Does Trust Matter For Entrepreuneurship : Evidence From A Cross-Section Of Countries

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DOES TRUST MATTER FOR ENTREPREUNEURSHIP: EVIDENCE FROM A CROSS-SECTION OF COUNTRIES[1]

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Abstract

To the extent that trust is necessary to conduct informal sector business activities, its absence could possibly constrain entrepreneurial spirit and overall economic growth. This paper tests the hypothesis that differences in trust levels between countries explain the observed differences in entrepreneurial spirit amongst them. Analyzing a cross-section of 60 countries in 2010, our findings suggest that about half of the variation in entrepreneurial spirit across countries in the world is driven by trust considerations. This result is robust to regional clustering, to outliers and to alternative conditioning variables. The findings of the study suggest that while formal incentives to nurture entrepreneurship must be maintained, policy-makers should also pay attention to the role of trust cultivated through informal networks.

1. Introduction

The subject of trust has recently received increased attention in the literature on economic development. The attention of scholars has been particularly retained in two broad dimensions of trust namely, its causes (see notably, Zak & Knack, 2001; Knack & Zak, 2002; Alesina & La Ferrara, 2002; Bjornskov, 2006; and Smith, 2008) and its impact on other variables. Regarding the impact of trust on economic variables, Knack & Keefer, 1997; Whiteley, 2000; Zak & Knack, 2001; Beugelsdijk et al., 2004; Berggren et al., 2008 examine trust as a factor in explaining cross-country differences in economic growth while Bjørnskov & Méon, 2010 measure the impact of trust on total factor productivity. Several other authors have been interested in the impact of trust on institutional development and quality (Helliwell & Putnam, 1995; La Porta et al., 1997; Rice & Sumberg, 1997; Knack, 2002; Bjørnskov et al., 2008;

Bjørnskov, 2010, 2012), on welfare state design (Bergh & Bjørnskov, 2009), on schooling (Bjørnskov, 2009, 2012), on innovation (Akçomak, I. Semih & ter Weel, Bas, 2009), on corruption (Uslaner, 2002; Bjørnskov, 2010), on trade (Greif 1989; Woolcock 1998; den Butter & Mosch 2003), on political and civic involvement (Knack & Keefer 1997, La Porta et al. 1997), on crime prevention (Wilson, 1987), on health (Rose, 2000) and on subjective life satisfaction (Uslaner, 2002; Bjørnskov, 2003; Helliwell, 2003).

The present study follows the latter broad approach to the subject of trust by investigating its impact on entrepreneurship. There are a number of reasons why trust would matter for entrepreneurship. First, as Harper (2003) has hypothesized, trust is crucial in order to cultivate entrepreneurship as business transactions rely on trust: where there is trust, businesses generally thrive. Second, a number of authors, notably, Chabaud & Ngijol, (2005), Bhagavatula et. al. (2010), Audretsch et. al. (2011) have shown that by creating room for new opportunities, trust enables entrepreneurship. Some other authors have shown that trust facilitates the creation of enterprises, (see notably, Mueller, (2006), Davidsson & Honig, (2003), Rodríguez & Santos, (2007), Clarke & Chandra, (2011) and Deakins et. al. (2007)) while others suggest that trust enables access to other resources (see notably, Baron & Markmann, (2003), Runyan et. al. (2006), Honig et. al, (2006) and Packalen, (2007)). Trust has also been found to be indispensable in the birth of new enterprises (see notably, Geindre (2009) and Aarstad et. al. (2010)) and also for the growth and development of small and medium-sized enterprises (see notably, Bosma et. al. (2004), Mosek et. al. (2007), Han, (2007) and Coviello & Cox, (2007)). While certainly informative and relevant, most of these prior studies linking trust to entrepreneurship have utilized a microeconomic or management framework. There is therefore need for a macroeconomic perspective to the subject, which is the object of our present study.

From a macroeconomic perspective, the absence of trust need not necessarily constrain business activity as long as formal institutions that bridge the trust gap exist. However, the absence of such formal institutions in many countries highlights the crucial role of trust in nurturing entrepreneurial spirit. Fafchaps (2002) emphasizes this thesis for sub-Saharan African countries while Berggren & Jordahl (2006) emphasize the link between social capital and economic freedom. Hafer & Jones (2012) instead emphasize the connection between economic freedom and entrepreneurship. The present paper goes beyond both preceding views by directly linking entrepreneurship to trust.

