

The Role of Personal and Family Background in Making Entrepreneurs in a Post-Socialist Environment

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ABSTRACT

This paper sets out to investigate entrepreneurs in Latvia, which is one of the most advanced transition countries, having joined the European Union in 2004. Empirically, the paper draws on results from a representative survey of the Latvian population, based on the method of the Global Entrepreneurship Monitor, and complemented with additional questions related to the background and experiences of Latvian entrepreneurs. Results suggest that there are significant differences between personal characteristics and family background of entrepreneurs and non-entrepreneurs in Latvia. The biggest effects on entering entrepreneurship come from having parent entrepreneurs, sibling entrepreneurs, and having higher education.

INTRODUCTION

Entrepreneurship is influenced by a variety of factors, which might differ in a transition context. Previous entrepreneurship research on transition economies has shown the environment and institutional factors to be highly relevant (e.g., Smallbone & Welter, 2006), although most research was confined to studying the legal and political environment, neglecting values and norms. Environmental influences in the meaning of culture may be reflected in both social norms, but also in a wider sense in the role models entrepreneurs draw on. Here, entrepreneurial experiences within the (wider) family were generally found to offer positive role models. Naturally, the decision to enter entrepreneurship also is influenced by the individual resource endowments of potential entrepreneurs such as access to financial capital and the level of human capital, with the latter generally being high in most transition countries.

In this context, the paper sets out to investigate entrepreneurs, their characteristics and their origins and background in Latvia, which is one of the most advanced transition countries, having joined the European Union in 2004. More specifically, the paper will analyse the following questions:

1. In which ways do entrepreneurs and non-entrepreneurs differ? Are there any characteristics and attitudes which render entrepreneurs in Latvia distinctive, compared to the general population?
2. Does family background play a role for entrepreneurship in an advanced transition context? Do role models influence the decision to enter entrepreneurship in a transition context, where private entrepreneurship officially was not allowed until the early 1990s?
3. Does human capital, measured by educational achievement, play a role for entrepreneurship in an advanced transition context?

LITERATURE REVIEW: PERSONAL AND FAMILY BACKGROUND FACTORS INFLUENCING ENTREPRENEURSHIP

Personal background: Human capital

From an individual's perspective, constituting factors of entrepreneurship are demographic characteristics such as age, gender and the individual human capital. Human capital expresses itself through factors such as the (professional) education, work experiences and previous management experiences. Research has shown that education and professional experiences positively influence entrepreneurship and business formation (e.g., Evans & Leighton, 1990). In transition economies, this takes on additional importance, given the fact, that, at least initially, most entrepreneurs had no previous private business experience. Here, several studies have drawn attention to the high education level of entrepreneurs in transition countries compared with their western counterparts. The propensity of entrepreneurs, in early stage transition conditions, to be highly educated is a consistent theme emerging from the transition literature. Kuczi and Vajda (1992) and Fogel (2001) show this for Hungary; Matusiak (2002) and Wasilczuk (2000) for Poland, and Smallbone and Welter (2001) also for the Ukraine, Belarus and Moldova. Similar results are presented for women entrepreneurs across Central and Eastern Europe (e.g., Welter et al., 2006; Wells et al., 2003). This is partly explained by the external conditions during transition where unemployment was widely spread leading well-educated people to enter entrepreneurship, although this might be expected to have changed as transition progressed.

With regard to the influence of human capital on entrepreneurship, some authors (e.g. Kolvereid, 1996) claim a more indirect influence through an effect on attitude and subjective norms, which influence the propensity for entrepreneurship. Others (e.g., Aldrich, 1999, pp. 93-96; Shane, 2003) emphasize the importance of human capital itself as a source of entrepreneurial knowledge, where education and professional experiences will both facilitate the way into entrepreneurship and shape entrepreneurial ventures. In this view, a higher level of human capital increases entrepreneurial alertness regarding opportunities as well as the ability to exploit these opportunities. We therefore assume that the higher the level of human capital, the higher will be the probability of individuals for entering entrepreneurship.

