

Make Your Publications Visible.

A Service of



Leibniz-Informationszentrum Wirtschaft Leibniz Information Centre

Hatos, Adrian; Hatos, Roxana; Bădulescu, Alina; Bădulescu, Daniel

Article

Are Risk Attitudes and Individualism Predictors of Entrepreneurship? A Multivariate Analysis of Romanian Data

Amfiteatru Economic Journal

Provided in Cooperation with:

The Bucharest University of Economic Studies

Suggested Citation: Hatos, Adrian; Hatos, Roxana; Bădulescu, Alina; Bădulescu, Daniel (2015): Are Risk Attitudes and Individualism Predictors of Entrepreneurship? A Multivariate Analysis of Romanian Data, Amfiteatru Economic Journal, ISSN 2247-9104, The Bucharest University of Economic Studies, Bucharest, Vol. 17, Iss. 38, pp. 148-161

This Version is available at: https://hdl.handle.net/10419/168908

${\bf Standard\text{-}Nutzungsbedingungen:}$

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.



http://creativecommons.org/licenses/by/4.0/

Terms of use:

Documents in EconStor may be saved and copied for your personal and scholarly purposes.

You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.

If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.





ARE RISK ATTITUDES AND INDIVIDUALISM PREDICTORS OF ENTREPRENEURSHIP IN ROMANIA?

Adrian Hatos¹, Roxana Hatos², Alina Bădulescu³ and Daniel Bădulescu^{4*}

1)2)3)4) University of Oradea, Oradea, Romania

Please cite this article as:

Hatos, A., Hatos, R., Bădulescu, A. and Bădulescu, D., 2015. Are Risk Attitudes and Individualism Predictors of Entrepreneurship in Romania? *Amfiteatru Economic*, 17(38), pp. 148-161

Abstract

This paper emerges in the context of authors' previous investigations concerning the individual determinants of entrepreneurship. More specific, it focuses on elaborating and empirically testing hypotheses related to structural push and pull factors, e.g. age, gender, education, type of residence, and also to two kinds of psycho-attitudinal factors, i.e. risk aversion and individualist vs. etatist economic ideology. While the literature review gives credit to both hypotheses, especially for the influence of risk attitudes on starting a business, this paper focuses on the analysis of self-employment by using the block-model logistic regression on 2008 Romanian EVS (European Values Survey) data. The results of multivariate analysis confirm the importance of risk aversion for entrepreneurship, as expected, but reject the hypothesis of a significant effect of individual's option for individualist vs. collectivist (or statist) continuum. It is important to notice that, contrary to expectations, two important push factors, i.e. age and education, do not correlate with self-employment and, on the other hand, risk attitude adds itself to the other effects without interacting with it. The theoretical consequences of the findings, the limits of the research and further developments are also discussed in the paper.

Keywords: entrepreneurship; changing environment, self-employment; individual predictors; risk attitudes; logistic regression

JEL Classification: L26, C35.

Introduction

Entrepreneurial activity, which is so important in terms of its contribution to economic growth, social inclusion and employment, boosting the economy etc., but so challenging in the current changing economic environment, it is also a fertile topic of research. Investigating motivations, factors, determinants and attributes that occur in the

^{*} Corresponding author, **Daniel Bădulescu** – dbadulescu@uoradea.ro



entrepreneurial process takes a central place in theoretical approaches regarding entrepreneurship. In this context are integrated our researches to investigate push and pull factors which determine the very essence of opportunity vs. necessity entrepreneurship.

In previous researches (Bădulescu and Hatos, 2013; Hatos, Ștefănescu and Hatos, 2012) we have revealed that push factors for entering self-employment predominate and that subjective benefits, i.e. a greater job satisfaction emerged from a larger autonomy for business owners, compensate the lack of economic and social outcomes of selfemployment. However, the socio-economic traits of the individual and the culturalinstitutional context are not exclusively able to explain the emergence of entrepreneurs and they admit the importance of psycho-attitudinal individual features. Among the many attitudinal and motivational variables approached in the literature on entrepreneurship, this paper focuses on two traits, which are apparently crucial in the context of an economy with low resources but strong push factors which is lacking a powerful entrepreneurial tradition, i.e. risk aversion and the valorization of economic freedom over state led businesses. The paper is organized as follows: the first part presents the literature review and the theoretical model regarding the structural push and pull factors of entrepreneurship, the attitudinal pull factors, especially risk aversion and economic individualism. The second part presents the research methodology, i.e. research hypotheses, data and research methods, the variables which are used. Next we will present and discuss the results obtained via logistic regression using blockmodeling (hierarchical regression) of the dependent variable. Finally, we draw conclusions and discuss how they are integrated in the literature.