The research question this paper seeks to answer is whether differences in trust levels between countries can explain the observed differences in entrepreneurial spirit amongst them? An empirical answer to this question would offer great insight into why some countries have superior entrepreneurial culture than others. Also, to the extent that the literature attributes a great role of entrepreneurship in economic development[2], understanding what drives entrepreneurship is helpful not only in understanding why some countries have superior entrepreneurial culture but also, why some countries are more developed than others.

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[2] See notably, Holcombe, 1998 ; Caree & Thurik 2003; Audretsch, et al. 2006; Kirzner, 1997; and Lazear, 2004 & 2005.

The paper employs cross section analysis on 60 countries investigated in 2010. The data for entrepreneurship was obtained from the recently published Global Entrepreneurship Monitor by Acs & Szerb (2010). Following the tradition in the literature, we use the trust variable provided by World Values Survey which measures the extent to which people trust each other. Our findings suggest that trust is a vital determinant of entrepreneurial spirit and about half of the variation in entrepreneurial spirit across countries in the world is driven by trust considerations.

The rest of the paper is organized as follows: section two discusses the data, while section three focuses on the methodology. Section four presents and discusses the empirical results, while section five focuses on robustness checks. Section six concludes.

2 Data

Following the tradition in the literature, we use the World Values Survey (WVS) trust indicator which surveys the proportion of a population that answers "yes" to the fundamental question: *"in general, do you think that most people can be trusted, or can't you be too careful?"* WVS data for a number of countries has been available since 1981 and is generally accepted as a reliable indicator of trust at the aggregate level[3]. National social trust scores have proved it to be a fairly valid measure of honesty, trust, and trustworthiness. Further, this indicator has been widely utilized in previous works.

Data for the aggregate national entrepreneurship activity is obtained from Global Entrepreneurship Monitor (GEM) which is an off-spring of the Global Entrepreneurship and Development Index (GEDI) of Acs et Szerb (2010). Both the GEDI are comprehensive and multi-dimensional datasets, which seek to uncover the different conditions, including the underlying environment underpinning entrepreneurial success at the micro level. GEDI is a composite index comprising three sub-indexes namely, entrepreneurial attitude, entrepreneurial activity and entrepreneurial ambition. The entrepreneurial attitude sub-index measures the attitude and dispositions of the population of a country towards entrepreneurship, while the entrepreneurial activity sub-index measures the proportion of the population engaged in entrepreneurial activity. Both sub-indexes are influenced by factors such as, market size, level of education of the population, and the business environment in the country. In an attempt to capture the likely influences of these exogenous factors on entrepreneurship spirit, Acs & Szerb (2010) suggested another much more complex sub-index - the entrepreneurial ambition sub-index – which basically captures individuals' ability to create new enterprises. The GEDI database covers seventy-one countries. However, due to missing data for some of the control variables, our study covers only sixty countries.

Following Bjornskov & Foss (2008) and Hafer & Jones (2012), we control for the influence of communism on entrepreneurial spirit by including a dummy for former communist states[4]. Also, following Bjornskov & Foss (2008) and Hafer & Jones (2012), we include the Gini

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[3] It is worth emphasizing that some other studies measure trust differently. For instance, Ramos-Rodríguez et. al. (2010) weigh in mostly on the structural relationship aspect : whether or not an entrepreneur is in contact with other entrepreneurs, while Coviello & Cox (2007) go a little further by including the network size or total number of direct connections that an enterprise possesses.

[4] To the extent that communism is believed to hinder private initiative, it could constrain entrepreneurial spirit.

coefficient to control for income inequality. The idea being that, sufficiently low incomes levels might constrain would-be entrepreneurs from realizing their dreams while also potentially motivating some other individuals into entrepreneurial activity as a means of breaking out of poverty. We also control for the level of development of a country by including a dummy for high income countries, the idea being that advanced countries necessarily provide more conducive environments for entrepreneurial activity.

