



Feelings about competition and self-reported trust. Evidence from the World Value Surveys.

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Abstract

Drawing on individual data from the World Values Surveys, this paper estimates the relation between individual feelings about competition and self-reported horizontal trust. On average, Individuals who increasingly dislike competition report lower levels of trust towards others. But the association is not linear. This finding is different than and complements previous research which shows a positive or negative relation. We conclude that the evolution of perceptions of competition may be causing more harm than good in terms of trust and wellbeing, and policy should direct efforts at minimizing the negative effects of one of the most important institutions of market capitalism: competition. The paper improves over previous research in that it approximates competitive environment by using individual-level measures while at the same time considering objectives measures of competition. We also consider representative samples which offer a different perspective with respect to experimental studies. Our measure of competition resembles the old classical view of competition which proves different from the mainstream view today. We test for robustness of our results by considering different approximations for trust: trust on relatives, trust on friends and other measures of trust. We conjecture about the potential negative effects on Trust and Social Capital of the declining appreciation of the benefits of competition.

Keywords: Trust, Well-being, Competition, Econometrics, World Values Surveys.

JEL Codes: C01; D00; D40; I3

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1. Introduction

The importance of trust³ as an engine for economic growth and welfare improvement has been considered as a relevant fact by many scholars (e.g. Knack and Keefer, 1997). As early as 1972, Arrow (1972) had already argued that “much of the economic backwardness in the world can be explained by the lack of mutual confidence”. Additionally, Fukuyama (1995) supports the view that trust is the basis for higher productivity and economic growth.

From an economic (theoretical) point of view, the research on trust has increased significantly in recent years since the development of incomplete contracts theory⁴. Trust has become an important economic variable affecting relevant economic outcomes.

On the other hand, the level of trust may depend on different factors (Arai, 2009): imagine a situation where some individual A (the trustor) evaluate entering into a transaction with another individual B (the trustee), of which both individuals expect a return. A will effectively engage in such transaction depending on: (a) B’s characteristics, (b) A’s own characteristics, (c) the social environment influencing A and B’s expectations about conduct, (d) the relation between A and B, and (e) the kind of transaction eventually linking A and B. Following Arai’s approach to the determinants of trust, one of the variables included in the social environment which may affect behavior can be competition.

Francois et al (2009) develop a theoretical model to try to explain why competition should have a positive effect on trust within organizations, and also explore the link empirically (see below). The theoretical model classifies workers as free-riders or trustworthy. Each worker supplies unobservable effort for a wage. If a company has more workers of the free-rider type, then its position in the marketplace is weak (because free-riders look for personal gains at the expense of social (e.g. the firm’s gains)). As a consequence strong competition may drive the company out of the market. A cultural evolutionary process based on expected returns of being of a certain type make workers want to switch from one type to another. Strong competition is assumed

³ By trust we mean horizontal or interpersonal trust, that is “trust on others” as opposed to vertical trust, eg. “trust in Government”

⁴ Basic Neoclassical theory, which assumes complete contracts and perfect knowledge, implicitly assumes that trust is irrelevant and does not affect outcomes.

to force free riders to become trustworthy and avoid the death of the company in which they work. Thus the positive link between market competition and trust..

On the other hand, Shleifer (2004) argues that competition may foster unethical behavior, at least in the short run, which suggests a negative effect of competition on trust on others. Although in the long run Shleifer adheres to the traditional arguments favoring the positive effects of competition on welfare, he points to five situations in which this may not be case, which allows at least for some speculation about the relation between competition and trust.⁵

Moreover, because individuals are not fully rational and may have limited willpower, they may show demand biases that may hamper maximization of well being and trust. In addition, since individual interests and group interests may also differ, the sum of individual (“good”) decisions may produce suboptimal outcomes and negatively affect society (Stucke, 2013).