Hypothesis 1: Entrepreneurs in Latvia have a higher level of human capital compared to non-entrepreneurs.

Family background in a transition context

A common influence on entrepreneurship in western countries is family background, where family origin in general was found to offer positive role models (e.g., Shapero & Sokol, 1982). A stylized fact emerging from research shows individuals whose parents were either self employed or business owners to be more likely to become entrepreneurs than those from families without such entrepreneurial experience (e.g., Dunn & Holtz-Eakin, 2000; Laferre, 2001). Such a family background is said to transport knowledge, skills, self-confidence and also positive attitudes towards entrepreneurship, thus facilitating entry of their children into entrepreneurship.

Obviously, in a transition context, the relationship between family tradition and entrepreneurship has to be seen in relation to a country-specific context, and also related to the time when the business was first established. First of all, there are differences between countries because of different experiences with entrepreneurship under socialism as well as different pre-war development paths. For Central European countries, various studies have estimated that the

offspring of pre-socialist entrepreneurs accounted for between 25 and 40% of all private entrepreneurship during early transition (Lageman, 1995, p. 114), whilst in a 1997 survey in Ukraine, Belarus and Moldova, 'family background' was only mentioned by a handful of respondents (Smallbone & Welter, 2001). Countries such as Poland, Hungary and Czechoslovakia had a strong pre-war history of private entrepreneurship. Moreover, in Poland and Hungary small craft enterprises persisted throughout the socialist period, and in the latter country government started to experiment with entrepreneurial reforms as early as the 1970s.

Secondly, especially in early stages of transition, where there is little recent experience of private enterprise development, one would expect a lesser impact of family origin for entrepreneurship. Evidence from Poland and also East Germany suggests that 'family tradition' was a common motive given by private firms that were set up under communism (Wyznikiewicz et al. 1993; Welter, 1996), but it was less often mentioned by businesses that were started during the transition period itself (Smallbone & Piasecki, 1996). Therefore, one would expect the role of family tradition for entrepreneurship to be more important in those transition countries where certain forms of private entrepreneurship (such as craft activities) were able to exist during the communist period (Smallbone & Welter, 2001).

This differs for Latvia, which was part of the Soviet Union, and where any kind of entrepreneurship or private business ownership was forbidden until the late 1980s, when cooperative enterprises were allowed. All forms of private entrepreneurship were illegal during Soviet times. 'Entrepreneurial' behavior in such environments was mainly restricted to illegal activities such as moonlighting, the unofficial use of state machinery for private aims and tolerated theft at the working place (Dallago, 1990; Smallbone & Welter, 2001), although some functions in state firms such as the *tolkach* who was responsible for securing resources, had entrepreneurial elements because they allowed for limited decision-making. Nevertheless, some researchers are highly critical, regarding the potential of a Soviet-type system to produce entrepreneurship at all (e.g., Dallago 1997), whilst others (e.g., Rehn & Taalas, 2004) emphasize the entrepreneurial nature of everyday life in a Soviet context, which lead them to understand bargaining and bartering in order to cope with shortages as Soviet entrepreneurial activities. Taking this into account, we suggest the following hypothesis:

Hypothesis 2: Family background in any kind of entrepreneurship, as acquired throughout Soviet period, will have an impact on today's entrepreneurs in Latvia.

However, 16 years after transition started, we also might expect a different influence of family background on new entrepreneurs, as more and more people have been able to gain entrepreneurial experiences in businesses owned by parents or relatives. We therefore also propose that in Latvia as of today more entrepreneurs will come from an entrepreneurial family, compared to non-entrepreneurs.

Hypothesis 3: Family background in entrepreneurship, acquired throughout the transition period, will have a high impact on entrepreneurs in Latvia.