1. Literature review

In this paper entrepreneurship is defined according to the conceptualizations of Knight (1933) and Drucker (1970), i.e. as any independent, self-employment activity where a person is risking his/her own resources, including material resources, in order to run an economic enterprise in the legal market. Most of the literature focusing on the individual predictors of entrepreneurship emphasizes the influence of gender and age. Men, for instance, show a higher prospect of being businesspersons than women (Georgellis and Wall, 2005, Walker and Webster, 2007). This regularity can be explained by the fact that the mechanisms of cultural models' reproduction and social roles' transmission favor men in acquiring active economic roles. Deficiencies of women' entrepreneurship had also been empirically confirmed in Western Romania (Dodescu, Bădulescu, Giurgiu and Pop-Cohu, 2011). Age does also have a significant positive effect on business ownership (Walker and Webster, 2007). This happens because at a younger age the changes in occupational status occur more frequently (Evans and Leighton, 1990). Moreover, the likelihood that older people have had already acquired a successful economic situation, is higher. We expect then that Romanian business owners to be similarly more likely men and of younger age.

Amit and Muller (1995) have consecrated, two decades ago, in the economic literature the distinction among *push* and *pull* reasons of entrepreneurship. They have stressed that many of the business owners are in the area of entrepreneurship because they had not find employment opportunities.

Moore and Mueller (2002) attribute to those less educated a more fragile position on the labor market and a subsequent negative relation of education with self-employment. However, in some cases, advanced education may also act as predictor of entrepreneurship:

educated people tend to start business with high added value. We can thus expect a linear relationship between education and the likelihood of owning a business.

Another possible push factor is the place of residence. In larger settlements the economic opportunities are greater and likewise the chances of finding appropriate paid job are better. Consequently, in smaller localities the labor opportunities are scarcer and the push towards self-employment more powerful (Hatos, Ştefănescu and Hatos, 2012). As a consequence, we expect a higher incidence of self-employment in the rural area and in the small towns than in the larger cities of Romania.

Despite the compelling evidence in favor of push-pull models of self-employment, the rather small explicative capacity of the variables that operationalize hypotheses derived from this model indicate that other factors of entrepreneurship still have to be looked for. Some of these appear to be, as already highlighted in Hatos, \$tefănescu and Hatos (2012), features of national context in which the economic behavior of individual has to be understood. Considering these factors there remains still a great deal of variation in entrepreneurial behavior not accounted for.

The research literature is rich in listing individual-level psycho-sociological predictors of entrepreneurship. David McClelland explains entrepreneurship through personality traits of the entrepreneur, especially through entrepreneur's need for personal fulfillment which would motivate him/her in maximizing the economic results (McClelland, 1961). Tremblay and Grasse (2007) explains the same thing through the profile's impact and previous achievements. A brief summary of the entrepreneur's personality features that encourages entrepreneurship demarcates: the need for success and self-fulfillment (Collins, Hannon and Smith, 2004), the focus on results and efficiency (Hornaday and Aboud, 1971), independence and autonomy (Engle, Mah and Sadri, 1997), initiative and creativity (Stoner and Fry, 1982), total involvement (De Vries, 1977), work strength, energy, enthusiasm (Pandey and Tewary, 1979), possibility of valorisation (Drucker, 1985).

Other explanations focusing on motivations emerge from the perception that career roles match internal, personal needs and values, and therefore the persistence of researchers in identifying motivations driving certain people to entrepreneurial career. Scheinberg and MacMillan (1988), Gatewood, Shaver and Gartner (1995) and Carter, Gartner, Shaver and Gatewood (2003) have identified 4-6 categories of entrepreneurial motives, i.e.: the need for approval, wealth, degree of communitarianism, need for personal achievement, the need for independence, the need for escape (or try something new). Finally, Birley and Westhead (1994) add also social considerations, tax reduction and models. Besides, entrepreneurs are willing to put the success of their business in the first place (even before personal or family life), to work much than they used to do as employees (Hamermesh, 1990; Chay, 1993) and to change priorities in their current activity: job security, wage expectations etc. (Kolvereid, 1996; Tyszka, Cieślik, Domurat and Macko, 2011).

Certainly, motivations weight much in a person's decision to choose an entrepreneurial career, as they are supposed to act as engines of the proposed objectives' achievement. But most of all, one should consider risk aversion and individual initiative, reflected in economic individualism and a preference for private business over state run economy as attitudinal correlates of entrepreneurship.

We could state that main motivators in choosing an entrepreneurial career reside in the need for independence, self-achievement, financial success and social recognition. On the other



hand, these motivations should be enough powerful to generate a high efficacy and to dominate fears related to job security, decisions uncertainty, nervous consumption and extra-time investment (compared to the employee status). Schumpeter or Knight recognized the role of uncertainty and self-confidence for the entrepreneurial life. Thus, entrepreneurs must bear uncertainty, they must accept that there is no certainty of success. Self-confidence makes the difference between entrepreneurs and regular individuals (Van Praag, 1999; Van Praag and Versloot, 2007). Moreover, self-confidence is strictly related to efficiency, to valorization of previous experiences and recovery after failures (Chen, Greene and Creek, 1998). Tyszka, Cieślik, Domurat and Macko (2011) found that only opportunity-driven (not necessity-driven) entrepreneurs revealed higher levels of self-confidence compared to other individuals. Moreover, even the entrepreneurs do not always prove to have high risk propensity, they have to (more that they really enjoy this!) get involved in more everyday risky investment activities than employees.

