

The Paradox of Institutional Trust and Entrepreneurship in Transitional Countries

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Abstract

The relationship between institutional trust and entrepreneurship is not straightforward but is intertwined with social context. This study explores this relationship by estimating the relationship between entrepreneurship and institutional trust together with a set of individual social demographics and the country of residence in 27 transitional countries in Eastern Europe and countries of the former Soviet Union using the data of the 2016 Life in Transition Survey (LiTS). The analytical framework in this study is that individuals make their decisions in choosing the type of employment by weighing the level of institutional trust in their communities, a set of democratic factors and social indicators.

The results of our 2SLS estimations indicate a consistent negative association between institutional trust and entrepreneurship for all the sub-datasets. However, this cannot be interpreted as evidence for the negative effect of institutional trust on entrepreneurship. Given our analytical framework, this counter common-sense phenomenon would be interpreted as when the institutional trust was high, individuals would rather choose to have a paid job instead of running their own business in these transitional countries. This study provides evidence of how far these countries have gone on the path of transition three decades after the transition.

Keywords: Institutional trust, entrepreneurship, transitional countries, Eastern Europe.

Introduction

Trust is one of the necessary conditions for social activities, as Arrow (1972) stated that every commercial transaction conducted over a period of time has an element of trust. Entrepreneurship may be positively related to trust intuitively since a higher level of trust would lower the transaction costs of any commercial activity and reduce the risks associated with business. However, in certain conditions, paradoxically, a lower institutional trust may drive individuals to pursue entrepreneurship. The relationship between institutional trust and entrepreneurship is not straightforward but is intertwined with social context. Although the study of trust is a well-documented topic in many areas, research into the role of trust in entrepreneurship has been popularized only in recent decades (Hömann & Welter, 2005). Previous studies have been conducted on various social contexts, Western and developing economies, and countries in transition (Liao & Welsch, 2005; Sohn & Kwon, 2018). Most of these studies focus on interpersonal trust or social networking, which connects trust with social capital. Consequently, there is a bright side and a dark side of social capital in business development (Zahra et al., 2006). Fewer studies have explored this relationship between institutional trust and entrepreneurship in Eastern European transitional countries. Meanwhile, after the fall of the Iron Curtain in the 1990s, these transitional countries have undergone a similar transformation, transitioning from a centrally planned economy to a market economy. However, the rapid formal institutional change was not accompanied by changes in informal institutions at the same pace in these transitional countries (Meier & Stiglitz, 2001; Estrin & Mickiewicz, 2010). Communism as a collective institution is incompatible with entrepreneurship, which has some to do with innovative activities of individuals. The legacy of communism is still incompatible with entrepreneurship development

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and a huge barrier, although it is not because of the lagging economy, industrial development, the accumulation of physical capital or even human capital. The fundamental obstacle is the social attitudes formed in the communist time (Schwartz & Bardi, 1997), whose distrust and social attitudes have extended into transition time (Estrin & Mickiewicz, 2010). Lower social and institutional trust, among many other issues, are both a consequence of the malfunction of social arrangements and a cause for lower levels of productivity in social transactions. Understanding the role of institutional trust in entrepreneurship would help understand the mechanism to improve innovative activities in entrepreneurship and the social setting for individuals to live and work. Reconstruction of institutional trust is essential to the success of the transition. Understanding the relationship between social trust and entrepreneurship would help identify the conditions for small private businesses to thrive during their transition to a market economy.

The focus of this study is the relationship between institutional trust and entrepreneurship in 28 transitional countries in Eastern Europe and countries of the former Soviet Union using the data of the 2016 Life in Transition Survey (LiTS). Exploring the role of institutional trust would help provide evidence of how far these countries have gone on the road of transition, especially the comparison between the former Soviet Union countries and other transitional Eastern European countries. Specifically, our research inquiry is formulated into two interrelated questions:

1. Does institutional trust affect the decision to be an entrepreneur in the former Soviet countries and other Eastern European transitional countries?
2. Are there any differences between these two groups of countries regarding the above relationship? What are the implications for these differences?

The following sections are organized as follows: the section following this introduction discusses the theoretical framework; Section 3 describes the data and methods; Section 4 discusses the results, and the last section summarizes findings and discusses issues for further study.

Theoretical Framework

To begin with, we need to specify two essential concepts in this study: institutional trust and entrepreneur. First, it is difficult to reach a consensus on the concept of trust, as it is subjective, and its meaning depends on where we use it (Lewicki & Bunker, 1996; Zucker, 1986). Specifically, this study focuses on peoples' trust in ministers, parliament, and legal systems in the respondents' sampling unit (community). The concept of institutional trust often refers to the trust of political systems, legal or economic systems, and other informal regulations (Williamson, 1993; Welter, 2012).

Second, theoretically, entrepreneurs and self-employed people are different concepts. The term 'entrepreneur' first appeared in French dictionaries three hundred years ago with an adventurer component and often refers to people engaged in innovation and new business development. Being self-employed refers to people involved in routine work on their own (Navale, 2013; Carlen, 2016). However, owing to vague distinctions in practice, surveys typically do not distinguish these two concepts (Henrekson & Sanandaji, 2014). The questionnaire in the Life in Transition Survey did not differentiate these two concepts and used the phrase "set up a business" instead. So, the actual meaning of entrepreneur in this study is to "set up a business."

As mentioned earlier, any activity performed by more than one person relies on trust among the people engaged in the activity. A higher level of social trust would also support a higher level of welfare (Bjørnskov & Svendsen, 2013). Kenneth Arrow (1972) saw the lack of mutual confidence as the source of much of the economic backwardness in the world. Arrow's statement explains the lower efficiency experienced in many transitional countries in all sectors. It also means that trust among people and between people and institutions would benefit both entrepreneurship and paid employment. However, this idea may not explain the behaviour of an individual in his or her choice to either work for others or work for themselves. Kwon and Sohn (2021) pointed out that

entrepreneurship exists in an equilibrium of business opportunities and employment opportunities in firms. They pointed out a missing aspect of the current research on whether a lack of trust leads to a particular employment type. This issue is especially relevant to the countries in transition.

For a theoretical framework about entrepreneurship, different levels of factors are involved: the totality of places or countries, the government policies, and the individuals' decision making.

First, the issue of place. In reviewing the research on contexts in entrepreneurship in the last decades, Welter and Becker (2020) identified a trend of increasing attention paid to the study of geographic locations or places. Narratives, collective memories, the influence of the past built environments of entrepreneurship. However, as they stated, the complexity of how "where" is intertwined with "when" remains underexplored and undertheorized. Places bear the totality of economic, social, cultural, historical, and geopolitical complexity to define the settings in which entrepreneurs work. Places are not mobile, but the totality of places is dynamic within the time dimension. Many empirical studies, such as Fritsch and Wyrwich (2014) and Fritsch, Pylak, and Wyrwich (2021), provided evidence of persistent historical influences on entrepreneurship in different transition countries.

Second, government policies. Drawing upon the research in different social science disciplines, Shane and Venkataraman (2000) synthesized a well-known framework explaining the mechanism of how organizations and individuals discover, evaluate, and exploit entrepreneurship opportunities. Baker et al. (2005) extended Shane and Venkataraman's framework with an assumption that a country's social context heavily affects how individuals discover, evaluate and exploit entrepreneurship opportunities. More recent studies found that macro-level factors, such as government policies, are a key element contributing to the heterogeneity of conditions for entrepreneurship between transitional countries with a similar past (Smallbone & Welter, 2010). The transitional countries provide interesting cases of how the institutional factors affect individuals' use of entrepreneurial opportunities.

