

# ENTREPRENEURSHIP PERCEPTIONS IN ROMANIA

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## ABSTRACT

*In Romania a representative sample of adult population was interviewed using a standard gem questionnaire. After emphasizing the special situation of Romanian entrepreneurship in international context we aimed to determine its main factors, using socio-demographic and perceptual variables. The findings of this paper can be a starting point in understanding entrepreneurship of ex-socialist countries.*

**KEYWORDS:** *entrepreneurship, early stage entrepreneurs, established entrepreneurs.*

## Introduction

The concept of the entrepreneur is not clearly defined, its definition and its attributed role in the economic literature changed frequently along its evolution. The unending debate persists also today, researchers having the duty to define the terms they use [1]. However, recent works indicate that the empirical definitions regarding the person of the entrepreneur are easily comparable, recommending the rejection of the definitions focused on the spiritually doted entrepreneur's opened mind for the innovation and pointing that there is a large scale of categories for a person to fit in, from "very entrepreneur" to "absolutely non-entrepreneur" [2]. These findings justify the analyses focused on finding the factors which influence entrepreneurial activity in individual cases.

We have to notice also that ongoing debates on how the entrepreneur can be defined have been replaced by debates on an extended view on the entrepreneurial process, as a whole. We accept Bygrave and Hofer's [1] extended view on the entrepreneurial process, confirmed by Shane and Ventakaraman's [3] summarizing remarks, partially concretized in the entrepreneurial lifecycle model [4]. We consider that business birth is a phase of the entrepreneurial activity, but not the starting point or the final result. The existence, the discovery of the entrepreneurial opportunity and the decision to exploit it are considered the starting point of any entrepreneurial activity [3]. Taking all this in consideration, the definition of Global Entrepreneurship Monitor on the entrepreneur's person and the phases of the entrepreneurial process has been accepted.

Global Entrepreneurship Monitor (GEM) is a large scale research program launched in 1997 by leading researchers in the field of entrepreneurship at London Business School and Babson College. The first research was published in 1999 and it included 10 countries. Since then the project has been extended to include 42 countries in 2007. The main aim of GEM research is to study the complex relationship between entrepreneurship and economic growth, to measure the level of entrepreneurial activity between countries, to uncover factors determining the levels of entrepreneurial activity and to identify policies which may stimulate the level of entrepreneurial activity. GEM, as a research program that focuses on a major driver of economic growth, entrepreneurship, also admits the widely acknowledged phenomena that entrepreneurship is one of the most important forces shaping the changes in the economic landscape [5], [6], [7].

In each country<sup>1</sup>, a survey company conducts a telephone survey or face to face interview of the adult population based on a sample of at least 2000 adults. In Romania in 2007 a representative sample of 2046 adults (1739 aged between 18-64 years) was interviewed using a standard GEM questionnaire. This survey was carried out to measure the entrepreneurial behaviour and the attitudes of adult population in Romania [7]. The survey data are used to calculate the Total Entrepreneurial Activity Index, the only comparable measure of entrepreneurial activity across countries [6].

GEM used the following terms in assessing the entrepreneurial activity of the adult population:

➤ *Nascent Entrepreneurs* are those who are actively planning a new venture. These entrepreneurs have done something during the previous 12 months to help start a new business, that he or she will at least partly own. Activities such as organizing the start up team, looking for equipment, saving money for the start up or writing a business plan would all be considered as active commitments to starting a business. Wages or salaries will not have been paid for more than three months in respect of the new business.

➤ *Young Business Entrepreneurs* are those entrepreneurs who at least partly own and manage a new business that is between 3 and 42 months old and have not paid salaries for longer than this period. These new ventures are in the first 42 month after the new venture has been set up.

➤ *Early-Stage Entrepreneurs* refers to the early stage entrepreneurial activity among the adult population aged 18-64 years inclusive, identified as nascent or young business entrepreneurs. In those cases when the respondent is involved both as nascent and young business entrepreneur then the respondent is counted only once as a nascent entrepreneur.