Low risk aversion encourages the choice for entrepreneurship, which is considered a truism in entrepreneurship studies (Cramer, Hartog, Jonker and Van Praag, 2002; Kan and Tsai, 2006). Individualism is also associated with higher likelihood of entrepreneurship (McGrath, MacMillan and Scheinberg, 1992, Tiessen, 1997).

Risk tolerance can be described as the risk dimension (i.e. financial risk or other risk) that an individual is willing to assume (Antonites and Wordsworth, 2009). For Casson (1990), the entrepreneurial risk is a result of the impossibility to determine with certainty the success of entering a market, or of the fact that a market innovation could have undesired results. Therefore, the immediate deduction is that the entrepreneur's success is related to the possibility of reducing risk. Zimmerer and Scarborough (1996) consider the risk as a conflictual situation where the entrepreneur himself is trapped. For them, the successful entrepreneur is the person who looks for the constructive effect of the conflictual situation which occurs when a certain risk is taken. More precisely, these entrepreneurs tend to reduce the negative reactions (fear, distress, frustration) which result from the possibility of a continuous failure face to materializing risks. In an empirical study, Simon, Houghton and Aguino (2000) have found that, due to cognitive biases, the entrepreneurs have a lower risk perception than the non-entrepreneurs (Antonites and Wordsworth, 2009). Among these cognitive biases, more important are the overconfidence (ignoring the own limits), the illusion and confidence in the "law of small numbers", i.e. there is a limited number of information that count for taking a decision (Simon, Houghton and Aquino, 2000).

Janney and Dess (2006) challenge the conventional theories speaking about entrepreneurs "assuming calculated risks" or their "risk tolerance". They state that there are important differences between the moments of assuming these risks during the entrepreneurial life and that the most important ones occur on the moment of settlement and launching of new ventures. Although the attitude towards risk over the life cycle and its contextual independence cannot be fully assumed, psychological research has shown that a certain amount of risk aversion and tolerance is a personality trait which is not influenced by the events in a person's life (Dohmen, Falk, Huffman, Sunde, Schupp and Wagner, 2011).

The individualism is the degree that individuals consider their own personal interests more important that the interests of a group where they belong to (Wagner and Moch, 1986). The entrepreneurs, as a group, were usually been considered as individualists by nature (McGrath, MacMillan and Scheinberg, 1992, Nicholson and Anderson, 2005), even Wood, Longenecker, McKinney and Moore (1988) have noticed that not all entrepreneurs match this description.

Several researches indicate that individualist persons present a reduced level of cooperation within a group (Wagner, 1995), that there is a reduced availability for team work (Kirkman and Shapiro, 2001) or that is less probable that individualist persons would perform discretionary yet helpful acts which enhance the overall performance of the group (Moorman and Blakely, 1995). On the other hand, there is evidence, at least on a general macroeconomic level, proving that individualism could present a positive relation with the social capital. Allik and Realo (2004) explain this through the fact that for individualist persons, group work could be interesting and profitable if they consider that it would provide personal benefices which could not have been obtained when working alone (Wagner, 1995; Allik and Realo, 2004; Aşcıgil and Magner, 2013).

2. Methodology

In the context of investigating attitudinal pull factors in entrepreneurship, in the following sections there will be analyzed the impact of the two factors already mentioned, i.e. risk attitudes and economic individualism. Our analysis is testing three hypotheses which are expected to be valid when changes in other variables are kept under control (*ceteris paribus*):

- Enterprise setting up is more likely among people with lower risk aversion (H1).
- Enterprise setting up is more likely among people with a liberal-individualistic thinking:
- Enterprise setting up is more likely among people who tend to think individuals are more economically responsible than the state (H2);
- Enterprise setting up is more likely among people who tend to favor private property and business over state ownership in economy (H3). (Table no. 1)

Table no. 1: Independent variables and descriptive statistics

Variable	Description	Measurement	% Missing
Age	Age at the moment of the	Numeric (in years),	
	survey	average=48.06, standard	
		deviation (sd)=17.33	
Gender	Gender	Dichotomy (male=43.7%)	
Size	Number of inhabitants	Category (<5000, 5000-	
of place	of the place of residence	100000, >100000	
of residence	of the subject	inhabitants)	
Education	Education of subject, in years	Numeric, (in years),	1%
		average=10.47, standard	
		deviation (sd)=4.1	
Education of	Education of subject's father,	Numeric, (years),	14%
father	in years	average=7.49, standard	
	-	deviation (sd)=4.95	
Education of	Education of subject's	Numeric, (years),	14%
mother	mother, in years	average=6.58, standard	
	-	deviation (sd)=4.73	
Individualism	Response to the item:	Interval (0-individual	
vs Etatism	Individual vs. state	responsibility, 10 – state	
	responsibility for providing	responsibility), average=3.89	
	individual welfare		



