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Regional Variations of the Impact of Role Models and Fear of Failure on Entrepreneurship Amongst the Youth

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Abstract: This paper examines the joint influence of two individual level factors on entrepreneurship amongst youth residing in the rural regions. Using data from an adult population survey (APS), our empirical results suggest that although the youth in rural regions are equally likely to be positively influenced by entrepreneurial role models, rural youths are more likely to refrain from entrepreneurship because of the greater level of fear of failure compared to urabn youths. We suggest ways how by understanding differences in the influence of entrepreneurial role models and fear of business failure policy makers can design locally relevant entrepreneurship policies. By using a more fine grained analysis in the form of the moderating effect of two important individual level factors, our study contributes to a better understanding of the barriers to entrepreneurship in lagging (rural) regions at the country level.

Keyword: Youth entrepreneurship, fear of failure, entrepreneurial role models, Spain.

1. INTRODUCTION

Extant evidence has shown that entrepreneurship through new business creation generally have a positive effect on the economy (van Praag and Versloot, 2007). Therefore, policy makers have increasingly considered entrepreneurship as an effective tool for enhancing growth and development (European Union, 2013; Mackenzie, 1992; Stephans, Partridge, and Faggian, 2013). However, there are challenges in promoting entrepreneurship in lagging territorities such as rural regions and among communities or segments with low representation in entrepreneurial activities. While several studies have focused on identifying the factors that contribute to the relatively low participation of females in entrepreneurship (Aidis, Welter, Smallbone, and Isakova, 2007; Alonso and Trillo, 2014; Warnecke, 2014; Driga, Lafuente, and Vaillant, 2009; Field,

Jayachandran, and Pande, 2010; Figueroa-Armijos and Johnson, 2013), there is a dearth of studies that have examined the reasons for low participation of youth in entrepreneurship especially in rural regions. Is it because rural youths are influenced by a different set of factors that affect entrepreneurship in general or does the same factors affect entrepreneurship amongst the rural youths but in different ways? In this paper we examine the later by focussing on entrepreneurial role models and attitude towards business failure in explaining differences in youth entrepreneurship in rural regions. Several analyses at the aggregate level reveals that entrepreneurial role models and attitude towards business failure have a significant effect on entrepreneurship (Arenius and Minniti, 2005; Bosma, Hessels, Schutjens, Van Praag, and Verheul, 2012; Wyrwich, Stuetzer, and Sternberg, 2016).

However, the youth may respond differently to entrepreneurial role models and business failure because of their cognitive and psychological differences with respect to non-youths (Minola, Criaco, and Cassia, 2014). Similarly, Vaillant and Lafuente, (2007) report that in rural regions individuals react differently to the presence of entrepreneurial role models and fear of business failure. For instance, Vaillant and Lafuente (2007) found that entrepreneurial role models have a significant positive effect on entrepreneurship in rural Catalonia region of Spain while the fear of business failure has no effect. This result about the attitude towards business failure is surprising. Vaillant and Lafuente (2007) attribute their results to the entrepreneurial culture of rural Catalonia, a region that has historically encouraged business activities that has resulted in a high rate of entrepreneurship in the region of Catalonia compared other rural regions of Spain. We extend Vaillant and Lafuente's study by including other provinces of Spain and examine both the direct and the interaction effect of entrepreneurial role models and fear of business failure in influencing entrepreneurship among the rural youth.

Understanding the impact of entrepreneurial role models and attitude towards business failure among the youth in rural regions is important because as a population segment the youth represents one of the most productive resources in an economy. North and Smallbone, (2006), argue that the positive impact of entrepreneurship in rural development is amplified when entrepreneurial activities are carried out by the young people residing in these areas. Moreover, the youth today are generally better trained in comparison to previous generations and entrepreneurship represents a suitable avenue through which the human capital of youths can be harnessed for economic development. By examining youth entrepreneurship in the rural regions our study fills the gap in understanding the participation of one of the most productive human resources in rural regions. Similarly, by using a more fine grained analysis in the form of the moderating effect of two important individual level factors, our study contributes to a better understanding of the barriers to entrepreneuship in lagging (rural) regions at a country level.