The evidence in Glaeser, Kerr & Ponzetto (2010) and Glaeser, Rosenthal & Strange (2010) suggests that entrepreneurial activity flourishes most in urban centers and advanced countries have more urban centers than under-developed countries. The data on high level of income levels come from Kalonda-Kanyama and Kodila-Tedika (2012). Acs, 2006 has found higher levels of education to be associated with higher levels of entrepreneurial activity, while Hafer and Jones (2012) recently show that entrepreneurship spirit is a positive function of the level of IQ. So, Human capital being an important driver of entrepreneurial activity, we control for this by including the Intelligence Quotient (IQ)[5] and the average of years of schooling. We use the IQ data furnished by Lynn & Vanhanen (2006), which has previously been used by Jones & Schneider (2010) and Hafer & Jones (2012). Following Bjornskov & Foss (2008); and Hafer & Jones (2012), we include a measure of economic freedom to control for the influence of economic freedom on entrepreneurship. Finally, we include regional dummies to take account of the specificities of different regions of the world. Table 1 describes the sources of different variables included in this study.

3. Methodology

This section first presents an empirical analysis of the data before discussing the empirical model. The empirical analysis of the data follows two steps − the summary descriptive statistics and then the analysis of partial correlations.

3.1. Summary Descriptive Statistics

Table 2 presents the summary descriptive statistics of the variables used in this study. It follows from the analysis of individual country statistics for the two key variables of interest, namely, entrepreneurial spirit and trust, that Uganda received the lowest score for the entrepreneurship variable, while Denmark received the highest score. The mean score position was earned by Japan and the coefficient of variation of 46.15 suggests great heterogeneity in entrepreneurial spirit amongst the countries included in the study. Regarding the trust variable, Sweden received the highest score, Russia was at the mean score position while Brazil received the lowest score. Again the coefficient of variation of 51.18 suggests great heterogeneity in trust amongst countries in our sample.

[5] See Lynn & Vanhanen (2012) for literature on this subject.

Table 1 Data Sources

Variables	Sources
Entrepreneurship	Acs and Szerb, (2010).
Gini	GINI coefficient, (UNDP, Human Development Report, 2004), downloaded from STM103 Global Indicators Shared Dataset, Updated Fall 2005.
Post-communist	Dummy variable. Author's own
Economic Freedom	Heritage Freedom (2010)
Social trust	World Values Survey
IQ	Lynn and Meisenberg, (2010).
Regulatory quality	World Bank Governance indicator. The measures come from the dataset compile by Kaufmann, Kraay and Mastruzzi at the World Bank.
MENA	Dummy variable. Author's own
High income	Dummy variable. Author's own
East Asia and Pacific	Dummy variable. Author's own
Sub-Saharan Africa	Dummy variable. Author's own
Education 1 (average years of schooling in population aged 25 and above)	Barro and Lee (2011)
Education 2 (average years of schooling in population aged 15 and above)	Barro and Lee (2011)
Log GDP per capita	Pen World Tables.
Africa	Dummy variable. Author's own
Americas	Dummy variable. Author's own
Asia	Dummy variable. Author's own
Europa	Dummy variable. Author's own
Oceania	Dummy variable. Author's own

3.2. Matrice of Correlation Coefficients

Figure 1 presents the scatter plot between Entrepreneurship (y-axis) and Trust (x-axis) for the countries included in our sample. The evidence clearly suggests a positive relationship between these two variables. This positive relationship is further confirmed in Table 3 by a strong statistically significant (at 1%) correlation coefficient of 0.71. Considering that entrepreneurial spirit is a function of many different factors, these correlation figures must not be taken seriously unless further examination of the partial correlation of these other variables with entrepreneurial spirit on the one hand, and with trust on the other hand, is undertaken. This is the objective of Table 3. As expected, the evidence in Table 3 suggests that entrepreneurship is strongly correlated with many other variables, notably, economic freedoms, human capital and regulatory quality. Hence, the relationship presented in Figure 1 might change or weaken in strength once these other variables are taken into account.