Variable	Description	Measurement	% Missing
Private or	Preference for private	Interval (0-private business,	
state owned	business vs. preference	10-state controlled business),	
business	for state owned business	average =4.50	
Attitude	Important for a job:	Dichotomy (job security	70 (4.7%)
toward	job security	is important=85.5%)	
economic			
risks			

In order to test these hypotheses we have used the Romanian EVS (European Value Survey) data for 2008, i.e. 1,456 valid cases regarding the indicator of belonging to the entrepreneurial category, from a representative sample of adult Romanian citizens of 1,489 total cases. The European Value Survey is one of the oldest and most prestigious European programs in comparative social research. The program surveys are conducted every nine years in the participating countries; the last such survey was conducted in 2008 and involved Romania along with 46 other nations. According to details published on the program's website (www.europeanvaluesurvey.eu) in each of the participating countries data were collected through face to face interviews of on multistage stratified random samples by specially trained interviewers. If the person selected wasn't available, each interviewer had to repeat three times the home visits, and interviews have been verified on the field.

To have a clear definition of the phenomena explained and the variable that measure them, there will be considered as entrepreneurs those individuals who, at the time of the investigation, are or had been earlier self-employed, in contrast with those who were employed throughout the entire period and those who were not active in the labor market. Thus, out of the 1,456 valid cases there were identified 84 current or former entrepreneurs (representing 5.7%).

Regarding the variables included in the analysis, there will be used as independent variables, explanatory for entrepreneurship, a number of socio-demographic and attitudinal characteristics, properly measured. In Table 1 it is shown the description of the independent variables of the study, including measurement characteristics of each of them, and their univariate statistics. Table 2 shows the equivalence scale of levels of education, in years of education, obtained from the used database.

3. Results and discussion

Some of the relationships assumed by the theory will be tested by using bivariate statistics. However, the proper test of our hypotheses requires control of all the relationships presumed in the previous research. Thus, testing of the three hypotheses will be delivered via hierarchical logistic regression of the dependent variable. In the following sections we will present both the results of the bivariate analyses (regarding both socio-demographic variables such as gender, age, education, size of residence, and attitudinal variables, namely the attitude towards risk and individualism), and later the results of the multivariate analysis.

Table 2. Equivalence scale of education levels, in years

	Years of education
Pre-primary education or none education	0
Primary education or first stage of basic education	4
General lower secondary or second stage of basic education	8
General (upper) secondary education	12
Pre-vocational or pre-technical (upper) secondary education	12
Post-secondary non-tertiary education	14
First stage of tertiary education (general)	15
First stage of tertiary education (vocational)	15
Second stage of tertiary education	17

In terms of gender, it is found that current and former male employees are 92.6% from all persons versus 7.4% current and former self-employed men, while former and current female employees are 95.54% compared to 4.5% former and current self-employed women.

The hypothesis that age has an impact on entrepreneurship is not supported, as the average age of current and former employees (i.e. 48.18 years) is similar to the average age recorded for current and former employees (i.e. 48.64 years). While there is no apparent relationship between age and likelihood of entrepreneurial activity, we notice, as expected, that people who have established businesses display lower levels of education. Measures in number of years of education, this means that entrepreneurs have, on average, almost one year less education than those who do not belong to the category of entrepreneurs (average number of years of education for employees is 10.52, while for entrepreneurs it is 9.69 years). This fact occurs because, among people with the lowest levels of education (i.e. primary and lower secondary education), the percentage of people owning their business is two times larger than in the case of people having completed tertiary level (see Figure 1).

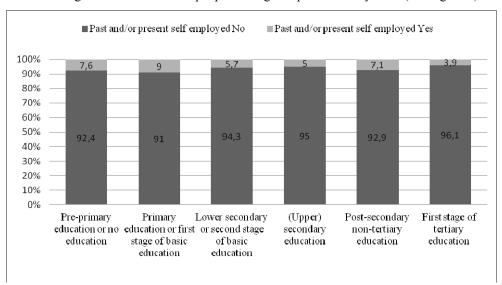


Figure no. 1: Self-employment and levels of education



As a result of our previous analyzes on EVS data for 2008 (Hatos, Ştefănescu and Hatos, 2012), residents of small settlements (i.e. villages and small towns), where employment opportunities are limited, are more likely to own a business. Indeed, the relative frequency of entrepreneurship (self-employment) in small towns with less than 5,000 inhabitants, is 8.6 per 100 people, compared to a self-employment frequency of 5.6 per 100 inhabitants in towns having 5,000-100,000 inhabitants, respectively 2.8 per 100 inhabitants in large cities with over 500,000 inhabitants.

