust affects democracy indirectly through the channels of economic development and human capital accumulation.

The contribution of this paper is twofold. This paper is the first in the literature to investigate the effect of trust on democracy while addressing the potential endogeneity problem by introducing novel instruments for trust. The remainder of the paper is organized as follows: section 2 includes the literature survey, section 3 includes a detailed description of the data, section 4 includes the empirical estimation, and section 5 concludes. References, tables and figures are included thereafter.

2 Literature

There are several studies that investigate the effect of trust on economic performance, on investment, on innovation, on the support for welfare state, on the demand for government regulations, and on the extent of central bank independence. The main contribution of this paper is that it is the first in the literature to investigate the effect of trust on democracy.

There is a stream of literature that argues that trust is one of the critical determinants of economic performance. A prerequisite for the success of market economies is to depart from closed group interactions and to expand transactions to anonymous others. Trust facilitates the extension of mutually advantageous

anonymous exchange in the presence of incomplete contracts and imperfect information. On the other hand, the lack of trust is associated with suspicion and fear of fraud. This increases the cost of transactions due to the need for enforcement of contracts by third parties.

In this context, some studies show that trust is positively associated with economic performance. For instance, Zac and Knack (2001) provide evidence, consistent with their theoretical prediction, that a low trust environment diminishes investment and economic growth. Knack and Zac (2003) find that policies that increase trust, by increasing educational levels and decreasing income inequality, efficiently stimulate economic prosperity. Knack and Keefer (1997) show that trust and civic cooperation are associated with better economic performance. Algan and Cahuc (2010) find that inherited trust explains a significant share of the economic backwardness of developing countries and the economic differences between developed countries over the twentieth century. Peiró-Palomino et al. (2015) show that higher levels of trust and active associational activities lead to higher economic growth in a sample of European regions. Peiró-Palomina and Tortosa-Ausina (2013) find that trust is one of the drivers of economic development, but that the effect of trust on income decreases as an economy becomes wealthier. Horváth (2013) shows that trust exerts a positive effect on economic growth especially in countries with a weak rule of law. Ahlerup et al. (2009) show that interpersonal trust has the greatest growth effect at lower levels of institutional strength, while the effect vanishes when institutions are strong.

Another stream of literature argues that trust can influence the accumulation of human capital and physical capital. Firms typically hire high-human-capital workers to perform complex tasks. Monitoring costs are higher with the complexity of tasks but lower with higher levels of trust. Furthermore, workers with high levels of human capital may be better able to cooperate and share information in an environment with higher levels of trust. Thus, trust increases the firm's demand for workers with higher levels of human capital. Similarly, trust would be accompanied by an increase in information dissemination about a larger variety of opportunities on investment in physical capital. In this context, Dearmon and Grier (2009) show that the positive effect of investment on economic development is enhanced in a high trust environment. Dearmon and Grier (2011) show that trust has a significant positive effect on human capital and that an increase in trust in a low-trust country has a greater effect on the accumulation of physical capital than an identical increase in a high-trust country.

Some studies posit that there is a positive association between trust and innovation. Innovators need venture capitalists to finance their ideas even though the outcome is uncertain. Thus, the risky enterprise benefits if the venture capitalist and the innovator trust one another. Akçomak and Bas ter Weel (2009)

show that social capital fosters innovation proxied by patent applications. Akçomak and Müller-Zick (2018) find that only generalized trust and non-egoistic fairness have a robust impact on inventive activities.

Some studies argue that trust affects the demand for government regulations. This is because a low level of trust in public officials and private agents increases the demand for government regulation that imposes restrictions on their actions. Aghion et al. (2010) provide evidence that the lack of trust generates demand for regulation even when people realize that the government is corrupt and ineffective. Other studies argue that a high level of trust may increase the support for welfare state as the former bolsters the belief that others will not use the system inappropriately. Algan et al. (2016) develop a model that predicts the existence of a twin peaks relationship between trust and the size of the welfare state, or the support for large welfare states in both low-trust and high-trust countries. The authors provide evidence for their predictions where individuals who declare that it is excusable to claim benefits to which they are not entitled, besides individuals who think that they are surrounded by trustworthy people, are found to support the welfare state.