Other authors (e.g. Hahnel, 2002, Khon, 1992) regard market competition as a process that can harm human behavior by creating conditions where the success of some (generally, a minority) has to occur through the failure and disappointment of others (a majority). Although competition may lead to a better allocation of resources (i.e. improve efficiency), it also conduces to the degradation of the environment and of good human characteristics such as solidarity and trust in favor of greed and selfishness. Moreover, research on management has found evidence that competition between members of a given organization weakens their tie strength, that is, the extent to which those individuals relate to each other (Reagans, 2005)

In light of these conceptual differences it is at least surprising that empirical tests on the relation of economic institutions such as competition and behavioral variables such as trust have been relatively scarce (Berggren and Jordahl, 2006). This paper contributes to the empirical literature on the relation of competition and trust and tries to

⁵ He exemplifies by analyzing positive incentives of competition to use child labor, to increase corruption, to grant "excessive" executive remunerations, to allow for corporate earnings manipulation, and to foster commercial activities by universities, all activities regarded as unethical and which in some sense, have to potential to erode trust among citizens.

reconcile both views⁶ of the relation by using individual data on feelings about competition and self-reported measures of trust derived from the World Value Surveys⁷.

Empirical research on this topic is based on survey and experimental studies which. Huck et al (2006) use a sample of 366 students recruited on line at the University of Erfurt. They find that competition fosters trust. They build a stylized environment where individuals play the role of buyers and sellers of experience goods, where buyers chose for quality, the price being fixed. The information available to buyers and sellers is either private or public, while the competitive environment is built by letting buyers select sellers according to their past history (given by the available information). The control group does not allow for any information or for competition among sellers. The buyer either selects not to trade (signaling for lack of trust) or to trade (signaling for trust). Sellers have the choice of delivering low or high quality products. Relative to the control group, making information available doubles their measure of trust, while adding competition reaches the level of trust close to the optimal level. Trust is measured by the percent of cases buyers decide to buy.

Conceptually, the notion of trust used in their paper is of a particularized type, that is, trust among individuals who know something of each other through previous market interactions. In this sense, competition acts as a disciplining device, fostering trust via reputation earned through market interactions.

Al-Ubaydii et.al (2011) runs a controlled experimental investigation using students from George Mason University. Before playing a standard Trust Game, some groups of students were (randomly) primed to think about markets and trade while others (the control group) were not. They find that those students primed to think about markets exhibit more trusting behavior. This study differs from other empirical studies in that participants are randomly assigned to think about markets, i.e. experimenters induce changes in behavior via changes in the contextual environment and not through changes in incentives. Nevertheless, the procedure they employ to prime participants casts doubts on the validity of the experiments (more below).

Francois et al (2009) test the association between competition and trust using data from the 2004 General Social Survey and private sources. The data suggests a

⁶ These contradictory views of the effect of markets and competition on social issues and behavior are not new. On the one hand, markets and competition may lead to cordiality (Paine, 1984) and better manners (Montesquieu, 1989). However, Veblen (1994) argues that competition hurts judgment and Marx (2000) writes that they depredate judgment, and hurt altruism and cooperation (Bowles, 1998).

⁷ To avoid drawing conclusions from subjective measures, we also introduce objective measures of completion in our analysis (see below)

positive relation between competition and trust beyond a certain threshold. Since data on competition is not available at the individual level, Francois et.al.(2009) compute the degree of competition of different productive sectors using different Hershfindal indexes and relate these concentration indexes to the sector of employment of each individual in the General Social Survey. After some manipulation, they end up with a little more of 600 observations for the year 2004. Controlling for socio-economic characteristics, they find that more competition on the worker sector of employment is associated with a more horizontal trustworthiness, which they find as supportive of their theoretical model.

Fischer (2008) uses data of the combined 3rd and 4th waves of the World Values Survey (WVS) (1997–2001) to find that competition enhances the positive market integration effect on horizontal trust. Fischer measures competition using the ratio of the (adjusted) national investment price to the national goods' prices (total price index), averaged from 1990 until 2000. Lower values of this ratio suggest stronger competition. She does not focus on a direct relation between competition and trust, but on an indirect effect by which more competition should have a positive effect on trust via individual market integration⁸. Fischer uses individual income level as a proxy for market integration, or trade frequencies. Trust is measured by the usual question deployed in the World Value Surveys (see below).

This paper contributes to current empirical literature on the relation between competition and generalized trust in at least three ways. First, we use self-reported opinions about competition derived from the World Value Surveys (WVS). To our knowledge, this is the first paper which attempts to approximate a view of competition through the opinions of individuals rather than using aggregate measures such as the degree of openness of an economy or the volume of capital inflows and outflows which may measure the actual competitive environment at one point in time and in a certain location⁹. Our approximation to competition can be regarded as an ex-ante view: people have, at certain moment and country, a specific view of the competitive process (more below) which they may considered good, not so good, or harmful. As a consequence, our measure is an individual rather than an aggregate measure which may prove more useful to draw behavioral conclusions.