Table 2 Descriptive Statistics

Variable	Obs	Mean	Std. Dev.	Min	Max
Entrepreneurship	60	.39	.18	.1	.76
Gini	54	36.65	9.39	24.00	59.00
Post-communist	60	.20	.40	0.00	1.00
Economic freedom	60	66.20	10.25	37.10	89.70
Trust	53	30.42	15.57	5.77	64.27
IQ	59	93.19	8.28	72.00	108.00
Regulatory quality	52	.58	.90	-1.35	1.94
MENA	60	.18	.39	0.00	1.00
High income	60	.53	.50	0.00	1.00
East Asia and Pacific (EAP)	60	.03	.18	0.00	1.00
Sub-Saharan Africa (SSA)	60	.02	.13	0.00	1.00
Education 1	51	8.97	2.43	3.86	13.09
Education 2	51	9.14	2.15	4.32	12.75
Log GDP per capita	52	9.51	1.44	4.86	12.44
Africa	60	.10	.30	0.00	1.00
Americas	60	.10	.30	0.00	1.00
Asia	60	.28	.45	0.00	1.00
Europa	60	.35	.48	0.00	1.00
Oceania	60	.18	.39	0.00	1.00

Figure 1: Entrepreneurship and Trust
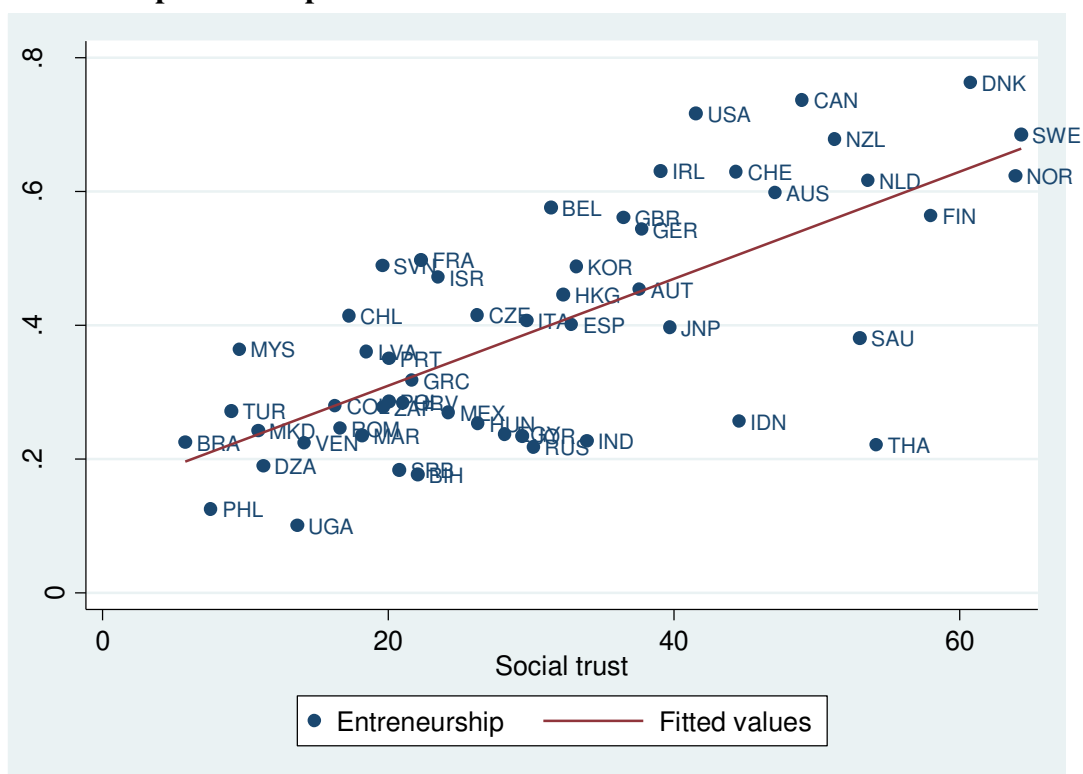
3.3 Empirical Model

The question we seek to answer in this study is whether differences in trust levels between countries can explain observed differences in entrepreneurial spirit amongst these countries? We specify thus a regression model of the form:

$$\text{Entrepreneurship}_i = \alpha + \beta \text{Trust}_i + \delta \text{Control}_i + \varepsilon_i \qquad (1)$$

Where:

- Trust is our variable of interest and thus the parameter of interest is β.

- $\text{Control}_i = (x_1; \ldots; x_n)$ is a vector of control variables, including the following: a dummy of high income countries, dummy for post communist countries, the index of economic freedoms, human capital variables[6] (IQ, years of schooling), indice of inequality (Gini), and a dummy to capture different geographical factors (namely regional dummies for East Asia and the Pacific, Middle East and North Africa and Sub-Saharan Africa).

