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CAN FATALISM EXPLAIN WHY ENTREPRENEURS TEND TO SAVE SO MUCH?

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ABSTRACT. According to robust empirical findings, entrepreneurial households tend to save more than non-entrepreneurial ones. This difference in saving propensity is not merely accounted by high entrepreneurial income. This paper aims to offer a better understanding of the financial behaviour of entrepreneurs. Building on previous empirical findings on the effect of fatalistic tendencies on economic behavior, we argue that fatalism may negatively affect both the decision to save and the decision of becoming an entrepreneur. Using data from the fifth and sixth wave of the World Value Survey for the empirical testing of this idea, our multivariate analysis shows that, controlling for a large set of individual and contextual traits, fatalistic beliefs discourage both choices.

JEL Classification: J24, L26, Z1

Keywords: fatalism; entrepreneurship; saving propensity; cultural beliefs and economic output

Introduction

Robust econometric evidences (Quadrini, 1999 and 2000; Carroll, 2000 and 2002; Gentry & Hubbard, 2004) show that entrepreneurial households are characterized by higher saving rates than non-entrepreneurial households. In economic literature there are various and conflicting theories explaining the relationship between attitudes towards risk, wealth accumulation and entrepreneurship.

Quadrini (2000) has shown there are large differences in asset holding and wealth mobility between entrepreneurs and workers, and a marked concentration of wealth in the hands of the former. These differences are not merely accounted for by higher entrepreneurial incomes, as entrepreneurs have higher wealth-income ratios than workers and experience greater upward mobility in the wealth-income ratio. This evidence could be interpreted as a negative relation between risk loving and wealth accumulation. In fact, if a risk-averse agent with a high level of entrepreneurial ability chooses to become an entrepreneur, then we can expect that he will save more to insure himself against entrepreneurial risks. However, the literature offers both theoretical and empirical arguments, suggesting that entrepreneurs are more risk-tolerant than non-entrepreneurs (Kihlstrom & Laffont, 1979; Guiso & Paiella, 2004; van Praag & Cramer, 2001; Cramer *et al.*, 2002).

Moreover, Carroll (2002) shows that portfolios of the rich are heavily skewed towards risky assets, particularly when it comes to investments in their own privately-held businesses. So, why do entrepreneurs tend to save more? A possible explanation is that individuals face borrowing constraints; that is, a limited ability to raise funds at the credit market. Therefore,

only the family with a higher entrepreneurial ability will be induced to save more to accumulate the capital needed to run their business. This explanation seems to be in line with the evidence on massive investments by entrepreneurs in their own firm.

However Hurst & Lusardi (2004) were not able to find evidence to support the idea that wealth matters more for businesses requiring higher initial capital.

Finally, if the only difference between entrepreneurs and workers is ascribable to credit market imperfection, why are the non-entrepreneurial investments of rich entrepreneurs riskier than the portfolio of non-rich entrepreneurs?

Carroll (2002) argues that if wealth enters as a luxury good in the utility function of entrepreneurs, it is possible to explain the tendency of rich entrepreneurs to save more. A further implication of the latter assumption is that richer people are also less at risk than the non-rich, which in turn could explain why the rich hold riskier portfolios than the rest of population and why high-wealth or high-income young households are more likely to become entrepreneurs. This last explanation also has some drawbacks. Specifically, it fails to explain the lack of diversification in the "out of their own firm" by rich people and the overconcentration of wealth in their own business. Therefore, at the state of art, there is not a single theory that may reconcile all the peculiarities that characterize the unusual saving behavior of rich entrepreneurs. This paper aims to offer a further element to explain this puzzle.

However, to give a possible explanation to the greater saving propensity of the entrepreneurs, we need first of all to clarify the notion of "entrepreneur" as used further in this text. Economic literature has furnished an overwhelming number of possible definitions of entrepreneurial talent. In this work, we will follow (Kirzner, 1973) in defining entrepreneurial talent as the ability to discover and exploit market opportunities and hence an entrepreneur – as someone who is able to discover a profit opportunity that will generate a higher expected return than what he could attain as an employee[1].

In general, occupational choices are based on people's expectations of the value of different options. Peoples' self-assessment of skills/talents, market opportunities, and eventually well-being, deriving from different occupational choices, is shaped by people's psychological traits and prior culture-based beliefs. For instance, the value of being self-employed should be more responsive to self-confidence than the value of being an employee. Overconfident individuals may attach a higher value to their skills/opportunities than other individuals (Koellinger *et al.*, 2007; Camerer & Lovallo, 1999). Since they feel better suited to govern life events, individuals characterized by an internal locus of control will attach a higher value to market opportunities relative to individuals with an external locus of control (Schiller & Crewson, 1997; Harper, 1998; Mueller & Thomas, 2001)[2].

In addition to personality-related traits, occupational choice can be influenced by cultural factors. More specifically (Guiso *et al.*, 2006) has defined culture as "those customary beliefs and values that ethnic, religious, and social groups transmit fairly unchanged from generation to generation" (p. 23).

According to (Guiso *et al.*, 2006) culture can influence occupational choice through its influence on preferences and prior beliefs. In particular, they show that trust is at least partly

[1] Note that also social entrepreneurs may fall under this definition. For the entrepreneur, the value of the opportunity is given by the reward of markets to his/her effort. Instead, the aims of social entrepreneur are not to generate market profits but to generate benefits to a segment of society or to the society as a whole (Martin and Osberg, 2007). For this reason, even though social entrepreneurs may enter in our definition of entrepreneurship, they are excluded from our analysis which aims to analyze the wealth accumulation process of entrepreneurs which is not a goal of the social entrepreneur.

[2] Locus of control refers to a person's belief about what causes the good or bad results in his/her life, either in general or in a specific area (Rotter, 1966, 1990). People's loci of control can be either internal or external, depending on whether or not they tend to believe that their actions ultimately determine personal outcomes.

culturally determined (in particular, it is influenced by religious beliefs), and that trusting others increases the probability of becoming an entrepreneur by 1.3 percentage points.

Building on these premises, our explanation is based on the idea, which is in principle compatible both with Carroll's hypothesis and with the market imperfection hypothesis, that people characterized by high fatalistic tendencies are less willing both to become entrepreneurs and to save money. The concept of fatalism is akin to the concept of locus of control developed in psychology, and can be defined as the tendency to believe that destiny is ruled by an unseen power, fate, rather than by the human's will.

Wu (2005), and Shapiro and Wu (2011) analyzed the role of fatalism in determining household saving behavior, finding that people characterized by high fatalistic beliefs are both less likely to save and less prone to exert efforts in learning about saving and investment options. Their argument runs as follows: saving decisions clearly depend on one's perception of the future and of how his or her current actions will affect the future. Fatalistic individuals believe that they have little or no control over future outcomes. Therefore, they may perceive their efforts at elaborating a saving strategy as useless.

For what regards entrepreneurship Ruiu (2014), shows that fatalistic tendencies, implying scant confidence in the link between the effort exerted in searching for an entrepreneurial project and the obtainable output, reduce the perceived probability of finding a good enough project and hence increase the level of ability (the latter determined by individual characteristics evaluated in the job market, e.g., cognitive ability) required for entering into entrepreneurship. Therefore, for a given level of ability, higher fatalistic tendencies imply a lower probability of becoming an entrepreneur. However, this result does not rule out the existence of "out of necessity" entrepreneurs, i.e., low-ability owners of low-productivity firms that decide to pursue an entrepreneurial career because they lack valid income-generating alternatives.