From a methodological point of view, our study also allows us to understand the differences in the influences of entrepreneurial role model and attitude to business failure among the rural youth compared to the rural non-youth. We suggest ways how by understanding such differences policy makers can design more effective measures based on the needs of the local communities.

Our paper is organized is organized as follows. In section 2 we carry out the literature review followed by hypotheses. Section 3 discusses the research methodology followed by the empirical results. We carry out a discussion of our study's results in section 5 along with the implication of the results and finally the conclusion in section 6.

2. LITERATURE REVIEW AND HYPOTHESES

2.1 Young Entrepreneurs and Entrepreneurial Role Models

A well received finding from social psychology is that individuals often encouraged to partake in a given behavior by observing others perform that behavior (Bandura, 1977). This act of engaging in a behavior by observing the actions of others has been known as role modelling. Several studies in entrepreneurship provide strong evidence about the positive effect that role models in the form of personal knowledge of other entrepreneurs have on entrepreneurship (Bosma, Hessels, Schutjens, Van Praag, and Verheul, 2012; Gibson, 2004; Lafuente, Vaillant, and Rialp, 2007; Wyrwich, Stuetzer, and Sternberg, 2016). The effect of role modelling is explained by social comparision theory first proposed by Festinger (1954). According to the social comparison theory, individuals are inherently driven to evaluate his or her opinions and abilities. However, in the absence of objective, non social means individuals tend to evaluate their opinions and abilities by comparing with others (Festinger, 1954). Such comparisons occur with 'others' whom the focal individual considers close to his own ability or with similar opinions (Festinger, 1954; Gibson, 2003). For instance, an individual who perceives himself to be entrepreneurial is more likely to compare himself with another entrepreneur who he personally knows.

Role models therefore play an important role in providing a frame of reference for comparing the skills and abilities relevant for the task of entrepreneurship. Evidence suggests that entrepreneurial role model play a important in (positively) influencing the attitudes and beliefs about an individuals' perceived ability to be successful in a new venture (Auken, Fry, and Stephens, 2006). In addition, entrepreneurial role models have two important functional utility. First of all, as a source of observational learning entrepreneurial role models create awareness about the role demands of entrepreneurship (Bosma, Hessels, Schutjens, Van Praag, and Verheul, 2012). This is especially important because of the relative rarity of entrepreneurship as compared to other professions. Secondly, entrepreneurial role models are a source of motivation for executing a difficult task such as entrepreneurship (Lockwood, Sadler, Fyman, and Tuck, 2004). However, there are differences in the way role models influence younger and older individuals. Younger individuals tend to perceive their role models as positive, and the source of a range of attributes while older individuals tend to perceive role models as sources of specific and often negative attributes (Gibson, 2003).

H1: Entrepreneurial role models increases the likelihood of being involved in entrepreneurial activities among the youth.

Since, entrepreneurial role models act as an information channel about the feasibility of business the density of interpersonal relationship could influence how strongly the information is transmitted. For example, in a relatively tightly knit rural society youths are more likely to be in a personal contact with entrepreneurial role models because of proximity (Wyrwich, Stuetzer, and Sternberg, 2016). We such we propose that,

H2: The positive influence of entrepreneurial role models on entrepreneurial activity of rural youths is higher than for their urban counterparts.

2.2 Young Entrepreneurs and the Attitude to Business Failure

Entrepreneurship is an act of individual volition in which the motivations, aspirations and attitudes toward business ownership play an important role in converting entrepreneurial intentions into entrepreneurial actions. While the several individual level attributes with positive connotations have been well researched,

recent studies have highlighted one important negative attribute that act as a barrier to entrepreneurship (Arenius and Minniti, 2005; Cacciotti and Hayton, 2015; Lafuente, Vaillant, and Rialp, 2007; Wennberg, Pathak, and Autio, E, 2013). This barrier is the fear that business failure has on individuals' motivation to go ahead and undertake the entrepreneurial journey through business ownership. It has been suggested that unlike the adverse fallout from the labor market (job loss) which can be attributed to events beyond the control of the individual, business failure is directly attributable to the efforts and ability of the individual and hence more likely to be stigmatized (Jenkins and McKelvie, 2015). Stigmatization of business failure has several social and physiological repercussions on the focal individual such as loss of reputation and social image (Ucbasaran, Shepherd, Lockett, and Lyon, 2013) while at the same time severely affecting the self-esteem of the individuals (Shepherd, Wiklund, and Haynie, 2009). This is in addition to the financial losses arising from business failure (Singh, Corner, and Pavlovich, 2007). Moreover, stigmatization could affect future career prospects as well (Simmons, Wiklund, and Levie, 2013). As such the fear of business failure has a strong deterrent on an individual's motivation to choose entrepreneurship over wage employment.