- ε_i is the error term.

We perform our analysis on the empirical model specified in equation (1) above using essentially ordinary least square (OLS) estimates. To address likely endogeneity and simultaneity problems associated with the estimation of equation (1), we employ the two-stage least square (2SLS) technique. To correct for likely heteroskedasticity, we present white-corrected standard errors. To further test the robustness of our results, and consistent with the approach by Bjornskov (2010) we consider the influence of outliers[7]. As further test of robustness, we use regional clusters to account for regional heterogeneity and also use alternative conditioning variables.

4 Regression Results

Table 4 presents the main regression results. The results in Model 1, which shows a positive and highly statistically significant relationship between trust and entrepreneurship, basically confirms Figure 1's theoretical predictions. The relationship between trust and entrepreneurship weakens in magnitude and statistical significance (now significant at the 10% level) when all other controls are included as Model 2 suggest. Important to note that the introduction of regional dummies[8] (Model 3) does not significantly change the results. Model 4 employs the 2SLS technique and uses the variables monarchy and average temperature as instruments – consistent with Bjørnskov (2010, 2012). The p-values from the Sargan and Basman test validate our approach and the empirical results in Model 4 do suggest that causality runs from trust to entrepreneurship. The results in Table 4 thus confirms the strong explanatory power of trust on entrepreneurship, in particular, that trust explains about 50 percent of the variation in entrepreneurial spirit in the sample of countries considered.

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[6] As suggested in the literature (see, Hafer & Jones, 2012), both variables – IQ and schooling years – can be maintained in the same regression so as to capture competing aspects of human capital.
[7] The approach is to eliminate outliers using both the Student test and the iteratively weighted least squares (IWLS) techniques.
[8] Some regions were dropped due to multicollinearity.

Table 3 Matrix of Correlation Coefficients

	Entrepreneurship	Gini	Post communist	Economic liberty	IQ	Trust	Regulatory quality	Log GDP per capita	Education 1	Education 2	High income
Entrepreneurship	1.00										
Gini	-0.41	1.00									
Post communist	-0.23	-0.27	1.00								
Economic freedom	0.79	-0.27	-0.21	1.00							
IQ	0.68	-0.62	0.18	0.54	1.00						
Trust	0.71	-0.47	-0.27	0.56	0.51	1.00					
Regulatory quality	0.79	-0.48	-0.02	0.79	0.70	0.49	1.00				
Log GDP per capita	0.76	-0.41	0.00	0.64	0.71	0.56	0.73	1.00			
Education 1	0.72	-0.45	0.20	0.66	0.77	0.43	0.73	0.83	1.00		
Education 2	0.70	-0.42	0.17	0.67	0.75	0.42	0.72	0.83	0.99	1.00	
High income	0.19	-0.20	0.05	0.13	0.37	0.08	0.30	0.12	0.34	0.31	1.00

Other determinants found to have an important impact on entrepreneurship include, former communist background, economic freedoms, and human capital. While a former communist background was found to negatively affect entrepreneurship, economic freedom and human capital (measured by the average years of schooling) instead has a strong positive impact. The statistical significance of the former communist background variable is however unstable and changes with the introduction of controls for regional specificities.

Table 4 Main Regression Results

Variables	Model 1	Model 2	Model 3	Model 4
Trust	.008***	.003*	.003*	.006*
	(.001)	(.001)	(.001)	(.003)
Gini		-.000	-.001	.002
		(.002)	(.002)	(.004)
Post communist		-.091	-.106*	-.037
		(.048)	(.045)	(.093)
IQ		.004	.004	.004
		(.003)	(.003)	(.004)
Economic freedom		.006*	.006*	.004
		(.003)	(.002)	(.003)
High income		-.010	-.019	-.007
		(.028)	(.027)	(.041)
Education 1		.022*	.019*	.012
		(.010)	(.008)	(.015)
SSA			.010	.051
			(.032)	(.068)
MENA			-.076	-.083
			(.045)	(.072)
EAP			-.074	-.138
			(.041)	(.103)
R²	0.50	0.82	0.83	0.86
Obs	53	47	47	39
Sargan				0.30
Basmann				0.42
OLS	Yes	Yes	Yes	No
2SLS	No	No	No	Yes

Notes: Absolute values of t-statistics appear in parentheses* $p<.05$; ** $p<.01$; *** $p<.001$. All regressions are estimated using white (1980) heteroskedasticity correction. All regressions include a constant term.

