

THE RELATIONSHIP BETWEEN MOTIVATION TO MAKE AN OCCUPATIONAL CHOICE AND ENTREPRENEURSHIP DEVELOPMENT

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Abstract

This study develops a simple model that explains the conditions which provide a choice by persons who have entrepreneurial talent self-employment instead of paid-employment. We assume that there are two factors determine this occupational choice: expected earnings and personal values. Our theoretical results show that in order to choose a job that fits talents of a person there are two extremal conditions have to be satisfied. (1) If expected earnings are equal, a person with entrepreneurial talent will always choose entrepreneurship; (2) if a person is interested only in an interesting job regardless of the monetary side of the decision, he will always choose an entrepreneurship. That is, the differences between the expected earnings at two occupations will guarantee the 'right' occupational choices only if personal values are more altruistic than greedy. We show that Russian entrepreneurs are more greedy than altruistic. Hence, they have more chances to get an occupation that does not fit their talent.

Keywords: occupational choice model, entrepreneurship, values, Russia

JEL code: L26, A13, M21

Introduction

Entrepreneurship is one of the key determinants of the economic growth. It enhances competition, innovations and supports the growth of productivity (Wennekers and Thurik, 1999; van Stel, Carree, Thurik, 2005). Since the development of an entrepreneurship may stimulate the growth of the wealth.

The entrepreneurship development depends on national, regional and individual indicators (Chepurenko, 2015). In this study, we focus our attention on the relationship between personal values that determine the choice between self-employment and paid-work and how these values explain the output at one of the chosen occupation. Thus we make an attempt to provide the link between the motivation for an occupation and future success.

The majority of the recent studies which are close to our research topic are empirical. They indicate that personal characteristics are important for the occupational choice, i. e a choice between types of entrepreneurship or a choice between entrepreneurship and a paid-work. That is, this choice is not a random, it is a reasonable decision and it is based on personal values (Krueger, Reilly, Carsrud, 2000; Krueger, 2007; Hayton and Cholakova, 2012; Fayolle and Liñán, 2014; Wales et al., 2016). Krueger (2007) indicate that there is a gap in knowledge regarding linkages between personal values which drive an occupational choice and future successes or failures in a chosen occupation.

There are several attempts to fulfil this gap. For example, Weitzel et al. (2010) show that egocentric individuals became entrepreneurs in industries that do not increase welfare or even destroy it. Haynes et al. (2015) find that greedy and arrogant entrepreneurs impede the development of their firms as an organization. These two empirical findings might be a signal that there are motives that make an occupational choice wrong, that is this career path will be unsuccessful in future. Despite to this inquiries, there is still a lack of theoretical knowledge regarding the mentioned issue. We observe that certain values might explain future output, however, there is not a theoretical explanation how these values do it. Thus, we make an attempt to fill this gap of knowledge and try to offer a theoretical model which explains the relationship between values, occupational choice and future successes or failures in a chosen occupation. In addition, we also provide a simple empirical support for our findings.

Theory

We consider a static occupational choice model at an individual level and assume that there are N homogeneous individuals in the economy. The model explains the relationship between personal values, occupational choice and future success in this occupation. We use productivity growth to measure the level of success, i. e. the entrepreneurship development:

Definition 1. Productivity p is a ratio of y to H (or $p = y/H$), where y is output; H is labour input.

Assume that an output is determined by Cobb-Douglas function with constant return to scale: $y = AK^\alpha H^{1-\alpha}$, where A — total factor productivity (TFP); K is a capital input; H is a labour input.

Definition 2. The development of a firm is $dy > 0$, where $dy = \frac{\partial y}{\partial A} * dA + \frac{\partial y}{\partial K} * dK + \frac{\partial y}{\partial H} * dH$, $dH = 0$, $dA > 0$ or $dH = 0, dK > 0$, or $dA, dK > 0, dH = 0$.

Definition 2.1 The development of a firm because of capital input growth is $dy' > 0$, where $d'y = \frac{\partial y}{\partial A} * dA + \frac{\partial y}{\partial K} * dK + \frac{\partial y}{\partial H} * dH$, $dA = 0$, $dH = 0$, $dK > 0$.