⁸ Usually, market integration is measured as the frequency of trade actions between different individuals. Her hypothesis, following Tullock (1985) is that more repeated interactions act as disciplining devices which foster trust via reputation effects.

⁹ As stated above, we complement our analysis controlling for objective approximations to competition.

The fundamental point of the paper is that individuals who dislike competition the most may be those who do not trust others, because they may feel competition does not lead to efficient and fair outcomes but encourages a race to the bottom which ends up favoring the richest and powerful. This intuition suggests that those who like competition the most are those of high socio-economic status and those with higher incomes. This association appears to be supported by preliminary analysis of longitudinal data of the World Value Surveys: while almost 60% of high-status individuals think competition is good, only 45% of low-status folks agree with that statement. On the other hand, less than 10% of those within the high-status category think competition is not good or harmful, compared to more than 16% in the low-status category. To be sure, the positive view of competition runs across all socio-economic categories.

Second, unlike Huck et.al (2007) and Al-Ubaydii et.al (2011), we consider representative samples by using the data of the 2008 wave of the World Values Surveys which comprises more than 60 countries. Since both studies work with student samples, their measure of trust may fail to meet the test of external validity: their result cannot be generalized to an entire population. Unlike Al-Ubaydii et.al (2011), whose design is targeted to think about markets, our paper focuses mainly on opinions about competition, which is an aspect of markets. Although Fischer (2008) considers representative samples from the WVS, she uses an aggregated measure of market competition, while we use individuals' feelings about competition: for example, the 2008 wave of the World Value Surveys asks each person how she feels about "competition", which, although a self-reported measure, allows us to set a direct link of an aspect of competition and a measure of trust towards others. Finally, Francois et.al also use aggregate measures of sectoral concentration as a proxy for competition, then look at the sector where the individual works and assign to that individual the corresponding measure of concentration which corresponds to his or her sector of employment. Consequently, competition ends up as being some sort of fixed effect and its direct relation with generalized trust is not clear.

The measure of competition considered in this paper resembles the view of competition that was present in the opinions of old political economists such as Adam Smith and David Ricardo which is generally ignored in current research. While mainstream economists conceptualize competition as an "end-state" where competitive

markets achieve efficient social outcomes, the opinions collected in the WVS may not coincide with the economist's vision of competition in that it may be representing a "process" in which firms attempt to maximize their stake of the market, sometimes achieving a zero-sum outcome: what one firm gains, other firm loses. Moreover, consumers may not always feel competition benefits them because the available goods and services they can potentially buy fail to achieve adequate quality standards for a given price.

Moreover, this competitive process may lead to satisfactory outcomes, e.g. lower prices, but may also lead to higher unemployment, lower quality products, or what is commonly denominated a "race to the bottom". Under this second view competition may drive firms to undertaking unfair, unjust and environmentally damaging strategies in order to get a larger share of the market¹⁰, thus a bad thing (Hahnel, 2011). I postulate that this process-view of competition, expressed by the answers collected in the WVS, is the view of what ordinary people do understand by competition (more below).

The above review leads me to the following hypothesis: Individuals regard competition as a process rather than a socially efficient equilibrium, thus the association between feelings about competition and trust on others is likely to be non linear. More competition-averse individuals may report similar levels of trust as those less competition-averse individuals.

¹⁰ These strategies may include deceiving costumers through advertising, for example. Some critics of corporate global capitalism have also argued that multinationals foster environmentally unsustainable growth strategies, which harm us all.

2. Data

To analyze the association between competition and generalized trust we employ data collected in the sixth wave (2005-2008) of the World Values Surveys (WVS)¹¹. This wave collected the opinions of more than 60.000 individuals from 56 countries about their perceptions of life, which includes self-assessments of trust on others, our measure of generalized trust. They are also asked about what they think about competition. The surveys also collect socio-demographic characteristics of each individual.

As our dependent variable, we employ the WVS measure of the individual's generalized trust on others which arises from the answers to the following question: *“Generally speaking, would you say that most people can be trusted, or that you need to be careful in dealing with people?”* This variable is then a dichotomous measure of generalized trust.