The difference between fatalism and locus of control is subtle, but crucial for our analysis. In general, while a personality trait can be attributed to the individual sphere, a cultural trait can be defined as a social construct characterized by a high degree of time-persistence (Church, 2000; Roland, 2004; Gorodnichenko & Roland, 2010). Therefore, if fatalism has a cultural origin, it can be argued that it is a very slow-moving belief, which is predetermined with respect to occupational choice. This in turn allows interpretation of the direction of causality from fatalism to the entrepreneurial choice and not vice versa. Regarding the cultural origin of fatalistic beliefs (Ruiu, 2013), shows that fatalism is at least in part culturally predetermined.

Summing up, our prediction is that fatalism plays a fundamental role in determining the choice of becoming an entrepreneur for high-ability individuals (and presumable more rich entrepreneurs), for which a large set of job alternatives is available. Therefore, putting together the argument proposed by Ruiu (2014) and Wu (2005), fatalism might represent a key concept for understanding why richer (and reasonably more able) entrepreneurs are more prone to save. Furthermore, the belief that all life events are under control may also induce entrepreneurs to overinvest in their own activities.[3] *Figure 1* schematizes our idea of the factors determining both the entrepreneurial choice and saving decision.

[3] Overconfidence may also exacerbate this kind of behavior. Overconfidence has been indicated as a possible belief that favors entrepreneurial choice. However, note that an overconfident individual is someone who tends to overestimate his level of skills; therefore, it is not obvious why this characteristic can favor entrepreneurship over other alternative skill-based occupations.

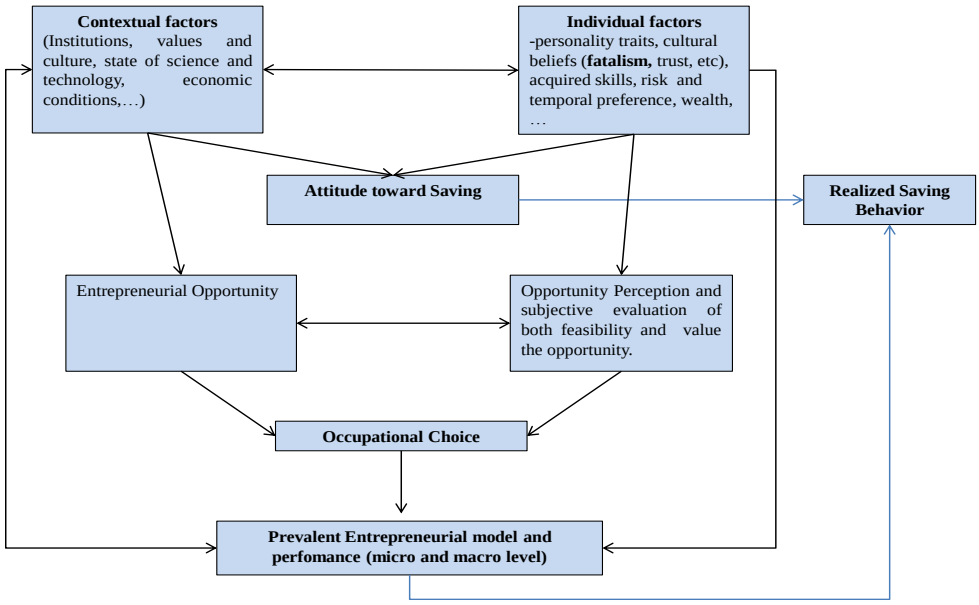

Figure 1. Entrepreneurial and saving decisions
Source: Our adaption of a conceptual scheme originally proposed by De Bruin and Ferrante (2011).

The results of some econometric analyses carried out using data from the World Values Survey (WVS) support these hypotheses. In particular, we find that once we have controlled for a very rich set of socio-demographic controls, the probability of having saved money is negatively related to the level of fatalism that characterizes an individual. At the same time, according to the model proposed by Ruiu (2014) we find that less fatalistic individuals are more likely entrepreneurs.

This work is organized as follows: in the second section, we introduce our data and our empirical strategy; in the third and in the fourth section we present our results; the last section is devoted to final considerations.

2. Data and Methodological approach

Our hypotheses about the role of fatalism can be formulated as follows:

H1 Controlling for other contextual and individual factors, the probability of saving is negatively related to fatalistic tendencies.

H2 Controlling for other contextual and individual factors, fatalism is negatively related to the probability of being an entrepreneur.

The empirical test of these hypotheses is based on data from the fifth (2005-2009) and sixth (2010-2014) wave of the World Values Survey (WVS). The WVS contains information about demographics (sex, age, education, etc.), self-reported economic conditions, political preferences, attitudes, and religion. Thanks to the wide variety of topics investigated, WVS represents a precious data source for various scientific disciplines (anthropology, demography, sociology, economics, etc.). Regarding the aims of our analysis, WVS represents the ideal source for testing our hypotheses while controlling for a vast range of possible confounding factors. Other possible data sources, even if appositely designed for the analysis of entrepreneurship, as for instance Global Entrepreneurship Monitor data, do not include questions that allows to capture a cultural trait as fatalism. The choice of the fifth and the sixth wave of the WVS is driven by the

introduction, in these rounds of the survey, of a set of questions that can be used to measure some important entrepreneurial traits and hence avoid biases related to the omission of relevant variable (e.g. creativity, risk attitude, attitude toward wealth accumulation).

For what regards the relation between saving behavior and fatalistic tendencies (H1) we are interested in the following estimation:

$$\begin{aligned} &P(S=1|\ fatalism_i, X_i, C_i) = P(\text{Saving Propensity} > 0 |\ fatalism_i, X_i, C_i) \\ &= P(\varepsilon > -\beta_0 - \beta_1 fatalism_i - \beta_2 X_i - \beta_3 C_i) = 1 - \Phi(-\beta_0 - \beta_1 fatalism_i - \beta_2 X_i - \beta_3 C_i) \\ &= \Phi(\beta_0 + \beta_1 fatalism_i + \beta_2 X_i + \beta_3 C_i) \end{aligned} \quad (1)$$

Where X_i is a vector of individual controls (age, gender, income, etc.), C_i is a vector of contextual controls (country and wave fixed effects, legal protection of credits) and where we cannot directly observe the saving propensity but only a variable S that assumes a value equal to one when an individual has a saving propensity higher than zero. Φ is a standard normal C.D.F.

For what regards equation (1) the WVS does not contain information on the financial situation of the households, but there is a question on the realized saving behavior: "During the past year, did your family: 1 Save money; 2 Just get by; 3 Spend some savings; 4 Spend savings and borrow some money".

We created a dummy variable named "saved" that is equal to one if an individual declared to have saved some money during the year, and we used it as a dependent variable in a probit estimation.

Our measure of fatalism is based on the answers to the following WVS question: "Some people feel they have completely free choice and control over their lives, while other people feel that what they do has no real effect on what happens to them. Please use this scale (1 means "none at all" and 10 means "a great deal") to indicate how much freedom of choice and control you feel you have over the way your life turns out." Therefore, higher values of this variable correspond to lower fatalistic tendencies.