One particular aspect of the fear of business failure is the differential impact it has on the choice of entrepreneurship among the different segments of the population. Similar to gender related differences in the fear of business failure (Driga, Lafuente, and Vaillant,2009), age related differences in the willingness to accept and withstand the negative consequences of business failure have been suggested (Levesque and Minniti, 2006). Such differences in turn could influence the motivation for entrepreneurship among some segments of the population. We suggest that younger individual or youths are less likely to affected by the fear of business failure for several reasons. First, because of lack of work experience the youth are less likely to perceive the full extent of business risks involved in starting a new business as well as the consequences of business failure (Blanchflower and Meyer, 1994). Second, the older individual's attitude towards risk could be tempered by familial obligations, unlike younger individuals who are at a life-cycle stage that allows considerable freedom as far as familiar obligations and vocational choices are considered. Third, the youth have the human capital advantage to recover from adverse effects that might befall to his or her entrepreneurial pursuit because of the relative ease with which they can reenter the labor market compared to older individuals. As such, we hypothesize that,

H3: Fear of business failure is less likely to affect the choice of entrepreneurship among the youth compared to non-youths.

Similarly, the likelihood of an individual becoming an entrepreneur is lower in regions with high levels of perceived fear of business failure (Busenitz, Gomez, and Spencer, 2000; Sitkin and Pablo, 1992;). It is suggested that fear of business failure, although is an individual level attribute, is socially embedded and arises from the social stigma attached to business failures (Jenkins and NcKelvie, 2015; Landier, 2004). As such differences in the social embeddedness within regions could influence the impact of fear of failure across regions. For instance, cultures that are considered to have greater acceptance of business failure are more likely to encourage individuals to take up entrepreneurship while low(er) tolerance to business failure leads to lower levels of entrepreneurship (Vaillant and Lafuente, 2007; Wennberg, Pathak, and Autio, 2013; Wyrwich, Stuetzer, and Sternberg, 2016). As rural regions are more likely to be tightly knit than urban regions, the relatively high social embeddedness in rural areas could amplify the negative consequences of business failure. Under such circumstances, it is likely that rural youths may be relatively more influenced by the perception of business failure than youths living in urban areas. Therefore, we hypothesize that,

H4: The negative impact of fear of business failure on entrepreneurship among rural youths is likely to be higher than their urban counterparts.

3. DATA AND METHODOLOGY

The data used to carry out the empirical analysis is obtained from the adult population survey (APS) of the Spanish Global Entrepreneurship Monitor (GEM). GEM is a consortium of entrepreneurship researchers that has carried out population level surveys to understand the determinants of entrepreneurship across a wide number of countries since 1998 (Reynolds *et. al.*, 2005). The GEM dataset used for this study was collected in 2012 and comprises 22900 observations randomly selected from the adult population of Spain. After accounting for missing values, we use a representative sample of 20868 individuals aged between 18 and 64 years, out of which 4428 (21.21% of the sample are respondents younger than 30 years). In this study, we consider youths as individuals younger than 30 years as per the criteria used by the Spanish Government (INJUVE, 2011) which is similar to the one used by the European Union. Our dependent variable, entrepreneurial activity is dichotomous and takes the value of one if, in the last 12 months, the respondent was actively involved in the process of creating his/her own business, and zero otherwise (Reynolds, Bosma, Auio, Hunt, de Bono, Servais, López-Gárcia, and Chin. 2005).