Some studies argue that trust is expected to affect the extent of central-bank independence. In high-trust countries, it is easier and less costly for politicians to trust and delegate power to independent central bankers. In low-trust countries, the need for independence is stronger because the time-inconsistency problem is worse and the credibility of political decision-making is weaker. Some studies, such as Bergren et al. (2014, 2016) find evidence to support this intuition.

3 Data

The countries included in the analysis are: Armenia, Australia, Azerbaijan, Belarus, Chile, China, Colombia, Cyprus, Ecuador, Egypt, Estonia, Germany, Ghana, Iraq, Japan, Jordan, Kazakhstan, Kuwait, Kyrgyzstan, Lebanon, Malaysia, Mexico, Morocco, Netherlands, Nigeria, Pakistan, Peru, Philippines, Poland, Qatar, Romania, Russia, Rwanda, Slovenia, South Korea, Spain, Sweden, Taiwan, Trinidad and Tobago, Tunisia, Turkey, Ukraine, United States of America, Uruguay, Uzbekistan, Yemen, and Zimbabwe. This sample is limited due to the availability of data in the World Values Survey. The summary statistics of the variables used in the analysis are included in table 1.

3.1 Democracy

The democracy variable is extracted from the Polity IV Project. The Polity score captures a country's political regime on a 21-point scale ranging from -10 (strongly autocratic) to +10 (strongly democratic).

The paper uses the Polity2 variable which is a modified version of the Polity variable by applying a simple treatment to convert instances of "standardized authority scores" (-66, -77, -88) to conventional polity scores within the range between -10 to +10.

3.2 Trust

The trust variables are extracted from the latest wave 6 of the World Values Survey which cover the period 2010-2014. The questions ask how much you trust different groups of people. The survey question is stated as follows: "I'd like to ask you how much you trust people from various groups. Could you tell me for each whether you trust people from this group completely, somewhat, not very much or not at all?" The list of groups include: (1) people of another nationality, (2) people of another religion, (3) people you know personally, (4) people you meet for the first time, (5) your family, (6) your neighborhood. The variables used in the analysis are the percentages of people who answered they trust completely, or trust somewhat, the groups considered. The variables are denoted Trust1, Trust2, Trust3, Trust4, Trust5, Trust6, respectively.

The other question used in the analysis is "Generally speaking, would you say that most people can be trusted or that you need to be very careful in dealing with people?" The percentage of people who responded "Most people can be trusted" is denoted Trust7.

3.3 Topography

The elevation variable measures the mean elevation in meters above sea level. The variable is extracted from the University of Harvard Center for International Development¹. This variable is denoted Elevation. The terrain ruggedness index is introduced and described in Nunn and Puga (2012). The index was originally devised to quantify topographic heterogeneity in wildlife habitats providing concealment for preys and lookout posts². This variable is denoted Rugged.

3.4 Controls

Several control variables are used in the analysis to check the robustness of the results. The first control variable is real Gross Domestic Product per capita derived from the Penn World Tables 8.0. The variable used is the real Gross Domestic Product in 2011 at constant 2005 national prices. This variable is divided by the population to calculate the real Gross Domestic Product per capita. The logarithm of the real Gross Domestic Product per capita is used in the analysis. This is included as a control variable since the

¹www.cid.harvard.edu/ciddata/geographydata.htm.

²The detailed definition of the variable can be found in http://diegopuga.org/data/rugged/.

modernization theory posits that higher income per capita causes a country to be democratic, as argued by Huntington (1991).

The second set of control variables is the colonial origin indicator. The data distinguishes between British, French, Portuguese, Spanish, and other European (Dutch, Belgian and Italian) colonial origin for countries colonized since 1700. For countries under several colonial powers, the last one is counted provided that it lasted for 10 years or longer. Acemoglu et al. (2001) discuss how different colonial practices created institutions in some areas that do not maintain the rule of law, which is one of the pillars of democratic governance. Thus, the identity of the colonial power might have an effect on democracy.