For what regards the relation between entrepreneurship and fatalism (H2), we are interested in the estimation of the following equation:

$$\begin{aligned} &P(y_i = 1|\ fatalism_i, Institutions_i, X_i) = P(y_i^* > 0 |\ fatalism_i, Institutions_i, X_i) \\ &= P(e_i > -\alpha_0 - \alpha_1 fatalism_i - \alpha_2 Institutions_i - \alpha_3 X_i) \\ &= 1 - \Phi(-\alpha_0 - \alpha_1 fatalism_i - \alpha_2 Institutions_i - \alpha_3 X_i) \\ &= \Phi(\alpha_0 + \alpha_1 fatalism_i + \alpha_2 Institutions_i + \alpha_3 X_i) \end{aligned} \quad (2)$$

Where Φ is, as above, a standard normal C.D.F. y_i^* represents the utility of being an entrepreneur that we cannot observe. Xi is a vector of controls (age, gender, education, etc.), and institutionsi represents a set of controls for the institutional setting.

The latter control is particularly important because formal and informal institutions determine the rule of game to which the entrepreneur is subject. The essential role of institutions in entrepreneurial selection has been clearly stated by Baumol – "[…]holding that entrepreneurs are always with us and always play some substantial role.[….] How the entrepreneurs act at a given time and place depends heavily on the rules of the game –the reward structure of the economy – that happen to prevail. Thus the central hypothesis here is that it is the set of rules and not the supply of entrepreneurs or the nature of their objectives that undergoes significant

changes from one period to another and helps to dictate the ultimate effect on the economy via the allocation of entrepreneurial resources" (1990, p. 894).

Furthermore, the control for institutions will allow us to avoid a possible bias due to omitted variables. In particular, if the institutional setting co-determines individual beliefs, the exclusion of these controls may invalidate our estimates.

Turning back to equation 2, we cannot observe y_i^* but only a dummy variable y_i that takes value equal to one when the utility of being an entrepreneur is higher than the utility of being a worker (for simplicity normalized to zero).

We will use, alternatively, two dependent variables: self-employed and entrepreneur.

The dependent variable named entrepreneur is obtained from the following questions (in the following named occupational status): "In which profession/occupation are you doing most of your work? If you do not work currently, characterize your major work in the past. What is/was your job there? 1) Employer/manager of establishment with ten or more employees; 2) Employer/manager of establishment with less than ten employees; 3) Professional worker lawyer; accountant, teacher, etc.; 4) Supervisory – office worker: supervises others; 5) Non-manual – office worker: non-supervisory; 6) Foreman and supervisor; 7) Skilled manual worker; 8) Semi-skilled manual worker; 9) Unskilled manual worker; 10) Farmer: has own farm; 11) Agricultural worker; 12) Member of armed forces, security personnel; 13) Never had a job; 14) Other job".

Therefore, the variable entrepreneur is equal to one if an individual answered 1 or 2 to the previous question.[4] The drawback of using this dependent variable is that this question has been included only in the 2005 wave and not in the 2010 wave.

The alternative dependent variable self-employed is instead available for both waves, and is based on the following more general question (in the following named employment status): "Are you employed now or not? If yes, about how many hours a week? If more than one job: only for the main job." The possible answers are: 1) full-time employee (more than 30 hours a week), 2) part-time employee, 3) self-employed, 4) retired, 5) housewife, 6) student, 7) unemployed, 8) other job.

We are aware that the concept of self-employment does not coincide with that of entrepreneurship. Self-employment is a catch-at all category that includes, for instance, lawyers, architects, craftsmen, pitchmen, etc., who, similarly to entrepreneurs, do not work for other people, but in contrast base their work on acquired skills or are driven by necessary self-employment, rather than opportunity perception. However, we believe that using these two alternative questions could be an interesting test to verify if there are characteristics that are important for entrepreneurs but not for the more general category of self-employed, and vice versa. Note that when self-employment is used in the analysis instead of entrepreneurship, we add to model specification a dummy to account for the wave effect to account for the effect of the change of the macroeconomic context between the two waves.

We decided to exclude from the sample those individuals declaring being a student, since this category of subjects has not yet taken an occupational choice. In the equation using self-employed as a dependent variable we also exclude retired persons, since we are not able to establish in which job they were occupied when they were in the labor force.

To control for institutional factors we used the following variables obtained from Gwartney *et al.* (2014) and from the World Bank World Development index:

- legalWB: this is a World Bank index that measures the degree to which collateral and bankruptcy laws protect the rights of borrowers and lenders, and thus facilitate lending.

[4] We are aware that this definition of entrepreneur also includes managers who are not entrepreneurs. Unfortunately, we lack information to separate these two categories.

The index ranges from 0 to 12, with higher scores indicating that these laws are better designed to expand access to credit.

- lmreg: this index measures the flexibility of the labor market and ranges from 0-10, where 10 is the highest level of flexibility. This index takes account of the following labor market regulations: minimum wages, dismissal regulations, centralized wage setting, extension of union contracts to nonparticipating parties, and conscription.
- busreg: the indicator is designed to identify the extent to which regulations and bureaucratic procedures restrain entry and reduce competition. It ranges from 0-10, where 10 indicates the maximum level of flexibility in the regulation of business activities. This index considers the following types of regulation: price controls, oppressiveness of administrative requirements, stringency of bureaucracy costs, costs (in terms of money and time) for starting a business, costs (in terms of money and time) for obtaining a license, the diffusion of corruption, costs of tax compliance.

We expect a positive relation between the strength of the legal system since a strong creditor protection can theoretically have a positive effect on both the chance of a business owner getting funded and on the normal running of the business, since the credits of the firms are better protected against insolvency. For obvious reasons we expect a positive effect of the flexibility of business regulation on entrepreneurship, while the consequences of labor marker rigidities on entrepreneurs are theoretically ambiguous. On one hand a flexible labor market could improve the firms' ability to adapt to economic shocks by adjusting demanded labor. On the other, the existence of rigid employment protection laws (from now EPL) implying a redistribution from high-skill to low-skill workers (Boeri *et al.*, 2004) may induce high ability individuals whose career aspirations are frustrated to "escape" from this compressed wage structure by opting for entrepreneurship (Ruiu, 2014). *Table 1* reports some descriptive statistics for the main variables used in our estimations. See *Table 4* in the appendix for summary statistics on some important control variables used in the empirical estimation of both equation (1) and equation (2).

