Entrepreneurs in Latin America

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Abstract

This technical note uses data from a new survey that collected information on entrepreneurs and their businesses in nine Latin American countries, with the objective of determining the relevant characteristics that define the different types of Latin American entrepreneurs. In particular, it analyzes personality traits and socio-demographic attributes. The results show that different types of entrepreneurs are associated with different personality traits and socio-demographic characteristics. The typical Latin American entrepreneur-employer has the following measured characteristics considered "above the mean": male, history of parent-entrepreneurs, financial access, and some specific personality traits (i.e., achievement-oriented, multitaskers, show a high tolerance for risk, and the need for autonomy). Potential entrepreneurs and self-employed individuals have some different characteristics. When countries are analyzed separately, heterogeneities are found, showing indirect evidence of the relevance of political-institutional, sociocultural, and other environment-related factors as determinants of entrepreneurship.

1. Introduction

Several classical studies place the entrepreneur as one of the main sources of economic growth and development (e.g., Peneder, 2009). The empirical evidence supports the statement that entrepreneurial activity is associated with higher levels of employment, innovation, and productivity (Quatraro and Vivarelli, 2013; Van Praag and Versloot, 2007). However, the effects of entrepreneurial activity are not homogeneous across countries, especially when developing countries are considered. For example, Wennekers et al. (2005) find evidence of a U-shaped relationship between entrepreneurial activity and per capita GDP. The empirical evidence shows that the presence of growth-oriented entrepreneurs is more important for economic performance than other types of entrepreneurs (Stam and van Stel, 2009). A possible explanation for these findings may be found in the prevalent types of entrepreneurs in developing countries. In these countries, many individuals are pushed into entrepreneurial activity out of necessity and not because of opportunity (Naudé, 2009). This is aligned with the hypothesis of Baumol (1990) that the contribution to society of entrepreneurs is not associated with the act of entrepreneurial activity itself, but with the allocations of their efforts.

For Latin America, the distinction between owners who are self-employed or those that employ personnel becomes relevant, as self-employment often acts as method of escape from unemployment during recessions and could generate allocation of resources into low productivity activities (Gluzmann, Jaume, and Gasparini, 2012). This allocation problem not only affect the economy as a whole but also the workers themselves, since an alternative employment could report a higher income and also prevent a lock-in effect in low productivity/wage jobs (Poschke, 2012).

The literature on the determinants of entrepreneurial activity at the individual level is scarce, and in Latin America it is almost inexistent. Rare exceptions include Corporación Andina de Fomento (CAF) (2013) and Gluzmann, Jaume, and Gasparini (2012), which are the basis for part of the analysis in CAF (2013).

Gluzmann, Jaume, and Gasparini (2012) model the occupational choice of individuals with a multinomial logit model using data from household and employment surveys from different Latin American countries. In their model, individuals choose to be employer, employee, self-employed, or unemployed, employer being the category associated with the concept of entrepreneur. This definition of entrepreneur is associated

with the legal status of the person and is close to the one proposed by Herbert and Link (1989) that defines an entrepreneur as a person who specializes in taking on responsibility and making judgments that affect the allocation of resources. The main limitations of the work of Gluzmann, Jaume, and Gasparini (2012) are the consequences of the data used in the empirical exercises. The household surveys are not designed to study entrepreneurship topics, and thus the authors do not have the opportunity to consider, for example, how personality traits influence the probability of becoming an entrepreneur. This is an important limitation. In turn, CAF (2013) is mostly a descriptive report that uses the 2012 Entrepreneurship CAF survey (ECAF) for some of its analysis.

The literature on entrepreneurial decision is based on a model of occupational choice where individuals face the employment decision based on the returns to their personal characteristics (e.g., education, age, and gender) and economic conditions (Hartog, Van Praag, and van der Sluis, 2010; Poschke, 2012). Another explanation for why some individuals decide to become entrepreneurs can be found in certain characteristics such as personality traits (Caliendo, Fossen, and Kritikos, 2013).

The aim herein is to explore how these characteristics, especially personality traits, influence the probability of individuals becoming entrepreneurs in nine Latin American countries: Argentina, Bolivia, Brazil, Colombia, Ecuador, Panama, Peru, Uruguay, and Venezuela. The contribution of this technical note is twofold. First, it is the only one of its type that analyzes, in the same framework, the different characteristics of different types of entrepreneurs and potential entrepreneurs. Second, as far as we know, this is the first paper that analyzes the importance of personality traits on the decision to become an entrepreneur in Latin America.

2. Related Literature

The literature on entrepreneurship is vast and diverse, especially the literature on the characteristics that determine what constitutes an entrepreneur and on the factors that determine entry into entrepreneurial activity (Audretsch, 2012). This section reviews some of this literature and discusses the concept of an entrepreneur.

The definition of an entrepreneur stated in the introduction above (a person who specializes in taking on responsibility and making judgments that affect the allocation of resources) is closely associated with the legal status of the individual as the owner of

a business. As stated in the literature, however, the definition of an entrepreneur is elusive not only because of the different roles they fulfill, but also because different academic fields approach the concept in different ways (Peneder, 2009).

As stated in Naudé (2009), in the Schumpeterian framework, entrepreneurs recognize and exploit opportunities to generate value. From the market coordination perspective proposed by Kirzner, the entrepreneur is tasked with discovering new opportunities. The entrepreneur must always be alert to recognize signals in the market and, according to Schultz, the reallocation of resources between activities serves as the basis for technological diffusion. Also, as emphasized by Knight, the entrepreneur is responsible for bearing the risk of innovations and exploring new ground.

Building on the theory of planned behavior proposed by Ajzen (1991), Verheul et al. (2012) propose that the entry into entrepreneurial activity can be thought of as a second stage of a cognitive process, the entry itself being the realization of that will. By this definition, it is possible to identify potential entrepreneurs as individuals who have thought about the possibility of becoming an entrepreneur. The distinction between non-entrepreneurs and potential entrepreneurs becomes relevant in this framework, as individual intentions can be good determinants of future actions.

Global Entrepreneurship Monitor (2012) makes a further distinction between necessity- and opportunity-driven entrepreneurs. The first are individuals who enter entrepreneurship because they do not have other employment options and are in need of income. The opportunity-driven entrepreneur, on the other hand, is an individual who detected an opportunity and acted upon the belief that the opportunity would be profitable.

From the functions that entrepreneurs fulfill in the market, one can derive the characteristics that make an entrepreneur. According to Lazear (2005), the person who becomes an entrepreneur is likely to be versed in a variety of fields, as he or she must have acquired a balanced skill set to produce the desired output. Lazear's model indicates that entrepreneurs are balanced individuals who acquire this knowledge mainly from prior experience in different roles.