The ethnic and linguistic fractionalization indicators are used as another control variable³. Fractionalization measures the probability that two randomly selected individuals from a country are from different ethnic and linguistic groups. Diversity along ethnic and linguistic lines tend to formulate weaker institutions. In highly diverse societies, the group that dominates power tend to expropriate resources from the other groups and restrict the rights of members of other groups. Therefore, we can expect that higher fractionalization would have an adverse effect on democratic governance.

The paper also an educational attainment indicator derived from the Barro and Lee International Data on 2010. The indicator used is the average years of secondary schooling for the population aged 15 and over. These indicator is denoted Education. There are several studies that show that schooling promotes political participation which is a core component of democratic practices. Glaeser et al. (2007) show that schooling increases the incentives for civic engagement and ensures a broader participation in the political process. Campante and Chor (2012) argue that "more educated citizens display a greater propensity to engage in virtually all forms of political activity, including voting, attending political events, staying informed about politics, working on campaigns, contributing money, and signing petitions." Milligan et al. (2004) find that educational attainment is related to measures of political interest and participation.

The paper also uses the suitability for irrigation agriculture derived from the Food and Agriculture Organization of the United Nations. Some studies argue that irrigation allows landed elites in arid areas to monopolize water and arable land. Bentzen et al. (forthcoming) show that countries whose agriculture relied on irrigation are less democratic than other countries with rainfed agriculture. The first indicator extracted is "Agricultural Land" which is the total land used for cultivation of crops and animal husbandry. The second indicator extracted is "Agriculture area actually irrigated" which is land area actually irrigated that is Agriculture. The variable used in the analysis is the "agriculture area actually irrigated" divided by the "agricultural land" which measures the proportion of agriculture land that is actually irrigated. This

³The dataset can be found at: http://www.anderson.ucla.edu/faculty pages/romain.wacziarg/papersum.html

variable is denoted Irrigation1. The third indicator extracted is "Land area" which is the country area excluding area under inland waters and coastal waters. The fourth indicator extracted is the "Land area equipped for irrigation" which is land area equipped with irrigation infrastructure and equipment to provide water to crops, which are in working order. The variable used in the analysis is the "land area equipped for irrigation" divided by " the "land area" which measures the proportion of land that is equipped for irrigation. This variable is denoted Irrigation2.

4 Estimation

This section estimates the effect of trust on democracy. Ordinary least squares estimations are used to assess the relationship between each one of the trust variables and democracy. Each regression is that of democracy on one of the trust variables, taken one at a time, as follows

$$Democracy_i = \alpha + \beta Trust_i + X_i \gamma + \varepsilon_i$$

where $Democracy_i$ is the polity indicator in country i. The trust variable $Trust_i$ can be Trust1, Trust2, Trust3, Trust4, Trust5, Trust6 or Trust7. X_i is a vector of control variables described in the previous section. Table 2 includes the Ordinary Least Squares results. The first column in table 2 shows the results of these regressions without control variables. Each coefficient is the outcome of a regression of democracy on each one of the trust variables. The results show that all the trust variables have a statistically significant positive association with democracy. This implies that trust significantly explains cross country variations in democratic governance.

In order to assess the robustness of these results, table 2 also includes the results of the regressions of democracy on the trust variables, one at a time, adding a control variable to each regression. Column 2 adds the ethnic and linguistic fractionalization indicators, column 3 adds the colonial origin, column 4 adds income per capita, columns 5 and 6 add the irrigation variables, columns 7 adds the educational attainment variable. The results show that the coefficients of every trust variable is highly statistically significant when fractionalization, the colonial origin, and the irrigation indicators are included. However, when income per capita and educational attainment variables are included, the trust variables have no statistically significant effect on democracy.

