THE EFFECT OF CULTURAL ENVIRONMENT ON ENTREPRENEURIAL DECISIONS
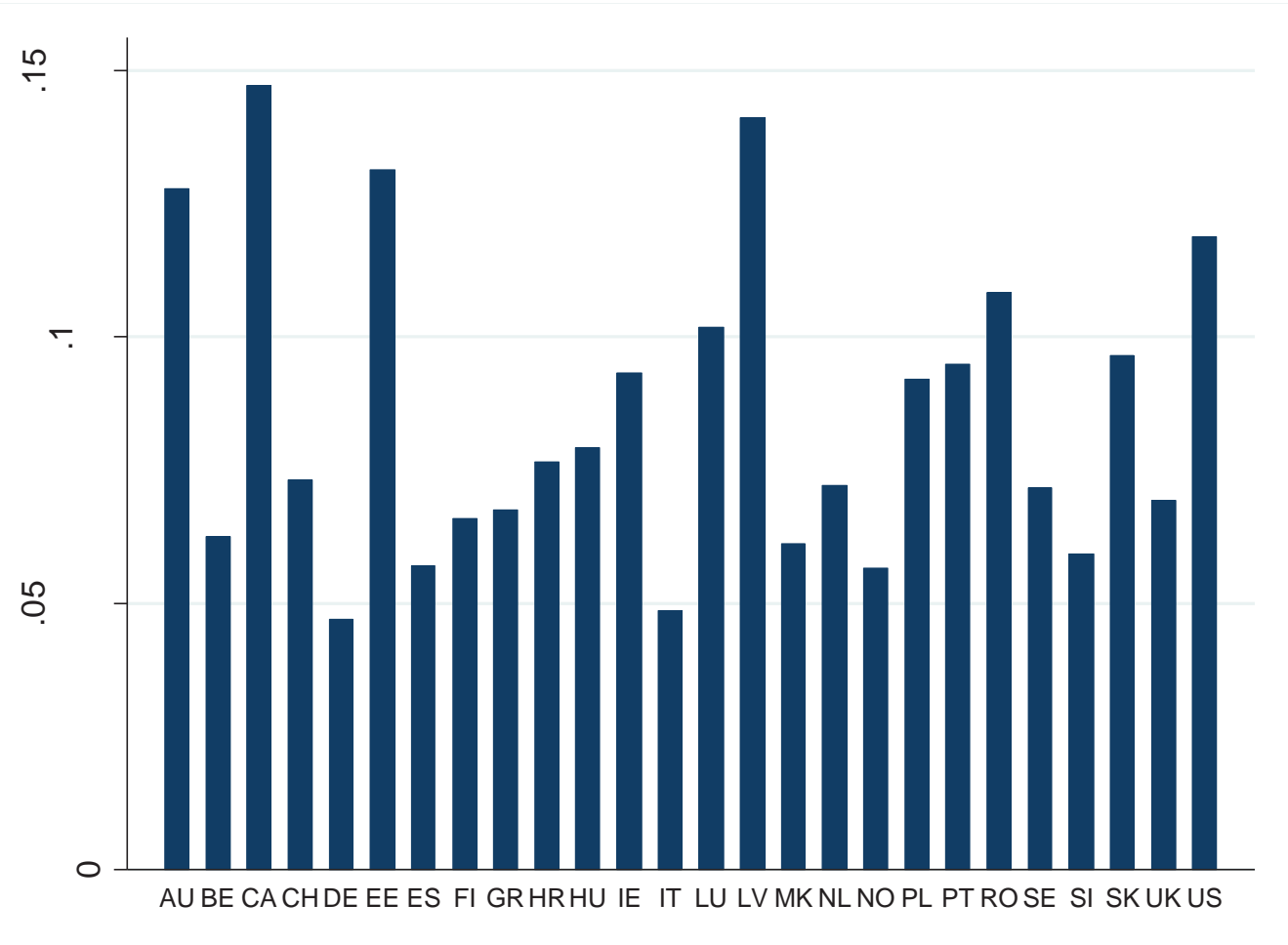
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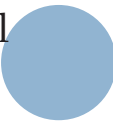
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FIGURE 1: PROPORTION OF ENTREPRENEURS BY COUNTRY IN 2015

Notes: Data come from GEM APS

INTRODUCTION

- **Several differences** can be appreciated among the percentage of entrepreneurs across developed countries.