Regarding educational attainment, Poschke (2013) finds a non-linear relationship between educational level and entrepreneurial activity. From the model's perspective, a person with a lower educational level is more likely to become an entrepreneur because the forgone wages are less than the expected returns of entrepreneurship. This is also related to entry cost; it is assumed that in developing

countries the opportunity to dodge administrative cost is higher in the informal sector. This could partially explain the prevalence of opportunity driven entrepreneurs in developing countries. On the other hand, highly educated individuals face higher returns when employed and therefore can delay entry until they find a good idea. The research cost for these opportunities is lower among more highly educated individuals, as they are more likely to observe opportunities and act upon their perception (Van Praag, van Witteloostuijn, and van der Sluis, 2013).

As pointed out by Parker (2009), age is an important factor. Younger individuals are less risk-averse than older individuals, even though they are less likely to have the knowledge or human and physical capital that entrepreneurial activities require.

Regarding gender, despite a recent increase in female participation, historically there has been a larger share of male entrepreneurs in developed countries (Parker 2009). Recent studies (e.g., Kobeissi, 2010) explore changes in female participation in developing and developed countries using gender-related environmental factors. Verheul et al. (2012) study the difference between the stated preference and actual involvement in entrepreneurial activity for women in European countries, finding that preference can partially explain the lower participation. They conclude, however, that the remainder gender effect may be evidence of gender obstacles in actual entrepreneurial activity.

Ability to perceive or create new opportunities is linked to the personality traits of individuals. The specific traits associated with entrepreneurial activity are reviewed in CAF (2013) and Caliendo, Fossen, and Kritikos (2013).

As stated before, innovative thinking is a prerequisite for the Schumpeterian entrepreneur, as he or she must create new products or processes that replace current ones. The need for achievement has been found to be relevant, as achievement-oriented individuals are more prone to take on challenging entrepreneurial activities. Given that the returns from the new activities are unknown, the entrepreneur in the Knight framework must be risk tolerant in order to venture into new activities. In the same manner, an entrepreneur must be confident in his or her abilities to succeed when confronted with uncertainty. Another key aspect of entrepreneurial activity is the opportunity to become your own boss/employer; it gives more autonomy in comparison with being an employee. Entrepreneurs also need to be able to multitask.

Finally, the literature has found the trait *locus of internal control* to be positively correlated to entrepreneurial intent. The locus of control can be interpreted as the

personal component of the perceived behavioral control in the theory of planned behavior (Verheul et al. 2012). Individuals who assume that external forces are not the main drivers of outcomes are found to be more successful as entrepreneurs.

It is interesting to wonder if traits or skills are inherited, learned, or acquired. The literature explores the effects of role models in entrepreneurship decisions (Fairlie and Robb, 2007; Toth, 2012). According to the literature, skills can be acquired by exposure to entrepreneurial activity, either by learning, doing, or transference from parents to children, which could affect perception of entrepreneurial activity. There are other external factors that could influence the decision-making process such as political-institutional and sociocultural factors. The entrepreneurs in developing countries may also face environmental barriers such as financial restrictions or high administrative costs. This could affect the rate of entry into entrepreneurial activity, forcing entry into informal, low productivity sectors, or it could cause prospective entrepreneurs to remain in situations where they are employees.

3. Data and Descriptive Statistics

The source of data for this technical note is the 2012 ECAF, which covers a sample of 9,039 observations, representative of individuals between the ages of 25 and 65 that live in urban areas of selected cities in Latin America and of the city of Los Angeles (United States). The ECAF collects socio-demographic information, personal traits, and previous work experience for these individuals. It is possible to collect personality traits by asking individuals their level of agreement with different statements designed to capture an associated trait. These statements are grouped together according to their target trait and then an index is created with the mean of each trait group. The risk tolerance is measured according to the revealed preference of individuals when faced with a fictitious decision about lottery payout options (see Appendix A). The score ranges from 1 to 4, with 4 being the highest level of risk preference

For the purpose of this study, only the economically active population of Latin America was considered (6,344 observations). Due to missing values for some variables, we are left with 5,680 cases. In our main empirical exercises, we use two sets of alternative definitions of entrepreneurs and non-entrepreneurs, as described in Tables 1 and 2.

Table 1: Types of Individuals (Definition 1)

Category	Code	Description
Non-entrepreneur	NE	Not an entrepreneur and is not considering becoming one
Entrepreneur	E	Not a full-time entrepreneur and employs personnel
Self-employed	SE	Not a full-time entrepreneur and does not employ personnel
Entrepreneur part-time	EP	Not a part-time entrepreneur (could or could not employ personnel)
Potential entrepreneur	PE	Not an entrepreneur but considering becoming one within two years

Table 2: Types of Individuals (Definition 2)

Category	Code	Description
Non-entrepreneur	NE	Not an entrepreneur and is not considering becoming one
Entrepreneur/employer	EE	Is a full- or part-time entrepreneur and employs personnel
Entrepreneur/non-employer	ENE	Is a full- or part-time entrepreneur and does not employ personnel
Potential entrepreneur	PE	Not an entrepreneur but considering becoming one within two years

In Definition 1, a distinction is made between individuals who are entrepreneurs and those who are not. Non-entrepreneurs are then separated into potential entrepreneurs (PE) and individuals who are not considering becoming entrepreneurs (NE). Among entrepreneurs a distinction is made between those that are full-time entrepreneurs and employ personnel (E), those that are full-time, self-employed entrepreneurs (SE), and those that are part-time entrepreneurs (EP). It is likely that these different groups have different characteristics.

Definition 2 categorizes part-time entrepreneurs according to their decision to employ personnel. If they employ personnel, they are grouped with E; if they do not, they are grouped with the self-employed (SE). It can be argued that those that employ personnel may have different characteristics; for example, they might be more tolerant to risk than those that do not employ personnel.

The personality traits are constructed as explained in Appendix A. According to their educational attainment, individuals are categorized as having basic education (primary education or lower), middle education (secondary complete or incomplete), or high education (tertiary education incomplete or higher).

The parents-entrepreneurs dummy measures if the parents of the individual where involved in entrepreneurial activities. A proxy is used to measure financial access; it takes a value of 1 if the household has a bank account or other kind of formal savings account. Descriptive statistics are presented for each category of Definition 1 in Tables 3.A through 3.C. Appendix B shows descriptive statistics for each category of Definition 2.

Entrepreneurs-owners have many characteristics that are, on average, above the mean: they are older, more educated, and present a higher share of entrepreneurial parents and financial access than any other category. The desirable personal traits (achievement-oriented, a high degree of autonomy, self-efficacy, innovative thinking, a locus of internal control, multitasking, and a risk-taking attitude) are all above the mean, and they are more prone to take risks than the other categories. Part-time entrepreneurs share some characteristics with entrepreneur-owners: high education, male, parent-entrepreneurs, financial access, and some desirable personality traits are above the mean (achievement-oriented, self-confidence, innovative thinking, multitasking, and a risk-taking attitude), and their risk preference is medium-low to medium-high. They differ from entrepreneur-owners in that they do not have the characteristics locus of internal control above the mean and are, on average, more educated but less inclined to risk.