Regarding the attitudinal variables took into consideration, the bivariate analyses of the focal study hypotheses confirm our expectations. There is a (much) larger likelihood to find entrepreneurs among those displaying risk tolerance towards economic risks (odds-ratio=1.99) (See Figure no. 2). Moreover, people who are currently or were previously involved in entrepreneurial activity consider individual as being more responsible for his/her own economic prosperity than the state, and favor the private economy over the state run economy (see Figure no. 3).

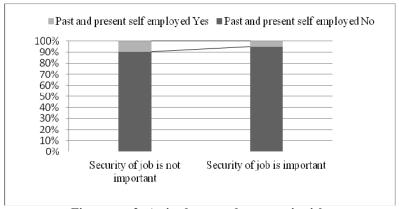


Figure no. 2: Attitude towards economic risks

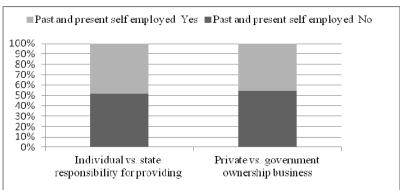


Figure no. 3: Individualist attitude and self-employment

Note: Small values of the two Likert items indicate agreement with the statements on individualism and private businesses

Regarding the multivariate results, we have to say that the small number of occurrences of self-employed individuals in the sample (i.e. N=84) might rise concerns about the

appropriate statistical technique for modeling probability (Menard, 2002). However, as it may be seen from in Table no. 3, the risk of inflated parameters did not materialize, and thus it was not necessary to use special logistic regression techniques.

Table no. 3. Blockmodel logistic regressions of entrepreneurship

	Model 1		
	В	Sig.	Exp(B)
Constant	-4.067	0.000	0.017
Male	0.492	0.049	1.636
Size city: <5000	1.221	0.001	3.392
Size city: 5000-100.000	0.994	0.011	2.701
Age	0.003	0.698	1.003
Education			
Individual vs. State responsibility for citizens' welfare			
Private vs. State business ownership			
Job security important			
-2 Log Likelihood			525.507
Nagelkerke R2			0.041

Model 2		Model 3			
В	Sig.	Exp(B)	В	Sig.	Exp(B)
-3.337	0.000	0.036	-2.256	0.002	0.105
0.563	0.027	1.756	0.569	0.027	1.767
1.121	0.004	3.067	1.144	0.003	3.140
0.887	0.026	2.429	0.985	0.014	2.678
0.000	0.950	1.000	0.000	0.983	1.000
-0.051	0.107	0.950	-0.056	0.076	0.945
			-0.010	0.815	0.990
			-0.084	0.057	0.919
		•	-0.866	0.003	0.421
		523.001			510.714
		0.047			0.074

Note. *Models were run with SPSS 21^(R).

The probability that a person in the sample to be entrepreneur (F(x)) can be expressed using the logistic function:

$$F(x) = \frac{1}{1 + e^{-(\beta 0 + \beta 1 x 1 + ...)}}$$

Reverse logistic function of probability for a person to become an entrepreneur, logit function (y) - a convenient way to express a logistic function – has the following expressions for the three models run in our study:

$$y_{\text{Model 1}} = \beta_0 + \beta_1 \text{Male} + \beta_2 (\text{Size city} < 5000) + \beta_3 (\text{Size city}: 5000-100.000) + \beta_4 \text{Age} + \epsilon$$
 (1)

 $y_{\text{Model 2}} = \beta_0 + \beta_1 \text{Male} + \beta_2 (\text{Size city} < 5000) + \beta_3 (\text{Size city}: 5000-100.000) +$

$$+\beta_4$$
Age $+\beta_5$ Education $+\varepsilon$ (2)

 $y_{\text{Model }3} = \beta_0 + \beta 1 \text{Male} + \beta_2 (\text{Size city} < 5000) + \beta_3 (\text{Size city} : 5000-100.000) +$

- + β₄Age+β₅Education+β₆(Individual/state responsability) +
- + β_7 (Private/state ownership business)+ β_8 (Job security) + ϵ (3)



According to the model fit indicators used, i.e. 2 Log Likelihood and Nagelkerke's \mathbb{R}^2 , the three models improve in relatively small proportion the accuracy of predictions of the dependent variable values compared to the model without independent variables. Introducing education produces a non-significant improvement in predictive capability. Instead, predictive capability increases by almost 50% in the third model compared to the second model (i.e. \mathbb{R}^2 increases from 0.047 to 0.074).