Third, the rational choice of individuals. Many assumptions and hypotheses can be involved in addressing the complexity of entrepreneurship activates. However, given the *units of analysis* in this study as individuals, we need a more basic assumption that is fundamental on which other assumptions are building. This assumption will help explain apparent paradoxes when different assumptions point to varying explanations in the empirical study.

Individuals are facing alternatives in choosing a type of employment. They estimate the payoff to run a business instead of working for alternative sectors, organizations and other private companies with paid incomes. Although running a business may lead to a higher return in the long term (Hamilton 2000; Parker, 2009), individuals would consider the risk of running a business, including uncertainty in the market, their skills and educational background, the regulations, ethics codes, and social connections with government officials. All these conditions are critical for individuals in a country with a communist past. From this perspective, if an individual living in a circumstance where people trust institutions, *ceteris paribus*, they would feel that the risk of running a business would be more manageable than a place with a lower level of trust in the institutions. *Vice versa*, if the individual decides to run a business in a circumstance of lower-level trust, they would be concerned about the costs of bribing the officials and dealing with uncertainty and corruption. Consequently, they would hesitate to proceed with the business.

However, running a business is only one of the choices for an individual. An individual also considers the conditions in the workplace to work for other organizations and other people. Suppose we simplify the choices into only two options, entrepreneurship or working for others. In that case, individuals will consider the wages, working conditions, job stability, fairness in promotion, welfare and culture of the organizations, and regulations for protecting the employees. From this perspective, trust in institutions would also help create good conditions for people to work for others, which would reduce the need to open their own businesses. This perspective is in favour of being employed if the level of institutional trust is high.

In addition, an individual's observed and unobserved personal characteristics are also heavily weighted factors affecting their choice to be an entrepreneur. These characteristics may generally have little to do with trust in institutions. Furthermore, an entrepreneur may pursue his or her career in entrepreneurship for its own sake, if conditions permit. Although working for others may be less risky than running their own business, many other factors would also be considered. They would consider the initial investment both in physical capital and human capital in terms of education and skill training to be an entrepreneur (Lazear, 2005), and employment compensation plans, workplace safety, earnings, and more importantly for our research interest, whether the employers and the institutions are trustable. Also, the barriers to get paid employment are an issue for many people. These are the types of "push" and "pull" factors that lead people to their self-employment business rather than paid employment, as Clark and Drinkwater's (1998) study indicated. So, an individual chooses a career, either working for others or running their own business by weighing these factors.

The above discussion can be summarized in Figure 1. As diagrammed in Figure 1, individuals make their decisions. These decisions are affected by both the individual's personal characteristics and the social conditions in which the individual lives; One of the decisions is whether to trust the institution, and another decision is the choice of entrepreneurship versus other employment; whether the individual decides to be an entrepreneur depends on a) trust in the institution, b) personal characteristics and c) social and economic contexts in which the individual lives. Given this framework, both a) and b) are observable, and their related indicators are recorded in the Life in Transition Survey in our study. Factor c) is an aggregation of various social and political systems, law and order, and cultural norms for social activities. The inclusion of factor c) has special meaning for our study: How this factor affects an individual's decision in entrepreneurship provides an understanding of how social and economic context affects individuals' lives and exposes their concerns in deciding for employment. The prevalence of corruption inherited from the communist past is an obstacle for people to be employed in public organizations and large private organizations that monopolise the industries.

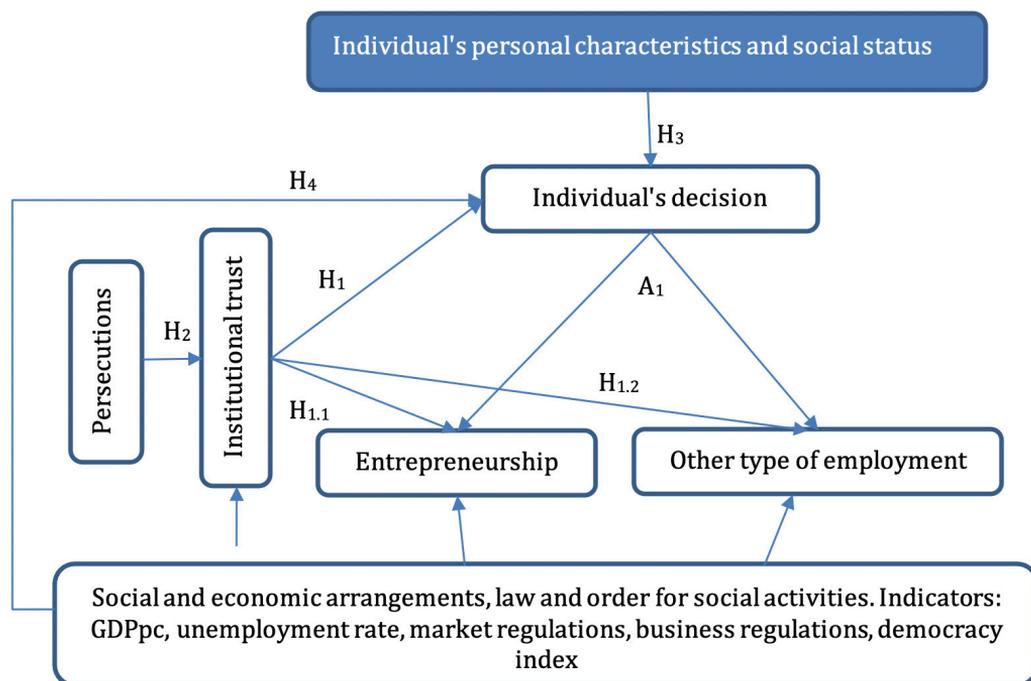


Figure 1: Individual's decision for entrepreneurship
 Source: Authors' own elaboration

Each arrow in the figure can be a hypothesis (H) for testing or an assumption (A) that helps to build this framework:

A₁: Individuals make their decision to be an entrepreneur or a paid employee by weighing the pros and cons in their given circumstances. This assumption is derived from a more basic hypothesis that individuals maximize their preferences in economic activities. In this study, it is an assumption, not for testing but for building the theoretical framework, that helps explain individuals' decisions.

H₁: The empirical relationship between institutional trust and an individual's decision to be an entrepreneur is conditional to social contexts. Institutional trust is a necessary condition for individuals to make almost any decision involved with social and economic transactions. When we explain the empirical results, the follow sub-hypotheses would apply:

H_{1.1}: Institutional trust is positively associated with entrepreneurship.

H_{1.2}: Institutional trust is positively associated with conditions for all other paid employment.

Although a higher institutional trust can make every activity easier (if both H11 and H12 are both true), empirical results may indicate that institutional trust may be positively or negatively associated with individuals' decisions to be an entrepreneur depending on the combination of circumstances.

H₂: Individuals' experiences in the past as collective memories, such as persecutions in political movements, affect their trust in political institutions. These experiences may not affect their decisions on entrepreneurship directly but affect such decisions indirectly through affecting their trust in institutions.

H₃: An individual's demographic factors and social status affect their decision to be an entrepreneur. Obviously, an individual's demographic factors and social status affect the individual's decision to be an entrepreneur. These factors are control variables in this study.

H₄: Social and economic arrangements, unemployment rate, market regulations, law, and orders for social activities affect an individual's decision to be an entrepreneur. Although these macro-level factors are necessary conditions for business activities, the statistical relationships between these factors and entrepreneurship are not necessarily straightforward intuitively. One example is the relationship between national business regulations and entrepreneurship: public interest theory suggests a positive relationship, public choice theory anticipates the opposite, while the empirical evidence indicates an inversed U-shaped relationship (Nikolaev, Boudreaux, Palich, 2018).