Table 1. Summary Statistics

Country	Fatalism	Trust*	Saved*	Entr*	LegalWB	Lmreg	Busreg	Country	Fatalism	Trust*	Saved*	Entr*	LegalWB	Lmreg	Busreg
AND	7.729	0.210	0.427	0.164	.	.	.	MLI	6.105	0.177	0.301	0.070	3.000	5.500	5.500
ARG	7.876	0.166	0.129	0.036	4.000	5.100	5.200	MEX	8.407	0.134	0.206	0.137	6.000	5.583	5.962
AUS	7.756	0.513	0.354	0.176	10.000	7.561	6.993	MDA	6.824	0.171	0.204	0.025	8.000	5.700	6.200
BRA	7.727	0.090	0.130	0.070	3.000	3.800	3.600	MAR	5.716	0.126	0.211	0.094	3.000	4.001	6.400
BGR	5.766	0.218	0.092	0.068	9.000	6.400	5.600	NLD	6.798	0.590	0.509	0.073	6.000	6.765	6.733
CAN	7.632	0.419	0.338	0.123	7.000	8.200	7.100	NOR	7.686	0.737	0.596	0.126	6.000	4.900	6.700
CHL	7.218	0.121	0.240	0.022	6.000	6.134	6.712	POL	6.534	0.208	0.191	0.073	9.000	7.131	5.940
CHN	7.189	0.585	0.367	0.051	5.000	5.259	5.680	ROU	7.733	0.140	0.129	0.046	9.000	6.417	6.366
TWN	7.435	0.262	0.277	0.034	0.000	4.780	6.643	RUS	6.366	0.275	0.212	0.047	5.000	5.957	5.187
CYP	7.485	0.108	0.181	0.135	9.000	4.420	5.663	RWA	6.669	0.109	0.342	0.007	7.000	7.837	7.618
ETH	6.058	0.245	0.336	0.055	4.000	7.100	6.200	VNM	7.059	0.523	0.272	0.061	5.000	5.300	4.700
FIN	7.426	0.585	0.392	0.083	8.000	4.800	8.700	SVN	7.626	0.186	0.342	0.055	4.000	5.600	6.246
FRA	6.683	0.182	0.000	0.062	4.000	5.500	6.600	ZAF	7.813	0.000	0.336	0.075	7.000	6.100	6.100
GEO	6.371	0.183	0.015	0.038	6.000	7.900	7.300	SWE	7.765	0.668	0.588	0.135	8.000	6.007	6.954
DEU	6.818	0.377	0.491	0.078	9.000	5.163	6.606	THA	6.909	0.412	0.224	0.028	7.000	5.600	6.200
GHA	7.340	0.069	0.438	0.010	8.000	6.324	5.960	TTO	8.019	0.034	0.305	0.069	9.000	7.500	6.049
HKG	6.300	0.400	0.180	0.130	10.000	9.100	7.800	TUR	7.389	0.089	0.121	0.100	5.000	4.624	6.409
HUN	5.792	0.290	0.221	0.103	7.000	7.300	5.800	UKR	6.314	0.258	0.106	0.045	9.000	6.139	4.443
IND	6.833	0.216	0.332	0.144	7.000	7.200	4.900	GBR	7.244	0.294	.	0.150	10.000	8.500	7.600
IDN	7.369	0.435	0.312	0.073	5.000	5.200	5.700	USA	7.753	0.387	0.395	0.163	9.000	9.074	6.626
IRQ	5.732	0.385	0.152	0.053	3.000	.	.	BFA	5.690	0.151	0.236	0.039	3.000	7.100	5.600
ITA	6.257	0.285	0.294	0.100	3.000	6.500	6.200	URY	7.775	0.213	0.146	0.070	4.000	6.050	6.200

JPN	5.837	0.387	0.276	0.201	6.000	8.362	6.431	SRB	6.395	0.147	0.174	0.082	6.000	5.900	5.200
MYS	7.427	0.085	0.442	0.082	10.000	7.820	6.810	ZMB	7.221	0.118	0.376	0.140	9.000	6.300	6.200

*Relative frequency; Three letters Country Iso-codes in the first column, Mean value for Fatalism (considering both waves if available)

For what regards LegalWB, LMreg, busreg we used the year-indicators corresponding to the year in which WVS survey has been carried out in each country. Therefore for those countries appearing in two waves, the table reports the mean of these two years.

3.1. Saving and Fatalistic Tendencies

Table 2 reports the results of a probit where in column (1) the dependent variable is "saved" and the explanatory variables are: fatalism, another culturally based belief, i.e. the level of trust in others, country and wave fixed effects. In column (2) we add more controls at an individual level. In column (3) we replicated the analysis reported in column (2), but the variable of employment status is used instead of the more specific one regarding the individuals' occupation. Column (4) reports the results of a linear probability model (LPM) conducted on the same variables of column (2). We are aware that LPM does not take in account the binary nature of our dependent variable; however, presenting both types of analysis may be interpreted as a sort of test of robustness of our results with respect to different specifications of the link function. Finally, column (5) reports the marginal effects on the probability of having saved for each variable included in the econometric model reported in column (2). The results are robust to a logistic specification of the link function (not reported to save space).

The number of observations varies from one column to another because of data availability on control variables.

Note also that, since the question relative to occupational status has been included only in one wave, the associated sample size dramatically falls in columns (2) and (4). As explained above, when two waves are considered, a wave dummy is added to account for the changes in the macroeconomic context occurred between one wave and the other (e.g. the 2007-2009 great recession).

Table 2. Estimating the probability of having saved

	(1) Probit Without Controls		(2) Probit With controls		(3) Probit Alternative specif.		(4) LPM With controls		(5) m. effects
	β	SE	B	SE	β	SE	β	SE	Model (2)
Fatalism	0.064	(0.003)***	0.020	(0.005)***	0.025	(0.003)***	0.005	(0.001)***	0.006
Trust	0.183	(0.013)***	0.115	(0.021)***	0.071	(0.015)***	0.037	(0.006)***	0.032
Age	.		-0.013	(0.004)***	-0.014	(0.003)***	-0.003	(0.001)**	.
Agesq	.		0.000	(0.000)***	0.000	(0.000)***	0.000	(0.000)***	0.003
Education (ref. Secondary school)									
Noeducation	.		-0.255	(0.053)***	-0.432	(0.036)***	-0.079	(0.014)***	-0.072
Notcomelementary	.		-0.296	(0.050)***	-0.373	(0.034)***	-0.076	(0.012)***	-0.083
Elementary	.		-0.089	(0.036)**	-0.232	(0.025)***	-0.028	(0.010)***	-0.025
Notcomvocational	.		-0.120	(0.043)***	-0.216	(0.029)***	-0.036	(0.012)***	-0.034
Vocational	.		-0.082	(0.031)***	-0.106	(0.022)***	-0.024	(0.009)***	-0.023
Notcomsecondary	.		-0.040	(0.047)	-0.091	(0.032)***	-0.012	(0.013)	-0.011
Notcomuniversity	.		-0.002	(0.039)	-0.029	(0.029)	0.001	(0.012)	-0.001
University	.		0.084	(0.034)**	0.156	(0.023)***	0.025	(0.011)**	0.024
Risk lovingness (ref. very like me)			.	.	.	.	.	.	
Like me	.		-0.015	(0.039)	-0.013	(0.028)	-0.002	(0.012)	-0.004
Somewhat like me	.		-0.113	(0.039)***	-0.116	(0.028)***	-0.030	(0.011)***	-0.032
Little like me	.		-0.068	(0.039)*	-0.087	(0.028)***	-0.016	(0.011)	-0.019
Not like me	.		-0.074	(0.038)**	-0.096	(0.027)***	-0.016	(0.011)	-0.021
Not at all like me	.		-0.027	(0.041)	-0.037	(0.029)	-0.003	(0.012)	-0.008
Wealth importance (ref. very like) me)									
Like me	.		-0.108	(0.042)***	-0.042	(0.030)	-0.031	(0.012)**	-0.031
Somewhat like me	.		-0.080	(0.041)**	-0.044	(0.029)	-0.020	(0.012)*	-0.023
Little like me	.		-0.068	(0.042)	-0.036	(0.029)	-0.016	(0.012)	-0.019
Not like me	.		-0.116	(0.040)***	-0.067	(0.029)**	-0.032	(0.012)***	-0.033