➤ *Established Business Owners* are those entrepreneurs who have set up businesses that they have continued to own and manage and which had paid wages and salaries for more than 42 months.

The paper, accepting Arenius and Minniti's [8] and Karadeniz's [9] recommendations focuses on the characteristics of the population i.e. the demographic composition, the resources, the abilities of individuals and their attitudes towards entrepreneurship, taking in account Arenius and Minniti's [8] classification of those factors as "socio demographic factors, perceptual variables, and contextual factors". Many factors influence an individual's decision to set a business: a perception of opportunities within their environment, whether they have sufficient knowledge and skills, if they know other people who are engaged in entrepreneurial activity and a reduced reluctance to become involved in entrepreneurial activity through fear of failure [8].

The paper aims to identify which of the above mentioned factors influence significantly the Romanian entrepreneurial activity. More specifically, the studied factors were grouped in demographic variables (such as age, gender, income level, education level and work status) and perceptual variables (such as networking, fear of failure, alertness to opportunities, self-confidence) [8], [9] on entrepreneurial activities in Romania, one of the lowest among low and middle income countries [7].

### **Overview on the romanian entrepreneurship**

GEM reports demonstrated a systematic, U-shaped relationship between a country's level of economic development and its level and type of entrepreneurial activity. The U-shaped relationship between per capita GDP levels and early stage entrepreneurial activity in countries with low levels of per capita income come the national economies characterized by the prevalence of many very small businesses. As per capita income increases, industrialization and economy of scale allow larger and established firms to

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<sup>1</sup> In year 2007.

satisfy the increasing demand of growing markets and to increase their relative role in the economy [6].

All ex-socialist countries present an early-stage entrepreneurial activity under the U-shape. In Romania one of the lowest rates of early-stage entrepreneurial activity were found (4.0%). Near Russia and Latvia this rate is one of the lowest among middle and low income countries. Only 6.5% of the population is in different stages of engagement in owner-managed businesses. This is, after Russia, the second lowest rate among middle and low income countries. However, almost a half of them are nascent entrepreneurs (2.9% of population). The share of young business owners in population is (around 2%) is the lowest among the middle and low income countries. Table 1 lists all prevalence rates of different phases of entrepreneurial activity for Romania in 2007. These low rates can be explained by the lack of entrepreneurial tradition, activity and education before the 90s during the socialist period, the unfavorable entrepreneurial environment in the transition period of the 90s, as well as the population's acceptance regarding the less risky jobs offered by big firms in the period of economic growth after 2000 [7].

### Entrepreneurial activity in Romania

**Table 1**

Entrepreneurial activity	Percentage
Nascent entrepreneurs	2.9
Young business entrepreneurs	1.3
Early stage entrepreneurs	4.0
Established business owners	2.5

**Source:** own calculation on Györfy et al. 2008, own calculations on GEM 2007, Adult Population Survey, Romania

In Romania 28.3% of the population has fear of failure, 29.4% has the required knowledge and skills to start a business, 41.6% knows a person who started a business in the past 2 years, 46.6% prefers that everyone had a uniform standard of living, 26.2% sees good opportunity for starting a business in the next 6 month, 61% considers that starting a new business is a good career choice, 62.5% thinks that those who are successful at starting a new business have a high level of status and respect and 50.4% considers that successful new businesses are properly promoted by the media [10].

Table 2 shows the correlation between the individual perception and the entrepreneurial activity in Romania. Despite the previously mentioned high rate of failure in Romania, the early-stage entrepreneurs and the established business owners doesn't fear of failure. It appears that the extent, to which people perceive themselves capable, they believe that they have the skills and knowledge to start a business, is linked with the level of early-stage entrepreneurial activity as much as with nascent entrepreneurial activity. Also significant correlations were found with established entrepreneurs.