Socio-demographic predictors confirm in a mixed way the theoretically based expectations: all variables except education and age have significant and predicted effects on the dependent variable: entrepreneurs are more likely to be found among males, people living in small places. Age and education however, two important indicators of socio-economic status, and life-cycle moment do not seem to interact with the probability of self-employment. These results, surprising given the bivariate correlations, might be explained by the covariation of size of residence and education: the average education is positively linked to the size of residence and the presumed impact of the lack of employment opportunities in small towns and villages overlap with the poor stock of education in these types of localities.

Introduction of attitudinal predictors improves significantly the fit of the regression model, which almost doubles from 4% to 7.4% in terms of Nagelkerke's R². Among the focal independent variables, attitude towards economic risks appear to be the most important; indeed, declaring that job security is important halves the likelihood of one being self-employed. Moreover, while a preference for private business is weakly associated with entrepreneurship, preference for individual economic responsibility seems to not have impact on the type of economic behavior we are trying to model.

Given the significance tests of the logistic regression parameters, we can consider confirmed only the hypothesis of the influence of the attitudes towards risk (H1) for the settlement of a business. At least as important is the fact that this factor, according to multiple logistic regressions performed by us, does not interact with the push-pull effects but rather it is added to them: the courage to start a business "helps", but at the same time strong push and pull factors can be enough for an averagely "courageous" person to start a business.

At the same time, the hypotheses stating the effect of individualistic attitudes on entrepreneurship (i.e. H2 and H3) are not supported by data. The result contradicts with some previous researches claiming that entrepreneurs display more pronounced individualistic attitudes than those who are not self-employed (McGrath, MacMillan and Scheinberg, 1992; Nicholson and Anderson, 2005); this fact suggests either that push-pull factors and risk tolerance are enough to offset the total effect of attitudes of this kind, or that individualism as economic ideology is less correlated with individualism as personal economic motivation.

Conclusions

In our research, performed by using 2008 Romanian EVS data to model past and present self-employment, as indicator of entrepreneurship, in relation with risk attitudes and individualist vs. etatist economic attitudes when other important predictors of entrepreneurship are kept under control confirmed one of the hypotheses, i.e. the positive influence of risk tolerance on entrepreneurship. The two operational hypotheses predicting

the impact of liberal individualist attitudes on entrepreneurship were not supported by data. In line with other research (Caliendo, Fossen and Kritikos, 2009), that risk attitudes – measured in our case via the perception of importance of job security in life - explain indeed the probability of initiating a business: in Romania as well as anywhere in the world, tolerance towards risk – say courage – increases the chances of becoming an entrepreneur. Even it is possible that only starting a business requires unusual amounts of courage (Janney and Dess, 2006), our data clearly suggests that entrepreneurs display a significant higher risk tolerance which is not subject of being influences by events in life (Dohmen, Falk, Huffman, Sunde, Schupp and Wagner, 2011).

Equally important is the result that an attitudinal buildup that favors individual responsibility and private enterprise is not effective in explaining individual self-employment. In simple words, those who have rather liberal or individualist economic opinions are in no way more likely to become entrepreneurs than those with a etatist-collectivist perspective on economics nor is true the less plausible reverse.

One important limit of our results is the possible endogeneity of some the effects described by the logistic regression. It seems reasonable to suspect that risk aversion and individualistic economical attitudes can be influenced by the business endeavors of one and not only the other way around. In the recent research literature tough we find compelling evidence that risk attitudes is source of entrepreneurship (Caliendo, Fossen and Kritikos, 2009). According to the cited article, entrepreneurs coming from regular employment displayed higher levels of tolerance towards risk than the non-entrepreneurs. On the other hand, the absence of unequivocal relationship between economic individualism and entrepreneurship solves in itself the issue of endogeneity: not only we know that individualists are no more likely to become entrepreneurs than etatist-collectivists, but we may also notice the important absence of reverse causation: business ownership does not make a person more individualist and liberal in thinking.

The results of our research can be developed in many ways important for the study of entrepreneurship. Due to the uncertainties related to endogeneity, an important direction for investigating the impact of risk attitudes on the likelihood of starting a business is the longitudinal approach: our results would be quasi-experimental confirmed if, over time, people with higher risk tolerance would display higher chances to start a business. Another interesting topic which could be investigated also through a longitudinal survey regards the contextual factors which, when socioeconomic conditions are equal, prevent or stimulate a courageous or, on the contrary, a prudent person, to start a private business. Moreover, the rejection of hypotheses linking entrepreneurship liberal ideologies is not sufficiently clear, in the context of the present research, as to consider it conclusive, and thus further investigations are needed to clarify this possible correlation: it is necessary, for example, to clarify the relationship between individualistic motivation (selfishness) and individualistic ideology.

References

Allik, J. and Realo, A., 2004. Individualism-collectivism and social capital. *Journal of Cross-Cultural Psychology*, 35(1), pp.29-49.