- The studies have focused on:

  - Economic conditions (Evans and Jovanovic, 2002; Storey and Johnson, 1987; Thurik et al., 2008; Wennekers and Thurik, 1999)

  - The institutional environment (Torrini, 2005)

  - Size of Government and financial environment (Yu, 1998; Bjornskov and Foss, 2006)

  - Socio-economic characteristics of entrepreneurs, such as age, formal education, work status, and income (Blanchflower, 2004; Evans and Leighton, 1989; Parker and Robson, 2004; Keeble et al., 1993; Velilla and Ortega, 2017)

- We contribute to these lines of research by studying the effect of cultural environment on on entrepreneurial decisions.

EMPIRICAL STRATEGY

○ To identify the effect of the cultural environment on entrepreneurial decisions, we first carry out an explanatory **factorial analysis.**

○ Once the cultural factor is defined, we propose a **Probit Model.** Formally, we estimate the following equation:

$$Y_{ijt}^* = \beta_0 + \beta_1 Culturalenvironment_{jt} + \beta_2 X_{ijt} + \delta_k + \gamma_t + u_{ijt}$$

$$Y_{ijt} = 1 \leftrightarrow Y_{ijt}^* > 0 \leftrightarrow \text{individual i is an entrepreneur}$$

$$Y_{ijt} = 0 \leftrightarrow Y_{ijt}^* \leq 0 \leftrightarrow \text{individual i is not an entrepreneur}$$

where Y_{ijt}^* is the unobservable subjective index of satisfaction. This index can be represented by a dichotomous variable, Yijt, that takes value 1 when individual i, residing in country j at time t, is an entrepreneur, and 0 otherwise. Once the variable Y_{ijt} has been defined, we can propose the Probit model to estimate as follows:

$$\Pr obit(p_{ijt}) = \beta_0 + \beta_1 Culturalenvironment + \beta_2 X_{ijt} + \delta_k + \gamma_t + u_{ijt}$$
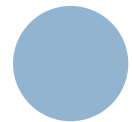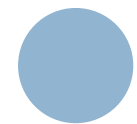
DATA

- We use data from the Adult Population Survey (APS) from 2010 to 2015 provided by GEM.

- To capture the effect of the cultural environment we use data from the National Expert Survey (NES) provided by GEM.

- Our sample selection consists of 391,904 observations of individuals between 25 and 65 years old from 34 different countries.

TABLE 1: SUMMARY STATISTICS BY COUNTRY OF ORIGIN

Country	Ratio of Entrepreneurs	Age	Gender	Secondary School	Observations
Italy	0.04	45.45	0.48	0.76	9.052
Russia	0.05	43.69	0.51	0.69	15.731
France	0.05	45.2	0.5	0.7	10.928
Spain	0.05	44.55	0.55	0.6	126.528
Slovenia	0.05	45.17	0.51	0.66	11.912
Belgium	0.06	45.73	0.52	0.48	6.821
UnitedKingdom	0.06	45.93	0.46	0.53	27.422
Denmark	0.06	42.86	0.5	0.66	2.217
Germany	0.06	45.36	0.55	0.77	26.785
Finland	0.06	45.34	0.54	0.75	11.017
Macedonia	0.06	44.52	0.46	0.61	7.991
Greece	0.07	44.13	0.53	0.48	10.904
Switzerland	0.07	44.58	0.53	0.78	11.350
Sweden	0.07	46.39	0.52	0.58	16.817
Norway	0.07	45.09	0.55	0.58	10.923
Portugal	0.08	43.12	0.55	0.44	11.026
Ireland	0.08	45.1	0.49	0.58	10.840
Croatia	0.08	45.16	0.49	0.7	10.936
Bosnia and Herzegovina	0.08	45.3	0.51	0.82	9.164
CzechRepublic	0.08	43.59	0.46	0.76	7.004
Hungary	0.09	44.27	0.52	0.64	10.879
Austria	0.09	44.59	0.49	0.77	4.548
Poland	0.09	43.82	0.53	0.61	8.915
Netherlands	0.1	45.38	0.53	0.75	13.644
Romania	0.1	44.15	0.56	0.71	6.977
Luxembourg	0.1	44.99	0.59	0.5	4.945
Lithuania	0.1	43.31	0.51	0.56	6.846
Slovakia	0.11	43.32	0.55	0.76	8.940
UnitedStates	0.12	46.29	0.55	0.49	20.739
Australia	0.12	45.25	0.49	0.56	3.994
Latvia	0.12	43.84	0.48	0.64	10.005
Canada	0.13	46.4	0.58	0.51	8.293
Estonia	0.13	44.81	0.55	0.61	7.199
Montenegro	0.15	43.59	0.51	0.87	2.000
Mean	0.07	43.98	0.53	0.65	
Std. Dev.	0.25	28.14	0.50	0.48	

RESULTS

- **Factorial analysis:** point to six components from the NES data, between we can find one of them related to the social norm followed in different aspects of entrepreneurship. This factor cluster the following variables:

-In my country, the national culture is highly supportive of individual success achieved through own personal efforts.