However, trust is shown to be endogenous to democracy. Therefore, a two stage least squares regression is conducted to estimate the effect of trust on democracy using instrumental variables. We use mean

elevation and terrain ruggedness as instruments for trust. Figure 1 shows the relationship between elevation and each of the trust variables. These figures show a negative relationship between Elevation and Trust1, Trust2, Trust3, Trust4, Trust5 and Trust7. The graphs also show a weak positive relationship between Elevation and Trust6. Figure 2 shows the relationship between Rugged and each of the trust variables. These figures show a negative relationship between Rugged and Trust1, Trust2, Trust3, Trust4, Trust5 and Trust7. The graphs also show a weak positive relationship between Rugged and Trust6. The weak positive relationship between these topographic variables and Trust6, or trust in your neighborhood, is intuitive. Natural barriers can impede communications with other communities but can enhance interactions with neighbors. This allows these natural barriers, such as elevation and ruggedness, to enhance trust in the neighborhood.

A Two Stage Least Squares regressions is conducted to address the question of whether trust, instrumented by elevation and terrain ruggedness, has an effect on democracy. The regression is as follows

Second Stage: $Democracy_i = \alpha + \beta Trust_i + X_i \gamma + \varepsilon_i$

First Stage: $Trust_i = \delta Elevation_i + \sigma Rugged_i + \epsilon_i$

The Controls X_i are a set of included exogenous variables. The error terms in the first and second stage regressions are ε_i and ϵ_i , respectively. Elevation and terrain ruggedness are considered excluded exogenous variables in that they are used as instrumental variables to extract the exogenous component of trust but are excluded in the second stage regressions. Table 3 shows the second stage coefficients of each one of the trust variables. Column 1 of table 3 shows the coefficient without the inclusion of control variables. The overidentifying restrictions test p-values are included in column 2 of table 3. The first stage p-values are included in column 3 of table 3. In the case without any control variables, the coefficients of all the trust variables are positive and statistically significant.

Table 4 shows the coefficients for trust after the inclusion of some control variables in a Two Stage Least Squares. Column 1 shows the coefficients after adding the fractionalization indicators. Column 2 shows the coefficients after adding the colonial origins. Column 3 shows the coefficients after adding income per capita. Columns 4 and 5 show the coefficients after adding the irrigation indicators. Column 6 shows the coefficients after adding the educational attainment indicator. The results show that the exogenous component of trust significantly explains democracy. When the fractionalization indicators,

colonial dummies, and irrigation agriculture variables are added, the coefficients of trust are statistically significant. However, the coefficients of all the trust variables are not statistically significant when we add income per capita or educational attainment.

The paper also focuses on Trust7, or what is referred to as generalized trust. Generalized trust has attracted lots of attention in the literature. Table 5 shows the effect of generalized trust on democracy to be statistically significant without control variables in column 1. The results show that when we add GDP per capita in column 2, the coefficient of trust loses its significance while that of income per capita is positively and statistically significant. This continues to be the case when we add other control variables in columns 3, 4 and 5. Table 6 shows the effect of generalized trust on democracy to be statistically significant without control variables in column 1. The results show that when we add Education in column 2, the coefficient of trust loses its significance while that of educational attainment is positively and statistically significant. This continues to be the case when we add other control variables in columns 3, 4 and 5. Tables 7 and 8 show the same pattern with two stage least squares⁴. These results imply that trust may impact democracy indirectly through enhancing the living standards which, in turn, induces democracy according to the modernization theory. Trust also may impact democracy indirectly by inducing the accumulation of human capital which, in turn, encourages political participation in the democratic system.

5 Conclusion

This paper examines the effect of trust on democracy. The key difficulty in estimating a causal effect of trust is that it is endogenous to democracy. To address the potential endogeneity, the paper uses the mean elevation and the terrain ruggedness as instruments for trust. The paper focuses on trust in people from another nationality, trust in people from another religion, trust in people you know personally, trust in people you meet for the first time, trust in your family, trust in your neighborhood, and whether most people can be trusted. The Ordinary Least Squares results show that all trust variables have a statistically significant positive association with democracy. These results are robust after the inclusion of control variables, with the exception of income per capita and educational attainment. The paper also conducts two stage least squares regressions where elevation and ruggedness are used to find an exogenous source of variation in trust. The results show that trust, instrumented by these geographic variables, explains cross country variations in democratic governance. These results are also robust after the inclusion of control variables, with the exception of income per capita and educational attainment. These findings indicate that

⁴The same pattern applies with the other trust variables.