Definition 2.2 The development of a firm because of total factor productivity growth is $dy'' > 0$, where $d''y = \frac{\partial y}{\partial A} * dA + \frac{\partial y}{\partial K} * dK + \frac{\partial y}{\partial H} * dH$, $dK = 0$, $dH = 0$, $dA > 0$.

Definition 3. Let an individual has a talent which is measured by T_o and $0 \leq T_o \leq 1$. Moreover there is T level for entrepreneurship and there is T level for paid-work. Max level of talent is $T = 1$ and vice versa.

Assume an individual makes a decision and chooses an occupation from the following set of occupations: $O = \{S, P\}$, where S — entrepreneurship, P — paid-work. He makes a decision to maximize the utility function:

$$U = \max\{U_s, U_p\}, \tag{1}$$

$$U_o = a * w_o * (T_o + q_o) - b * (1 - T_o^\alpha), \tag{2}$$

where U_o is a utility of an occupation; a measures income utility, that is if this variable is higher, hence, an individual more “greedy”; b measures individual’s attitude to an occupation: higher values mean that an individual is more interested in interesting occupation which fits his talents; w_o — discounted income in an occupation. The variable $(w_o * T_o)$ means that an individual will get lower reward, if he has less talents for this occupation. The variable q_o measures opportunities to get income without exploiting talents for each occupation, for example, informal payments. The variable $(1 - T_o)$ multiplied by $-b$ shows that if an individual has less talents for an occupation, he will lose more utility from this occupation.

The equilibrium condition is

$$U_s = U_p \tag{3}$$

Or

$$a * w_s * (T_s + q_s) - b * (1 - T_s) = a * w_p * (T_p + q_p) - b * (1 - T_p) \tag{4}$$

Equilibrium income w_s^* is

$$w_s^* = \frac{b * (1 - T_s) + a * w_p * (T_p + q_p) + b * (1 - T_p)}{a * (T_s + q_s)} \tag{5}$$

The same method can be used to get w_p^* . Equilibrium level of w_s^* means if $w_s > w_s^*$, an individual will choose entrepreneurship even he has more talents for the paid-work.

Equilibrium level q_s^* is

$$q_s^* = \frac{b * (1 - T_s) + a * w_p * (T_p + q_p) + b * (1 - T_p)}{a * w_s} - T_s \tag{6}$$

Thus, if an individual has more entrepreneurship talents, there is a case when he will choose paid-work.

In addition personal values determines chances to choose an occupation that does not fit talents. The growth of a leads to lower equilibrium level of w_s^* or w_p^* and (or) q_s^* or q_p^* . The growth of b leads to higher levels equilibrium level of w_s^* or w_p^* and (or) q_s^* or q_p^* :

$$\frac{\partial w_s^*}{\partial a} < 0; \frac{\partial w_s^*}{\partial b} > 0, \tag{7}$$

$$\frac{\partial q_s^*}{\partial a} < 0; \frac{\partial q_s^*}{\partial b} > 0. \tag{8}$$

Thus, more greedy individuals have more chances to get an occupation that won’t fit their talents because of lower equilibrium levels of incomes.

Next, consider how personal values determines the development of a firm that has been established by an entrepreneur.

Theorem 1. If (1) $w_s - w_p' > w_s - w_p^*$ and $T_s > T_p$, hence $U_s > U_p$, $dy_s'' > dy_p''$ and (2) $w_s - w_p' < w_s - w_p^*$ and $T_s > T_p$, hence $U_s < U_p$, $dy_s'' > dy_p''$.

Proof:

Assume that an output at each occupation is determined by Cobb-Douglas production function:

$$y_s = AK^a H^{1-a} \quad (9)$$

and

$$y_p = AK^a H^{1-a} \quad (10)$$

First function is an output for entrepreneurship occupation, second one is for paid-work occupation. Assume that $q_s = q_p = 0$. Definition 2.2 states that the growth of an output is determined by TFP. Let $dA = rT$, where r measures the transformation of personal talents into TFP. Hence, $dA_s = rT_s$, $dA_p = rT_p$ are TFP input in outputs' growth at each occupation.