Not at all like me	.	-0.123	(0.044)***	-0.095	(0.031)***	-0.035	(0.013)***	-0.035
Scale of income (ref. first step)		.	.	.	.	.	.	
Second step	.	0.172	(0.054)***	0.113	(0.038)***	0.023	(0.009)**	0.035
Third step	.	0.279	(0.050)***	0.223	(0.035)***	0.044	(0.009)***	0.059
Fourth step	.	0.426	(0.048)***	0.406	(0.034)***	0.078	(0.009)***	0.096
Fifth step	.	0.644	(0.046)***	0.641	(0.032)***	0.140	(0.009)***	0.157
Sixth step	.	0.822	(0.048)***	0.843	(0.034)***	0.199	(0.011)***	0.213
Seventh step	.	1.022	(0.050)***	1.023	(0.035)***	0.273	(0.012)***	0.280
Eight step	.	1.234	(0.053)***	1.200	(0.038)***	0.350	(0.013)***	0.353
Ninth step	.	1.283	(0.064)***	1.229	(0.048)***	0.372	(0.018)***	0.371
Tenth step	.	1.411	(0.065)***	1.300	(0.049)***	0.421	(0.018)***	0.415
Occupational status (ref. skilled manual)								
Entrepreneur	.	0.156	(0.037)***	.		0.051	(0.012)***	0.044
Professional worker	.	0.092	(0.036)***	.		0.034	(0.011)***	0.026
Superv. No Manual	.	0.190	(0.039)***	.		0.071	(0.013)***	0.053
Non Manual worker	.	0.088	(0.034)***	.		0.028	(0.010)***	0.025
Foreman	.	0.077	(0.064)	.		0.020	(0.020)	0.022
Semiskilled Manual	.	-0.135	(0.038)***	.		-0.036	(0.010)***	-0.038
Unskilled Manual	.	-0.155	(0.040)***	.		-0.036	(0.010)***	-0.043
Farmer	.	-0.121	(0.046)***	.		-0.034	(0.012)***	-0.034
AgricWorker	.	-0.276	(0.048)***	.		-0.072	(0.012)***	-0.077
ArmedForce	.	0.092	(0.076)	.		0.029	(0.023)	0.026
Never had job	.	-0.139	(0.060)**	.		-0.015	(0.011)	-0.039
Other job	.	0.059	(0.108)	.		0.017	(0.032)	0.017
Employment status (ref. full time								
Part time worker	.	.		-0.074	(0.024)***	.		.
Self-employed	.	.		0.003	(0.021)	.		.
Retired	.	.		-0.049	(0.026)*	.		.
Housewife	.	.		-0.065	(0.025)***	.		.
Unemployed	.	.		-0.337	(0.027)***	.		.
Other	.	.		-0.290	(0.046)***	.		.
LegalWB	NO	0.176	(0.037)***	0.187	(0.027)***	0.059	(0.012)***	0.049
N	78556	30241		61720		30241		
Adj R^2/ Pseudo R^2	0.082	0.183		0.176		0.201		

White robust standard errors in parentheses. Author's survey weights are used in each estimation to ensure national representativeness. Controlling for perceived health status, marital status, sex, religious affiliation, wave and countries fixed effects; *p <0.10, ** p<0.05, ***p<0.01.

The relation between "saved" and "fatalism" is in the expected direction. In both columns the results do not change a great deal in terms of coefficients and statistical significance.

A decrease in the fatalistic tendency increases the probability of saving money, and this result is strongly statistically significant. In particular, from column (5) we see that an individual who reported 10 on this question (a non-fatalistic individual) has about a 6% higher probability of having saved during the last year with respect to an individual who reported 1 (an extremely fatalistic individual). All the results for the other controls seem to be very reasonable. This result confirms previous findings obtained by Wu (2005).

However, our econometric exercise includes a larger set of control variables and is not limited to presenting the results of a linear probability model.

In particular, since trust and fatalism are very likely to be correlated, the omission of trust from equation 2, as in Wu (2005), does not allow to establish whether fatalism is significant only because we omit another cultural belief such as trust, which is the true cultural determinant of a saving attitude. Therefore, our results seem to offer a more robust empirical support to Wu's hypothesis. Having shown that H1 is supported by the data, we will now discuss the results associated to other results. The reasonableness of the results associated to other control variables in fact a way to evaluate the goodness of a model.

As shown by Guiso *et al.* (2006), trust has indeed a positive effect on saving behavior. In our analysis, the variable trust is a dummy variable equal to one if an individual has answered that "most people can be trusted" to the following question: "Generally speaking, would you say that most people can be trusted or that you need to be very careful in dealing with people?"

Therefore, according to column (5), an individual who trusts other people has a probability of having saved that is 3.2% higher than someone who does not trust other people.

For what constitutes employment status, we confirm the results obtained by Quadrini (1999). Being an entrepreneur ("entr") increases the probability of saving money with respect to a skilled manual worker. In particular, an entrepreneur has a higher probability with respect to a manual worker of about 4.4%. Only being a supervisor (office work) has a stronger impact on the probability of having saved.

We also include a control for risk (named risk loving), obtained by the answer to the following question: "Now I will briefly describe some people: 'Adventure and taking risks are important to this person; to have an exciting life. Would you please indicate whether that person is very much like you, like you, somewhat like you, not like you, or not at all like you?" We created a variable that starts from 1 if the individual declares "very much like you" to 5 if the individual declares "not at all like you". We created a dummy variable for each possible answer using "very like me" as a reference category.

The attitude toward risk seems to significantly affect savings; however, the statistical significance is not very stable, going from the probit model to the alternative LPM specification. In particular, an individual who answered "not like me" to the associated question has about a 2% lower probability of having saved than an individual who has answered "very like me". At first, this result seems counterintuitive. We can expect that a higher risk individual will save more to insure himself against fluctuations in his income. However, from a theoretical point of view, it is not clear what the effect of risk is on saving behavior. In fact, as observed by Karni (1982) a higher degree of risk aversion is neither a necessary nor sufficient condition for lower (higher) savings.

Another interesting result is the impact of formal education. We included a dummy for each level of education going from no education to university. Taking "secondary education" as a reference category we find that an individual who has completed university has a higher probability of having saved of about 2.4%, while an individual with no formal education has a lower probability of having saved money of about 7%. These differences are not merely accounted for by the fact that better educated people have better jobs and therefore earn more, since we are both controlling for professional status and income level. Therefore, education seems to play an important role in determining positive attitude toward savings.

Guiso *et al.* (2003) argued that religious beliefs may positively influence thriftiness. It is worthwhile to note that once we control for trust and fatalism, religions' coefficients (with the exception of Orthodox and Muslim) are not statistically significant (omitted to save space in the table). These two cultural traits are probably more able to capture the effect of cultural beliefs on saving behaviors than religious affiliations.

As a sort of test of Carroll's hypothesis, we included in the analysis a set of dummy variables obtained from the following question: "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? It is important to this person to be rich; to have a lot of money and expensive things". We created a dummy for each of the possible answers, and using "very like me" as a reference category we find that the less importance people give to being rich the less likely they have saved money. This can be interpreted in favor of Carroll's luxury goods hypothesis.

Finally, it seems very reasonable that the better the legal protection of the rights of the creditors, the more that people are induced to save. Unfortunately, we are not able to observe how these savings are invested.

The other controls that we used are: age, age square, sex (a dummy equal to 1 if an individual is female), perceived status of health, marital status, a dummy reflecting the declared

income level (individuals were asked to rank their household in a decile scale of income), country fixed effects, and, where possible, wave fixed effects.

Of these other controls, the larger effect on the probability of having saved is reasonably produced by the household income level.

A comment is needed regarding the effect of age on savings. Our results suggest a convex relationship between age and probability of having saved. We were rather skeptical about this result, since it is clearly in contrast with the well-known life-cycle hypothesis (LCH). However, as noted by Hassan *et al.* (2011), often empirical works are unable to find a concave relation between age and saving. A possible explanation is that, given increasing life expectancy, retired people continue to save to cope with the rising risk of sustaining medical expenses in the future (De Nardi *et al.*, 2009). According to De Nardi *et al.* this increasing risk will slow down the process of saving de-accumulation of the elderly.