Table 1 shows the descriptive statistics for all variables used in this study. The descriptive statistics reveals that overall 5.22% of the adult population in Spain are involved in (early stage) entrepreneurship in Spain (Table 1, Column, II), while the corresponding figure for rural and urban entrepreneurship is 5.19% (Table 1, Column III) and 5.22% respectively (Table 1, Column IV). Table 1 also shows that the youth entrepreneurship rate as 5.22% while the corresponding figure of entrepreneurship among the rural and urban youth are 5.29% and 4.36% respectively. It should be noted that there is significant difference in entrepreneurship rates between the youth and the non-youth in Spain (4.49% versus 5.41%) as well as the urban sample (4.36% versus 5.46%) while no significant difference exist among the rural youth and the rural non-youths.

The two independent variables are entrepreneurial role models (Vaillant and Lafuente 2007; Lucas *et. al.*, 2009) and fear of business failure (Wagner 2007; Vaillant and Lafuente 2007). In our sample, 30.10 % of respondents report personal knowledge of a recent entrepreneur, and the proportion of youths who know a recent entrepreneur (33.28 %) is significantly higher than the proportion shown by non-youths (29.24 %) (Table 1). As shown in Table 1 shows that the youths perceive significantly higher fear of failure (53.72 %) than the rest of the adult population (51.56%). Furtheremore, there is a significant (mean) difference in entrepreneurial role models on entrepreneurship among rural youths compared to rural non-youths (Table 1, Column III) and between urban youths and urban non-youths (Table 1, Column IV). However, unlike the urban sample there is no significant mean differences in the fear of business failure among the youth and the non-youth in the rural sample (Table 1, Column III).

We use three control variables in the form of gender (Verheul, Thurik, Grilo, and van der Zwan, 2012), educational attainment of the respondents and entrepreneurial self-confidence (Van Praag and Cramer 2001).

To examine the differential impact of the entrepreneurial role models and fear of business failure on our dependent variable, we use a Logistic regression model. Our empirical model allows to estimate

Table 1
Descriptive statistics for the selected variables

	Full sample	*Rural sample*	*Urban sample*						
	Young	*Not-young*	*Overall*	*Young*	*Not-young*	*Overall*	*Young*	*Not-young*	*Overall*
Entrepreneurial activity	0.0449** (0.2071)	0.0541 (0.2264)	0.0522 (0.2220)	0.0529 (0.2241)	0.05174 (0.2215)	0.0519 (0.2220)	0.0436*** (0.2041)	0.0546 (0.2042)	0.0522 (0.2225)
Region (1 for rural)	0.1406*** (0.3477)	0.1633 (0.3697)	0.1585 (0.3652)	–	–	–	–	–	
Gender (1 for male)	0.5476*** (0.4977)	0.4920 (0.4999)	0.5038 (0.4999)	0.5345*** (0.4992)	0.4668 (0.4989)	0.4796 (0.4996)	0.5498*** (0.4975)	0.4969 (0.5000)	0.5084 (0.4999)
Age (years)	23.3080*** (3.4700)	41.226 (12.796)	41.226 (12.796)	23.5152*** (3.4691)	46.5368 (9.6157)	42.2024 (12.583)	23.274*** (3.4695)	45.9576 (9.7595)	41.0422 (12.8280)
Primary education	0.2669*** (0.4424)	0.3763 (0.4844)	0.3531 (0.4779)	0.2580*** (0.4376)	0.3501 (0.4770)	0.3302 (0.4702)	.2580*** .4376	.3501 .4770	.3302 .4702
Secondary Education	0.4683 (0.4990) ***	0.3071 (0.4613)	0.3413 (0.4740)	0.4269*** (0.4950)	0.2825 (0.4503)	0.3097 (0.4624)	0.4751*** (0.4994)	0.3119 (0.4633)	0.3473 (0.4761)
Tertiary Education	0.2646 (0.4412)	0.3160 (0.4651)	0.3054 (0.4606)	0.2520** (0.4345)	0.2069 (0.4050)	0.2154 (0.4112)	0.2667*** (0.4423)	0.3378 (0.4729)	0.3224 (0.4674)
Entrepreneurial Self-confidence	0.4202*** (0.4936)	0.5038 (0.5000)	0.4861 (0.4998)	0.4815 (0.5000)	0.4944 (0.5000)	0.4919 (0.5000)	0.4102*** (0.4919)	0.5057 (0.4999)	0.4850 (0.4997)
Entrepreneurial Role-Model	0.3328*** (0.4712)	0.2924 (0.4549)	0.3010 0.4587	0.3242* (0.4684)	0.2870 (0.4524)	0.2940 (0.4556)	0.3342*** (0.4718)	0.2935 (0.4553)	0.3023 (0.4592)
Fear of failure	0.5372** (0.4986)	0.5156 (0.4997)	0.5202 (0.4996)	0.5634 (0.4963)	0.5390 (0.4985)	0.5436 (0.4981)	0.5329** (0.4989)	0.5110 (0.4998)	0.5158 (0.4997)
Observations	4428	16440	20868	623	2686	3309	3809	13754	17559