Show that expected earnings at each occupation determines the expected TFP at each occupation. Let $T_s > T_p$ and an individual knows the expected earnings at each occupation. Moreover, there is an equilibrium w_p^* which provides $U_s = U_p$. If the expected earnings from self-employment w_p' higher than w_p^* , he will choose paid-work despite to the fact that he is more talented for an entrepreneurship. In this case his TFP in the paid-work will be lower than his possible TFP in entrepreneurship.

Show how personal values determine the TFP and the output in turn. The difference between w_p^* and w_s will be lower, if an individual is less 'greedy', i. e. his a is low. In turn the difference will be higher, if he is more interested in the interesting occupation, i. e. b is high. Hence, if he is more interested in the interesting occupation, he will be more likely to choose the occupation that fits his talents. Thus, his TFP will be higher which assumes higher output and its growth. This proves the first part of this Theorem. Second part might be proved similarly.

Theorem 2. If $w_s - w_p > w_s - w_p^*$ and $T_s > T_p$ and $q_s - q_p < q_s - q_p^*$, hence $dy_s'' < dy_p''$.

Proof.

The proof is similar to the proof of the Theorem 1.

Theorem 1 and Theorem 2 mean that good institutional environment is not enough for the development of entrepreneurship. The existence of a personal potential to support business development is also important. This potential depends on talents for entrepreneurship. Thus, if a person chooses an occupation (self-employment) which fits his talents, he will demonstrate higher output because of higher TFP at this occupation than in an alternative occupation (paid-work). In order to provide this choice, it is important to keep the difference between expected earnings in self-employment and paid-work as small as possible. At this moment small differences might won't provide an impact for this choice if a person is altruistic enough.

In addition, the negative effect from income inequality depends on personal values. The Society with more "greedy" persons is more vulnerable to inefficient talent allocation. In turn, the society that has more altruistic people is less vulnerable. Thus, the high level of income inequality does not necessarily means negative effect for the economy. This effect depends on personal values.

The empirical part of this research is about empirical verification of theoretical conclusions: (1) Russian entrepreneurs are greedy, hence they occupy occupations that as a rule do not fit their talents; (2) The case when personal talents do not fit an occupation leads to a lower output.

Data and Method

We employ the latest wave of the World Values Survey (WVS) data in order to describe personal values of Russian entrepreneurs. Russian sample covers 2011-2012 years. WVS is an individual level survey and it is representative at a national level and includes questions about values, social status, occupation, individual characteristics: gender, age, education etc.

The dependent variable is an answer for the question about the occupation status of an individual: self-employed or paid-worker. List of variables which measure values is in Table 1. There are also control variables: gender, age, male, marital status.

Tab 1. Values

No	Description	Codes
	Now I'd like you to tell me your views on various issues. How would you place your views on this scale? 1 means you agree completely with the statement on the left; 10 means you agree completely with the statement on the right; and if your views fall somewhere in between, you can choose any number in between.	
1	Self-confidence (H 1)	In the long run, hard work usually brings a better life. Hard work doesn't generally bring success—it's more a matter
		0=Disagree, 9=Agree
2	Money - greedy (H 4)	Incomes should be made more equal We need larger income difference as incentives for individual effort
		0=We need larger income difference 9=We need more equality
	Now I will briefly describe some people. Using this card, would you please indicate for each description whether that person is very much like you, like you, somewhat like you, not like you, or not at all like you?	
3	Creativity (H 2)	It is important to this person to think up new ideas and be creative; to do things one's own way
		0= Not at all like me 5= Very much like me
4	Money - rich (H 4)	It is important to this person to be rich; to have a lot of money and expensive things
		0= Not at all like me 5= Very much like me
5	Success (H 5)	Being very successful is important to this person; to have people recognize one's achievements
		0= Not at all like me 5= Very much like me
6	Risk aversion (H 3)	Adventure and taking risks are important to this person; to have an exciting life
		0= Not at all like me 5= Very much like me

Source: World Values Survey; author's calculations

There are unanswered questions with "I don't know" or refusals. These observations are empty for the conventional analysis and might lead to biased results and decrease the sample. In order to resolve this problem of the existence of empty observations, two estimation methods are used: simple logit-model and multiple imputations chained equations (MICE). The latter is developed in (van Buuren, Oudshoorn, 1999). It is assumed that missed values are not dependent on other variables like gender, marital status and etc.