3.2. Entrepreneurship and fatalistic tendencies

Table 3 reports in column (1) the results of a probit where the dependent variable is entrepreneur and the explanatory variables are fatalism, trust, and country fixed effects. In column (2) we add the controls for institutions and other individual level controls. In column (3) we used the same controls as column (2) but with the variable self-employed instead of entrepreneur as our dependent variable. Column (4) reports a LPM conducted on the same variables of column (2). Column (5) reports the marginal effects on the probability of being an entrepreneur of each variable included in the econometric model reported in column (2).

The same issues of *Table 2* regarding the sample size apply here. Furthermore, note that the sample size significantly increases when using self-employed as the dependent variable because this question allows us to use two waves of the WWS. The results are robust to a logistic specification of the link function (not reported to save space).

Considering *Table 3*, in all of the columns a decrease in fatalistic tendencies implies an increase in the probability of being an entrepreneur. In particular, we have about a 3% lower probability of observing an extremely fatalistic individual declaring being entrepreneur than a non-fatalistic individual.

Note that trust is instead not significant in determining the probability of being an entrepreneur, while fatalism is negatively related to both the latter probability and to the likelihood of having saved money. Even if we are not able, at the moment, to furnish evidence on an individual level on the direction of causality, Ruiu (2014) has shown, using country-level data, that the GEM indicator of opportunity driven early-stage entrepreneurship is negatively related to fatalism even when the latter is instrumented using the ratio of number of natural disasters' victims on the number of such events. The choice of this instrument is based on some evidence furnished in the ambit of the epidemiological literature, according to which fatalistic tendencies undermine the capacity of people to adopt self-protecting behaviors even in the case of pre-announced disasters.

When the more general category of self-employed is considered, both trust and fatalism are significant predictors of the probability of being an entrepreneur.

This could be interpreted as follows: self-employed, which for instance includes craftsmen, farmers or other low-skilled occupations, are probably more occupied in informal sectors of the economy where trust among trading partners operates a substitute of formal institutions in reducing transaction costs (Smallbone & Lyon, 2002; Welter *et al.*, 2004). Therefore, while trust seems important in determining saving propensity, fatalism seems to be crucial in both saving and occupational choices.

Therefore, supporting our H2 fatalism may play a role in both determining who is observed an entrepreneur and his/her saving choices is not rejected by the data. Having

furnished some empirical support to our hypotheses, we will now discuss the results associated to other control variables.

We also add a control for self-perceived level of creativity obtained from the answer to the following question: "Please indicate for each description whether this person is very much like you, like you, somewhat like you, not like you, or not at all like you: It is important to this person to think up new ideas and be creative; to do things one's own way". We created a variable that goes from 1 if the individual declares "very much like you" to 5 if the individual declares "not at all like you". We take "very like me" as a reference category. Creativity has a positive impact on the probability of being an entrepreneur, and this result is strongly statistically significant in all of the columns. This result is in line with those obtained at a macro-level by Lee *et al.* (2004). In particular, they have shown that there are significantly positive links between new firm formations and indicators of creativity.

Giving further support to Carroll's hypothesis, when entrepreneurs are considered, the variable capturing attitude toward wealth accumulation is highly significant, while when the broader category of self-employed is used this result is not statistically significant. Therefore, according to Carroll (2002), this result seems to suggest that entrepreneurs are selected among those having particular preferences toward wealth accumulation.

Another interesting result is associated with education. Econometric studies have found contrasting findings. On the one hand there are studies that have found a positive relation between educational attainment and probability of being self-employed (Blanchflower, 2000; Carrasco, 1999; Moore & Muller 2002; etc.). On the other, there are empirical works that have found a negative relation (Blanchflower *et al.*, 2001; Laferrère & McEntee, 1995; O'Farrell & Pickles, 1987, etc.) or an insignificant effect of education on selection in entrepreneurship (Taylor, 2001; Schiller & Crewson, 1997; van Der Sluis *et al.*, 2003). Interestingly, van der Sluis *et al.* (2003) find that the effect of education on selection into entrepreneurship is insignificant, while its effect on entrepreneurial performance is positive and significant.

Table 3. Determinants of entrepreneurship and self-employment

	(1) Probit Dep. Var: entr Without Controls		(2) Probit Dep. Var: entr With Controls		(3) Probit Dep. Var: self-emp. With Controls		(4) LPM Dep. Var: self-emp. With Controls		(5) m. Model
	β	SE	β	SE	β	SE	β	SE	
Fatalism	0.039	(0.005)***	0.025	(0.006)***	0.009	(0.004)***	0.003	(0.001)***	0.003
Trust	0.082	(0.022)***	0.026	(0.025)	0.060	(0.019)***	0.005	(0.004)	0.003
Age	.		0.032	(0.004)***	0.048	(0.003)***	0.004	(0.001)***	.
Agesq	.		-	(0.000)***	-	(0.000)***	-	(0.000)***	0.003
Female	.		-	(0.022)***	-	(0.015)***	-	(0.003)***	-0.029
Health Status (ref very poor health)									
Vghealth	.		0.121	(0.056)**	0.108	(0.039)***	0.013	(0.007)*	0.017
Ghealth	.		0.141	(0.053)***	0.126	(0.037)***	0.015	(0.006)**	0.020
Fhealth	.		0.074	(0.054)	0.084	(0.038)**	0.006	(0.006)	0.010
Marital status (ref. single)									
Married	.		0.175	(0.032)***	0.078	(0.022)***	0.025	(0.004)***	0.024
Divorced	.		0.116	(0.051)**	0.032	(0.036)	0.016	(0.007)**	0.016
Widowed	.		0.095	(0.064)	-	(0.044)	0.014	(0.008)*	0.013
Education (ref. secondary education)									
No education	.		-	(0.072)***	0.283	(0.035)***	-	(0.008)***	-0.083
Not comp. element.	.		-	(0.062)***	0.217	(0.034)***	-	(0.007)***	-0.056
Elementary	.		-	(0.043)***	0.164	(0.028)***	-	(0.006)***	-0.049
Not comp. vocat.	.		-	(0.050)***	0.105	(0.033)***	-	(0.007)***	-0.031
Vocational	.		-	(0.036)**	-	(0.027)	-	(0.006)***	-0.012
Not comp. second.	.		-	(0.054)	0.054	(0.041)	-	(0.008)	-0.011
Not comp univ.	.		0.081	(0.044)*	-	(0.038)	0.013	(0.008)*	0.011
University	.		0.143	(0.036)***	-	(0.030)***	0.026	(0.007)***	0.020
Risk lovingness (ref very									
2. Like me	.		-	(0.046)	-	(0.031)	-	(0.007)	-0.010
3.Somewhat like me	.		-	(0.046)**	-	(0.031)	-	(0.007)**	-0.014