Potential entrepreneurs have the following characteristics above the mean: middle and high education, male, parent entrepreneurs, and financial access. The desirable personality traits that are above the mean are achievement-oriented and self-efficacy. On average, they are younger than the previous categories of entrepreneurs. Self-employed have low to middle education levels, parents who are/were entrepreneurs, and medium-low and medium-high risk preferences. Note that none of the desirable personal traits were above the mean with the exception of the risk-taking attitude. Self-employed people have less financial access and have more female workers in their group than the mean. Non-entrepreneurs are close or below the mean for all characteristics.

Finally, Table 3.C shows the economic sectors of the individual. Most entrepreneur-owners and self-employed people belong to the commerce sector.

Table 3.A: Descriptive Statistics for Definition 1 of Entrepreneurs

| Category | Number of observations | Education attainment by category | | | Gender | Age | Entrepreneurial human capital | Financial access |
		Basic education	Middle education	High education	(1 = male)	(years)	(1 = parent entrepreneurs)	(1 = savings accounts in household)
PE	898	13%	44%	44%	62%	37	21%	68%
NE	2,748	20%	46%	34%	55%	39	13%	66%
E	383	16%	39%	45%	67%	41	36%	80%
SE	1,629	26%	48%	26%	59%	43	20%	58%
EP	202	10%	42%	49%	65%	39	29%	73%
Total	5,860	20%	46%	35%	58%	40	18%	66%

Table 3.B: Descriptive Statistics for Definition 1 of Entrepreneurs, Personal Traits

Category	Achievement oriented	Autonomy	Self-efficacy	Innovative thinking	Locus of internal control	Multitasking	Risk attitude	Risk 1	Risk 2	risk 3	risk 4
PE	3.78	3.71	4.25	2.57	3.38	2.94	2.18	47%	15%	9%	28%
NE	3.72	3.71	4.20	2.57	3.44	2.94	2.00	54%	15%	7%	24%
E	3.86	3.78	4.28	2.60	3.51	2.99	2.61	33%	14%	10%	42%
SE	3.75	3.70	4.19	2.53	3.39	2.95	2.40	43%	13%	7%	38%
EP	3.81	3.75	4.30	2.62	3.39	3.03	2.32	42%	14%	13%	30%
Total	3.75	3.71	4.21	2.56	3.42	2.95	2.19	48%	15%	8%	30%

Table 3.C: Descriptive Statistics for Definition 1 of Entrepreneurs, Sector of Activity

Category	Unemployed	Agriculture	Mining	Industry	Construction	Services	Commerce	Transport	Health and education	Public administration	Other services	Total
PE	131	17	11	103	52	19	129	40	91	59	203	855
NE	396	44	20	270	192	56	376	148	312	239	571	2,624
E	0	16	6	40	32	8	152	19	12	4	88	377
SE	0	33	19	77	158	45	586	160	48	11	447	1,584
EP	7	7	2	17	10	9	28	13	35	24	46	198
Total	534	117	58	507	444	137	1,271	380	498	337	1,355	5,638

4. Empirical Strategy

As stated before, the main aim herein is to understand the characteristics that are correlated with the choice of being an entrepreneur. With this purpose in mind, we will implement different econometric strategies to shed some light on the issue. Given that the ECAF database allows for classifying individuals into different categories, a multiple-choice approach is needed.

Discrete choice models are extensively used in the literature to model occupational choice; in our case the individual has to choose an entrepreneurial category. We will estimate a multinomial logit model where all options will be associated with individual characteristics. More precisely, the probability model of the ith individual choosing the jth category can be expressed as function of personal characteristics.

$$P_{ij} = P\ (Y_i = j\ /\ X_i) = F_j(X_i,\ )$$

$$P_{ij} = \frac{e^{(\ '_j X_i)}}{\sum_{k=1}^{J} e^{(\ '_k X_i)}}$$

Where P_{ij} is the probability of the ith individual choosing the jth category, X_i are the personal characteristics of the ith individual and are the coefficients associated with those characteristics for the jth category.

To eliminate the indeterminacy of the model, a convenient normalization will be made, taking the NE (non-entrepreneur) category as a base outcome of the model. The coefficients in the tables below are interpreted as the multinomial odds ratio relative to the base outcome (i.e., NE). The interpretation (when causality can be attributed) is that for a unit change in variable X (for example, male) the odds of outcome Y (for example, being an entrepreneur) change (with respect to the base outcome of being a non-entrepreneur) by the respective (1 minus the) estimated coefficient of variable X, assuming that all other variables in the model are held constant. In the example, if the parameter is *greater than 1*, it means that the male variable positively influences the odds of being an entrepreneur.

For this model to perform well, it is necessary to make a basic assumption—that is, the independence of irrelevant alternatives (IIA), which means that the relative odds ratios $(\frac{P_{ij}}{P_{ik}})$ are independent of the other alternatives. In other words, the absence of the other outcomes does not affect the relative probability. Significant changes in

coefficients when an alternative is left out are evidence of deviation from this assumption.

Classical models study the decision of entering entrepreneurial activity using dichotomous choice models (Blanchflower and Oswald, 1998; Blanchflower, Oswald, and Stutzer, 2001). In these cases, a common approach is to model the decision using a logit model (or logistic regression). We will run logistic regressions as a robustness check of the results found with the multinomial logit. At this stage, the definition of the positive outcome will become relevant, and we will deal with this difficulty estimating different logistic models with alternative definitions of the positive outcomes (i.e., definition of who is an entrepreneur).

It should be noted that the previous models (logit and multinomial logit) can be derived from a random utility model (Green, 2003). In this context, the choice made can be interpreted as being determined by a utility maximization problem. The ith individual is faced with j choices that report a utility $U_{ij} = X_i{}_j + {}_{ij}$ where ${}_{ij}$ is a random shock. If the individual chooses the j alternative, we can interpret that U_{ij} is the choice that maximizes utility among the alternatives. Hence, $U_{ij} > U_{ik} \, for \, all \, k \neq j$, given the characteristics of the individual.

Apart from the determinants of entrepreneurship mentioned in the previous section, we introduce city dummy variables to control for city fixed effects. We estimate cluster standard errors to allow for correlations among individuals from the same city.

4.1   Multinomial Logit Models

The results from the multinomial logit models are presented in Table 4. Two models where estimated considering, alternatively, Definitions 1 and 2 of individuals.[1] Based on the first column of Table 4, the results indicate that entrepreneur-owners have significant higher odds (with respect to non-entrepreneurs) of the following characteristics (note that we should compare the coefficients with respect to one, [i.e., same odd]): achievement-oriented, autonomous, multitasking, medium-high and high risk tolerance, male, age, parent-entrepreneurs, and financial access.