-In my country, the national culture emphasizes self-sufficiency, autonomy, and personal initiative.

-In my country, the national culture encourages entrepreneurial risk-taking.

-In my country, the national culture encourages creativity and innovation.

-In my country, the national culture emphasizes the responsibility of the individual (rather than the collective) in managing his or her own life.
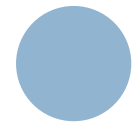
- **Main results**

Table 2: The effect of culture on the entrepreneurial decision

Dependent Variable: Probability of being an entrepreneur	(1)	(2)	(3)	(4)
Cultural Environment	0.020**	0.022***	0.025***	0.026**
	(0.010)	(0.008)	(0.009)	(0.012)
Institutional Environment	0.000			
	(0.013)			
Commercial Access	0.013			
	(0.010)			
Financial Environment	0.032***			
	(0.012)			
Entrepreneurial Education	0.009			
	(0.010)			
Internal Markets	-0.001			
	(0.014)			
Age	0.050***	0.050***	0.050***	0.064***
	(0.003)	(0.003)	(0.003)	(0.005)
Age squared	-0.076***	-0.076***	-0.076***	-0.094***
	(0.003)	(0.003)	(0.003)	(0.005)
Male	0.301***	0.301***	0.315***	0.287***
	(0.008)	(0.008)	(0.008)	(0.012)
Secondary School	-0.149***	-0.148***	-0.154***	-0.113***
	(0.008)	(0.008)	(0.008)	(0.012)
Country F.E.	Yes	Yes	Yes	Yes
Year F.E.	Yes	Yes	Yes	Yes
Observations	391.904	391.904	355.833	184.983

Table 3: Robustness checks

Dependent Variable: Probability of being an entrepreneur	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Cultural Environment	0.023***	0.022***	0.023***	0.019**	0.026**	0.024***	0.028**
	(0.008)	(0.008)	(0.008)	(0.010)	(0.013)	(0.008)	(0.012)
Institutional Environment							0.040**
							(0.017)
Commercial Access							0.072***
							(0.013)
Financial Environment							0.029*
							(0.015)
Entrepreneuria lEducation							0.038***
							(0.012)
Internal Markets							0.001
							(0.018)
Age	0.040***	0.050***	0.039***	0.068***	0.104***	0.049***	0.095***
	(0.003)	(0.003)	(0.003)	(0.009)	(0.029)	(0.003)	(0.011)
Age squared	-0.063***	-0.075***	-0.062***	-0.102***	-0.126***	-0.075***	-0.203***
	(0.004)	(0.003)	(0.004)	(0.013)	(0.026)	(0.003)	(0.020)
Male	0.325***	0.303***	0.329***	0.300***	0.300***	0.261***	0.244***
	(0.009)	(0.008)	(0.009)	(0.010)	(0.013)	(0.008)	(0.010)
Secondary School	-0.160***	-0.145***	-0.156***	-0.139***	-0.166***	-0.139***	-0.088***
	(0.008)	(0.008)	(0.009)	(0.009)	(0.013)	(0.008)	(0.010)
Large Family						0.057***	
						(0.011)	
Middle Income						-0.086***	
						(0.010)	
Homemaker						-0.550***	
						(0.026)	
Country FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	278.431	367.967	254.494	215.594	176.310	391.904	156.814
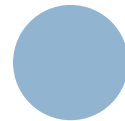
CONCLUSIONS

○ Our results may be interpreted as evidence that **cultural environment plays a role** in the individual choice to become an entrepreneur, especially in European and Mediterranean countries.

○ Our estimates are **robust** to controls for unobservable characteristics by country of origin and year, to the use of different subsamples, and to the redefinition of our dependent variable.

○ Thus, policy-makers should consider these results in order to promote entrepreneurship through culture in Mediterranean countries, but using other channels in non-Mediterranean countries.