4. Little like me	.	-	(0.046)**	0.006	(0.031)	-	(0.007)**	-0.017
5. Not like me	.	-	(0.045)***	-	(0.031)**	-	(0.007)**	-0.018
6. Not at all like me	.	-	(0.049)***	-	(0.033)***	-	(0.007)***	-0.022
Wealth importance (ref very like me)		.	.	.	.	.	.	
2. Like me	.	-	(0.054)	-	(0.032)	-	(0.008)	-0.013
3. Somewhat like me	.	-	(0.052)	-	(0.032)	-	(0.008)	-0.005
4. Little like me	.	-	(0.052)	-	(0.033)	-	(0.008)	-0.012
5.Not like me	.	-	(0.052)***	-	(0.032)	-	(0.008)***	-0.024
6. Not at all like me	.	-	(0.056)***	-	(0.035)	-	(0.008)***	-0.035
Creativity (ref very like me)		.	.	.	.	.	.	
2. Like me	.	-	(0.030)***	-	(0.021)***	-	(0.005)***	-0.007
3. Somewhat like me	.	-	(0.033)***	-	(0.023)***	-	(0.005)***	-0.011
4. Little like me	.	-	(0.040)***	-	(0.027)***	-	(0.006)***	-0.022
5. Not like me	.	-	(0.048)***	-	(0.032)***	-	(0.006)***	-0.019
6. Not at all like me	.	-	(0.078)***	-	(0.051)***	-	(0.008)***	-0.014
Institutions								
LegalWB	.	0.147	(0.071)**	0.077	(0.036)**	0.027	(0.011)**	0.040
Lmreg	.	-	(0.110)**	-	(0.021)**	-	(0.018)**	-0.006
Busreg	.	-	(0.187)	0.233	(0.035)***	-	(0.026)	0.031
N	45689	37076		60571		37076		
adj. R^2/ pseudo R^2	0.053	0.091		0.176		0.048		

White robust standard errors in parentheses. Author's survey weights are used in each estimation to ensure national representativeness Controlling for religious affiliation, country and wave fixed effects. The marginal effects of age is calculated at its mean value;
*p < 0.10, ** p<0.05, ***p< 0.01

In our analysis we find that the relation between education and probability of becoming an entrepreneur is positive and linear, since, taking secondary education as reference, the decrease in the coefficients for each education dummy variable capturing lower levels of education is almost proportional at least when the dependent variable entrepreneur is used. Instead, when self-employed is used as a dependent variable, the sign of the relation is reversed. This is the only case of sign reversion in our analysis, which may be due to the fact that the variable self-employed also includes necessity-driven entrepreneurs, i.e., those who are pushed to entrepreneurship because other options of work are absent or unsatisfactory (the so-called refugee effect of entrepreneurship). Therefore, if this interpretation is correct, then it is very reasonable that less educated individuals are those who are more likely to opt for entrepreneurship out of necessity. We believe that the ambiguity of former empirical results found can be caused both by the omission of cultural-based beliefs from the analysis and by the confusion between necessity-driven and opportunity-driven entrepreneurs.

Regarding the possible confounding effect due to the omission of cultural beliefs from the empirical analysis we indeed expect that education has a direct effect on entrepreneurship (enhancing managerial ability) as well as an indirect effect through its relation with culture. In particular, as observed by Guiso *et al.* (2006), when cultural-based beliefs are omitted from the analysis the effect of education may be confused with their effects, causing a bias in estimation.

In accordance with previous literature, females are less likely to become entrepreneurs (Thebàud, 2010; Guiso and Rustichini, 2011).

The U-reverse shaped relation between aging and entrepreneurship is not a new finding. In fact, the probability of starting a business has been shown to increase with age up to a threshold point (between 35 and 44 years of age) and to decrease thereafter (Levesque and Minniti, 2006).

Finally, our results on institutional factors indicate that the better the legal protection of credits the more likely an individual will opt for the entrepreneurial choice. Business regulation seems not to impact on the probability of being an entrepreneur, while our indicator of labor market flexibility is negatively related to the probability of being an entrepreneur. Two possible explanations of the sign of the latter correlation have been anticipated above; however, we believe that this suggestive result has to be more deeply investigated from a theoretical point of view to draw a definitive conclusion. For what regards business regulation, it would be

interesting to test if the complexity of regulation undermines the survival probability of firms. Unfortunately, with our data this is not possible.

Discussion

In this paper we argue that fatalism may affect both occupational choice and the saving decision of economic agents. A better understanding of the figure of the entrepreneur is fundamental to understanding how to foster entrepreneurship, and hence economic growth. Furthermore, understanding the saving behavior of entrepreneurs is important for understanding the demand of assets because entrepreneurs own a large part of the financial assets (Quadrini 1999 and 2000; Gentry and Hubbard, 2004).

Using WVS data, some encouraging correlations have been reported in the second and in the third section of this work. Specifically, fatalistic individuals seem to be both less willing to save and less willing to become entrepreneurs. Despite the fact we strongly believe that fatalism is at least in part culturally determined (see also Tabellini, 2010), and hence fatalistic beliefs are predetermined with respect to occupational choice, to be on the safe side we limit to affirmat that our results are only interpretable as promising correlations. Indeed, the possibility of reverse causality is not ruled out. Specifically, it may be argued that individuals enter into entrepreneurship because they are characterized by a particularly high managerial ability (as in Lucas, 1978) or by a particularly low risk aversion (Kihlstrom & Laffont, 1979) and that the fact of being at the "helm" of a firm increases their perception of control. If confirmed, our results may indicate a way to foster entrepreneurship through formal education. Indeed, as sustained by Guiso *et al.* (2006), formal education may mitigate the influence of cultural traits on people's decisions.

Other promising results regard the role of institutions. In particular, the strength of the protection of credit rights is positively related both with the probability of having saved money and with the probability of being an entrepreneur. Therefore, strengthening the legal protection of creditors may be another policy instrument to both stimulate individuals to save money and to incentivize entrepreneurial choice. In fact, thanks to the strength of legal enforcement, on the one hand entrepreneurs can more easily attain access to funding, and on the other they can be sure (or almost sure) that there exist effective protective tools in the case of the insolvency of trading partners. Our results suggest also that the rigidity of the labor market may be not an obstacle to entrepreneurial choice as often hypothesized in economic literature.

Finally, a note of caution is needed in interpreting our results. The explanation of the peculiar saving habits of entrepreneurs proposed in this work should not be consideredas an alternative to Carroll's model or to the borrowing constraints explanation, but rather as an additional element for a better understanding of the financial behavior of this intriguing protagonist of the economic scene.