We also test the robustness of our general analysis by considering 5 different dichotomous measures of trust in different groups of people based on the answers to the following question posed in the World Values Survey: *“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 groups are family members, neighbors, people known personally, people know for the first time and people from other nationality.

Competitive capitalism feeling or market competition subjective perception is approximated by computing the feelings individuals express about competition. Specifically, individuals are asked the following question: *“How would you place your views on this scale? 1 means you agree completely with the statement on the left; 10 means you agree completely with the statement on the right; and if your views fall somewhere in between, you can choose any number in between. Sentences: Competition is good. It stimulates people to work hard and develop new ideas vs Competition is harmful. It brings the worst in people”*. If the person chooses option 1 (10) it means she believes competition is a good thing (harmful). Subjective competition is then a categorical variable that takes 10 values.

¹¹ www.worldvaluessurvey.org

As mentioned above, we also explore the relevance of objective measures of competition. Objective competition is constructed following Fischer (2008). For the countries that data for 1990-2000 period is not completely available we use the average of the years that have data. The only countries of the survey that have no data for this variable are Iraq, Andorra and Serbia.

The choice of additional control variables follows Alesina and La Ferrara (2002), and includes self-reported income (1 if the individual reports himself is from the lowest decile and 10 if he is from the top decile), social class (1 if the individual perceives himself as from the upper class and 5 if he perceives himself from the lowest class), educational level (1 if the individual has no education and 10 if he has a completed college), gender, age, a dummy if the person is employed or not and country and ethnic controls. Additionally, in order to see correlation with trust with other interesting variables we include self reported happiness (1 if individual is completely happy 4 if the individual is completely unhappy), a dummy if the individual is religiously active, a dummy if the individual is active in humanitarian organizations and a control for the size of the town the individual lives in (1 if the town is of less than 2000 people and 8 if it has more than 500000 people). Finally we include in our controls marital status. Descriptive statistics of dependent, explanatory and control variables are shown in Table 1.

3. The Model¹²

Our econometric model specifies individual's "i" generalized trust ($Trust_i$) as a function of how individual "i" feel about competition ($Competition_i$), other socio-demographic variables (X_i) which include country fixed effects. This relation can be expressed as follows:

$$Trust_i = \alpha Competition_i + \beta X_i + \varepsilon_i \quad (1)$$

Where ε_i is an individual-specific error term.

The previous model can be extended to test for non-linearities of the relation by including a quadratic term on subjective competition. We also test if the effect of competition (subjective) on trust varies with the level of objective competition by

¹² For a theoretical background of this model, see Train (2011)

including the interaction between subjective competition and the objective measure of competition in the regression:

$$Trust_i = \alpha Competition_i + b Competition_i^2 + \partial Competition_i * ObjCompetition_i + \beta X_i + \varepsilon_i \quad (2)$$

The same model can be extended to the other measures of trust just changing the dependent variable $Trust_i$ for the particular kind of trust measured. As Fischer (2008) states, given the cross-section nature of our sample, we avoid multi-collinearity of macro-variables with the country fixed effects included. Nevertheless, we cannot include directly the objective measure of objective competition because it will be closely related with the country fixed effects.

Since the dependent variable is dichotomous, OLS results may be biased. Nevertheless we first run OLS since we wish to gauge for any non-linear relation between competition and trust. Following the OLS regression, we run logit regressions to take account of the nature of the variables involved.

With respect to the control variables, standard expected results follow: trust on others is supposed to be higher among higher class and higher income individuals, those more educated and older.

4. Results

Table 2 shows the fitted values of Self-reported trust and feelings about completion derived from the original OLS regression and the logistic regression. At a first sight we can see that both models give consistent estimates in terms of sign and significance. Additionally, both show a non-linear relation which tells us that more negative (less positive) views about competition are associated with higher levels of horizontal trust, but at some point this relation changes its sign and becomes positive in the sense that higher (lower) trust is associated with more (less) positive feelings about competition. For the OLS case, the level of disgust of competition that maximizes trust is 5¹³.

¹³ This results arise for simply deriving the trust linear equation with respect of subjective competition.

This result is different as the one reported by the literature reviewed, which postulates either a positive or a negative relation between competition and trust, but not both.