The likely intuition for this could be that former communist countries that fail to undertake institutional reforms that favor entrepreneurship are likely going to continue witnessing the detrimental effects of communism whereas those countries that reform their institutions to make them conducive to entrepreneurship are less likely to suffer the negative effects.

Income inequality measured by the Gini coefficient, has a negative but statistically insignificant effect on entrepreneurship while the level of development of a country, as well as all the regional dummies are statistically insignificant. If anything, the lack of statistical significance on the sub-Saharan African dummy suggests that entrepreneurial weakness is not entirely a sub-Saharan African phenomenon. If one would pursue the argument further, the positive sign on the sub-Saharan African dummy as opposed to the negative signs on the Middle-East & North Africa (MENA) and East Asia & Pacific (EAP) dummies; suggests that

entrepreneurship can evolve favorably in sub-Saharan Africa if certain conditions, notably, institutional reforms are met.

We test the robustness of our main results in the next section (section 5).

5 Robustness Checks

We conduct two forms of robustness checks. First, regional clustering, outlier observations and endogeneity (Table 5) and second, using alternative conditioning variables, outlier observations and endogeneity (Table 6). It makes sense to perform regional clustering considering the extent of heterogeneity observed in both variables – trust and entrepreneurship – across countries included in our sample. We would have wished to use an alternative variable for trust in our robustness checks but the non-availability of suitable proxies constrained this option. We therefore make use of alternative conditioning variables, which is the approach that has been used in some studies, see notably, Potrafke (2011). There are a number of differences between the conditioning variables in our main results (Table 4) and Table 6. First, instead of Economic freedom used in Table 4, we use regulatory quality in Table 6. Also, instead of Education 1 (average years of schooling in population aged 25 and above) used in Table 4, we use instead Education 2 (average years of schooling in population aged 15 and above) in Table 6. We also use the natural logarithm of GDP per capita instead of a dummy variable for high income countries. Finally, we use dummies for regional classification of countries instead of dummies for continents. Of course, the decision to use alternative proxies for Economic freedom and human capital is justified by the fact that both variables were significant in our main regression. As we have already explained, the ideal robustness check would involve using alternative proxies for the principal explanatory variable (trust) but data constrains limited this option.

In Models 4 and 5 of Table 5, we control for the influence of outliers on our main results. The residuals from the Student test permitted us to eliminate only Slovenia from Model 4, while both Slovenia and Venezuela were eliminated from Model 5. Besides diminishing the magnitude of the coefficient of the trust variable, the exclusion of these countries from the sample does not significantly affect the impact of trust on entrepreneurship. However, the impact of economic freedoms and education – which previously were insignificant – becomes statistically important, while communism also gains in statistical significance. However, the inconvenience associated with the estimation of Models 4 and 5 is that we lose a great deal of degrees of freedom owing to the limited number of observations. To correct for this, we proceed alternatively by maintaining the same specification as in Models 4 and 5 but this time employing a different econometric technique – the IWLS technique (see Model 6). The empirical observation in Model 6 is that this also does not substantially change our main results. In other words, the impact of trust on entrepreneurship is robust to the presence of outliers. Model 7 explores the 2SLS technique on the empirical specification of Model 5, which a dual means of controlling for likely simultaneity and for the presence of outliers. The results confirm a positive statistically significant impact of trust on entrepreneurship. Using alternative conditioning variables and controlling for the presence of outliers and endogeneity in Table 6 basically upholds our main result: that trust matters for entrepreneurial spirit.