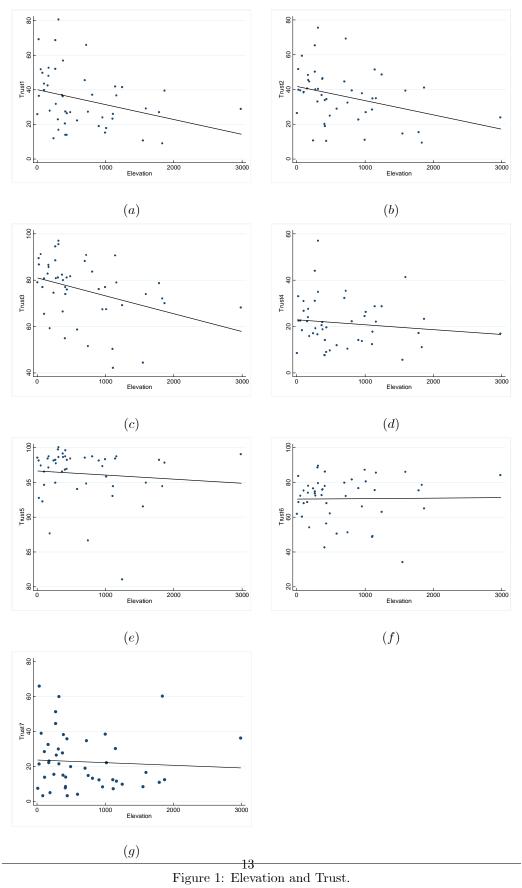
trust may impact democracy indirectly through the channels of economic development and human capital accumulation.

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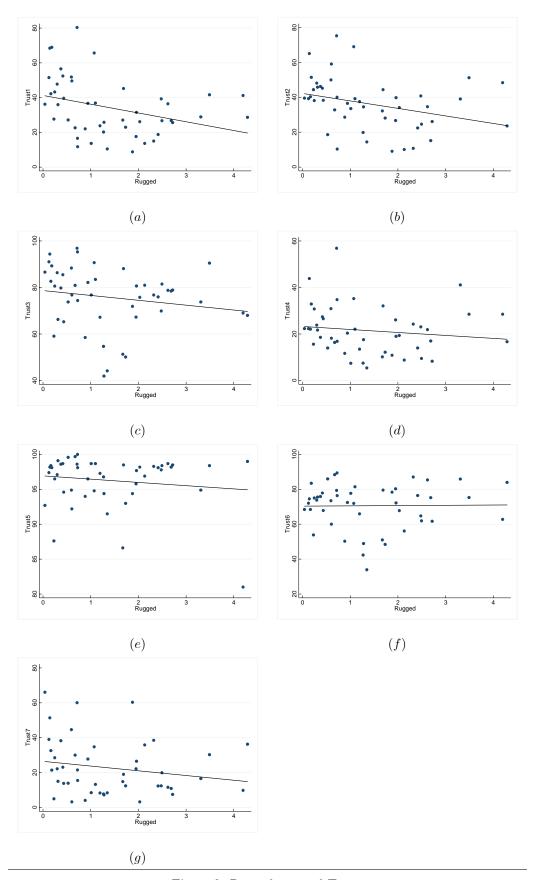


Figure 2: Ruggedness and Trust.

Variable	Observations	Mean	Standard Deviation	Min	Max
GDP per capita	47	9.292571	0.9944901	7.125494	11.62254
Democracy	47	4.382979	6.384605	-10	10
Elevation	47	677.3824	623.5491	9.1667	2988.048
Rugged	47	1.397128	1.106847	0.037	4.287
Trust1	47	34.1766	16.68607	8.8	80.3
Trust2	47	36.21064	15.10796	9.1	75.3
Trust3	47	75.77021	13.1298	41.9	96.9
Trust4	47	21.45745	10.44956	5.4	56.9
Trust5	47	96.28085	3.699215	81	100
Trust6	47	70.6383	12.80853	33.9	89.4
Trust7	47	22.67234	15.81723	3.2	66.1
Irrigation1	26	1.001887	3.83707	7.06e-06	19.59493
Irrigation2	47	0.0460071	0.0537505	0.000118	0.2620382
Education	41	3.68561	1.432219	0.68	6.84

