

Entrepreneurship in the EU: to wish and not to be

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Motivation

It is often argued that the key to economic growth and productivity improvements lies in the entrepreneurial capacity of an economy

Aim

- Provide further information on a particular measure of entrepreneurial spirit
- and disentangle the role of demographic variables, of education, of obstacles and of country specific effects on this measure.

How

Probit regression using:

- Declared preference for self-employment over employment to capture latent entrepreneurial spirit in the population
- Declared professional status to measure actual entrepreneurship

Data

Flash Eurobarometer survey on Entrepreneurship:

- Conducted during September/October 2000
- 15 Member States and the US covering roughly 8500 respondents
- Information on demographic variables such as age, gender, education and professional status
- Questions that can be used to roughly capture “perception of financial support” and “perception of administrative procedures complexity” as obstacles to entrepreneurial activity, and “risk tolerance”

Advantages and drawbacks:

- Available and comparable recent data on all EU15 countries and US
- The qualitative aspects of entrepreneurship cannot be captured

Latent entrepreneurship

- Suppose you could choose between different kinds of jobs. Which one would you prefer:
 - - being an employee?
 - or
 - - being self-employed?

Latent entrepreneurship

- Simplified concept of entrepreneurship
- Consistent across countries
- Possible effect caused by the unrealistic setting
- It does not take into consideration the various types of activities that can be undertaken

Actual entrepreneurship

- Percentage of actual self-employment

To wish and not to be

- A first look at the data gives an idea of the share of individuals frustrated in their desire to become entrepreneurs.

Table 1 – Self-employment: preferences and actual status (in %)

Country	Preferences		Status		Number of observations	
	Total population	Active population	Total population	Active population	N total	N active
Belgium	36.94	35.34	6.96	15.52	517	232
Denmark	37.53	34.42	8.53	12.99	469	308
Greece	74.41	75.85	20.04	39.83	469	236
Spain	64.69	61.26	7.82	19.37	473	191
France	57.58	53.75	5.33	10.28	488	253
Ireland	63.97	68.60	18.42	37.60	494	242
Italy	60.38	65.22	12.71	28.99	472	207
Luxembourg	46.43	47.41	7.56	14.34	476	251
Netherlands	41.50	40.30	14.57	21.82	494	330
Austria	37.66	37.94	8.66	15.81	462	253
Portugal	71.64	71.43	11.94	22.86	469	245
Finland	27.97	26.04	10.02	16.67	479	288
Sweden	33.40	32.80	4.07	7.60	467	250
United Kingdom	49.00	49.66	9.40	15.99	500	294
West Germany	54.80	56.13	9.59	16.73	469	269
East Germany	41.56	42.34	6.54	12.50	474	248
US	70.10	70.97	24.33	42.29	485	279

To wish and not to be

- Percentage of the population expressing a preference for self-employment is quite high and highly variable across countries (Greece, Portugal and US display the highest values).
- More interesting is the fact that these values are 1.5 (in Finland) to 5 (in France) times higher than the percentage of the sampled active population actually self-employed.

Latent entrepreneurship

- To estimate the impact of:
 - gender
 - age
 - education level
 - perception of availability of financial support,
 - perception of complexity of administrative procedures,
 - risk tolerance
 - country effects
- On:
 - the probability of wanting to be self-employed.

Education level

- “Age when finished full education” is used to construct three education levels:
 - The first encompasses all those with no education or having left school before the age of 15;
 - the second those who left school between the age of 15 and 21;
 - and the third those having left school past the age of 21.
 - *A dummy variable is used for the lower level and another for the higher level so that the intermediary level works as the base.*

Perception of lack of available financial support

- *Do you strongly agree, agree, disagree or strongly disagree with the following statement?*
 - *It is difficult to start one's own business due to a lack of available financial support.*

Perception of complexity of administrative procedures

- *Do you strongly agree, agree, disagree or strongly disagree with the following statement?*
 - *It is difficult to start one's own business due to the complex administrative procedures.*

Perception of financial support and administrative complexities

- For these two questions a dummy variable was constructed:
 - value “1” in the case of “strongly agree” or “agree”

Perception of financial support and administrative complexities

- These two variables capture, at best, the perception individuals have of the existence of financial or administrative barriers, but not their actual existence.
- To a large extent perceptions of these barriers are probably more influential in determining an individual's willingness to become self-employed than the actual existence of such barriers.

Risk tolerance

- *Do you strongly agree, agree, disagree or strongly disagree with the following statements?*
 - *One should not start a business if there is a risk it might fail.*

Risk tolerance

- A dummy takes the value “1” if “disagree” or “strongly disagree”.

Risk tolerance

- A rough indicator of risk attitudes
- In the absence of a better measure it gives some useful information on how taking risks is perceived by the respondent.

Country effects

- Are evaluated using country dummy variables with the US as the base.