Finally, there could be a more indirect influence of family background on entrepreneurship, namely through social status and (consequently) through access to social ties. In his study on socialist entrepreneurs in Hungary, Szelenyi (1988) identified a so-called 'parking mechanism', where previous entrepreneurs were able to use their knowledge and capabilities to secure leading positions in state firms. This appears to confirm that cultural entrepreneurial traditions could be transported via high-level professional positions, where individuals 'parked' their entrepreneurial skills, but they were also able to use their skills insofar as they were allowed to 'practise' autonomous decision-making involving limited risk-taking (Szelenyi, 1988).

Moreover, Djankov et al. (2005) describe a transgenerational transmission, showing that parents of current entrepreneurs in Russia were less likely to have been workers during Soviet times. Related to this, studies on post Soviet societies illustrate how members of the party 'nomenclature' and so called 'red directors', i.e., individuals in leading positions in state enterprises, were able to capitalize on their networks for setting up new or privatizing existing firms (e.g., Dallago, 1997; Frydman et al., 1998; Gustafson, 1999; Smallbone & Welter, 2001, 2006). Therefore, we assume that entrepreneurs in a post Soviet context also might have been influenced in their decision of entering entrepreneurship by the social status their families had reached in Soviet times.

Hypothesis 4: Entrepreneurs in a transition context will come from more affluent and highly positioned families compared to non-entrepreneurs.

METHODOLOGY AND DATA

Empirically, the paper draws on results from a representative survey of the Latvian population, based on the method of the Global Entrepreneurship Monitor (GEM), and complemented with additional questions related to the background and experiences of Latvian entrepreneurs. Most of the additional questions asked were identical to those used by Djankov et al. (2005) in their study of entrepreneurship in Russia, China, Brazil, India, and Nigeria. Face-to-face interviews were conducted by a professional survey firm (*Latvijas Fakti*) with a total of 1,964 adults (aged 18-64 years) in May-June 2005. Interviews, on average, took 20 to 65 minutes, depending on whether a respondent was identified as a potential entrepreneur or not. Observations were then weighted by age, gender, and geographic region. A multistage survey design was implemented with 370 sampling points (primary sampling units) at the first stage.

The survey allows us to identify a number of characteristics and attitudes of entrepreneurs and non-entrepreneurs. Besides demographics, relevant questions ask for the family background (educational attainment of parents, entrepreneurial role models within the family), financial situation of the household, education and skills of the respondents, religious beliefs and perceptions of corruption. We define an entrepreneur broadly as an owner-manager of existing business, or someone in the process of establishing a business. According to the GEM methodology, on which our survey is based, our definition encompasses nascent entrepreneurs as well as owners-managers of new and established firms.

We use educational attainment, performance in school, and proficiency in English language to operationalize the concept of human capital. In particular, respondents were asked whether they were among the top 10%, or 50%, of students in basic school, secondary school, and the university. Also, respondents were asked to evaluate their proficiency in foreign languages, if any.

To measure family background in entrepreneurship respondents were asked if their relatives (e.g. parents, siblings, cousins) were involved in entrepreneurship in Soviet times, as well as post-Soviet times. Measuring family welfare, which we use as a proxy for family status is tricky because we need to know family welfare before an individual entered entrepreneurship. Thus, family welfare is proxied by asking respondents whether, in their self-assessment, their families' were doing better than average at a time when they themselves were 16 years old.

Results are analysed by comparing various characteristics between entrepreneurs and non-entrepreneurs, as well as using probit regressions with the dependent variable measuring

whether a respondent is an entrepreneur or not. In all of our analysis we account for the survey design of the data.

DIFFERENCES BETWEEN ENTREPRENEURS AND NON-ENTREPRENEURS

First, we summarize differences in individual characteristics and family background between entrepreneurs and non-entrepreneurs in Latvia. About 11 percent of all individuals in the sample were identified as entrepreneurs. We report sample means for entrepreneurs and non-entrepreneurs on various questions from the survey, along with the P-value from the test of equality of means between the two groups.