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[1] A general version of the Haussmann specification test (i.e., not considering the cluster structure) were performed for both models, rejecting the hypothesis that the coefficients vary when excluding other categories, meaning that we are likely not violating the IIA assumption.

Potential entrepreneurs (column 2) present positive significant odds in the following characteristics: achievement-oriented, medium and high education, male, and parent-entrepreneurs. The odds of locus of internal control and age are significantly lower than one. They are different with respect to entrepreneur-owners in that they present greater odds of high education and lower odds of risk and age.

Self-employed (column 3) have higher odds with respect to non-entrepreneurs in the following characteristics: achievement-oriented, high risk tolerance, and parent-entrepreneurs. They share these three characteristics with entrepreneur-owners, even though the odds are significantly lower. The odds for financial access, medium education, and high education are below the level of the excluded category. In addition, they do not present gender bias with respect to the excluded category.

Part-time entrepreneurs (column 4) share some of the characteristics of entrepreneur-owners in comparison to non-entrepreneurs; in particular they have higher odds in the following characteristics: achievement-oriented, multitasking, medium-high to high risk tolerance, male, high education, and parent-entrepreneurs. In contrast, they seem to have lower odds in the locus of internal control characteristic. In comparison with entrepreneurs, they do not have the same financial access, and they lack internal locus of control while having higher education (see Table B.5 in Appendix B).

When we employ Definition 2 for entrepreneurs, the results for entrepreneur-employers are very similar to the results for entrepreneur-owners in Definition 1. The same happens for the potential entrepreneurs in Model 2 in comparison with the same category in Model 1. The results for the category of entrepreneurs non-employers, which contains the category self-employed and some of the part-time entrepreneurs, are similar to the results for the category of self-employed in Classification 1.

Table 4: Multinomial Logit Models' Relative Odds Ratios

	Model 1. Entrepreneurs Classification 1				Model 1. Entrepreneurs Classification 2		
	E	PE	SE	EP	EE	PE	ENE
Achievement-oriented	2.083***	1.317*	1.415***	1.534**	1.975***	1.317*	1.413***
	(0.376)	(0.195)	(0.168)	(0.324)	(0.324)	(0.195)	(0.175)
Autonomy	1.191**	1.101	1.222**	1.159	1.167**	1.101	1.222**
	(0.088)	(0.113)	(0.102)	(0.105)	(0.074)	(0.113)	(0.103)
Self-efficacy	1.011	1.104	0.984	1.199	1.036	1.103	1.000
	(0.080)	(0.101)	(0.097)	(0.219)	(0.099)	(0.101)	(0.100)
Innovative thinking	0.996	0.984	0.968	1.077	1.002	0.984	0.978
	(0.090)	(0.054)	(0.039)	(0.123)	(0.080)	(0.054)	(0.039)
Locus of internal control	1.008	0.806**	0.894	0.743**	0.897	0.806**	0.897
	(0.119)	(0.075)	(0.080)	(0.108)	(0.106)	(0.075)	(0.080)
Multitasking	1.172*	1.019	1.027	1.296*	1.198**	1.018	1.040
	(0.103)	(0.072)	(0.052)	(0.191)	(0.109)	(0.072)	(0.052)
Medium low risk tolerance	1.261	0.992	1.076	1.034	1.147	0.992	1.088
	(0.217)	(0.170)	(0.109)	(0.296)	(0.161)	(0.170)	(0.113)
Medium high risk tolerance	2.402***	1.595***	1.430**	2.554***	2.342***	1.592***	1.518***
	(0.570)	(0.253)	(0.203)	(0.576)	(0.479)	(0.253)	(0.196)
High risk tolerance	2.738***	1.495***	2.212***	1.596**	2.386***	1.497***	2.180***
	(0.428)	(0.183)	(0.226)	(0.292)	(0.333)	(0.183)	(0.210)
Middle education	0.869	1.218*	0.912	1.670*	1.047	1.217*	0.919
	(0.166)	(0.136)	(0.104)	(0.462)	(0.205)	(0.136)	(0.103)
High education	0.799	1.319**	0.519***	2.079**	1.069	1.316**	0.545***
	(0.213)	(0.163)	(0.084)	(0.605)	(0.273)	(0.163)	(0.086)
Gender	1.497***	1.257***	1.040	1.439***	1.495***	1.256***	1.056
	(0.222)	(0.080)	(0.105)	(0.188)	(0.177)	(0.080)	(0.108)
Age	1.025***	0.984***	1.035***	1.006	1.022***	0.984***	1.033***
	(0.005)	(0.004)	(0.004)	(0.008)	(0.005)	(0.004)	(0.004)
Financial access	1.904***	1.047	0.797***	1.115	1.652***	1.047	0.812***
	(0.311)	(0.115)	(0.063)	(0.207)	(0.265)	(0.115)	(0.061)
Parents entrepreneurs	3.426***	1.704***	2.091***	2.516***	3.363***	1.705***	2.072***
	(0.615)	(0.172)	(0.202)	(0.360)	(0.537)	(0.173)	(0.197)
Constant	0.000***	0.063***	0.021***	0.001***	0.000***	0.063***	0.021***
	(0.000)	(0.051)	(0.011)	(0.001)	(0.000)	(0.051)	(0.011)
City fixed effects	YES	YES	YES	YES	YES	YES	YES
Observations	5,860	5,860	5,860	5,860	5,860	5,860	5,860

Notes: Base level non-entrepreneurs. The coefficients reported in the table are the odds.
*** $p<0.01$, **$p<0.05$, *$p<0.1$.

4.2 Robustness analysis

4.2.1 Logit models

The results from logistic regressions are presented in Table 5, taking two alternative definitions for the positive outcome. In the first model entrepreneurs are defined as individuals belonging to the categories EE, ENE, and PE, or what is the same E, EP, PE, SE. In the second and third models we employ a more restrictive definition of entrepreneur: those that are entrepreneur-employers (EE) or entrepreneur-owners (E). The results for the three models are shown in Table 5 (which reports the odds, instead of the marginal effects).

Based on Models 2 and 3, the characteristics achievement-oriented, multitasking, medium-high and high risk tolerance, higher age, male, parent entrepreneurs, and financial access are positively correlated with the probability of being an entrepreneur. Note that these results are similar to the results found for the category entrepreneur-owner in the multinomial logit Model 1 in Table 4 and to the results found for the category entrepreneur-employer in the multinomial logit Model 2 in Table 4, except for the odd of autonomy.

When we use the more lax definition of entrepreneurs from Model 1 in Table 5, the picture becomes blurred. The characteristics that are positively correlated with entrepreneurship are achievement-oriented, high risk tolerance and parent-entrepreneurs. Locus of internal control reduces the odds of being an entrepreneur.