Standard deviation is presented in brackets. *,**,*** indicates significance at the 10%, 5%, and 1% level, respectively (Kruskal-Wallis test).

1. the direct effect of the two main independent variables, entrepreneurial role models and fear of business failure, along youth entrepreneurship among
2. Several interaction effects (double interaction term) that considers the joint effect of the independent variables on entrepreneurship among youth (compared to non-youths)
3. Two triple interaction effect that estimates the joint effect of the two independent variables on entrepreneurship among rural youths.

Our empirical estimation also takes into account the intrinsic non-linearity of Logit models that results in the interaction effect, *i.e.*, the change in both interacted variables with respect to the dependent variable not being equal to the marginal effect of changing just the interaction term. In addition, the interaction effect in non-linear models may have different signs for different values of the co-variates (Wiersema and Bowen, 2009). As such the parameter estimate of the interaction term in non-linear models does not necessarily indicate the sign and significance of the interaction effect. Thus, to obtain robust estimates of our logistic model we use the method suggested by Cornelissen and Sonderhof (2009). Cornelissen and Sonderhof (2009) incorporates the modifications suggested by Ai and Norton (2003) to obtain the true effects of interaction terms. Moreover, as suggested by Wiersema and Bowen (2009) and Cornelissen and Sonderhof (2009) we use the output of the marginal effect to interpret the results of our empirical analysis.

4. EMPIRICAL RESULTS

The four columns of Table 2 presents the marginal effect of our estimation (table 4 in the Apendix show the Logit coefficients). Column 1 of table 2 shows the direct effect of our independent variables while column 2, 3 and 4 shows the various interaction effects. If we observe the direct effects (Table 2, specification 1) we find no significant difference in the probability of entrepreneurship among the youth and the non-youth. However, in our fully specified models (Table 2, specification 4) that includes all effects (double and triple interaction) we find that youth in Spain are less likely than non-youths to be involved in entrepreneurship.

As regards our main independent variables we find that we find that entrepreneurial role model have a significant positive impact on the probability of pursuing entrepreneurship while fear of business failure has a negative effect on entrepreneurship. These results are similar to that found by several other studies and support that in general entrepreneurial role models and fear of business failure does influence entrepreneurship, but in opposite directions.

If we analyze the independent variables in conjunction (double interaction terms) we find that there is no differences in the effect of fear of business failure on entrepreneurship among the youth and the non-youths (The inaction term of fear of business failure with X youth). Thus, we find no support for hypothesis H3. If we analyze the effect of entrepreneurial role models, we find that there is no difference in the influence of entrepreneurial role models on entrepreneurship among youths and non-youths suggesting that entrepreneurial role models are positively influences entrepreneurship among both youth and non-youths. Thus, we find also do not find support for hypothesis H1.