[TABLE 1 HERE]

In terms of basic demographic characteristics, as compared with non-entrepreneurs, entrepreneurs on average are somewhat younger, more likely to be male, married, and have more children. A substantially lower proportion of women entrepreneurs is consistent with what we see in other countries across the world (e.g., Brush et al., 2006; Welter et al., 2006), although the level of women's entrepreneurship in Latvia and other post Soviet countries in general is higher compared to Western European countries. There is no statistically significant difference in the proportion of religious believers (i.e. non-atheists) between entrepreneurs and non-entrepreneurs.

We find that entrepreneurs are, on average, better educated, performed better in schools, and are more proficient in foreign languages. Our main proxy for the educational attainment is a dummy variable for whether an individual has higher education (i.e. bachelor's degree or higher) or not. Admittedly, number of years of education would be a more informative proxy of educational attainment. However, there is an inevitable errors-in-variables problem because number of years of education could not be accurately imputed from the variety of educational degrees reported by the respondents. Nevertheless, we re-estimated our models using number of years of education, imputed under a set of conservative assumptions. This did not change our qualitative results.

Entrepreneurs, on average, have higher level of educational attainment. For example, an entrepreneur is twice as likely to have higher education compared with non-entrepreneur. Moreover, entrepreneurs more often reported being in the top 10% in the last two years of primary school as well as in the secondary school.¹ However, we were quite surprised to see that about 27 percent of individuals in the sample reported being among the top 10 percent of students in primary school. Although it is plausible that most of the entrepreneurs were exceptionally good students, we think part of the answer may be due to a possible greater overconfidence among entrepreneurs, as has been reported in other studies (Busenitz & Barney, 1997; Shane, 2003). We use proficiency in foreign languages as another proxy for human capital. Since most of Latvia's population is essentially bilingual (speaking both Latvian and Russian), we focused on good knowledge of English, which is measured by a dummy variable indicating whether respondent reported "rather good" or "very good" knowledge of the language. 38 percent of all entrepreneurs reported good proficiency in English, which is substantially higher than for non-entrepreneurs.

There is a strong ethnic dimension to entrepreneurship as the survey data suggest that the predominantly Russian-speaking ethnic minority is substantially less likely to be entrepreneurs. Part of the reason could be that a substantial number of Russians are not proficient in the official state language (Latvian), and, thus, may find it harder to do business in Latvia. Another

explanation might be that they have lesser financial resources needed for entering entrepreneurship, and they might be less well connected in the Latvian society. All in all, this is a surprising result which would need more analysis, in particular so, as it appears to contradict studies from the West indicating a high level of entrepreneurship in ethnic communities (e.g., Butler & Greene, 1997).

We now turn to family background of entrepreneurs. We report substantial differences in family background among entrepreneurs and non-entrepreneurs. The families of entrepreneurs were themselves better educated, more affluent, and more entrepreneurial. Firstly, 20 percent of all entrepreneurs had a father with higher education and 23 percent had a mother with higher education. This compares with 14 and 15 percent for non-entrepreneurs, respectively. Secondly, as compared with non-entrepreneurs, entrepreneurs were more likely to come from families with higher than average welfare when they were 16 years old. The reasoning behind this question follows the idea elaborated above, namely that social status and social ties might facilitate entrepreneurship. Moreover, respondents from better off families might have better access to financial capital, which was especially important in early stages of transition where the banking system did not function properly. Simple descriptive statistics are consistent with this view.

In order to analyse the influence of Soviet entrepreneurial experiences, we also asked whether the respondents' relatives were involved in legal or illegal entrepreneurship in Soviet times, as well as after the restoration of independence in early 1990s. We were surprised to see how many relatives were reported to be involved in some kind of 'entrepreneurship' in Soviet times, when profit-motivated private enterprises were essentially forbidden. 25 percent of all respondents reported that some relative of theirs was an entrepreneur during the Soviet times. While this is understandably lower than the percentage of respondents reporting a relative being an entrepreneur after independence (37%), the implications, nevertheless, are remarkable. This implies that there were substantial underground profit-seeking activities in the Soviet Union, which underlines the proposition put forward by Rehn and Taalas (2004), that Soviet entrepreneurship is a complex phenomenon. In short: Entrepreneurs are much more likely to have relatives-entrepreneurs in both Soviet and independence periods, as compared with non-entrepreneurs.