Given this framework, whether individuals prefer to be entrepreneurs or not may be independent of whether they trust the institutions. However, if we control for individuals' characteristics, we may find explanations. For example, in the scenario that an individual lives in a community of low institutional trust and still chooses to be an entrepreneur, it may mean that this individual understands the unfavourable conditions of running a business but cannot find a satisfactory position of paid employment, so they have to take "the lesser of two evils." If we examine this scenario under the social contexts in which this scenario occurs, we may discover why this scenario occurs. This framework will be used to discuss the implications of the results of our model estimations.

Data, Variables, and Methodology

Data set

This study uses the Life in Transition Survey (LiTS) III. This survey was conducted jointly by the European Bank and the World Bank in 2016. LiTS was undertaken to understand how socioeconomic changes impact the lives of individuals in transitional countries in Eastern Europe and the former Soviet Union since the collapse of communism in 1989. This survey covers socioeconomic status,

attitudes, and perceptions about various economic, political, and social issues, the respondents' well-being, and the impacts of political transition and economic change on their life. LiTS III covered 51,000 households in 34 countries, including 29 transitional countries (EBRD, 2016). This survey allows us to explore the relationship between institutional trust and entrepreneurship in these transitional countries.

Because of the absence of some country-level information for Kosovo and Montenegro, these two countries are not included in this study. The remaining 27 countries are further grouped into the former Soviet Union (FSU) countries and the non-former Soviet Union (Non-FSU) countries. The reason for this breakdown is that there are growing differences between these two groups in economic freedom and political arrangement after the transition. The FSU group (12 countries) includes Armenia, Azerbaijan, Belarus, Georgia, Kazakhstan, Kyrgyz, Moldova, Mongolia, Russia, Tajikistan, Ukraine, and Uzbekistan; The non-FSU group (15 countries) are Albania, Bosnia and Herz, Bulgaria, Croatia, Czech Rep., Estonia, FYR Macedonia, Hungary, Latvia, Lithuania, Poland, Romania, Serbia, Slovak, and Slovenia.

The three Baltic countries, Estonia, Latvia, and Lithuania, were in the Soviet Union. They are classified into the non-FSU group because they are very different from the other FSU countries after the transition. They were the first to join the EU, and their economic freedom is among the most developed Western countries. Mongolia was not in the Soviet Union, but it is classified to the former Soviet Union group for a similar reason.

To explore the patterns of how institutional trust and other social-economic conditions affect individuals' choice of entrepreneurship, estimations are performed on the full data set and four data sub-sets: Males, Females, Former Soviet Union, and non-Former Soviet Union.

Variables

Entrepreneurship. Entrepreneurship is the outcome variable. The LiTS questionnaire asks whether the respondents had the experience to set up a business with four choices: 1 for "Yes, I have set up my current business"; 2 for "Yes, I set up a business in the past, but I am no longer involved in it, or it is no longer operational"; 3 for "Yes, I tried to set up a business and did not succeed (in setting up the business)" and 4 for "No." We recode choice 1-3 = 1 and choice 4 = 0. So, Entrepreneurship is a binomial variable, takes the value of 1 if the respondent had the experience of setting up a business regardless of success and takes the value of 0 for no such experience. About 12.4 percent of the respondents had experience of entrepreneurship. Since LiTS does not identify whether the business was an innovative initiative or a routine business, this is a limitation of this study. This can be a limitation of this study. However, Dvouletý's (2018) study indicates that no matter the measure of entrepreneurship or self-employment, the country-level determinants appear in the same direction of impact.

Institutional Trust. This is the predictor, the variable of our research interest. In the LiTS questionnaire, three items refer to institutional trust: trust in ministers, trust in parliament, and trust in courts. Respondents were asked to rate their trust level for these items using a 5-point Likert scale ranging from "complete distrust" to "complete trust." The variable of Institutional Trust is constructed by adding the rating values of all the three items and calculating the mean of the sampling unit of constructed value. So, this variable represents the institutional trust of the respondent's immediate community. That is why we choose this variable to explore the socioeconomic conditions during transitions.

Age. Age is a control variable; it is a continuous variable coded as the actual age of the respondent.

Female. Being female is an important predictor for entrepreneurship, especially in developing countries where women's labour participation rates were low compared to those in the developed countries (Acs et al., 2004). We predict a negative relation between Woman and Entrepreneurship.

Marriage status. Marriage has a positive effect on the family members' human capital, which in turn improves the capacity for entrepreneurship (Wong, 1986; Baker & Pollock, 2007). In many developing countries, the support of families is a necessary condition for small businesses. In this study, we predict that being married is positively correlated with Entrepreneurship.

Number of Children. Number of Children is an indicator of family size and maybe a good indicator for lifestyle preference. Previous studies found that family size affects entrepreneurship (Vladasel, 2019), and evidence supports that entrepreneurship routes in the family (Parker, 2009). Family size affects individuals' education, economic conditions of the family, the formation of human capital, and the experience of entrepreneurship. Given the broad definition of entrepreneurship in this study, we expect that the number of children is positively associated with entrepreneurship.

University education. This dummy variable takes the value of 1 if the respondent had a university degree or higher. About 40 percent of the respondents had a university education or higher. It is reasonable to believe that individuals with higher education have a greater ability to run a business than less educated individuals because they have the knowledge and skills for running a business. However, it is also reasonable to believe that individuals with higher education have little chance to experience labour market discrimination for high-paid jobs, which will reduce their desire for self-employment. So, individuals would weigh their value in the job market before going to run their own business. Previous studies show mixed results about the relationship between education and entrepreneurship. Some studies find a negative association between education and entrepreneurship (Kwon & Sohn, 2021), or "the impact of education on selection into entrepreneurship is insignificant." However, "the effect of education on performance is positive and significant" (van der Sluis et al., 2008, p. 795).

Better Economy. This is a respondent's subjective assessment of the economic situation of the country. If the respondent agreed that the economic situation in the country today was better than that around four years ago, the value is 1; otherwise, it is 0.

Better Political Situation. This is the subjective assessment of the political situation of the country. If the respondent agreed that the political situation in the country today was better than that around four years ago, the value is 1; otherwise, it is 0. Together with Better Economy, these two variables provide information about the subjective assessment of the macro-level situation of the country, which may have a relationship with the respondent's experience of entrepreneurship.

Household Consumption. This variable is measured in a decile scale of monthly household consumption, adjusted to an equivalent scale. The household consumption figures in LiTS are recorded in the currency of the country in which the respondents live. These consumption data cannot be used as it is in a cross-country analysis. We first adjust the respondent's total household consumption to a conventional equivalent scale by dividing consumption by the square root of the number of people in the household. Second, the equivalent consumption is recoded into ten deciles, with 10% of respondents in each decile in each country. Household consumption is an indicator of economic well-being and capacity. We predict that a higher level of household consumption is associated with a higher chance of running a business.

GDPpc, Unemployment Rate, Business Regulations, and Market Regulations. Previous studies identified various macrolevel variables affecting entrepreneurship, including GDP per capita, unemployment rate, economic freedom, democracy index, and market regulations (Audretsch, 2007; Audretsch, Belitski & Desai, 2019; Nikolaev, Boudreaux & Palich, 2018). We choose four country-level aggregated variables for estimation. These variables are indicators of the economic level, working conditions for the employees, freedom to do business and freedom to do other activities, and institutional constraints. There is no doubt that more favourable conditions regarding these indicators would encourage people to run their business; however, good conditions would also reduce the need for people to seek entrepreneurship.