Table 5: Logistic Regressions' Odds Ratios

	EE+PE+ENE	EE	E
Achievement-oriented	1.454***	1.652***	1.725***
	(0.159)	(0.263)	(0.310)
Autonomy	1.173***	1.067	1.088
	(0.063)	(0.079)	(0.084)
Self-efficacy	1.031	1.017	0.990
	(0.086)	(0.088)	(0.074)
Innovative thinking	0.983	1.016	1.009
	(0.036)	(0.081)	(0.091)
Locus of internal control	0.872*	0.970	1.102
	(0.069)	(0.092)	(0.103)
Multitasking	1.055	1.178*	1.144
	(0.035)	(0.105)	(0.098)
Medium low risk tolerance	1.068	1.123	1.239
	(0.099)	(0.129)	(0.181)
Medium High risk tolerance	1.661***	1.862***	1.869***
	(0.170)	(0.373)	(0.444)
High risk tolerance	1.991***	1.656***	1.894***
	(0.192)	(0.199)	(0.269)
Middle education	0.978	1.066	0.873
	(0.095)	(0.183)	(0.140)
High education	0.780*	1.288	0.939
	(0.103)	(0.279)	(0.205)
Gender	1.174**	1.403***	1.392**
	(0.090)	(0.149)	(0.191)
Age	1.018***	1.013***	1.015***
	(0.004)	(0.004)	(0.005)
Financial access	0.962	1.775***	2.044***
	(0.075)	(0.248)	(0.307)
Parent-entrepreneurs	2.154***	2.301***	2.277***
	(0.195)	(0.311)	(0.360)
Constant	0.046***	0.001***	0.000***
	(0.022)	(0.001)	(0.000)
City Fixed effects	YES	YES	YES
Observation	5,860	5,860	5,860

Note: *** p<0.01, **p<0.05, *p<0.1.

4.2.2 Other Robustness Checks and Heterogeneity Across Countries

The previous regressions were not able to control for the economic sector of activity because there were unemployed people among the economically active. In Table B.9 (Annex) we run two different versions of Model 1 from Table 4. The first version excludes the unemployed from the sample, while the second excludes the unemployed and controls for sector.

As seen in Table B.9, the results are relatively robust to both the exclusion of unemployed from the sample and the exclusion of unemployed, taking into account sector fixed effects. We also run specific models for each country in the sample (see Table B.10). Although the small size of the sample conspires against the robustness of these estimations, there is still evidence of heterogeneity across countries in Latin America. This probably shows the relevance of political-institutional, sociocultural, and other environment-related and country-specific factors as determinants of entrepreneurship.

5. Conclusions

The objective of this technical note is to understand the different characteristics that are associated with different types of entrepreneurs in Latin America. Using a strict definition of entrepreneur (entrepreneur-owner or entrepreneur-employer) we find that the characteristics that are associated with them are male, age, parent entrepreneurs, financial access, and some personality traits (achievement-oriented, autonomous, multitasking, and high risk tolerance).

Potential entrepreneurs share some of the characteristics of entrepreneur-owners. What makes them different is that they are younger and more educated; they also present a lower locus of internal control and a lower tolerance to risk. Part-time entrepreneurs and entrepreneur-owners share the characteristics of gender bias, achievement-oriented, and a history of entrepreneurs in the family. The main differences with respect to entrepreneur-owners are that they lack locus of internal control, are less risk tolerant, and are highly educated.

These different characteristics probably explain why they are not entrepreneur-owners, as they might face higher opportunity cost and are more risk averse. Self-employed are a very particular type of entrepreneur who have some characteristics that

make them very different with respect to entrepreneurs-owners. They are less educated; they do not present gender bias; and they do not have the same financial access as entrepreneur-owners. On the other hand, they share some characteristics with entrepreneur-owners: they are achievement-oriented, risk takers, require autonomy, and have a history of entrepreneurs in the family.

Self-employed individuals and potential entrepreneurs are very different types of individuals and should be addressed as such. When countries are analyzed separately, heterogeneities are found, showing indirect evidence of the relevance of political-institutional, sociocultural, and other environment-related factors as determinants of entrepreneurship.

One interesting point—with potential policy implications—is that potential entrepreneurs work in larger firms than the EO type. Therefore, potential entrepreneurs are located in more dynamic firms and have important knowledge that could have significant spillovers to the economy as a whole if they decide to create new firms.

If this is the case, the question is how to make them enter into entrepreneurial activity. Policy probably cannot affect the personality traits of potential entrepreneurs but could affect some variables in the environment that could impact their predisposition to become entrepreneurs. For example, they are risk averse; therefore, policy actions directed to reduce the risk of failure of new ventures or to promote risk sharing could help. They are not multitaskers; therefore the association of different types of potential entrepreneurs in a common venture could partially solve this problem.

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Appendix A: Definition of Variables Not Defined in the Main Text

The 2012 ECAF includes a set of questions designed to capture the personality traits considered to be desirable in an entrepreneur. The interviewer asks the subject what their level of agreement is with a set of statements (5 being the maximum level of agreement and 1 the lowest). It should be noted that some questions represent the opposite of a desirable trait. Those were rescaled to show the desirable trait and marked with an asterisk as shown in the following table.

Table A1. Categories Included in the Definition of Personality Traits

Associated trait	Questionnaire	Statements
Achievement-oriented	Q.50	When faced with a challenge, I think about the outcome of success instead of the consequences of failing.
	Q.53	I prefer demanding challenges instead of easy tasks.
	Q.59	When I am working on a special assignment, it does not matter if I have to wake up early or stay up late.
	Q.63	I'd rather think about future possibilities than past achievements.
	Q.67*	I don't mind having a routine, unchallenging job if the pay is good.
	Q.70	I dislike when things are not done properly.
Autonomy	Q. 52*	I find it difficult to start a new task from scratch.
	Q.56	I feel uncomfortable when others decide for me.
	Q.62	I generally defend my point of view when someone disagrees with me.
Self-efficacy	Q.57	I am able to learn anything if I set my mind to it.
	Q.60	If I make a promise, I keep it.
Innovation and creativity	Q.55*	I don't usually daydream.
	Q.64*	I find it harder to adapt to change than to follow a routine.
Locus of internal control	Q.51	The outcomes in my life depend on my actions and decisions.
	Q.54	Achieving my objectives has little to do with luck.
	Q.68*	In comparison to other people, I haven't accomplished everything that I deserve.
	Q.69*	Most of the bad outcomes that a person experiences are caused by bad luck.
Multitasking	Q.61	I'd rather be good at many things than very good at only one thing.
	Q. 65*	I get annoyed if someone interrupts me when I am focusing on a task.

Source: CAF (2013).