Table 2
Logit estimates: The marginal effect of the probability of involvement in entrepreneurial activity

	(1)	*(2)*	*(3)*	*(4)*
Gender (male)	0.0063***	0.0063***	0.0062***	0.0063***
Secondary education	0.0086***	0.0086***	0.0086***	0.0086***
Tertiary education	0.0073***	0.0072***	0.0072***	0.0074***
Entrepreneurial Self-confidence	0.0573***	0.0573***	0.0570***	0.0571***
Youth (less than 30 years old)	–0.0028	–0.0034	–0.0043*	–0.0036*
Region (1 for rural)	0.0014	0.0007	0.0042	0.0022
Entrepreneurial Role-Model	0.0406***	0.0406***	0.0408***	0.0403***
Fear of failure	–0.0164***	–0.0164***	–0.0162***	–0.0166***
Double Interaction terms				
Region X Youth		0.0038	0.0069	0.0006
Entrepreneurial Role-Model X Region			–0.0096	
Entrepreneurial Role-Model X Youth			–0.001	
Fear of failure X Region				0.0059
Fear of failure X Youth				–0.0041
Tripple Interaction				
Entrepreneurial Role-Model X Region X Youth			–0.0081	
Fear of failure X Rural X Youth				–0.0252*
Observations	20868	20868	20868	20868

*, **, *** indicates significance at the 0.10, 0.05 and 0.01 levels, respectively.

The marginal effect represents the change in the probability as a result of a change in the independent variable. Following equations (1) and (2), the marginal effect of the interaction term for changes in two variables (x_2, x_3) is estimated by $\gamma_{x2,x3} = \frac{\Delta^2 F(X,\beta)}{\Delta x_2 \Delta x_3}$, whereas for the triple interaction term the marginal effect emerges from $\gamma_{x2,x3,x4} = \frac{\Delta^3 F(X,\delta)}{\Delta x_2 \Delta x_3 \Delta x_4}$. *, **, *** indicates significance at the 0.10, 0.05 and 0.01 levels, respectively.

Now, when we consider the results of the logistic model with triple interaction terms, we find that there is no difference in the effect of entrepreneurial role models on entrepreneurship among the youth in rural regions compared to non-youths in rural regions. Thus we also do not find support for hypothesis H2. However, the fear of business failure lowers entrepreneurship among the youth (compared to youths in urban regions) by 2.52 percentage points. Thus we find support for hypothesis H4. (see Table 3 for a summary of the results).

5. DISCUSSION AND IMPLICATIONS

Entrepreneurship through business ownership is now considered an important avenue for stimulating economic development. However, significant barriers to entrepreneurship remain. From a territorial perspective, individuals living in rural regions tend to be less entrepreneurial than those that live in urban

Table 3
Results of the Interaction Terms

Variables	*Youth*	*Youth X Region*
Entrepreneurial Role models	No effect (Hypothesis 1)	No effect (Hypothesis 2)
Fear of Business failure	No effect (Hypothesis 3)	Negative (Hypothesis 4)

regions as the latter tend to have better developed industrial infrastructure and a ready market for new ventures. Moreover, unlike urban regions, there are perceptual barriers to entrepreneurship among the youth. The results of our study show that overall the likelihood of youths' involvement in entrepreneurship is lower compared to their non-youth counterparts. Although we do not find any difference in entrepreneurship in the rural and urban regions of Spain, we find that fear of business failure has a significantly negative impact on youth entrepreneurship compared to non-youth entrepreneurship in the rural regions of Spain. As such the lower participation of youth in entrepreneurship can be explained by the higher impact of fear of busuiness failure has entrepreneurship among the rural youth. Another possible explanation for this result could be that the recent economic downturn in Spain has made people more aware of the bleak prospects of entrepreneurship. This evidence lends support to the contingency model of behavior in which the context surrounding the individual play a more dominant role in influencing entrepreneurial behaviour (Welter, 2011).

The main policy implications of our study is that policy to promote entrepreneurship needs to be more specific to the needs of the local population. For instance, in many context entrepreneurial role models can be used in motivational training to motivate young individuals towards entrepreneurship. This method is universal and can be applied to motivate individuals in both rural and urban regions as well as among youth and non-youths. However, some factors affect some population segments more than others, as for instance, the significant fear of failure among the rural youth in Spain. Under such circumstances policy making should focus on addressing the more contextual inhibitor of entrepreneurship among segments of the population. The exact reasons why the rural youths have a higher fear of failure go beyond the scope of this study, but recent analysis from the Global Entrepreneurship Monitor in Catalonia and Spain (Corduras, Hernández, Sánchez, Díaz, Vaillant, and Lafuente, 2012) suggest that there may be socio-psychological factors behind these influences. Rural youths are socially expected to move to the city to further their studies and careers. The social perception in many rural communities is that professional and personal success for young adults is determined upon whether they have managed to move and establish themselves within a metropolitan area. The reverse of that same coin would mean that youths who stay behind and become entrepreneurs are socially judged as less successful. A similar observation has been made by the OECD in rural areas of Sweden, which was limiting the generational continuity of Smaland's strong entrepreneurial tradition (OECD, 2009).