Instrumental variable: Persecution. This is the instrumental variable with Institutional Trust as the instrumented variable. LiTS questionnaire has a question to ask whether a) the respondent, b) immediate families, c) grandparents, and d) any other relatives experienced persecution, torture, or any acts of violence by the government before the transition (1989 for Eastern Europe, 1991 for the Soviet Union). This is the mean of the sampling unit of respondents for this question.

We choose Persecution as the instrumental variable because statistical tests confirm that it affects institutional trust in the meanwhile, does not affect the choice of entrepreneurship, which is the requirement of an instrumental variable. The experiences of persecution in the communist past, directly or narratively, affected institutional trust. Although the institutions have changed a lot after the transition, the new institutions are built on the ruins of the old institutions, and more importantly, the social conventions and social attitudes formed in the communist times can extend to the new era (Schwartz & Bardi, 1997; Estrin & Mickiewicz, 2010). The experiences of persecutions in the communist time, regardless of direct experiences or experiences of family members and people in the community, definitely affect people's trust in institutions today.

More details about the definitions and basic statistics are listed in Table 1.

Methodology and estimate strategies

In exploring the relationship between institutional trust and socioeconomic factors in transitional countries, we perform a logistic 2SLS regression on the full data, Males and Females, the Former-Soviet Union, and Non-former Soviet Union samples, respectively.

The 2SLS model

For estimating the reverse causality between *Entrepreneurship* and *Institutional Trust*, and some of the unobservable effects, we use 2SLS regression to address these issues. In our 2SLS model, the dependent variable, Institutional Trust, is an explanatory variable, and it is the variable of interest. The model specifications are as follows:

$$\text{Institutional Trust}_i = \alpha_0 + \alpha_1 X_{1,i} + \alpha_2 X_{2,i} + \dots + \text{Persecuted} + \varepsilon \quad (1)$$

$$\text{Entrepreneurship}_i = \alpha_0 + \alpha_1 \text{Institutional Trust} + \alpha_2 X_{2,i} + \alpha_3 X_{3,i} + \dots + \varepsilon \quad (2)$$

Where, *Entrepreneurship*, the dependent variable, is a binary variable that takes the value of 1 if the respondent had the experience to run a business; *Institutional Trust*, the variable of our research interest, is an explanatory variable constructed by the mean value of institutional trust of the sampling unit of the respondent; *Persecuted*, the instrumental variable, is a count variable denoting that the respondent and his or her families and relatives were persecuted during the communist time; and *X* represents a set of covariates.

In our initial study, *Persecution* passes the endogeneity test for all the samples. The Durbin and Wu-Hausman tests confirm the presence of strong endogeneity, suggesting that Persecution affected Institutional Trust but did not affect Entrepreneurship directly. This indicates that 2SLS estimations are preferable.

Results and Discussions

Table 2-1 and Table 2-2 report the results of two-stage estimations on the full sample, male and female, Former the Soviet Union and non-Former Soviet Union samples with Age, Female, Married, Children, University, Better Economy, Better Political Situation, and country dummies with all of the 28 countries included. Because country dummies cause issues of multicollinearities, the number of other independent variables is limited. The estimation of Table 3 does not include the

country dummies, so that we can add a few more variables: Household Consumption, GDPpc, Unemployment Rate, Business Regulations, and Market Regulations. All the regression models are good, as indicated by the Wald test. Both the Durbin test and the Wu-Hausman test indicate endogeneities for all models, meaning that our 2SLS regressions for all models are reliable. The first stage regression results of Model 1-5 presented in Table 2-1 provide more details about the performance of the instrumental variable, Persecuted, for all the five samples: Persecuted is negatively co-related with Institutional Trust and this relationship is statistically significant at the 0.001 level. In addition to confirming the performance of a couple of independent variables, such as Better Economy and Better Political Situation, it is interesting to see that University education is negatively associated, at the 0.01 statistical level, with Institutional Trust for the former-Soviet samples, but not for the non-former Soviet countries.

Institutional Trust. This variable is the variable of our research interest. As motioned above, the regressions passed the endogeneity test, and the regressions produced a more accurate estimation. Results in these tables demonstrate clear and consistent indication across all the nine models, Model 1-5 with country dummies for the full sample, Male and Female, FSU and non-FSU indicates, and Model 6-9 for more explanatory variables. Institutional Trust is negatively associated with Entrepreneurship, and this relationship is statistically significant for all nine models. The values of coefficients range from -0.2025 (Model 6) to -0.3821 (Model 2). A straightforward interpretation of these results is that an individual made the choice of running a business by weighing the level of institutional trust around his or her neighbourhood, given the individual's characteristics and a combination of other social and economic conditions. The weighing of institutional trust was negative, or specifically, one unit increase of institutional trust reduced the chance of being an entrepreneur by 20.25% to 38.21%, with a maximum effect of 303%-573.15% (or 3-5.7 times) for the maximum value of 15 units of Institutional Trust. As discussed in the Theoretical Framework section, a negative value of Institutional Trust does not mean that a higher level of Institutional Trust was a barrier for running a business, but that a higher-level Institutional Trust provided better conditions for individuals to find better jobs, a better workplace, and better circumstances to work with, reducing the needs to run a business, if all other conditions remain the same.

Age. Entrepreneurship, as the outcome variable, is coded as the experience of running a business. Older age should indicate a higher chance to have an occasion to run a business. However, it turns out that Age has almost no relation with Entrepreneurship for Model 1-Model 3, and Model 5 and has a significant negative value for Model 4 and Model 6-Model 9. Since the transition from central planning economy to market economy occurred in 1989 for Eastern Europe and 1991 for the Soviet Union, owning a business has been a new phenomenon. For this reason, it is natural to see that younger generations had a higher chance of owning a business than the older generation.

Female. The relationship between being a female and entrepreneurship is estimated in two ways, Female as an explanatory variable and Females as a sample compared with Males as a sample.

Although we see a similar pattern regarding the effects of other demographical characteristics on Entrepreneurship for the Males sample and Females sample, as a variable, being a female is negatively associated with Entrepreneurship compared with being a male in all the models except Model 2-3 that do not include Female as a variable. This may imply that females had more barriers to running a business than males, given the circumstances that females had to do more housework and raise children in these transitional countries. Motherhood, a metaphor of household and family context, represents a challenge for female entrepreneurship (Brush et al., 2009). In many developing countries, lower levels of women's labour participation and entrepreneurship are associated with lower levels of education. However, women's education in transition countries has a different pattern than most developing countries. Before the transition, women's educational attainments in many of these countries were even higher than those of men, almost the same as in developed countries, at least in a nominal sense. Women's labour participation rate was high due to the arrangement of the planned economy through the state-owned enterprises before the transition (Grogan & Koka, 2010; Fuchs-Schündeln & Schündeln, 2020). However, although education acquired in the past can largely be extended to the transition

time, women have suffered more from dramatic government retrenchment in health care and social services, and women may have to stay at home to take care of children and those who are old and sick (Habibov, 2011). As a result, women have experienced gender roles and sectoral and occupational segregation during the transition. A few surveys on female entrepreneurship indicate that a small portion, less than 30%, of entrepreneurs were women. Although highly educated, most of them were in the low entry thresholds and low financial risk retail and service sectors (Aidis, Welter, Smallbone, et al., 2007).