Following variables include missed observation: occupation status (1.3%) ; marital status (0.6%); self-confidence (7%); creativity (16.7%), money (1st) (7.2%); money (2nd) (23.9%); success (17.9%); risk (27.8%).

Results and Conclusions

Estimations are in Table 2. They indicate that the majority of self-employed are male and the optimal age for this occupation is 37 years and there is an inverted U-shape relationship between age and likelihood to be self-employed. The coefficients for variables “gender” and “age”, “age squared” are statistically significant.

Tab 2. Estimations after MICE. Logit-model. Coefficients are marginal values

Variable	(8)	(9)
Male (male=1)	0.0290*** (0.00836)	0.0291*** (0.00833)
Marital status (married=1)	0.00553 (0.00869)	0.00358 (0.00867)
Age, years	0.0110*** (0.00253)	0.0111*** (0.00253)
Age ² , years	-0.000144*** (0.00003)	-0.000144*** (0.00003)
Self-confidence	0.00152 (0.00151)	0.00153 (0.00155)
Creativity	0.0161*** (0.00482)	0.0172*** (0.00467)
Money - rich	0.00770 (0.00487)	
Money-greedy		-0.00463*** (0.00141)
Success	-0.00180 (0.00522)	-0.00102 (0.00522)
Risk aversion	0.00191 (0.00502)	0.00267 (0.00485)
Average RVI	0.0923	0.0820
Max FMI	0.1986	0.1971
Imputations	25	25
F-stat	7.17***	7.82***
N	2500	2500

Robust standard errors are in parenthesis. *** p<0.01, ** p<0.05, * p<0.1.

Source: World Values Survey; author’s calculations

Regarding values, the estimations show that self-confidence does not affect occupational choice. Hence, the belief that if a person works hard in the long-run he will be successful does not matter for choosing self-employment. At this moment, the respondents have low value for this variable which indicates that the belief is also low. Thus entrepreneurship is not chosen because of a belief that if a person has a talent and he will work hard, he would be eventually successful.

Individuals choose self-employment because they are creative. The variable “creative” is statistically significant and has a positive coefficient for all estimations: (3), (8), (9).

Entrepreneurs desire to be in a top-income group. It is supported by the statistical significance of the coefficients “money – greedy” and “money – rich”. However, the variable “money – rich” which measure desire to earn more money is significant with positive coefficient only in (4) estimations. At this moment, the variable “money – greedy” also measures attitudes to money and it is significant in estimations (5) and (9) with the negative coefficient.

The public recognition of their occupation status is not important. The variable “success” is statistically significant in (7) at 0.95 level and it is not significant in estimations (8) and (9).

Similar results are obtained for the estimation the relationship between risk attitudes and the occupational choice. The variable “risk aversion” is significant in estimation (7) and it is not significant in (8) and (9). The same results are in (Djankov et al., 2005; Djankov et al., 2006). They find out that the variable which measures risk attitude is not significant for Russian entrepreneurs.

Thus, individuals in Russia choose self-employment because they desire to earn more money. They achieve these goals because of creativity. However, they do not do this because of a belief that hard work in the long-run brings success. In other words, if such individuals have an option to choose a job which assumes higher expected income they won’t prefer an occupation which better fits their talent. At this moment, they do not desire to participate in a risky activity and them less interested in public recognition of their achievements.

Results indicate that talents of Russian entrepreneurs are less likely to be fitted with their occupation. They prefer less risky business, and they desire to earn more money as possible due to creativity. Hence, individuals choose self-employment because it offers higher income and the rest occupation even they are better fitted with their talents are less preferable, because of low earnings. Finally, it leads to a worsen talent allocation and less developed entrepreneurship compared to similar economies with lower income inequality.

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