Amit, R. and Muller, E., 1995. "Push" and "pull" entrepreneurship. *Journal of Small Business & Entrepreneurship*, 12(4), pp.64-80.

- Antonites, A. and Wordsworth, R., 2009. Risk tolerance: a perspective on entrepreneurship education. *Southern African Business Review*, 13(3), pp.69-85.
- Aşcıgil, S.F. and Magner, N.R., 2013. Is Individualism a Predictor of Social Capital in Business Incubators? *Journal of Management*, 14(5), p.113-119.
- Bădulescu, A. and Hatos, R., 2013. Entrepreneurship Versus Self-Employment in the Context of Social Changes in Romania: Individual and Contextual Factors. In: ACPI (Academic Conferences and Publishing International Limited), *Proceedings of the 8th European Conference on Innovation and Entrepreneurship: ECIE 2013*. Brussels, Belgium, 19-20 September 2013. Reading: Academic Conferences and Publishing International Limited.
- Birley, S. and Westhead, P., 1994. A taxonomy of business start-up reasons and their impact on firm growth and size. *Journal of Business Venturing*, 9(1), pp.7-31.
- Caliendo, M., Fossen, F.M. and Kritikos, A.S., 2009. Risk attitudes of nascent entrepreneurs—new evidence from an experimentally validated survey. *Small Business Economics*, 32(2), pp.153-167.
- Carter, N.M., Gartner, W.B., Shaver, K.G. and Gatewood, E.J., 2003. The career reasons of nascent entrepreneurs. *Journal of Business Venturing*, 18(1), pp.13-39.
- Casson, M., 1990. Entrepreneurship. Aldershot: Edward Elgar Publishing.
- Chay, Y.W., 1993. Social support, individual differences and well-being: a study of small business entrepreneurs and employees. *Journal of Occupational and Organizational Psychology*, 66(4), pp.285-302.
- Chen, Ch., Greene, P.G. and Creek, A., 1998. Does self-efficacy distinguish entrepreneurs from managers? *Journal of Business Venturing*, 13(4), pp.295-316.
- Collins, L., Hannon, P.D. and Smith, A., 2004. Enacting entrepreneurial intent: the gaps between student needs and higher education capability. *Education+Training*, 46(8/9), pp.454-463.
- Cramer, J.S., Hartog, J., Jonker, N. and Van Praag, C.M., 2002. Low risk aversion encourages the choice for entrepreneurship: an empirical test of a truism. *Journal of economic behavior & organization*, 48(1), pp.29-36.
- De Vries, M., 1977. The entrepreneurial personality: a person at the crossroads. *Journal of management studies*, 14(1), pp.34-57.
- Dodescu, A., Bădulescu, A., Giurgiu, A. and Pop-Cohu□, I., 2011. Women Entrepreneurship in the Western Romania. Research Results and Policy Recommendations. *Theoretical and Applied Economics*, 1(1), pp.25-48.
- Dohmen, T., Falk, A., Huffman, D., Sunde, U., Schupp, J. and Wagner, G.G., 2011. Individual risk attitudes: measurement, determinants, and behavioral consequences. *Journal of the European Economic Association*, 9(3), pp.522-550.
- Drucker, P., 1970. Entrepreneurship in business enterprise. *Journal of Business Policy*, 1(1), pp.3-12.
- Drucker, P., 1985. Innovation and Entrepreneurship. New York: Harper & Row.
- Engle, D.E., Mah, J.J. and Sadri, G., 1997. An empirical comparison of entrepreneurs and employees: implications for innovation. *Creativity Research Journal*, 10(1), pp.45-49.