Married. Marriage has a positive effect on the social capital of the family members, adding the capacity for entrepreneurship. This is especially true for people in many developing countries. All the models (Model 1-9) indicate a statistically significant positive association between being married and Entrepreneurship, although the absolute value is small. For people in these transitional countries, families' support was a favourable condition for running a business.

Number of Children. The coefficients of six out of the ten models are statistically significant, and all of them show a positive relationship between the Number of Children and entrepreneurship. A higher number of children may indicate a bigger household size, which may explain this positive relationship.

University Education. For seven out of the nine models, the coefficients of University Education demonstrate a positive, statistically significant relationship. This indicated that knowledge and skills increased the capacity to run a business, especially the enterprises involved with innovations. Meanwhile, higher education also helps individuals get a better job, which reduces the desire to run their businesses. However, this is not the case for the Former Soviet Union countries. The coefficient for FSU is not statistically significant. It seems that the business arrangements in the FSU and non-FSU are different; we need additional information to explain these differences.

Better Economy, and Better Political Situation. These two variables are the respondent's subjective assessment of the economic and political situation compared with those five years ago. Since these two variables are similar, we discuss them together. Consistently, the estimations indicate that people who had expectations of a better economic and political situation would be more confident about the business's success. It is not surprising that 19 out of the 20 coefficients for these two variables are statistically significant with a positive sign, except the one for the female sample (Model 3).

Household Consumptions. Owing to the problem of multicollinearity, this variable is only estimated in Model 6-8. This variable is an indicator of economic well-being and the capacity to run a business. All of the estimated three models produce a positive coefficient, and three of these four coefficients are statistically significant. However, the absolute values of these coefficients are small (0.0046-0.0056), even considering this variable is a decile scale. We can say that a higher level of household consumption is associated with a higher chance of running a business. It is still unclear whether higher household consumption supported running a business or the business improved household consumption, or they mutually affected each other.

GDPpc, Unemployment Rate, Business Regulations, and Market Regulations. These four country-level variables are indicators for the economic situation, market and business regulations, and political freedom. For this reason, we will discuss them together. As predicted, all these variables are statistically significant with projected signs. Among these variables, GDPpc, Business Regulations, and Market Regulations are positively associated with Entrepreneurship, while Unemployment Rate is negatively associated with entrepreneurship. There is no doubt that more favourable economic conditions would encourage people to run their businesses; however, better conditions would also reduce the need for people to run their own businesses.

Discussions

There is no doubt that institutional trust is the foundation for economic prosperity and all human activities performed by more than one person (Bjørnskov & Svendsen, 2013; Arrow, 1972; Acs, 2006). However, the point is that higher institutional trust also helps better welfare and working conditions of paid employment, which reduces the need for setting up a business. So, the relationship between institutional trust and entrepreneurship is not straightforward, as Figure 1 explains.

On the one hand, setting a business is a choice, weighing the pros and cons of paid employment and setting up one's own business. This decision is affected by factors, personal demographics, social status, and the socioeconomic situation of the community and the country. The effects of these factors can be empirically estimated.

However, on the other hand, the effects of these factors on entrepreneurship may vary from country to country. The estimation results only reflect these relationships in the circumstances of these transitional countries. To understand the complexity of how these factors affect entrepreneurship, we have to consider the market conditions in these countries. Self-employment was highly restricted under the communist regime. The past communist experience affected the subsequent economic behaviour of the people in transitional countries. For example, Laudenbach, Malmendier, and Niessen-Ruenzi (2020) demonstrate the long-lasting effects of experiencing communism on the attitudes toward financial markets in the area that was East Germany, three decades after the German unification.

The above argument can be echoed by the differences in estimation results between the former Soviet Union countries and non-former Soviet countries, as shown between Model 4 and Model 5. There are differences between these two samples regarding the values of the coefficients and level of statistical significance, for example, with variables of Age, Number of Children, and University education. As our research interest, we will only discuss the variable University. The coefficient of University for FSU is only 0.0175 and not statistically significant; the coefficient for non-FSU is 0.0657, about four times that of FSU and statistically significant 0.001 level. Based on the estimation, in general, we can say that Entrepreneurship is positively associated with university education in the non-Former Soviet Union countries, but not in the Former Soviet Union countries. However, further interpretation of these results is challenging. For example, given the framework illustrated in Figure 1, this difference can be interpreted in two ways: First, in the FSU countries, people with higher education can easily find a paid job, which reduces the need for running their own business; Second, in the Former Soviet Union countries, the market conditions are not favourable for individuals to run their own business. Possibly, all of these two interpretations are true. However, given our understanding of the situation in the Former Soviet Union countries, we tend to believe that the second explanation is more convincing. If this is true, the insignificant role of education indicates a higher level of "crony capitalism" compared with other non-Former Soviet Eastern European countries. The difference between the Former and non-Former Soviet Union countries in the relationship between institutional trust and entrepreneurship echoes the observations that innovation is most likely to occur within a favourable entrepreneurial ecosystem consisting of institutions, active agencies, and surrounding cultures (Feldman, Siegel & Wright, 2019, Zoltan et al., 2018). The source of slower development in the Former Soviet Union countries is a much longer communist rule in these countries, leading to a slower institutional change (Estrin & Mickiewicz, 2010).

Summary and Conclusions

Institutions set up the rules of games in social transactions, which reduce uncertainty and unproductive and no-value-added activities by reducing rent-seeking and organized crime (Baumol, 1996), and therefore reduce social costs. Trust in institutions is part of the game for economic efficiency. So, by intuition, a higher level of institutional trust would lead to a higher

level of entrepreneurship. However, empirical evidence may indicate that this relationship is not straightforward since a higher level of institutional trust improves the conditions both for entrepreneurship and paid employment. We believe that choosing to be an entrepreneur is an individual's choice made by weighing the conditions of running a business, including institutional trust and market regulations, against paid employment. Understanding the relationship between institutional trust and entrepreneurship may help recognize socioeconomic conditions and help the government develop better social and economic policymaking.

This study examines the effects of institutional trust on entrepreneurship in 27 transitional countries using the 2016 Life in Transitions Survey. This study estimates the full sample and four sub-datasets: males and females, former Soviet Union countries, and non-former Soviet Union countries. Two seemingly counterintuitive points are highlighted as follows:

1. Institutional Trust has a strong and negative correlation with Entrepreneurship across all the sub-datasets, both the former Soviet Blocks and other transitional countries, males and females. These results consistently show a negative association between Institutional Trust and Entrepreneurship. However, this cannot be interpreted as evidence for the negative effect of institutional trust on entrepreneurship. Given our analytical framework, this counter common sense phenomenon would be instead interpreted as: When the institutional trust was high, individuals would rather choose to have a paid job instead of running their own business. The statistical negative effect of trust on entrepreneurship does not mean that policy makers should never reform institutional systems for a higher level of social trust. Instead, it means that the business environments were not favourable, and the government needs to build institutional trust and facilitate better business conditions in order to promote entrepreneurship. One point is sure, the higher institutional trust supports a higher level of efficiency in the outcomes of entrepreneurship and innovative activities, but it does not necessarily lead to higher-level participation in entrepreneurship activities. Higher-level participation in entrepreneurship activities is grounded on favourable government regulations and policy, culture and tradition. In short, the totality of place and institutional trust are two elements amongst all considerations.
2. Having a university degree, as an indicator of possessing knowledge, skills, and higher capacity to run a business, did increase the chance to be an entrepreneur for these transitional countries in general. However, this relationship is not statistically significant for the former Soviet Union countries. A possible explanation is that the market mechanism was not yet developed in the former Soviet Union countries, and running a business at least partially depended on other factors, such as relationships with government officers.