The people involved in entrepreneurial activity know more entrepreneurs, according to our expectations it has a significant correlation with each stage of entrepreneurship.

On bases of our correlation analyzes we can affirm that the not necessity-based entrepreneurs also see good opportunities for business start-ups in the next six month. No significant correlation at the 0.05 level were found between any kind of entrepreneurial activity and the appreciation of the media coverage for businesses, as well as with the consideration of a new business start-up being appreciated by society as a good career choice [7].

## Correlation between individual perception and entrepreneurial activity in Romania

**Table 2**

	Nascent entrepreneurs	Young business entrepreneurs	Early stage entrepreneurs	Established entrepreneurs
Fear of failure would prevent to start a business	-0.04	-0.04	-0.05(*)	-0.07(**)
Has the required knowledge/skills to start a business	0.20(**)	0.10(**)	0.22(**)	0.19(**)
Knows a person who started a business in the past 2 years	0.16(**)	0.08(**)	0.18(**)	0.12(**)
All inhabitants prefer uniform living standard	0.06(*)	-0.06(*)	0.02	0.02
Sees good opportunities for starting a business in the next 6 months	0.15(**)	0.03	0.15(**)	0.14(**)
Starting a business is considered as a good career choice	-0.01	0.01	-0.01	0.01
Lots of media coverage for new businesses	0.04	-0.003	0.04	0.04

\*\* Correlation is significant at the 0.01 level (2-tailed).

\* Correlation is significant at the 0.05 level (2-tailed).

Source: Nagy et al. 2008, own calculation on GEM 2007, Adult Population Survey, Romania

Furthermore we examine the Romanian entrepreneurs in terms of their social-demographic characteristics: gender, age, household income, educational attainment, labor force status, area of residence. According to the correlation table presented below (Table 3) the entrepreneurial activity is significantly correlated with almost all of the mentioned social-demographic factors, except for the necessity early-stage entrepreneurial activity.

### The correlation between the entrepreneurial activity and social-demographic factors

**Table 3**

	Established entrepreneurs	Early stage entrepreneurs
Gender	-0.05(**)	-0.04(**)
Age	0.04(*)	-0.04(*)
Household income	0.12(***)	0.13(***)
Educational attainment	0.03	0.07(***)
Labor force status	-0.11(***)	-0.11(***)
Rural/urban area	0.07(***)	0.07(***)

\*\*\* Correlation is significant at the 0.01 level (2-tailed).

\*\* Correlation is significant at the 0.05 level (2-tailed).

\* Correlation is significant at the 0.10 level (2-tailed).

Source: Györfy et al. 2008, own calculation on GEM 2007, Adult Population Survey, Romania

Correlation calculations and the previous order of the qualitative data indicate that the entrepreneurs in Romania are mostly men. The participation of women is higher among

those involved in early-stage entrepreneurial activity, than of established entrepreneurs. Age proves to be also significant at 0.1 level. According to our earlier findings [7], [10] early-stage entrepreneurs most often can be found in the 25-34 age groups, while established business entrepreneurs are most frequent among the 35-44 age groups. Contrarily, at the higher income level people tend to be opportunity-driven entrepreneurs, since they start their own business when they perceive an obvious potential gain in a new business. They have more financial resources to take advantage of the opportunities in the market. The percentage of people who have attained a university degree is similar in both early-stage entrepreneurs and established entrepreneurs, while the largest segments of necessity-based entrepreneurs are those with post secondary degree. Most of the entrepreneurs, early-stage as well as established entrepreneurs, are full time workers. The highest rate of entrepreneurs is of those who live in urban area.

### Influencing factors of the entrepreneurial activity in Romania

Using the GEM Adult Population Survey data for 2007, according to recent methodological recommendations [8], [9] we built up two logistic regression models in order to determine the main influencing factors for early stage<sup>1</sup> and established<sup>2</sup> entrepreneurship in Romania, using the set of explanatory variables as it can be seen in Appendix 1.