We are actually able to have a very detailed look at the family members who were reported to be entrepreneurs. Respondents were asked whether their parents, brothers or sisters, uncles or aunts, cousins, grandparents or grand grandparents were entrepreneurs. At this stage of analysis we do not distinguish between entrepreneurship in Soviet or independence time and merge them into one group. Note that there is a lower percentage of individuals reporting having entrepreneurial grandparents. This is consistent with what we know about the attitude towards entrepreneurship in the Soviet times. Another important observation is that entrepreneurs are much more likely to have entrepreneurial relatives in any group of relatives. For example, entrepreneurs are more than twice as likely to have entrepreneurial parents, compared with non-entrepreneurs. As pointed out by Djankov et al (2005), who reported similar findings in a study of Russian entrepreneurs, this is strongly suggestive of the fact that in the near future family diffusion effects would play a very important role in fostering entrepreneurship in Latvia.

To summarize, the results from the descriptive statistics are consistent with our theoretical hypotheses. Entrepreneurs are characterized by higher levels of human capital and are more likely to come from affluent, well-educated, and entrepreneurial families, thus indicating that both personal and family background plays a role in an advanced transition context such as Latvia.

RESULTS OF PROBIT REGRESSIONS

We now turn to multivariate probit regressions to perform a more rigorous analysis of the possible determinants of entrepreneurship in Latvia. In Table 2 we report estimation results from four specifications in which we include the variables which are plausibly exogenous to entrepreneurial behaviour. We begin by having a broad look at the effect of family background on entrepreneurial behaviour. The results are reported in the second column, regression (1). Then, in regression (2) we examine entrepreneurial family background in more detail. In regression (3) we add proxies for the respondent's human capital. Finally, in regression (4) we also control for age, age squared, gender, marital status, number of children, belonging to an ethnic minority, being a religious believer, and region. We do not report estimation results for the control variables since they are not central to our prior hypotheses.

[TABLE 2 HERE]

In contrast to the results from the descriptive statistics, parents' education has the expected sign but is not statistically significant in any specification when we control for entrepreneurial relatives. This result is also in contrast to the findings reported by Djankov et al. (2005) in their study of Russian entrepreneurs. The authors found that higher levels of parents' education are significantly positively associated with entrepreneurship in Russia. These results are surprising, since Latvia itself is an ex-Soviet republic, and one with a large Russian minority.

Family welfare when respondent was 16 years old has the expected sign but is not significant in any specification either, once entrepreneurship among relatives is controlled for. This result, again, is surprising, since we would expect individuals from more affluent families to have better access to financial resources needed to start their businesses. One possible explanation is that family welfare when respondent was 16 years old is a poor proxy for access to financial resources at a time when the business was set up. This explanation is appealing because of great socio-economic upheavals that took place during the transition to market economy, when fortunes of many families changed virtually overnight. Using current level of individual's household income, however, is fraught with an endogeneity problem, as current income could be a result of successful entrepreneurial activity, rather than the cause of it.² All in all, once we progress to multivariate methods, we do not find evidence that entrepreneurs in Latvia come from more affluent families.

As the educational level of parents and family wealth at the time the respondent was 16 years old also reflect the social status the family has reached, these results lead us to suggest that it is less social status which plays a role in influencing the decision to enter entrepreneurship. We therefore reject hypothesis 4.

As to the *family background in entrepreneurship*, we begin by looking at the effect of broad measures of entrepreneurial involvement. As shown in regression (1), the presence of entrepreneurial relatives, either in Soviet or after independence, is significantly correlated with the respondent's participation in entrepreneurship. However the effect of having a relative who was an entrepreneur after independence increases the likelihood of being an entrepreneur by 8 percentage points, or by more than twice as much as having a relative-entrepreneur in Soviet times. This obviously confirms hypothesis 3, which states a high impact of family background in entrepreneurship, while apparently also confirming researchers who are critical of the potential of socialism to breed capitalistic entrepreneurship. Interestingly, this result also indicates a higher importance for 'transition period' role models compared to Soviet entrepreneurial experiences.