The estimations in this study illustrate a picture of a specific part of life in Eastern European transitional countries and former Soviet Union countries: how individuals made their decisions to run a business considering all their characteristics and factors beyond their control. Given our framework, institutional trust has positive effects both on paid employment and entrepreneurship. With this framework, given the socioeconomic circumstances, higher institutional trust facilitated better working conditions for paid work and, therefore, suppressed people from running their own businesses. In other words, people choose to run their own business just because institutional trust is low. As a result, a negative relationship between institutional trust and entrepreneurship appeared. This means that a higher level of institutional trust does not necessarily lead to a higher-level entrepreneurship. Entrepreneurship is an important mechanism in facilitating selection process, diversity and knowledge spillover as evidenced in empirical studies (Audretsch & Keilbach, 2004). In the meanwhile, all the relevant macro level conditions, policy factors, government size and taxation function as entrepreneurial ecosystems (Audretsch & Belitski 2021; Audretsch, Belitski, Chowdhury & Desai, 2021). If a higher level of institutional trust is not associated with a higher level of entrepreneurship activities, the implication is that either the social contexts are not favourable for innovation, or the government policy is insufficient to facilitate selection process and innovation. In this case, economic development depends merely on a process accumulation of production capital rather than relying on innovation. So, these findings only reflect the behaviours of individuals of these transitional countries and may not be generalized to other social contexts.

Meanwhile, because institutional trust is the basis both for the marketplace of paid employment and entrepreneurship, the relationship between institutional trust and entrepreneurship is often confusing in empirical studies. What we can understand based on our estimation is an individual's choice behaviour in given circumstances. Understanding beyond this point needs a more sophisticated framework and more empirical evidence. Designing a better framework would be an interesting area for further study.

Three decades after the transition, many of these transitional countries are still far from the Western market economy, but a type of “crony capitalism,” under which the success of a business operation mainly depends on a nexus between the businesspeople, government officials and the political class. Corruption has been prevalent, which affected the economy in these transitional countries (Aidt, 2009; Habibov et al., 2019). For those reasons, life satisfaction levels remained lower for a long time (Easterlin, 2015). Corruption and rent seeking create entry obstacles and distort business conducts (Aidt, 2009; Aidt et al., 2021). So, it is not a surprise that education was less important in entrepreneurship in the current Former Soviet Union countries. This problem did not arise from education but may cause deterioration in education since the devaluation of education will frustrate the demand for investment in education. Crony capitalism is a legacy of communism. The extent of crony capitalism depends on how far the economic reform and political reform have gone. The process of transition presents a very good example of path dependence. The pace of transition not only depends on the similar communist past among these countries, but also depends on how long the communist rule lasted, and more importantly, how communism took control of the country, voluntarily with unrealistic beliefs, or imposed by external forces such as in the cases of Czech Republic, Poland, Hungary, and Baltic countries. Substantial institutional changes may take generations to go through.

References

- Acs, Z. (2006). How is entrepreneurship good for economic growth? *Innovations*, 1(1), 97–107.
- Acs, Z., Arenius, P., Hay, M., & Minniti, M. (2004). Global entrepreneurship monitor: 2004 Executive Report. Babson College, London Business School, and the Kauffman Center for Entrepreneurial Leadership, London.
- Aidis, R., Welter, F., Smallbone, D., & Isakova, L. (2007). Female entrepreneurship in transition economies: the case of Lithuania and Ukraine. *Feminist Economics*, 13(2), 157–183.
- Aidt, T. (2009). Corruption, institutions, and economic development. *Oxford Review of Economic Policy*, 25(2), 271–291.
- Audretsch, D.B., Belitski, M., Chowdhury, F. & Desai, S. (2021). Necessity or opportunity? Government size, tax policy, corruption, and implications for entrepreneurship. *Small Business Economics*. <https://doi.org/10.1007/s11187-021-00497-2>
- Audretsch, D. B., & Belitski, M. (2021). Towards an entrepreneurial ecosystem typology for regional economic development: the role of creative class and entrepreneurship. *Regional Studies*, 55(1), 1–22.
- Audretsch, D. B., Belitski, M., & Desai, S. (2019). National business regulations and city entrepreneurship in Europe: A multilevel nested analysis. *Entrepreneurship Theory and Practice*, 43(6), 1148–1165.
- Audretsch, D., & Keilbach, M. (2004). Entrepreneurship and regional growth: An evolutionary interpretation. *Journal of Evolutionary Economics*, 14(5), 605–616.
- Arrow, K. J. (1972). Gifts and Exchanges. *Philosophy & Public Affairs*, 1(4), 343–362.
- Baker, T., Gedajlovic, E., & Lubatkin, M. (2005). A framework for comparing entrepreneurship processes across nations. *Journal of International Business Studies*, 36(5), 492–504.
- Baker, T., & Pollock, T. G. (2007). Making the marriage work: the benefits of strategy's takeover of entrepreneurship for strategic organization. *Strategic Organization*, 5(3), 297–312. <https://doi.org/10.1177/1476127007079957>

- Baumol, W. J. (1996). Entrepreneurship: Productive, unproductive, and destructive. *Journal of Business Venturing*, 11(1), 3–22.
- Bjørnskov, C., & Svendsen, G.T. (2013). Does social trust determine the size of the welfare state? Evidence using historical identification. *Public Choice*, 157, 269–286. <https://doi.org/10.1007/s11127-012-9944-x>
- Brush, C.G., de Bruin, A., & Welter, F. (2009). A gender-aware framework for women's entrepreneurship. *International Journal of Gender and Entrepreneurship*, 1(1), 8-24.
- Carlen, J. (2016). *A brief history of entrepreneurship: The pioneers, profiteers, and racketeers who shaped our world*. Columbia University Press.
- Clark, K., & Drinkwater, S. (1998). Ethnicity and self-employment in Britain. *Oxford Bulletin of Economics and Statistics*, 60(3), 383–407.
- Dvoutely, O. (2018). How to analyse determinants of entrepreneurship and self-employment at the country level? A methodological contribution. *Journal of Business Venturing Insights*, 9(C), 92-99.
- Easterlin, R.A. (2015). Happiness and economic growth - The evidence. In W. Glatzer, L. Camfield, V. Møller, & M. Rojas (Eds.), *Global handbook of quality of life* (pp. 283-299). Springer.
- Estrin, S., & Mickiewicz, T. (2010). Entrepreneurship in transition economies: The role of institutions and generational change. IZA Discussion Papers 4805, Institute of Labor Economics (IZA).
- European Bank for Reconstruction and Development (EBRD). (2016). *Life in transition after the crisis*. EBRD.
- Feldman, M., Siegel, D.S., & Wright, M. (2019). New developments in innovation and entrepreneurial ecosystems. *Industrial and Corporate Change*, 28(4), 817-826.
- Fritsch, M., Pylak, K., & Wyrwich, M. (2021). Historical roots of entrepreneurship in different regional contexts – the case of Poland. *Small Business Economics*. <https://doi.org/10.1007/s11187-021-00535-z>
- Fritsch, M., & Wyrwich, M. (2014). The long persistence of regional levels of entrepreneurship: Germany, 1925–2005. *Regional Studies*, 48(6), 955–973.
- Fuchs-Schündeln, N., & Schündeln, M. (2020). The long-term effects of communism in Eastern Europe. *The Journal of Economic Perspectives*, 34(2), 172–191.
- Grogan, L., & Koka, K. (2010). Young children and women's labour force participation in Russia, 1992–2004. *Economics of Transition and Institutional Change*, 18(4), 715–739.
- Habibov, N. (2011). Public beliefs regarding the causes of poverty during transition: Evidence from the Caucasus, Central Asia, Russia, and Ukraine. *International Journal Sociology and Social Policy*, 31(1/2), 53-74.
- Habibov, N., Fan, L., & Auchynnikava, A. (2019). The effects of corruption on satisfaction with local and national governments. Does corruption' grease the wheels'? *Europe-Asia Studies*, 71(5), 736-752.
- Hamilton, B. H. (2000). Does entrepreneurship pay? An empirical analysis of the returns to self-employment. *Journal of Political Economy*, 108(3), 604–631.
- Henrekson, M., & Sanandaji, T. (2014). Small business activity does not measure entrepreneurship. *Proceedings of the National Academy of Sciences*, 111(5), 1760–1765.
- Hömann, H-H., & Welter, F. (2005). *Trust and entrepreneurship: A west-east perspective*. Edward Elgar.
- Kwon, I., & Sohn, K. (2021). Trust or distrust: entrepreneurs vs. self-employed. *Small Business Economics*, 56, 1553-1570.
- Laudenbach, C., Ulrike M., & Alexandra N-R. (2020). The long-lasting effects of experiencing communism on attitudes towards financial markets. *NBER Working Paper*, 26818.
- Lazear, E. (2005). Entrepreneurship. *Journal of Labor Economics*, 23(4), 649–680.
- Lewicki, R, & Bunker, BB. (1996). Developing and maintaining trust in work relationships. In: R.M. Kramer & T.R. Tyler (Eds.), *Trust in organizations: Frontiers of theory and research*, (pp.114–139). Sage.