- Evans, D.S. and Leighton, L.S., 1990. Small business formation by unemployed and employed workers. *Small Business Economics*, 2(4), pp.319-330.
- Gatewood, E.J., Shaver, K.G. and Gartner, W.B., 1995. A longitudinal study of cognitive factors influencing start-up behaviors and success at venture creation. *Journal of Business Venturing*, 10(5), pp.371-391.
- Georgellis, Y. and Wall, H.J., 2005. Gender differences in self-employment. *International review of applied economics*, 19(3), pp.321-342.
- Hamermesh, D. S., 1990. *A General Model of Dynamic Labor Demand*. [pdf] Available at: http://www.nber.org/papers/w3356.pdf [Accessed 4 September 2014].
- Hatos, A., Ştefănescu, F. and Hatos, R., 2012. Individual and contextual factors of entrepreneurship in Europe: cross-country comparison. *Actual Problems in Economics*, 9(135), pp.553-563.
- Hornaday, J.A. and Aboud, J., 1971. Characteristics of successful entrepreneurs. *Personnel Psychology*, pp.141-153.
- Janney, J.J. and Dess, G.G., 2006. When entrepreneurs bundle resources: toward an integration of entrepreneurial-orientation and the resource-based view of the firm. In: M. Afzalur Rahum ed., Current Topics in Management, Transaction Publishers, New Brunswick, USA, 11, pp. 157-173.
- Kan, K. and Tsai, W.D., 2006. Entrepreneurship and risk aversion. *Small Business Economics*, 26(5), pp.465-474.
- Kirkman, B.L. and Shapiro, D.L., 2001. The impact of cultural values on job satisfaction and organizational commitment in self-managing work teams: the mediating role of employee resistance. *Academy of Management Journal*, 44(3), pp.557-569.
- Knight, F.H., 1933. Risk, uncertainty and profit: with an additional introductory essay hitherto unpublished. London school of economics and political science.
- Kolvereid, L., 1996. Prediction of employment status choice intentions. *Entrepreneurship Theory & Practice*, 21(1), pp.47-57.
- McClelland, D.C., 1961. The achieving society. Princeton, NJ: Van Nostrand, pp.301-335.
- McGrath, R.G., MacMillan, I.C. and Scheinberg, S., 1992. Elitists, risk-takers, and rugged individualists? An exploratory analysis of cultural differences between entrepreneurs and non-entrepreneurs. *Journal of Business Venturing*, 7(2), pp.115-135.
- Menard, S., 2002. *Applied logistic regression analysis*. 2nd ed. (vol. 106). Thousand Oaks, CA: Sage.
- Moore, C.S. and Mueller, R.E., 2002. The transition from paid to self-employment in Canada: the importance of push factors. *Applied Economics*, 34(6), pp.791-801.
- Moorman, R.H. and Blakely, G.L., 1995. Individualism-collectivism as an individual difference predictor of organizational citizenship behavior. *Journal of Organizational Behavior*, 16(2), pp.127-142.
- Nicholson, L. and Anderson, A.R., 2005. News and Nuances of the Entrepreneurial Myth and Metaphor: Linguistic Games in Entrepreneurial Sense-Making and Sense-Giving. *Entrepreneurship Theory and Practice*, 29(2), pp.153-172.
- Pandey, J., and Tewary, N., 1979. Locus of control and achievement values of entrepreneurs. *Journal of Occupational Psychology*, 52(2), pp.107-111.

- Scheinberg, S. and MacMillan, I.C., 1988. An 11 country study of motivations to start a business. *Frontiers of Entrepreneurship Research*. Wellesley, MA: Babson College.
- Simon, M., Houghton, S.M. and Aquino, K., 2000. Cognitive biases, risk perception, and venture formation: how individuals decide to start companies. *Journal of Business Venturing*, 15(2), pp.113-134.
- Stoner, C.R., and Fry, F.L., 1982. The entrepreneurial decision: dissatisfaction or opportunity. *Journal of Small Business Management*, 20(2), pp.39-44.
- Tiessen, J.H., 1997. Individualism, collectivism, and entrepreneurship: a framework for international comparative research. *Journal of Business Venturing*, 12(5), pp.367-384.
- Tremblay, M. and Gasse, Y., 2007. L'impact des antécédents sur les perceptions, attitudes et intentions des étudiants collégiaux et universitaires à l'égard de l'entrepreneuriat. [online] Available at: http://www.strategie-aims.com/events/conferences/7-xvieme-conference-de-l-aims/communications/2057-limpact-des-antecedents-sur-les-perceptions-attitudes-et-intentions-des-etudiants-collegiaux-et-universitaires-a-legard-de-lentrepreneuriat/download [Accessed 20 October 2014].
- Tyszka, T., Cieślik, J., Domurat, A. and Macko, A., 2011. Motivation, self-efficacy, and risk attitudes among entrepreneurs during transition to a market economy. *The Journal of Socio-Economics*, 40(2), pp.124-131.
- Van Praag, C.M., 1999. Some classic views on entrepreneurship. *De Economist*, 147(3), pp.311-335.
- Van Praag, C.M. and Versloot, P.H., 2007. What is the value of entrepreneurship? A review of recent research. *Small Business Economics*, 29(4), pp.351-382.
- Wagner, J.A., 1995. Studies of individualism-collectivism: effects on cooperation in groups. *Academy of Management Journal*, 38(1), pp.152-173.
- Wagner, J.A. and Moch, M.K., 1986. Individualism-collectivism: concept and measure. *Group and Organization Management*, 11(3), pp.280-304.
- Walker, E.A. and Webster, B.J., 2007. Gender, age and self-employment: some things change, some stay the same. *Women in Management Review*, 22(2), pp.122-135.
- Wood, J.A., Longenecker, J.G., McKinney, J.A. and Moore, C.W., 1988. Ethical attitudes of students and business professionals: a study of moral reasoning. *Journal of Business Ethics*, 7(4), pp.249-257.
- Zimmerer, T.W. and Scarborough, N.M., 1996. *Entrepreneurship and new venture formation*. Upper Saddle River: Prentice Hall.