Controls show mixed results. Older persons do not significantly trust others more than their younger counterparts while women do not trust others more than men do. Additionally, more educated people seem to trust others more, as well as employed people do relative to the unemployed. The less happy and wealthier a person is, the less they trust others. People involved in religious or humanitarian activities also trust more. Finally, people living in bigger towns trust less.

The subjective measure is an important measure. Nevertheless, the relationship with objective measures of competition and its effect on trust are also important. In table 3 we present results of the previous logit regression but incorporating Fischer measure of objective competition. At the first look, it would seem that people in less competitive countries and with more dislike for competition would trust more. Nevertheless, the first column of Table 3 is not corrected. As Fischer (2008) states, market competition might cause and thus proxy for economic development and inequality. In order to correct at least for economic development we run a regression of this objective measure to GDP per capita of the countries and then use the residuals of this regression as the measure of objective competition that is not related with economic development. When we correct this, the interaction effect loses significance (column 2 of table 3). Thus what we were capturing in column 1 of table 3 was that developed countries that dislike competition trust more in people.

As we already stated, trust can be decomposed in trust to different kind of individuals. In table 4 we present the logit regressions for 5 kinds of trust measures. Here we find that subjective taste for competition keeps the non-linear relationship. In all cases the quadratic term of competition is significant and negative. Age is not significant for trust in family members and does not have a clear pattern across the different kinds of trust. In some cases it presents linearity and in some cases other kind of curvatures. Difference in trust related to gender only occurs for trust in neighbors and in people known for the first time. In both cases, women trust less than men. Education has 5% significance for all the types of trust but only 1% significance for trust in people which are known personally, trust in people which are known for the first time and trust in people from other nations. In these cases and in the case of trust in familiars more

educated people trust more. In the case of neighbors the case is the opposite, more educated people trust less. Employment does not present a consistent result; it shows slightly significant for some, no significance for others regressions and only 5 % significance for trust in people known personally. Social class shows 1% significance and a negative relationship only for trust in members of the family. It also presents a negative relationship but at 5% level of significance for people from other countries. Income presents a positive relationship (significant at 1%) for all kinds of trust except for people from other nations where no significance happens. Happiness has a solid relationship with all kinds of trust at 1% level. More happy people trust more. People involved in religious activities trust more in their families, in people known personally (both at 1% level), in neighbors and in people known for the first time (both at 5% level). They have no relation with people from other nation. People involved in humanitarian activities trust more in people known for the first time and in people from other nations (both at 1% level). People living in bigger towns systematically trust less in all kinds of people, this is true at 1% level of significance except for people known personally that is true at 5% level.

5. Discussion

Drawing on data from the World Value Surveys, this paper attempts to analyze the relation between feelings about competition and trust. We also aim to present stylized facts of trust on individuals that were widely described in the results section and are in the tables of the appendix. We find this relation to be non-linear: as individuals become less optimistic about competition, they tend to report higher levels of trust towards others. At some point, however, the relation reverses: we report less trust towards others as we increasingly dislike competition. The results on average, indicate that less optimistic views about competition are associated with lower levels of trust. This relationship of trust and competition is solid in several kinds of human relationship.

These results may indicate that people are regarding competition as a process which implies multiple tradeoffs among individuals where, e.g., a few winners may get a lot of the pie from a lot of losers. This is in line with the opinions of Hahnel (2011)

and Kohn (1992), among others. On the other hand, since the relation appears to be positive on average, economists can argue that the average citizen may regard competition as a good thing in terms of achieving some socially efficient outcome.

What does the data tell us about this association? In broad terms, the evolution of the opinion about competition and trust may shed some light. A view to the data contained in the World Value Surveys shows that a positive view about competition decreases from 35% in 1990 to 25% in 2005¹⁴. If the findings of this paper are accurate, the implications for horizontal trust are negative, *ceteris paribus*, that is, the level of social trust should decrease. In fact, this is what has been happening: in 1980 almost 35% of respondents thought that most people can be trusted, while in 2005 only 24% of respondents answered in the same way.

If the findings of this paper reflect the true relation between competition and a key component of social capital, what should we expect of the consequences of fostering competition for long time growth, and long time welfare? If competition creates negative incentives to produce and consume goods and services and harm the environment, or if competition creates negative incentives by which people do not develop feelings of solidarity and trust, we should also expect negative consequences for the well-being of future generations.