To measure risk tolerance, individuals are presented with a nested set of choices regarding fictitious lottery payout options. In each stage, individuals must choose between a certain monthly wage (approximately the mean of the monthly income in the country) and a payment with a degree of uncertainty. If the individual chooses the certain wage, then two other alternatives are presented: the certain wage and a less risky option with a higher expected return than the previous one. This is replicated in three stages, and the individual is then classified according to the decisions made. Figure A1 illustrates this process. Table A2 shows the definition of risk level used herein.

Figure A1: Measuring Risk Aversion
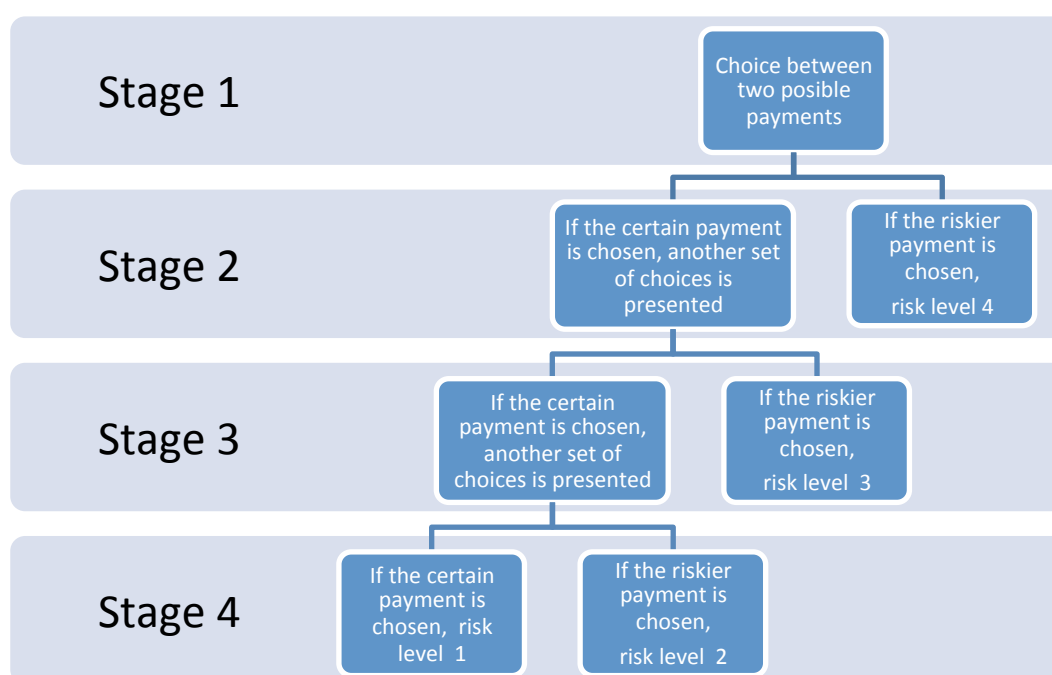
Table A2: **Risk Level at Each Stage**

Stage	Certain payment (A)	Uncertain payment (B)	Classification
1	The mean of monthly income in the individual country	A payment that is as likely to be 200% as 30% of A	*Classified as risk level = 4 if B is chosen
2	The mean of monthly income in the individual country	A payment that is as likely to be 200% as 60% of A	*Classified as risk level = 3 if B is chosen
3	The mean of monthly income in the individual country	A payment that is as likely to be 200% as 80% of A	*Classified as risk level = 2 if B is chosen *Classified as risk level = 1 if A is chosen

Regarding socio-demographic variables, gender is a dummy variable that equals 1 if the individual is male. Education attainment is obtained by asking the individual what was the maximum level attained in formal education. We categorize the answers in 3 levels as follows: basic education (primary education complete or less), middle education (secondary education complete or incomplete), and high education (tertiary, university, and other specialized education, complete or incomplete). Financial access is a dummy variable that equals 1 if any member of the household has access to a savings account or other kind of account from a financial institution. The parent-entrepreneur dummy variable is constructed using the question that inquires if the parent of the individual owns/owned a business.

Annex B: Additional Tables

Table B.1: Descriptive Statistics for Definition 2 of Entrepreneurs

Category	Number of observations	Education attainment by category			Gender	Age	Entrepreneurial Human Capital	Financial access
		Basic education	Middle education	High education	(1 = male)	(years)	(1 = parent entrepreneurs)	(1 = savings account in household)
PE	898	13%	44%	44%	62%	37	21%	68%
NE	2,748	20%	46%	34%	55%	39	13%	66%
EE	497	14%	39%	47%	67%	41	36%	79%
ENE	1,717	25%	48%	27%	59%	43	21%	59%
Total	5,860	20%	46%	35%	58%	40	18%	66%

Table B.2: Descriptive Statistics for Definition 2 of Entrepreneurs, Personal Traits

Cat.	Achievement-oriented	Autonomy	Self-efficacy	Innovative thinking	Locus of internal control	Multitasking	Risk attitude	Risk 1	Risk 2	Risk 3	Risk 4
PE	3.78	3.71	4.25	2.57	3.38	2.94	2.18	47%	15%	9%	28%
NE	3.72	3.71	4.20	2.57	3.44	2.94	2.00	54%	15%	7%	24%
EE	3.85	3.76	4.27	2.59	3.46	3.00	2.54	36%	14%	11%	39%
ENE	3.75	3.71	4.20	2.54	3.39	2.95	2.39	42%	13%	7%	37%
Total	3.75	3.71	4.21	2.56	3.42	2.95	2.19	48%	15%	8%	30%

Table B.3: Descriptive Statistics for Definition 2 of Entrepreneurs, Sector of Activity

Category	Unemployed	Agriculture	Mining	Industry	Construction	Services	Commerce	Transport	Health and education	Public administration	Other services	Total
PE	131	17	11	103	52	19	129	40	91	59	203	855
NE	396	44	20	270	192	56	376	148	312	239	571	2,624
EE	3	22	8	53	36	13	170	24	29	16	115	489
ENE	4	34	19	81	164	49	596	168	66	23	466	1,670
Total	534	117	58	507	444	137	1271	380	498	337	1,355	5,638

Table B.4: Correlation Between Personality Traits

	Achievement oriented	Autonomy	Self-efficacy	Innovative thinking	Locus of internal control	Multitasking	Risk 1	Risk 2	Risk 3	Risk 4
Achievement oriented	1									
Autonomy	0.3036	1								
Self-efficacy	0.4443	0.3575	1							
Innovative thinking	-0.0677	0.0953	-0.0248	1						
Locus of internal control	0.235	0.3298	0.2284	0.1256	1					
Multitasking	-0.0334	-0.0608	0.0137	-0.0363	-0.0008	1				
Risk 1	-0.0166	0.0104	0.0168	-0.0636	-0.0178	0.0309	1			
Risk 2	0.0029	-0.0041	0.0188	0.011	-0.0053	-0.0154	-0.3963	1		
Risk 3	-0.0027	0.001	-0.0013	0.0401	0.0259	-0.0015	-0.2788	-0.1194	1	
Risk 4	0.0174	-0.0089	-0.0322	0.0376	0.0084	-0.021	-0.625	-0.2676	-0.1883	1