Table 1: Statistical Summaries

	No Controls	Diversity	Colonial	Income	Irrigation1	Irrigation2	Education
Trust1	0.109822*	0.117774*	0.093134*	0.007759	0.126968*	0.093742*	-0.023659
	(0.027901)	(0.030164)	(0.032697)	(0.06941)	(0.031374)	(0.032859)	(0.067363)
Trust2	0.114486*	0.151968*	0.111106*	0.061105	0.133071*	0.102787*	0.022483
	(0.022193)	(0.028791)	(0.030540)	(0.061324)	(0.030323)	(0.027074)	(0.052986)
Trust3	0.05614*	0.075472*	0.0531*	-0.059164	0.071908*	0.051950*	-0.020988
	(0.012439)	(0.018823)	(0.017409)	(0.070232)	(0.015445)	(0.016442)	(0.040607)
Trust4	0.166333*	0.182710*	0.139585*	-0.023153	0.229720*	0.138877*	-0.029993
	(0.040462)	(0.049363)	(0.04940)	(0.088648)	(0.041002)	(0.050631)	(0.0748)
Trust5	0.045235*	0.072368*	0.041831*	-0.073532	0.056841*	0.043280*	-0.000279
	(0.009714)	(0.016677)	(0.015679)	(0.098776)	(0.012529)	(0.01292)	(0.027193)
Trust6	0.05453*	0.071145*	0.046979*	-0.139387*	0.076377*	0.047109*	-0.036069
	(0.013931)	(0.025225)	(0.020924)	(0.04579)	(0.017992)	(0.018403)	(0.031836)
Trust7	0.128627*	0.097120	0.104071*	-0.027280	0.167834*	0.098805*	-0.070842
-	(0.037708)	(0.052414)	(0.044112)	(0.063145)	(0.037203)	(0.045804)	(0.056407)

Table 2: Trust and Democracy.

Ordinary Least Squares.

Coefficients for control variables are ommitted for space considerations.

() includes heteroskedasticity consistent standard errors.

 $^{^{*}}$ indicates statistical significance.

	No Controls	OIR	First Stage	Instruments
	$(standard\ errors)$	(p-values)	(p-values)	
Trust1	0.1632922*	(0.1563)	(0.0000)	Elevation, Rugged
	(0.0295548)			
Trust2	0.1510688*	(0.1947)	(0.0000)	Elevation, Rugged
	(0.0286575)			
Trust3	0.0666767*	(0.2308)	(0.0000)	Elevation, Rugged
	(0.0125877)			
Trust4	0.2370329*	(0.1891)	(0.0000)	Elevation, Rugged
	(0.0531778)			
Trust5	0.0500913*	(0.1175)	(0.0000)	Elevation, Rugged
	(0.0098652)			
Trust6	0.0678738*	(0.1580)	(0.0000)	Elevation, Rugged
	(0.0143226)			
Trust7	0.2167686*	(0.1334)	(0.0000)	Elevation, Rugged
	(0.059613)			

Table 3: Two Stage Least Squares without control variables.

Standard errors are heterosked asticity consistent.

 $^{^{*}}$ indicates statistical significance.