As regression (1) clearly indicates the importance of growing up in an entrepreneurial family, we proceed by examining correlation with entrepreneurship of various members of the family. The results are first reported in regressions (2) to (4). As suggested in hypothesis 3, there is a strong and robust relationship between having entrepreneurial parents and siblings, and one's own involvement in entrepreneurship. For example, in regression (4), having parents who were (or still are) entrepreneurs increases the probability of entrepreneurship by 10.5 percentage points. Contrary to the results from descriptive statistics, having entrepreneurial uncles, aunts, godfathers/godmothers, or grandparents is not significantly correlated with entrepreneurship.

How are we to interpret these results? One possibility is that some 'entrepreneurs' in our sample inherited their business from their relatives. Although there was no such question in our survey, we think it is highly unlikely that many Latvian entrepreneurs inherited their businesses. The reason is that only 15 years ago Latvia was a centrally planned Soviet republic, where entrepreneurship was officially prohibited. Djankov et al (2005) report that, for a sample of Russian entrepreneurs, only 5% of all respondents stated inheriting their business. Another possibility is that in an entrepreneurial family there is a transmission of entrepreneurial knowledge and attitudes from one generation to another. Our findings are consistent with this view, as the correlation between the respondent's entrepreneurship and having relatives-entrepreneurs is increasing with the 'strength' of the family connection. The effect of relatives-entrepreneurs is the strongest for parents, followed by siblings, then by grandparents, then the more distant relatives like cousins, uncles, etc. These findings suggest that social learning that takes place within the closer family has a very strong effect on entrepreneurial behaviour.

However, it would be premature to conclude that there is a causal effect between family background and entrepreneurship. As with any cross-sectional regression we cannot rule out presence of omitted variables that could influence entrepreneurial behaviour of respondents and their families. Indeed, our data show that some families seem to be better educated, more affluent, and more entrepreneurial. Moreover, we also need to take into account that entrepreneurial experiences during the Soviet period are self-reported by respondents, thus probably distorted by hindsight bias of the respondent's own experiences.

Finally, we look at the effects of proxies for human capital. The results are reported in regressions (3) and (4). As in the descriptive statistics, there is a robust and significant correlation between educational attainment, performance in school, and participation in entrepreneurship. For example, according to regression (4), having a higher education would increase the likelihood of being an entrepreneur by 7.2 percentage points. However, proficiency in English language is not found to be significant in explaining entrepreneurship.

To sum up, we find evidence consistent with the hypotheses that the likelihood of entrepreneurship increases with the human capital of the entrepreneur and an entrepreneurial family background in the sense of having been exposed to entrepreneurial experiences by parents, siblings or the wider family. We do not find evidence that entrepreneurs come from more affluent families, i.e., that social status plays a role in determining entry into entrepreneurship. The most important effects on entrepreneurship are from having entrepreneurial parents, entrepreneurial siblings, and higher education. Thus, according to regression (4), one standard deviation increase in the number of individuals having entrepreneurial parents is expected to increase the percentage of entrepreneurs in adult population by 3.57 percentage points. One standard deviation increase in the number of adults having higher education is expected to increase the percentage of entrepreneurs in adult population by 2.82 percentage points. These effects are very substantial in the real-world sense, as percentage of entrepreneurs in the sample is about 11 percent. As we have mentioned earlier,

these results imply that, as Latvia moves further away from its Soviet legacy, family linkages are likely to play an even greater role in fostering entrepreneurship.