Table B.5: Test of Equality of Coefficients Across Types of Individuals, Main Model, Definition 1

	PE vs. E			PE vs. SE			PE vs. EP			E vs.SE			E vs. EP			SE vs. EP		
	Statistic	DF	p-values	Statistic	DF	p-values	Statistic	DF	p-values	Statistic	DF	p-values	Statistic	DF	p-values	Statistic	DF	p-values
Achievement-oriented	4.70	1.00	0.03	0.34	1.00	0.56	0.55	1.00	0.46	3.59	1.00	0.06	1.62	1.00	0.20	0.24	1.00	0.63
Autonomy	0.43	1.00	0.51	0.56	1.00	0.45	0.12	1.00	0.73	0.06	1.00	0.81	0.08	1.00	0.78	0.26	1.00	0.61
Self-efficacy	0.87	1.00	0.35	2.14	1.00	0.14	0.20	1.00	0.65	0.07	1.00	0.80	1.13	1.00	0.29	1.70	1.00	0.19
Innovative thinking	0.02	1.00	0.90	0.08	1.00	0.78	0.68	1.00	0.41	0.09	1.00	0.76	0.25	1.00	0.62	0.80	1.00	0.37
Locus of internal control	6.61	1.00	0.01	1.40	1.00	0.24	0.51	1.00	0.48	1.33	1.00	0.25	5.36	1.00	0.02	1.71	1.00	0.19
Multitasking	2.07	1.00	0.15	0.01	1.00	0.94	1.75	1.00	0.19	1.73	1.00	0.19	0.49	1.00	0.49	2.64	1.00	0.10
Medium-low risk tolerance	1.63	1.00	0.20	0.17	1.00	0.68	0.02	1.00	0.90	1.06	1.00	0.30	0.40	1.00	0.53	0.02	1.00	0.89
Medium-high risk tolerance	1.99	1.00	0.16	0.31	1.00	0.58	2.74	1.00	0.10	3.81	1.00	0.05	0.06	1.00	0.81	4.87	1.00	0.03
High risk tolerance	12.09	1.00	0.00	14.14	1.00	0.00	0.20	1.00	0.66	2.65	1.00	0.10	5.29	1.00	0.02	2.90	1.00	0.09
Middle education	3.94	1.00	0.05	4.54	1.00	0.03	1.03	1.00	0.31	0.10	1.00	0.75	4.89	1.00	0.03	4.49	1.00	0.03
High education	4.89	1.00	0.03	31.43	1.00	0.00	1.75	1.00	0.19	4.85	1.00	0.03	8.11	1.00	0.00	19.15	1.00	0.00
Gender	1.91	1.00	0.17	3.34	1.00	0.07	1.23	1.00	0.27	5.71	1.00	0.02	0.05	1.00	0.81	8.70	1.00	0.00
Age	46.78	1.00	0.00	149.96	1.00	0.00	7.90	1.00	0.00	4.62	1.00	0.03	4.25	1.00	0.04	12.89	1.00	0.00
Financial access	10.55	1.00	0.00	4.90	1.00	0.03	0.17	1.00	0.68	37.32	1.00	0.00	8.33	1.00	0.00	3.97	1.00	0.05
Parent entrepreneurs	20.03	1.00	0.00	2.54	1.00	0.11	5.90	1.00	0.02	13.19	1.00	0.00	2.27	1.00	0.13	2.33	1.00	0.13
Controlling for city FE	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES

Table B.6: Firm Size By Category, Definition 1

Category	One employee	2–3	4–5	6–10	11–20	21–50	51–100	More than 100	Total
PE	24	114	69	92	90	112	69	188	758
NE	58	274	207	348	327	343	239	540	2,336
E	0	275	57	25	16	5	2	2	382
SE	1,629	0	0	0	0	0	0	0	1,629
EP	9	28	19	23	24	29	20	42	194
Total	1,720	691	352	488	457	489	330	772	5,299

Table B.7: Firm Size By Category, Definition 2

Category	One employee	2–3	4–5	6–10	11–20	21–50	51–100	More than 100	Total
PE	24	114	69	92	90	112	69	188	758
NE	58	274	207	348	327	343	239	540	2,336
EE	6	292	67	38	28	16	17	28	492
ENE	1632	11	9	10	12	18	5	16	1713
Total	1,720	691	352	488	457	489	330	772	5,299

Table B.8: Size of Part-time Entrepreneur's Firm *(secondary activity firm)*

Number of employees	Total part-time entrepreneurs with this number of employees
None	88
1	53
2–3	40
4–5	4
6–10	8
11–20	5
21–50	1
51–100	1
More than 100	2
Total	202

Table B.9: Multinomial Logit Models' Relative Odds Ratios *(excluding unemployed and controlling for sector[2])*