What about with the opinions of the authors who find competition good for trust? Francois et.al (2009) seems to consider the existence of a company as a public good where some individuals free ride on the companies' benefits, which constitute an extreme view of a company, in my opinion. Second, competition appears as a disciplining device by which free riders may reconvert themselves in trustworthy individuals within their companies, which I believe confuses the notion of "convenience" with the notion of "trust". And finally, the eventual transformation from free riders to trustworthy within a company is assumed to percolate to the entire society, and the authors do not explain why.

Fischer (2008) is the closest to the spirit of this article. However, Fischer disentangles the potential effect of competition in fostering trust through market interactions but does not address the direct effect of competition on trust. She also uses an aggregate measure of competition instead of an individual measure, as I use in this paper.

¹⁴ The figures correspond to the percent of individuals who respond "Competition is good". In 1990, 35% considered competition as a good thing, 28% in 1995, 33% in 2000 and 25% in 2005.

Al-Ubaydii et.al (2011) primes students to think about markets and trade. Besides the fact that they use non representative samples, the way the authors prime students about markets seems to be leading the students to a positive conclusion. For example students in the treatment group are asked to make a grammatical four word phrase or sentence out of the following words: “him loves trade she to”. That phrase or sentence could be “she loves to trade”. On the other hand, those in the control group are required to form a four word phrase or sentence out of the following words: “him love analyze she to”. I believe it is possible that the phrase itself is leading to a positive feeling about trade and markets which may be reflected in the way a subject behaves, that is, a person who is induced to think that “she loves to trade” may be willing to give others more, to trust more on others. So it may not be “the market” that is leading to more trusting behavior but the positive feeling that arises from thinking about how “she loves to trade”.

In sum, we believe the evolution of perceptions of competition may be causing more harm than good in terms of trust and wellbeing, and policy should direct efforts at minimizing the negative effects of one of the most important institutions of market capitalism: competition, the alternative being a reconsideration of the incentives in place in the worldwide structure of production and consumption.

Appendix

Table 1.					
Summary Statistics					
Variable	Observations	Mean	s.d	Min	Max
Trust	77802	0.3	0.4	0	1
Trust in relatives	74403	1.0	0.2	0	1
Trust in neighbors	73466	0.7	0.4	0	1
Trust in known people	73774	0.8	0.4	0	1
Trust in recently known people	71982	0.3	0.4	0	1
Trust in other nationals	68585	0.4	0.5	0	1
Competition (subjective)	77922	3.8	2.5	1	10
Competition (objective)	79051	1.7	0.9	0.8	4.0
Residual objective competition on GDP per capita	77824	0.0	0.7	-0.9	2.0
Happiness	83097	1.9	0.7	1	4
Religious participation	78291	0.6	0.8	0	2
Participation in Humanitarian activities	77647	0.3	0.6	0	2
Age	83708	41.5	16.5	15	98
Education l	83416	5.2	2.5	1	9
Social class	69864	3.4	1.0	1	5
Income	76788	4.6	2.3	1	10
Town size	56342	4.8	2.5	1	8
Married (%)	83714	0.6	0.5	0	1
Coupled (%)	83714	0.1	0.3	0	1
Divorce (%)	83714	0.0	0.2	0	1
Separated (%)	83714	0.0	0.1	0	1
Widow (%)	83714	0.1	0.2	0	1
Single (%)	83714	0.3	0.4	0	1
Female (%)	83879	0.5	0.5	0	1
Employed (%)	81422	0.5	0.5	0	1

Table 2.
Regression Results
Dependent Variable: Self-Reported Trust

Explanatory Variables	Regression I OLS	Regression II Logit
Competition (Subjective)	0.02140*** (0.00325)	0.14717*** (0.02168)
Competition (Subjective) Squared	-0.00215*** (0.00033)	-0.01491*** (0.00227)
Age	-0.00134 (0.00090)	-0.00633 (0.00562)
Age Squared	0.00003*** (0.00001)	0.00014** (0.00006)
Female	-0.00650 (0.00464)	-0.04497 (0.02911)
Education	0.00984*** (0.00120)	0.06146*** (0.00759)
Employment	0.01742*** (0.00524)	0.11496*** (0.03376)
Social Class	-0.00065 (0.00275)	-0.00752 (0.01863)
Income Level	0.00396*** (0.00128)	0.02241*** (0.00793)
Happiness	-0.02917*** (0.00323)	-0.19915*** (0.02217)
Religious participation	0.00887*** (0.00335)	0.05626*** (0.02126)
Participation in Humanitarian activities	0.02617*** (0.00400)	0.15585*** (0.02337)
Town size	-0.00437*** (0.00114)	-0.02716*** (0.00721)
Constant	-0.11501 (0.10049)	-16.06603*** (2.14552)
Marital Status Controls	Yes	Yes
Ethnic Group Controls	Yes	Yes
Country Controls	Yes	Yes
Observations	32,583	32,516
R-squared	0.16750	