	Diversity	Colonial	Income	Irrigation1	Irrigation2	Education
Trust1	0.4120011*	0.169825*	-0.1272743	0.1818148*	0.1646553*	0.0041832
	(0.1472544)	(0.0537049)	(0.1725959)	(0.0417327)	(0.0502582)	(0.2715678)
Trust2	0.3467808*	0.1727393*	-0.127307	0.1904832*	0.1564383*	0.4362296
	(0.1178957)	(0.0567842)	(0.2319627)	(0.0467455)	(0.0499562)	(0.8729786)
Trust3	0.1302885*	0.0664433*	0.5474769	0.0777715*	0.0704475*	0.0718886
	(0.0294859)	(0.0203266)	(0.7828495)	(0.0165476)	(0.022145)	(0.0880177)
Trust4	0.6065046*	0.2333123*	-1.192381	0.3068475*	0.2352439*	0.2452902
	(0.229325)	(0.0932839)	(1.980326)	(0.0735278)	(0.0924459)	(0.5902527)
Trust5	0.1018518*	0.0500967*	-0.0551498	0.0577555*	0.0513429*	0.0194362
	(0.0237927)	(0.0167518)	(0.1950382)	(0.0125237)	(0.0169529)	(0.0487536)
Trust6	0.1456591*	0.0627052*	-0.0273659	0.0801373*	0.0691174*	0.0269642
	(0.0390288)	(0.0229423)	(0.2230888)	(0.0184856)	(0.0246554)	(0.0629283)
Trust7	0.3253361	0.1400306*	-0.3302281	0.2740535*	0.2081676*	-0.5126689
	(0.2626125)	(0.0698145)	(0.2334092)	(0.0657825)	(0.1068882)	(0.4692633)

Table 4: Two Stage Least Squares with control variables.

⁽⁾ includes heterosked asticity consistent standard errors.

 $[\]ast$ indicates statistical significance.

Dependent Variable: Democracy						
Generalized Trust	0.1286274*	-0.0272801	-0.0675749	-0.0275872	-0.027071	
	(0.0377089)	(0.0631453)	(0.0668024)	(0.0826715)	(0.0830229)	
Income		0.5464956*	0.8974712*	0.7348031*	0.7270355*	
		(0.1742427)	(0.2196963)	(0.3072976)	(0.3048295)	
Fractionalization	No	No	Yes	Yes	Yes	
Colonial	No	No	No	Yes	Yes	
Irrigation2	No	No	No	No	Yes	

Table 5: Generalized Trust and Democracy (Control for Income per capita).

Ordinary Least Squares

() includes heteroskedasticity consistent standard errors.

^{*} indicates statistical significance.

Dependent Variable: Democracy						
Generalized Trust	0.1412053*	-0.0708427	-0.106125	-0.0753719	-0.0935522	
	(0.0384895)	(0.0564076)	(0.0633437)	(0.0670716)	(0.0724294)	
Education		1.807963*	2.381357*	2.17025*	2.141027*	
		(0.3785124)	(0.5730809)	(0.5728139)	(0.5644804)	
Fractionalization	No	No	Yes	Yes	Yes	
Colonial	No	No	No	Yes	Yes	
Irrigation2	No	No	No	No	Yes	

Table 6: Generalized Trust and Democracy (Control for Education).

Ordinary Least Squares

() includes heteroskedasticity consistent standard errors.

^{*} indicates statistical significance.

Dependent Variable: Democracy						
Generalized Trust	0.2167686*	-0.3302281	-0.1357365	-0.1845731	-0.1887188	
	(0.059613)	(0.2334092)	(0.0971665)	(0.0943595)	(0.0980069)	
Income		1.297631*	1.099369*	1.258961*	1.285419*	
		(0.5300893)	(0.2672982)	(0.2909065)	(0.3379023)	
Fractionalization	No	No	Yes	Yes	Yes	
Colonial	No	No	No	Yes	Yes	
Irrigation2	No	No	No	No	Yes	

Table 7: Generalized Trust and Democracy (Control for Income per capita).

Two Stage Least Squares

() includes heteroskedasticity consistent standard errors.

 $[\]ast$ indicates statistical significance.

Dependent Variable: Democracy						
Generalized Trust	0.2281989*	-0.5126689	-0.1939237	-0.1819001	-0.0836945	
	(0.0604983)	(0.4692633)	(0.1455521)	(0.1145121)	(0.0804578)	
Education		4.522787	2.981601*	2.899843*	2.075723*	
		(2.762393)	(0.9098538)	(0.7244105)	(0.4828752)	
Fractionalization	No	No	Yes	Yes	Yes	
Colonial	No	No	No	Yes	Yes	
Irrigation2	No	No	No	No	Yes	

Table 8: Generalized Trust and Democracy (Control for Education) .

Two Stage Least Squares

() includes heteroskedasticity consistent standard errors.

^{*} indicates statistical significance.