CONCLUSIONS AND IMPLICATIONS

Descriptive results suggest that there are significant differences between personal characteristics and family background of entrepreneurs and non-entrepreneurs in Latvia. Entrepreneurs are more likely to come from families that are more affluent, more educated, that are or were involved in entrepreneurship or entrepreneurial tasks through the Soviet period. For example, in Soviet times the parents of entrepreneurs were almost three times more likely to be involved in (illegal) entrepreneurial activities, compared to non-entrepreneurs, thus indicating socialism as a possible seed-bed for entrepreneurship. Entrepreneurs themselves are more educated, know more foreign languages, and have higher levels of educational achievement in schools.

Probit regressions show a slightly different picture with regard to family background. We can confirm hypotheses 1 (higher educational level for entrepreneurs), 2 (Soviet entrepreneurship experiences matter) and 3 (transition entrepreneurship experiences matter even more). In this, our results are broadly consistent with findings for other post-Soviet economies reported in the literature. For example, Djankov et al. (2005) also report that highly significant and robust correlation between having entrepreneurs in the family and entrepreneurship in Russia. We cannot confirm hypothesis 4, namely that social status of the family plays a role. From our results, we deduct that it is individual human capital and the ideas and experiences as transmitted by the (wider) family which influence the decision to enter entrepreneurship in Latvia as one example for an advanced transition context.

Interestingly, the results also illustrate that socialist entrepreneurship did play a role for today's entrepreneurs in Latvia. Not surprisingly, this decreases as transition progresses. However, in the light of an ongoing discussion of the antecedents of entrepreneurship in a transition context, this indicates a need to take the 'historical' dimension into account. Moreover, the findings suggest that the closer family plays an important role in transmitting experiences and entrepreneurial values. Both results draw attention to the need to look at entrepreneurship in its social and historical context.

Thus, the paper contributes to the ongoing discussion on what constitutes entrepreneurship in different environments in two important aspects. It discusses what constitutes entrepreneurship and where does it come from in the setting of one of those advanced transition countries. Moreover, in the context of entrepreneurship research in a transition context, the paper adds to existing research by comparing both entrepreneurs and non-entrepreneurs drawing on a large-scale representative sample. An important caveat to the above findings, however, is the possible presence of unobservable omitted variables, which simultaneously determine entrepreneurship and investment in human capital of individuals and their family members. We need a better understanding of the factors shaping entrepreneurship in the family in a (post) transition context in order to be able to identify and analyse these omitted influences.

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NOTES

¹ There was some ambiguity in the question as it was relatively uncommon for Soviet schools to have ratings of the students.

² One instance in which current income can be used as a plausibly exogenous explanatory variable is when dependent variables is whether an individual is a nascent entrepreneur, or a non-entrepreneur. In this case it can be argued that household income is not yet a result of entrepreneurial activity. However, less than 4 percent of all individuals in our sample can be classified as nascent according to the GEM methodology. We have re-estimated regression (4) with the nascent dummy, but the results for most variables were not statistically significant, including the current level of household income.

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TABLE 1. Differences between entrepreneurs and non-entrepreneurs (comparison of means).