Robust standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Table 3.
Regression Results
Dependent Variable: Trust on others

Explanatory Variables	Regression III	Regression IV
Competition (subjective)	0.10286*** (0.02687)	0.14216*** (0.02267)
Competition squared (subjective)	-0.01463*** (0.00233)	-0.01448*** (0.00240)
Competition (subjective)*Competition (objective)	0.02492*** (0.00883)	
Competition (subjective)*Competition (objective, corrected)		0.00021 (0.01192)
Constant	-0.64811 (0.39680)	-0.72483* (0.39692)
Other Controls	Yes	Yes
Marital Status Controls	Yes	Yes
Ethnic Group Controls	Yes	Yes
Country Controls	Yes	Yes
Observations	30,698	29,489

Robust standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Table 4.**Regression Results**

VARIABLES	Dependent Variables				
	Trust in Relatives	Trust in neighbors	Trust in known people	Trust in recently known people	Trust in other nationals
Competition (subjective)	0.08356 (0.05462)	0.09461*** (0.02030)	0.04019* (0.02174)	0.15073*** (0.02106)	0.06343*** (0.01973)
Competition squared (subjective)	-0.01381*** (0.00513)	-0.01133*** (0.00203)	-0.00785*** (0.00216)	-0.01373*** (0.00214)	-0.00653*** (0.00200)
Age	-0.02184 (0.01519)	0.01446*** (0.00555)	-0.01068* (0.00609)	-0.01133** (0.00547)	-0.00789 (0.00521)
Age squared	0.00016 (0.00016)	0.00001 (0.00006)	0.00015** (0.00007)	0.00019*** (0.00006)	0.00015*** (0.00005)
Female	0.06988 (0.08048)	-0.09891*** (0.02839)	0.02249 (0.03062)	-0.09162*** (0.02891)	-0.03077 (0.02746)
Education	0.05765** (0.02353)	-0.01790** (0.00767)	0.02290*** (0.00824)	0.03249*** (0.00772)	0.08458*** (0.00729)
Employed	0.09225 (0.09122)	-0.05864* (0.03264)	0.08184** (0.03420)	0.06668** (0.03353)	0.03514 (0.03129)
Social Class	-0.14353*** (0.05072)	-0.01262 (0.01764)	-0.00598 (0.01900)	-0.01715 (0.01797)	-0.04090** (0.01716)
Income level	0.06233*** (0.02375)	0.04062*** (0.00793)	0.04342*** (0.00883)	0.03301*** (0.00788)	0.00280 (0.00756)
Happiness	-0.52372*** (0.05453)	-0.24788*** (0.02067)	-0.20263*** (0.02192)	-0.14319*** (0.02173)	-0.12758*** (0.01999)
Religious activities	0.22479*** (0.06065)	0.05458** (0.02122)	0.11010*** (0.02331)	0.04950** (0.02076)	-0.00269 (0.02006)
Participation in humanitarian activities	-0.03106 (0.06875)	0.01422 (0.02448)	0.02052 (0.02731)	0.12876*** (0.02242)	0.19154*** (0.02271)
Town size	-0.09331*** (0.02215)	-0.08565*** (0.00744)	-0.01792** (0.00833)	-0.02861*** (0.00730)	0.02313*** (0.00683)
Constant	5.03966 (37.53762)	0.76239 (1.24167)	14.57153*** (0.68109)	-15.14125 (.)	1.91033 (1.17067)
Marital Status Controls	Yes	Yes	Yes	Yes	Yes
Ethnic Group Controls	Yes	Yes	Yes	Yes	Yes
Country Controls	Yes	Yes	Yes	Yes	Yes
Observations	30,630	31,039	30,990	30,777	29,614

Robust standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

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