- Liao, J., & Welsch, H. (2005). Roles of social capital in venture creation: Key dimensions and research implications. *Journal of Small Business Management*, 43(4), 345-362.
- Meier, M., & J. Stiglitz (Eds.) (2001). *Frontiers of development economics: The future in perspective*. Oxford UP and World Bank.
- Navale, A.B. (2013). Developing entrepreneur skills for corporate work. *Research Directions*, 1(4). Retrieved Feb 15, 2021, from <https://web.archive.org/web/20170329060112/http://researchdirection.org/UploadArticle/48.pdf>
- Nikolaev, B.N., Boudreaux, C.J., & Palich, L. (2018). Cross-country determinants of opportunity and necessity, entrepreneurship: Accounting for model uncertainty. *Journal of Small Business Management*, 56(S1), 243-280.
- Parker, S.C. (2009). *The economics of entrepreneurship*. Cambridge University Press.
- Shane, S., & Venkataraman, S. (2000). The promise of entrepreneurship as a field of research. *Academy of Management Review*, 25(1), 217-226.
- Smallbone, D., & Welter, F. (2010). Entrepreneurship and government policy in former soviet republics: Belarus and Estonia compared. *Environment and Planning C: Government and Policy*, 28(2), 195-210.
- Sohn, K., & Kwon, I. (2018). Does trust promote entrepreneurship in a developing country? *The Singapore Economic Review*, 63(5), 1385-1403.
- Schwartz, S., & Bardi, A. (1997). Influences of adaptation to communist rule on value priorities in Eastern Europe. *Political Psychology*, 18(2), 385-410.
- van der Sluis, J., van Praag, M., & Vijverberg, W. (2008). Education and entrepreneurship selection and performance: A review of the empirical literature. *Journal of Economic Surveys*, 22(5), 795-841.
- Vladasel, T. L. (2019). Birth order, family size, and sibling sex composition effects in entrepreneurship. *Academy of Management Annual Meeting Proceedings*, 2019(1), 11723.
- Welter, F. (2012). All you need is trust? A critical review of the trust and entrepreneurship literature. *International Small Business Journal*, 30(3), 193-212.
- Welter, F., & Becker, T. (2020). Moving contexts onto new roads: Clues from other disciplines. *Entrepreneurship Theory and Practice*, 45(5), 1154-1175. <https://doi.org/10.1177/1042258720930996>
- Williamson, O.E. (1993). Calculativeness, trust, and economic organization. *Journal of Law & Economics*, 36(1), 453-486.
- Wong, Y. C. (1986). Entrepreneurship, marriage, and earnings. *The Review of Economics and Statistics*, 68(4), 693-699.
- Zahra, S., Yavuz, R.I., & Ucbasaran, D. (2006). How much do you trust me? The dark side of relational trust in new business creation in established companies. *Entrepreneurship Theory and Practice*, 30(4), 541-559.
- Zoltan J. A., Estrin, S., Mickiewicz, T., & Szerb, L. (2018). Entrepreneurship, institutional economics, and economic growth: an ecosystem perspective. *Small Business Economics*, 51(2), 501-514.
- Zucker, L.G. (1986). Production of trust: Institutional sources of economic structure, 1840-1920. *Research in Organizational Behavior*, 8, 53-111.

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Appendix

Table 1: Descriptive statistics.

Variable	Description	Mean	SD	Min	Max	Source
Outcome variable						
Tried to set up a business	Have the experience of setting up a business = 1, otherwise =0.	0.124	0.329	0	1	LiTS
Predictors						
Institutional Trust	This is the respondent's sampling unit mean of the sum of Likert scale values of three items: trust in ministers, trust in parliament, and trust in courts.	7.936	2.511	3	15	LiTS
Age	Age in years	48.560	17.441	18	95	LiTS
Female	If the respondent was female, the value is 1.	0.570	0.495	0	1	LiTS
Married	If the respondent was married, the value is 1.	0.586	0.493	0	1	LiTS
Number of Children	Number of children in the household	0.655	1.033	0	8	LiTS
University	If the respondent had a bachelor's degree or higher, the value is 1.	0.403	0.490	0	1	LiTS
Better Economy	If the respondent agreed that the economic situation in the country was better today than around 4 years ago, the value =1, otherwise =0	0.278	0.448	0	1	LiTS
Better Political Situation	If the respondent agreed that the political situation in the country was better today than around 4 years ago, the value =1, otherwise =0	0.252	0.434	0	1	LiTS
Consumptions	Decile of household consumption per month, adjusted to equivalent scale.	5.497	2.872	1	10	LiST
GDPpc	GDP per capita adjusted by purchasing power parity (PPP) of the country in 2016, in 1,000.	18.615	9.519	2.985	35.140	World Bank, 2017
Unemployment rate	Unemployment rate of the country in 2016	0.113	0.095	0.040	0.511	World Bank, 2017
Business Regulations	Business regulations by country	6.693	0.721	5.28	8.34	FI (2019)
Market Regulations	Labor market regulations by country	6.615	0.747	5.09	8.12	FI (2019)
Democracy Index	Democracy index by country 2016	5.560	1.835	1.89	7.85	The Economist (2017)
Instrumental variable						
Persecuted	This is the respondent's sampling unit mean of the sum of four items: whether a) the respondent, b) immediate families, c) grandparents, and d) any other relatives experienced persecution, torture, or any acts of violence by the government before the transition (1989, or 1991).	0.145	0.232	0	3.950	LiTS

Sources:

The Economist Intelligence Unit Limited (2017). Democracy Index 2016: Revenge of the “deplorables”.

FI (Fraser Institute). (2019): Economic Freedom of the World: 2019 Annual Report.

World Bank. (2017). World Development Indicators. The World Bank. <https://databank.worldbank.org/data/source/world-development-indicato>

Table 2-1: The first stage of 2SLS model for the full sample, Male, Female, FSU and Non-FSU samples, outcome variable: Institutional trust (instrumented).