Table 5 Robustness Checks: Regional Clusters, Outlier and Endogeneity

Variables	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7
Trust	.008**	.003*	.029*	.003*	.003*	.003*	.008*
	(.002)	(.000)	(.001)	(.001)	(.001)	(.001)	(.004)
Gini		-.000	-.001	-.000	-.001	-.001	.004
		(.001)	(.001)	(.002)	(.002)	(.002)	(.006)
Post communist		-.091*	-.106*	-.129**	-.115**	-.120*	-.022
		(.026)	(.026)	(.043)	(.041)	(.049)	(.110)
IQ		.004	.004	.003	.003	.004	.004
		(.002)	(.002)	(.002)	(.003)	(.003)	(.004)
Economic freedom		.006	.006	.005*	.008***	.005*	.004
		(.003)	(.003)	(.002)	(.002)	(.002)	(.005)
High income		-.010	-.018	-.005	-.014	-.012	.020
		(.020)	(.019)	(.024)	(.023)	(.030)	(.049)
Education 1		.022	.019	.022**	.019*	.020*	.011
		(.011)	(.011)	(.008)	(.007)	(.010)	(.014)
SSA			.010	-.015	.023	-.021	-.019
			(.030)	(.034)	(.037)	(.064)	(.043)
MENA			-.076	-.071	-.047	-.076*	-.033
			(.035)	(.045)	(.043)	(.044)	(.068)
EAP			-.074	-.069	-.023		-.134
			(.044)	(.044)	(.041)		(.093)
R²	0.50	0.82	0.83	0.86	0.87		0.88
Obs	53	47	47	46	45	47	37
Outliers				Slovenia	Slovenia		Slovenia
					Venezuela		Venezuela
IWLS	No	No	No	No	No	Yes	No
OLS	Yes	Yes	Yes	Yes	Yes	No	No
2SLS	No	No	No	No	No	No	Yes

Notes: Absolute values of t-statistics appear in parentheses* p<.05; ** p<.01; *** p<.001. All regressions are estimated using White (1980) heteroskedasticity correction except model 4, 5 and 6. All regressions include a constant term.

6. Conclusion

This paper sought to investigate whether differences in trust levels between countries can explain observed differences in entrepreneurial spirit across countries in the world. We started out, using simple ordinary least squares regression to investigate whether trust does matter for entrepreneurship. We later controlled for other important factors that matter for entrepreneurship, including regional idiosyncratic factors. Finally, we utilized 2SLS technique to control for likely endogeneity. Our findings suggest that trust does have a strong positive impact on entrepreneurship and this result is robust to regional clustering, to alternative conditioning variables and to the presence of outliers. Quantitatively, our results suggest that about half of the variability in entrepreneurial spirit across countries in the world is driven by trust considerations.

The implications of this finding are that, to spur entrepreneurial spirit, countries that lack formal trust-building institutions can benefit from creating conditions that favor the expansion of informal networks where trust is built.

Table 6 Robustness Checks: Alternative Conditioning Variables, Outliers and Endogeneity

Variables	Model 1	Model 2	Model 3	Model 4
Trust	.004**	.003*	.003*	.007*
	(.001)	(.001)	(.002)	(.003)
Gini	.001	.001	-.001	.004
	(.002)	(.003)	(.003)	(.005)
Post communist	-.084	-.099*	-.113*	-.076
	(.042)	(.043)	(.051)	(.074)
IQ	.003	.004	.003	.006
	(.002)	(.004)	(.004)	(.004)
Regulatory quality	.075**	.075**	.086**	.023
	(.024)	(.028)	(.030)	(.039)
Log GDP per capita	.012	.007	-.010	-.002
	(.016)	(.021)	(.022)	(.026)
Education 2	.015	.017	.019	.024*
	(.010)	(.010)	(.013)	(.013)
Africa		.014	-.032	.0061
		(.075)	(.086)	(.076)
Asia		-.027	-.104	-.071
		(.084)	(.087)	(.078)
Europe		-.022	-.069	-.000
		(.063)	(.081)	(.057)
Oceania		.008	-.035	-.024
		(.057)	(.083)	(.051)
Americas		-.004	-.035	.017
		(.075)	(.090)	(.073)
R²	0.82	0.83		0.88
Obs	47	47	47	37
IWLS	No	No	Yes	No
OLS	Yes	Yes	No	Yes
2SLS	No	No	No	No
Outliers				Slovenia
				Venezuela

Notes: Absolute values of t-statistics appear in parentheses* $p<.05$; ** $p<.01$; *** $p<.001$. All regressions are estimated using White (1980) heteroskedasticity correction except model 3. All regressions include a constant term.

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