	Category with sector				Sector			
	E	PE	SE	EP	E	PE	SE	EP
Achievement-oriented	2.250***	1.240	1.519***	1.731**	2.365***	1.222	1.521***	1.739**
	(0.412)	(0.227)	(0.183)	(0.384)	(0.470)	(0.219)	(0.187)	(0.381)
Autonomy	1.177**	1.130	1.206**	1.137	1.218**	1.139	1.239**	1.161
	(0.092)	(0.149)	(0.114)	(0.122)	(0.099)	(0.140)	(0.113)	(0.131)
Self-efficacy	0.979	1.025	0.967	1.167	0.973	1.023	0.976	1.160
	(0.088)	(0.106)	(0.105)	(0.232)	(0.082)	(0.111)	(0.109)	(0.238)
Innovative thinking	0.982	0.943	0.951	1.074	1.014	0.954	0.981	1.084
	(0.093)	(0.058)	(0.044)	(0.146)	(0.089)	(0.058)	(0.045)	(0.147)
Locus of internal control	0.955	0.787**	0.863	0.711**	0.938	0.797**	0.863	0.705***
	(0.112)	(0.075)	(0.085)	(0.094)	(0.109)	(0.078)	(0.081)	(0.093)
Multitasking	1.151	1.033	1.020	1.283	1.140	1.028	1.012	1.282
	(0.109)	(0.078)	(0.059)	(0.202)	(0.118)	(0.076)	(0.067)	(0.203)
Medium low risk tolerance	1.246	0.928	1.096	1.053	1.189	0.912	1.049	1.030
	(0.209)	(0.182)	(0.105)	(0.303)	(0.180)	(0.178)	(0.099)	(0.309)
Medium High risk tolerance	2.400***	1.585**	1.447**	2.492***	2.257***	1.565**	1.389**	2.487***
	(0.570)	(0.299)	(0.228)	(0.627)	(0.529)	(0.292)	(0.208)	(0.623)
High risk tolerance	2.902***	1.490***	2.405***	1.738***	2.750***	1.469***	2.261***	1.698**
	(0.375)	(0.222)	(0.251)	(0.368)	(0.341)	(0.217)	(0.237)	(0.350)
Middle education	0.852	1.183	0.878	1.446	0.952	1.228	0.971	1.436
	(0.169)	(0.159)	(0.099)	(0.415)	(0.192)	(0.163)	(0.088)	(0.408)
High education	0.721	1.390**	0.466***	1.895**	1.177	1.534***	0.748**	1.763*
	(0.188)	(0.226)	(0.073)	(0.570)	(0.302)	(0.238)	(0.104)	(0.530)
Gender	1.386**	1.366***	0.942	1.297*	1.462***	1.452***	0.957	1.384**
	(0.200)	(0.100)	(0.106)	(0.185)	(0.200)	(0.127)	(0.106)	(0.195)
Age	1.030***	0.985**	1.039***	1.009	1.036***	0.987*	1.045***	1.008
	(0.005)	(0.007)	(0.004)	(0.008)	(0.006)	(0.007)	(0.005)	(0.008)
Financial access	1.695***	1.049	0.699***	0.915	1.772***	1.056	0.736***	0.902
	(0.279)	(0.119)	(0.060)	(0.152)	(0.263)	(0.122)	(0.053)	(0.153)
Parent entrepreneurs	3.579***	1.833***	2.127***	2.554***	3.535***	1.845***	2.125***	2.539***
	(0.717)	(0.228)	(0.249)	(0.400)	(0.755)	(0.243)	(0.297)	(0.424)
Constant	0.000***	0.101**	0.025***	0.001***	0.000***	0.110**	0.014***	0.002***
	(0.000)	(0.091)	(0.015)	(0.001)	(0.000)	(0.101)	(0.010)	(0.002)
Country FE	YES	YES	YES	YES	YES	YES	YES	YES
Sector FE	NO	NO	NO	NO	YES	YES	YES	YES
Observations	5,104	5,104	5,104	5,104	5,104	5,104	5,104	5,104

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[2] Individuals who do not declare their sector of employment were excluded to make both models comparable.

Table B10: Logistic Regressions' Odds Ratios for Different Latin American Countries

VARIABLES	Latin America	Argentina	Bolivia	Brazil	Colombia	Ecuador	Peru	Uruguay	Venezuela
Achievement-oriented	1.652***	2.108	1.340	4.578***	1.169	2.153***	2.703	1.455**	1.089
	(0.263)	(1.853)	(0.561)	(1.507)	(0.349)	(0.192)	(2.494)	(0.251)	(0.353)
Autonomy	1.067	1.185**	0.991	0.831	0.815***	1.108***	0.986	1.773***	1.947***
	(0.079)	(0.092)	(0.035)	(0.395)	(0.001)	(0.024)	(0.039)	(0.130)	(0.483)
Self-efficacy	1.017	1.283***	0.815	1.063	0.862	1.190**	0.727	1.224***	0.858
	(0.088)	(0.061)	(0.204)	(0.128)	(0.221)	(0.083)	(0.275)	(0.091)	(0.559)
Innovative thinking	1.016	0.817**	1.295***	1.245	1.132	0.972	1.133	0.729*	0.767
	(0.081)	(0.064)	(0.065)	(0.351)	(0.094)	(0.176)	(0.314)	(0.119)	(0.524)
Locus of internal control	0.970	0.902	0.931	1.169	1.305	0.867	0.944	1.150	0.519***
	(0.092)	(0.433)	(0.419)	(0.426)	(0.294)	(0.087)	(0.507)	(0.437)	(0.008)
Multitasking	1.178*	1.051	0.863**	1.469**	1.235	0.912***	1.714***	1.172	1.167
	(0.105)	(0.179)	(0.051)	(0.231)	(0.253)	(0.010)	(0.034)	(0.148)	(0.496)
Medium low risk tolerance	1.123	3.664*	0.750	0.946	1.260	1.181**	1.242***	0.739***	0.268*
	(0.129)	(2.753)	(0.305)	(0.786)	(0.320)	(0.094)	(0.040)	(0.039)	(0.205)
Medium High risk tolerance	1.862***	3.996***	2.267*	2.034	2.241	2.640***	1.879***	0.519	4.348***
	(0.373)	(1.175)	(0.986)	(1.198)	(1.331)	(0.411)	(0.041)	(0.413)	(0.562)
High risk tolerance	1.656***	2.929***	1.248	2.195***	1.502	1.473*	2.341***	0.955	3.383***
	(0.199)	(1.043)	(0.353)	(0.294)	(0.768)	(0.300)	(0.249)	(0.103)	(0.485)
Middle education	1.066	0.978	1.825*	0.671	0.841	0.812***	0.927	1.772	2.371
	(0.183)	(1.178)	(0.631)	(0.248)	(0.327)	(0.028)	(0.051)	(1.000)	(2.094)
High education	1.288	1.730	1.586	0.736	1.506	0.869	0.940	1.375***	4.355
	(0.279)	(2.031)	(0.967)	(0.636)	(0.643)	(0.447)	(0.173)	(0.030)	(3.932)
Gender	1.403***	1.234**	1.420*	1.636*	1.165	0.867	1.484*	2.252***	1.461
	(0.149)	(0.105)	(0.260)	(0.452)	(0.193)	(0.201)	(0.306)	(0.423)	(0.710)
Age	1.013***	1.005**	1.009	1.007	0.993**	1.013	1.012*	1.022**	1.045***
	(0.004)	(0.002)	(0.006)	(0.005)	(0.003)	(0.008)	(0.006)	(0.011)	(0.014)
Financial access	1.775***	1.024	1.829***	1.593**	2.888***	2.621***	2.581***	1.004	0.525***
	(0.248)	(0.554)	(0.197)	(0.338)	(0.684)	(0.736)	(0.524)	(0.079)	(0.128)
Parents entrepreneurs	2.301***	2.524***	2.196***	1.258*	2.670*	1.795***	1.537	5.037***	3.049*
	(0.311)	(0.677)	(0.302)	(0.150)	(1.566)	(0.204)	(0.823)	(3.154)	(1.868)
Constant	0.001***	0.000***	0.015***	0.000***	0.012***	0.001***	0.000*	0.000***	0.003***
	(0.001)	(0.000)	(0.006)	(0.000)	(0.001)	(0.002)	(0.001)	(0.000)	(0.000)
City FE	YES	YES	YES	YES	YES	YES	YES	YES	YES
Observations	5,860	602	683	734	657	745	685	719	737

Notes: Positive outcome = EE. We are not presenting the results for Panama since there are only 11 positive outcomes in the sample. *** p<0.01, **p<0.05, *p<0.1.