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Appendix

Table 4. Summary Statistics on Control Variables

	Creativity*						Wealth Importance*						Risk Loving*					
COU	1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6
AND	0.232	0.390	0.276	0.066	0.030	0.006	0.014	0.033	0.131	0.238	0.332	0.252	0.085	0.166	0.264	0.214	0.184	0.088
ARG	0.112	0.317	0.189	0.214	0.112	0.056	0.013	0.035	0.056	0.170	0.445	0.281	0.039	0.126	0.103	0.191	0.340	0.200
AUS	0.151	0.234	0.293	0.207	0.094	0.022	0.010	0.042	0.116	0.214	0.406	0.212	0.044	0.099	0.165	0.216	0.314	0.162
BRA	0.197	0.384	0.221	0.068	0.111	0.018	0.006	0.034	0.054	0.096	0.449	0.360	0.042	0.092	0.091	0.098	0.413	0.264
BGR	0.118	0.227	0.228	0.191	0.164	0.072	0.027	0.071	0.172	0.201	0.352	0.178	0.067	0.115	0.190	0.197	0.278	0.153
CAN	0.245	0.331	0.248	0.110	0.057	0.009	0.019	0.045	0.107	0.163	0.453	0.212	0.072	0.141	0.164	0.167	0.310	0.145
CHL	0.295	0.295	0.224	0.060	0.084	0.041	0.059	0.112	0.230	0.102	0.272	0.225	0.110	0.138	0.207	0.079	0.268	0.199
CHN	0.081	0.255	0.236	0.149	0.235	0.044	0.054	0.196	0.231	0.178	0.290	0.051	0.032	0.096	0.108	0.138	0.457	0.170
TWN	0.110	0.192	0.289	0.178	0.203	0.028	0.019	0.058	0.115	0.165	0.505	0.138	0.016	0.047	0.106	0.138	0.490	0.204
CYP	0.365	0.333	0.197	0.060	0.033	0.012	0.065	0.115	0.154	0.160	0.260	0.247	0.153	0.159	0.156	0.165	0.203	0.164
ETH	0.199	0.254	0.239	0.201	0.095	0.012	0.178	0.240	0.230	0.140	0.145	0.067	0.124	0.190	0.244	0.184	0.157	0.102
FIN	0.172	0.305	0.296	0.137	0.079	0.011	0.010	0.048	0.103	0.164	0.432	0.244	0.041	0.093	0.154	0.180	0.319	0.214
FRA	0.176	0.245	0.245	0.202	0.097	0.035	0.017	0.034	0.056	0.124	0.339	0.430	0.061	0.119	0.138	0.191	0.263	0.226
GEO	0.097	0.299	0.271	0.108	0.156	0.069	0.052	0.108	0.183	0.160	0.318	0.179	0.065	0.105	0.195	0.141	0.273	0.222
DEU	0.135	0.280	0.276	0.191	0.099	0.019	0.037	0.094	0.179	0.245	0.300	0.144	0.026	0.076	0.125	0.177	0.276	0.320
GHA	0.402	0.379	0.144	0.046	0.025	0.004	0.322	0.296	0.177	0.097	0.086	0.022	0.224	0.287	0.210	0.113	0.118	0.048
HKG	.	.	.	.	.	.	.	.	.	.	.	.	0.000	0.000	0.000	0.000	0.000	0.000
HUN	0.176	0.362	0.252	0.126	0.065	0.019	0.023	0.124	0.243	0.242	0.267	0.101	0.028	0.119	0.158	0.188	0.264	0.243
IND	0.317	0.350	0.162	0.081	0.067	0.022	0.130	0.194	0.214	0.130	0.214	0.118	0.220	0.246	0.206	0.134	0.106	0.088
IDN	0.199	0.299	0.231	0.143	0.112	0.017	0.085	0.126	0.097	0.125	0.404	0.163	0.139	0.248	0.196	0.171	0.206	0.041
IRQ	0.266	0.366	0.175	0.104	0.066	0.024	0.114	0.242	0.220	0.189	0.183	0.053	0.110	0.158	0.128	0.187	0.224	0.193
ITA	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
JPN	0.053	0.147	0.196	0.351	0.218	0.034	0.003	0.015	0.052	0.173	0.472	0.284	0.010	0.023	0.059	0.171	0.486	0.251
MYS	0.112	0.299	0.318	0.160	0.091	0.019	0.106	0.214	0.280	0.185	0.179	0.037	0.057	0.161	0.195	0.170	0.212	0.205
MLI	0.436	0.265	0.119	0.063	0.088	0.029	0.345	0.227	0.136	0.087	0.141	0.064	0.216	0.207	0.162	0.143	0.159	0.113
MEX	0.201	0.292	0.241	0.117	0.060	0.088	0.025	0.051	0.092	0.154	0.233	0.445	0.099	0.137	0.149	0.142	0.158	0.315
MDA	0.181	0.304	0.222	0.168	0.090	0.036	0.039	0.130	0.169	0.228	0.294	0.140	0.056	0.133	0.125	0.175	0.274	0.236
MAR	0.228	0.275	0.209	0.156	0.091	0.042	0.177	0.179	0.203	0.164	0.165	0.113	0.116	0.136	0.163	0.205	0.233	0.147
NLD	0.104	0.251	0.242	0.213	0.156	0.034	0.010	0.029	0.084	0.163	0.483	0.232	0.025	0.077	0.146	0.194	0.385	0.173
NOR	0.153	0.278	0.336	0.133	0.082	0.018	0.002	0.020	0.072	0.161	0.551	0.193	0.064	0.142	0.208	0.229	0.296	0.061
POL	0.100	0.356	0.299	0.134	0.089	0.021	0.019	0.092	0.162	0.339	0.274	0.114	0.062	0.177	0.212	0.235	0.220	0.094
ROU	0.211	0.220	0.298	0.172	0.056	0.043	0.041	0.082	0.174	0.324	0.170	0.209	0.048	0.073	0.143	0.257	0.183	0.296
RUS	0.133	0.240	0.286	0.234	0.070	0.037	0.069	0.167	0.262	0.296	0.144	0.062	0.060	0.145	0.224	0.293	0.145	0.134
RWA	0.230	0.333	0.185	0.137	0.091	0.022	0.126	0.270	0.246	0.173	0.152	0.033	0.137	0.243	0.182	0.153	0.182	0.103
VNM	0.140	0.332	0.289	0.124	0.070	0.044	0.050	0.187	0.257	0.268	0.177	0.061	0.031	0.110	0.123	0.225	0.287	0.225
SVN	0.189	0.306	0.273	0.126	0.085	0.021	0.007	0.049	0.151	0.170	0.377	0.245	0.054	0.120	0.148	0.158	0.297	0.222
ZAF	0.318	0.414	0.156	0.070	0.033	0.009	0.173	0.263	0.208	0.138	0.170	0.048	0.128	0.238	0.199	0.135	0.182	0.118
SWE	0.241	0.302	0.303	0.096	0.051	0.007	0.014	0.037	0.120	0.185	0.417	0.227	0.055	0.118	0.182	0.184	0.312	0.149
THA	0.041	0.238	0.300	0.314	0.096	0.011	0.017	0.118	0.189	0.203	0.410	0.062	0.031	0.160	0.249	0.289	0.221	0.050
TTO	0.272	0.344	0.181	0.086	0.088	0.029	0.052	0.113	0.102	0.115	0.448	0.170	0.108	0.195	0.149	0.127	0.290	0.131
TUR	0.243	0.395	0.217	0.090	0.048	0.008	0.081	0.231	0.243	0.165	0.181	0.100	0.110	0.186	0.192	0.154	0.199	0.158
UKR	0.091	0.184	0.235	0.202	0.206	0.083	0.044	0.120	0.203	0.227	0.296	0.110	0.048	0.086	0.153	0.187	0.323	0.203
GBR	0.172	0.309	0.247	0.166	0.087	0.019	0.019	0.058	0.096	0.168	0.486	0.173	0.077	0.168	0.139	0.165	0.337	0.114
USA	0.128	0.236	0.324	0.183	0.101	0.027	0.017	0.039	0.126	0.189	0.406	0.223	0.037	0.103	0.202	0.219	0.308	0.132
BFA	0.333	0.329	0.160	0.109	0.051	0.018	0.146	0.200	0.146	0.119	0.249	0.140	0.147	0.198	0.183	0.129	0.199	0.144
URY	0.244	0.283	0.226	0.130	0.071	0.046	0.019	0.043	0.081	0.122	0.316	0.418	0.058	0.086	0.124	0.151	0.243	0.337
SRB	0.137	0.145	0.225	0.327	0.127	0.038	0.066	0.096	0.164	0.245	0.331	0.098	0.088	0.091	0.120	0.240	0.357	0.104
ZMB	0.372	0.344	0.163	0.064	0.044	0.014	0.178	0.231	0.233	0.149	0.142	0.067	0.174	0.212	0.186	0.145	0.167	0.116
TOT	0.190	0.287	0.241	0.153	0.099	0.030	0.067	0.122	0.163	0.183	0.299	0.166	0.078	0.137	0.163	0.177	0.268	0.177

*Percentage of people answering: 1: Very like me; 2 Like me; 3 Somewhat like me; 4 Little like me; 5 Not like me; 6 Not at all like me