	M1 Full Sample	M2 Male Sample	M3 Female Sample	M4 FSU Sample	M5 Non-FSU Sample
	b/se	b/se	b/se	b/se	b/se
<i>Independent Variables:</i>					
Age	0.0008 (0.0005)	0.0017* (0.0008)	0.0038 (0.0007)	0.0001 (0.0008)	-0.0012 (0.0006)
Female	0.0208 (0.0159)			0.0737** (0.0242)	-0.0237 (0.0211)
Married	0.0725*** (0.0169)	0.0675* (0.0276)	0.0771*** (0.0220)	0.0324 (0.0263)	0.1052*** (0.0221)
Children	0.0018 (0.0089)	-0.0082 (0.0134)	0.0086 (0.0119)	0.0193 (0.0115)	-0.0214 (0.0138)
University	-0.0232 (0.0172)	-0.0188 (0.0259)	-0.0275 (0.0232)	-0.0722** (0.0245)	0.0273 (0.0098)
Better Economy	0.4737*** (0.0230)	0.4893*** (0.0346)	0.4576*** (0.0308)	0.5384*** (0.0379)	0.4355*** (0.0291)
Better Political Situation	0.5635*** (0.0244)	0.5657*** (0.0366)	0.5564*** (0.0326)	0.6535*** (0.0370)	0.4853*** (0.0324)
Country dummies	YES	YES	YES	YES	YES
<i>Instrumental variable:</i>					
Persecuted	-0.1700*** (0.0373)	-0.1727** 0.0553	-0.1139* (0.0507)	-0.3167*** (0.0809)	-0.1265*** (0.0424)
Constant	7.960*** (0.0509)	7.9155*** (0.722)	7.998*** (0.0670)	12.7978*** (0.0725)	7.960*** (0.0572)
R-squared	0.6242	0.6228	0.6287	0.7623	0.2610
F-statistics	1870.19	837.85	1101.56	2836.03	346.96
Number of cases	39439	17287	22152	16821	22618

Notes:

Country dummies are not reported.

Standard errors are reported in parentheses.

*: $p < 0.05$, **: $p < 0.01$, ***: $p < 0.001$.

Source: Authors' calculation.

Table 2-2: 2SLS for the full sample, Male, Female, FSU and Non-FSU samples, outcome variable: Entrepreneurship.

	M1 Full Sample	M2 Male Sample	M3 Female Sample	M4 FSU Sample	M5 Non-FSU Sample
	b/se	b/se	b/se	b/se	b/se
<i>Independent Variables:</i> Institutional Trust	-0.2961*** (0.0791)	-0.3821** (0.1421)	-0.3380* (0.1709)	-0.2462** (0.0835)	-0.3322* (0.1296)
Age	-0.0004 (0.0002)	-0.0003 (0.0004)	-0.0004 (0.0003)	-0.0008** (0.0002)	-0.0000 (0.0003)
Female	-0.0635*** (0.0060)			-0.0428*** (0.0102)	-0.0838*** (0.0087)
Married	0.0441*** (0.0083)	0.0620*** (0.0155)	0.0413** (0.0156)	0.0322*** (0.0090)	0.0559*** (0.0160)
Number of Children	0.0089** (0.0032)	0.0099 (0.0061)	0.0072 (0.0048)	0.0100* (0.0041)	0.0056 (0.0060)
University	0.0396*** (0.0065)	0.0483*** (0.0119)	0.0310** (0.0102)	0.0175 (0.0100)	0.0657*** (0.0098)
Better Economy	0.1367*** (0.0382)	0.1913** (0.0709)	0.1443 (0.0789)	0.1096* (0.0467)	0.1514** (0.0573)
Better Political Situation	0.1691*** (0.0454)	0.2136** (0.0820)	0.1943* (0.0958)	0.1716** (0.0558)	0.1588* (0.0641)
Country dummies	YES	YES	YES	YES	YES
Constant	2.5278*** (0.6265)	3.2018** (1.1179)	2.7997* (1.3617)	3.3373** (1.0669)	2.8057** (1.0276)
Wald Test	605.93***	174.74*	205.94***	410.08***	237.38***
<i>Endogeneity test</i>					
Durbin Test	39.46***	24.27***	16.13 ***	18.21***	22.98***
Wu-Hausman Test	39.46***	24.26***	16.12 ***	18.21***	22.99***
Number of cases	39439	17287	22152	16821	22618

Notes:

Country dummies are not reported.

Standard errors are reported in parentheses.

*: $p < 0.05$, **: $p < 0.01$, ***: $p < 0.001$.

Source: Authors' calculation.

Table 3: 2SLS Regression for more household and country variables (full sample), outcome variable: Entrepreneurship.

<i>Outcome variable:</i> Entrepreneurship	M6	M7	M8	M9	M10
	b/se	b/se	b/se	b/se	b/se
<i>Independent Variables:</i> Institutional Trust	-0.2025***	-0.2412***	-0.2556***	-0.3721***	0.2140***
	(0.0363)	(0.0490)	(0.0532)	(0.0969)	(0.0472)
Age	-0.0011***	-0.0010***	-0.0017***	-0.0018***	-0.0005*
	(0.0003)	(0.0003)	(0.0004)	(0.0004)	(0.0002)
Female	-0.0581***	-0.0569***	-0.0553***	-0.0497***	-0.0742***
	(0.0071)	(0.0080)	(0.0081)	(0.0098)	(0.0069)
Married	0.0421***	0.0385***	0.0354***	0.0512***	0.0129
	(0.0091)	(0.0097)	(0.0093)	(0.0122)	(0.0074)
Number of Children	0.0781***	0.0814***	0.0625***	0.1128***	-0.0068
	(0.0110)	(0.0132)	(0.0099)	(0.0259)	(0.0069)
University	0.0611***	0.0555***	0.0144	0.0600***	0.0419***
	(0.0087)	(0.0095)	(0.0085)	(0.0094)	(0.0072)
Better Economy	0.2060***	0.2494***	0.2023***	0.3123***	-0.2386***
	(0.0379)	(0.0518)	(0.0432)	(0.0818)	(0.0541)
Better Political Situation	0.3394***	0.3950***	0.3489***	0.5191***	-0.2586***
	(0.0639)	(0.0838)	(0.0760)	(0.1382)	(0.0585)
Household Consumptions	0.0056**	0.0046	0.0054*		0.0203***
	(0.0020)	(0.0025)	(0.0024)		(0.0018)
GDPpc in PPP	0.0301***				
	(0.0063)				
Unemployment Rate		-0.2399***			
		(0.0467)			
Business Regulations			0.1565***		
			(0.0305)		
Market Regulations				0.0883***	
				(0.019)	
					0.0999***
					(0.0206)
Constant	1.4714***	1.8376***	0.9276***	2.2116***	-2.0512***
	(0.2507)	(0.3558)	(0.1971)	(0.5704)	(0.4582)
Wald Test	424.53***	344.95***	341.76***	142.93***	392.26***
<i>Endogeneity test</i>					
Durbin Test	78.16***	76.31***	70.72***	90.97***	54.58***
Wu-Hausman Test	78.36***	76.50***	70.88***	91.17***	54.68***
Number of cases	26643.0000	26643.0000	25895.0000	36618.0000	25194.0000

Notes:

Country dummies are not reported.
Standard errors are reported in parentheses.
*: $p < 0.05$, **: $p < 0.01$, ***: $p < 0.001$.

Source: Authors' calculation.