| | Whole sample | Entrepreneurs | Non-entrepreneurs | p-value for test of difference in means | |
|---|--------------|---------------|-------------------|---|-----|
| Entrepreneurs, % | 0.11 | 1 | 0 | - | |
| Individual characteristics | | | | | |
| Age | 39.51 | 37.74 | 39.73 | 0.017 | ** |
| Females, % | 0.53 | 0.39 | 0.54 | 0.000 | *** |
| Married, % | 0.57 | 0.69 | 0.56 | 0.000 | *** |
| Number of children | 1.21 | 1.37 | 1.20 | 0.046 | ** |
| Religious believer, % | 0.77 | 0.76 | 0.77 | 0.886 | |
| Has higher education, % | 0.18 | 0.33 | 0.16 | 0.000 | *** |
| Speaks good English, % | 0.27 | 0.38 | 0.25 | 0.001 | *** |
| Ethnic minority, % | 0.42 | 0.30 | 0.43 | 0.000 | *** |
| Top 10% in basic school (self reported), % | 0.27 | 0.41 | 0.25 | 0.000 | *** |
| Top 10% in secondary school (self reported), % | 0.23 | 0.32 | 0.22 | 0.012 | ** |
| Family characteristics | | | | | |
| Father had higher education, % | 0.15 | 0.20 | 0.14 | 0.029 | ** |
| Mother had higher education, % | 0.16 | 0.23 | 0.15 | 0.014 | ** |
| Family welfare when 16 yrs old was above average, % | 0.16 | 0.22 | 0.15 | 0.024 | ** |
| Family welfare when 16 yrs old was below average, % | 0.22 | 0.17 | 0.23 | 0.042 | ** |
| A relative was an entrepreneur in Soviet times, % | 0.25 | 0.39 | 0.23 | 0.000 | *** |
| A relative was an entrepreneur after independence, % | 0.37 | 0.57 | 0.34 | 0.000 | *** |
| A parent was entrepreneur, % | 0.15 | 0.33 | 0.13 | 0.000 | *** |
| Brother/sister was entrepreneur, % | 0.13 | 0.24 | 0.12 | 0.000 | *** |
| Uncle/aunt or godfather/godmother were entrepreneurs, % | 0.13 | 0.21 | 0.12 | 0.006 | *** |
| A cousin was entrepreneur, % | 0.15 | 0.23 | 0.14 | 0.005 | *** |
| A grandparent was entrepreneur, % | 0.04 | 0.09 | 0.04 | 0.020 | ** |

Note: Means and standard errors (and P-values) are adjusted for sampling weights, stratification, and clusters (primary sampling units). * significant at 10%; ** significant at 5%; *** significant at 1%.

TABLE 2. Entrepreneurship, family background and human capital

| | (1) | (2) | (3) | (4) |
|---|---------------------|---------------------|---------------------|---------------------|
| Father had higher education | 0.024 [0.027] | 0.018 [0.027] | 0.000 [0.025] | 0.019 [0.025] |
| Mother had higher education | 0.021 [0.028] | 0.023 [0.027] | 0.009 [0.025] | 0.004 [0.022] |
| Family welfare above average | 0.029 [0.023] | 0.024 [0.023] | 0.021 [0.023] | 0.030 [0.022] |
| Family welfare below average | -0.024 [0.019] | -0.022 [0.019] | -0.018 [0.019] | 0.001 [0.020] |
| Any relative was an entrepreneur in Soviet times | 0.037 [0.022]* | | | |
| Any relative was an entrepreneur after independence | 0.081 [0.020]*** | | | |
| Parents are entrepreneurs | | 0.109 [0.029]*** | 0.111 [0.030]*** | 0.105 [0.029]*** |
| Siblings are entrepreneurs | | 0.101 [0.029]*** | 0.097 [0.028]*** | 0.075 [0.027]*** |
| Uncles or aunts are entrepreneurs | | 0.031 [0.025] | 0.027 [0.025] | 0.018 [0.023] |
| Cousins are entrepreneurs | | 0.052 [0.024]** | 0.047 [0.024]** | 0.019 [0.020] |
| Grandparents are entrepreneurs | | 0.043 [0.044] | 0.051 [0.046] | 0.074 [0.048] |
| Has a higher education | | | 0.068 [0.027]** | 0.072 [0.028]*** |
| Was in top 10% in school | | | 0.057 [0.020]*** | 0.062 [0.020]*** |
| Speaks English | | | 0.001 [0.020] | 0.011 [0.019] |
| Controls | no | no | no | yes |
| Observations | 1681 | 1681 | 1662 | 1635 |

Probit regressions. Marginal effects.

Note: Whether an individual is an entrepreneur is a dependent variable in all regressions. Standard errors corrected for survey design in brackets. Marginal effects are evaluated at sample means of independent variables. Coefficient estimates and standard errors are corrected for sample weights, clusters, and stratification. The controls are gender, age, age squared, marital status, number of children, belonging to an ethnic minority, being a religious believer, and region.

* significant at 10%; ** significant at 5%; *** significant at 1%.