6. CONCLUDING REMARKS

In this paper we examined the effect of entrepreneurial role models and attitude towards business failure among the youths with respect to non-youths in rural regions using an random sample obtained from the Global Entrepreneurship Monitor's 2012 Spanish Adult Population Survey that includes 20868 observations, of which 4,428 can be considered youths (under the age of 30). The results of our logistic regression suggest that in Spain the likelihood of youth being involved in entrepreneurship is lower compared to non-

youths. Moreover, the youth in rural regions are more likely to be negatively influenced by fear of business failure than entrepreneurial role models. In addition, the impact of fear of business failure on entrepreneurial activity is higher in rural regions amongst the rural youth compared to the rural non-youths.

Our study contributes to the understanding of why some regions have lower rates of entrepreneurship. Within the context of Spain, we identify fear of business failure as a significant factor that lowers entrepreneurship among some segment of the population, in this case the youths in rural regions. Arising from the need to promote entrepreneurship among segements with low representation we pinpoint which segment is likely to have low representation and why.

Our study also opens new lines of research. A greater number of socio-cultural factors could be added into the analysis as well as a replication of the study in other territorial contexts, both in developed and developing economies. Moreover, a longitudinal analysis could provide even more rigor to the findings presented in this study.

Table 4
Logit estimates: Change in the probability to being involved in entrepreneurial activity

	(1)	*(2)*	*(3)*	*(4)*
Gender (male)	0.2506***(0.0670)	0.2506***(0.0670)	0.2504***(0.0670)	0.2530***(0.0671)
Secondary studies	0.3252***(0.0851)	0.3247***(0.0850)	0.3287***(0.0849)	0.3271***(0.0851)
Tertiary	0.2755***(0.0853)	(0.2740)***(0.0853)	0.2763***(0.0853)	0.2805***(0.0855)
Entrepreneurial self-confidence	1.9554***(0.1019)	1.9533***(0.1019)	1.9531***(0.1019)	1.9562***(0.1018)
Young (less than 30 years old)	–0.1180 (0.0840)	–0.1407(0.0914)	–0.2960*(0.1637)	–0.0972(0.1119)
Rural	0.0566(0.0897)	.0300(0.0996)	0.1788(0.1497)	–0.1537(0.1306)
Rural X Youth		0.1429(0.2283)	0.4183(0.3405)	0.4894*(0.2885)
Entrepreneurial Role-Model	1.2225***(0.0667)	1.2229***(0.0667)	1.2393***(0.0804)	1.2203***(0.0668)
Entrepreneurial Role-Model X Rural			–0.2581(0.1994)	
Entrepreneurial Role-Model X Youth			0.2283(0.1960)	
Entrepreneurial Role-Model X Rural X Youth			–0.4404(0.4560)	
Fear of failure	–0.6372***(0.0678)	–0.6376***(0.0678)	–0.6342***(0.0679)	–0.6626***(0.0824)
Fear of failure X Rural				0.4442**(0.2013)
Fear of failure X Young				–0.1196(0.1920)
Fear of failure X Rural X Youth				–0.8624*(0.4831)
Intercept	–4.9213***(0.1182)	–4.9157***(0.1184)	–4.9289***(0.1206)	–4.913***(0.1209)
Pseudo R2	0.1592	0.1592	0.1598	0.1602
Log likelihood	–3597.5873	–3597.3903	–3594.7947	–3593.312
LR (chi2)	924.38	923.86	927.58	950.16
Correctly predicted cases (full sample)	94.78%	94.78%	94.78%	94.78%
Observations	20868	24,695	24,695	24,695

Robust standard errors are presented in brackets. *, **, *** indicates significance at the 0.10, 0.05 and 0.01 levels, respectively.

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