Distribution of variables by country

- Lack of financial support is more frequently perceived in the US than in the EU
- The opposite happens for administrative complexities.
- Concerning risk tolerance, the US population reveals a more positive attitude than in the EU

Table 2 – Distribution of variables by country (in %)

Country	Actual Entrepreneurship	Latent Entrepreneurship	Men	Low education	High education	Financial Support	Administrative Complexities	Risk Tolerance
Belgium	17	37	44	08	43	77	83	49
Denmark	14	37	52	07	65	67	84	64
Greece	39	75	64	17	37	91	77	58
Spain	19	60	61	19	44	90	81	62
France	10	53	53	08	36	90	88	60
Ireland	38	68	63	07	24	79	72	73
Italy	30	64	62	26	22	89	88	57
Luxembourg	16	48	56	04	41	85	65	43
Netherlands	23	43	58	04	37	45	59	56
Austria	15	38	54	07	20	75	68	49
Portugal	23	70	61	24	28	86	83	46
Finland	17	27	48	03	53	62	69	60
Sweden	08	35	44	06	41	72	87	48
UK	17	54	56	00	25	81	65	69
West Germany	16	56	52	10	30	75	70	44
East Germany	12	42	49	03	29	79	81	36
EU	19	50	55	09	36	77	76	55
US	43	71	48	03	51	86	66	78

Main findings on Latent Entrepreneurship:

- **Men** display higher latent entrepreneurship than **women**
- The probability of preferring self-employment decreases with **age**
- The **education** level has no significant impact on latent entrepreneurship
- Perceived **lack of financial support** has no significant impact
- Perceived **administrative complexity** has a negative impact
- **Risk tolerance** increases the preference for self-employment
- Relative to US, being Greek, Irish, Italian or Portuguese has no significant impact
- All other nationalities have a negative impact on wanting to be self-employed

Table 3 – Effects on the probability of preferring to be self-employed

	dF/dx	P> z 	dF/dx	P> z
Male	0.152*	0.000	0.154*	0.000
Age	-0.002*	0.008	-0.002*	0.003
Low education	-0.048	0.146	-0.054	0.101
High education	-0.007	0.720	0.000	0.980
Perceived lack of financial support	0.019	0.374	-	-
Perceived administrative complexity	-0.042*	0.038	-	-
Risk tolerance	0.063*	0.000	-	-
Belgium	-0.303*	0.000	-0.310*	0.000
Denmark	-0.329*	0.000	-0.328*	0.000
Greece	0.048	0.274	0.042	0.424
Spain	-0.104*	0.033	-0.126*	0.016
France	-0.167*	0.000	-0.190*	0.000
Ireland	-0.046	0.315	-0.056	0.268
Italy	-0.059	0.215	-0.084	0.107
Luxembourg	-0.227*	0.000	-0.246*	0.000
Netherlands	-0.284*	0.000	-0.291*	0.000
Austria	-0.328*	0.000	-0.325*	0.000
Portugal	0.001	0.987	0.027	0.595
Finland	-0.429*	0.000	-0.400*	0.000
Sweden	-0.321*	0.000	-0.327*	0.000
United Kingdom	-0.185*	0.000	-0.194*	0.000
West Germany	-0.126*	0.005	-0.155*	0.001
East Germany	-0.261*	0.000	-0.283*	0.000

Main Findings on Actual Entrepreneurship

- Gender has no significant impact on being self-employed
- The probability of being self-employed increases with **age**
- The relation between actual status and education is U-shaped
- Perception of administrative and financial obstacles play a negative role
- Risk **tolerance** increases, indirectly (through preferences), the probability of being self-employed
- Manifested latent entrepreneurship increases actual entrepreneurship
- Relative to US, being Greek or Irish has no significant impact
- All other nationalities have a negative impact on being self-employed

Table 4 – Effects on the probability of being self-employed

	dF/dx	P> z 	dF/dx	P> z 	dF/dx	P> z
Male	-0.008	0.547	0.021	0.112	0.025	0.053
Age	0.004*	0.000	0.004*	0.000	0.004*	0.000
Low education	0.075*	0.003	0.062*	0.016	0.058*	0.022
High education	0.054*	0.000	0.053*	0.000	0.063*	0.000
Preference for self-employment	0.187*	0.000	-	-	-	-
Perceived lack of financial support	-0.054*	0.001	-0.051*	0.002	-	-
Perceived administrative complexity	-0.057*	0.000	-0.065*	0.000	-	-
Risk tolerance	0.017	0.192	0.027*	0.049	-	-
Belgium	-0.119*	0.000	-0.146*	0.000	-0.153*	0.000
Denmark	-0.142*	0.000	-0.169*	0.000	-0.173*	0.000
Greece	-0.024	0.439	-0.020	0.544	-0.033	0.305
Spain	-0.121*	0.000	-0.134*	0.000	-0.142*	0.000
France	-0.160*	0.000	-0.176*	0.000	-0.183*	0.000
Ireland	-0.017	0.587	-0.024	0.461	-0.024	0.463
Italy	-0.059	0.055	-0.065*	0.040	-0.080*	0.009
Luxembourg	-0.126*	0.000	-0.148*	0.000	-0.152*	0.000
Netherlands	-0.096*	0.000	-0.129*	0.000	-0.119*	0.000
Austria	-0.123*	0.000	-0.153*	0.000	-0.152*	0.000
Portugal	-0.102*	0.000	-0.105*	0.000	-0.116*	0.000
Finland	-0.108*	0.000	-0.151*	0.000	-0.149*	0.000
Sweden	-0.162*	0.000	-0.185*	0.000	-0.189*	0.000
United Kingdom	-0.120*	0.000	-0.143*	0.000	-0.141*	0.000
West Germany	-0.141*	0.000	-0.154*	0.000	-0.157*	0.000
East Germany	-0.138*	0.000	-0.161*	0.000	-0.167*	0.000

Some unanswered questions (avenues for further research)

- What is behind country differences: cultural aspects, market legislation, tax environment, bankruptcy law, etc?
- What is the role of job security, social security regimes and wage level relative to self-employment income in shaping entrepreneurial activity?
- Can the sectoral composition of economic activity explain part of the country differences?