The logistic models were estimated using the STATA program.

According to the results of the univariate tests, the following variables were maintained as influencing factors of the early stage entrepreneurial status:

- Household income (HHINC)
- Knowing other entrepreneurs (KNOWEN)
- Perception regarding the trust in own entrepreneurial skills (SUSKILL)
- Perception on the proper promotion of entrepreneurial successes by the mass media (NBMEI)

The statistical analyses emphasized that the other variables have an insignificant influence in explaining the phenomena of being an early stage entrepreneur in Romania in 2007.

### The results of the logistic regression on the estimation sample for the dependent variable: early stage entrepreneur

(Number of observations: 1739)<sup>3</sup>

Table 3

Explanatory variable	Coefficient	Standard Error	z Statistics	p value
Constant	-4.5082560	0.2976152	-15.15	0.000
HHINC	6.94E-06**	3.50E-06	1.98	0.048
KNOWEN	0.2113727**	0.0657148	3.22	0.001
SUSKILL	0.1360408**	0.0577667	2.36	0.019
NBMEI	-0.13061730*	0.2976152	-1.95	0.051
McFadden pseudo R <sup>2</sup> = 0.1197				
Likelihood Ratio: $\chi^2(12) = 55.12$ (with p value 0.0000)				
Log likelihood = -202.67749				

Note: \*\* significant at 5% level, \* significant at 10% level.

Source: Own calculations in STATA on basis of GEM Adult Population Survey for Romania, 2007

The values of the statistic tests indicate that the obtained model respects the exigencies of good econometrical standards. The variables are statistically significant. The variables HHINC, KNOWEN, SUSKILL have an expected sign, NBMEI indicates that

<sup>1</sup> Model 1.

<sup>2</sup> Model 2.

<sup>3</sup> 18-64 years old

Romanian early stage entrepreneurs are unsatisfied by how entrepreneurial successes are promoted by the mass-media, feeling a need for a better promotion, starting from their own situation. The general explanatory level of the model is not very good, but it is acceptable, taking in account the value of the McFadden pseudo  $R^2$  0.1197.

In the model describing the determinant factors of the established entrepreneurs in Romania in 2007 the following variables were maintained:

- \* Household income (HHINC)
- \* Knowing other entrepreneurs (KNOWEN)
- \* Age (AGE)
- \* Perception on the appreciation of the society regarding the principle of equality in life standard (EQUALI)
- \* Opportunity perception (OPPORT)

The analysis emphasized that the remaining variables have insignificant explanatory power for the phenomena of established entrepreneurship in Romania.

**The results of the logistic regression on the estimation sample for the dependent variable: established entrepreneur**

(Number of observations: 1739)<sup>1</sup>

**Table 4**

Explanatory variable	Coefficient	Standard Error	Z statistics	p value
Constant	-6.986118	0.8442749	-8.27	0.000
HHINC	0.0000117**	4.30E-06	2.72	0.006
AGE	0.0344526**	0.0146021	2.36	0.018
KNOWEN	0.2568257**	0.075781	3.39	0.001
OPPORT	-0.2134989**	0.0809967	-2.64	0.008
EQUALI	0.2183047**	0.0646453	3.38	0.001
McFadden pseudo $R^2$ = 0.1114				
Likelihood ratio $\chi^2(4)$ = 51.31 (with p value 0.0000)				
Log likelihood = -204.57965				

Note: \*\* significant at 5% level, \* significant at 10% level.

Source: Own calculations in STATA on basis of GEM Adult Population Survey for Romania, 2007

The statistical tests on the level of the estimation sample indicate that the model obtained respects the exigencies of a good econometrical performance. The coefficients are statistically significant. The signs of the variables HHINC, KNOWEN and OPPORT have an expected sign. The sign of the variable AGE can be explained by the fact that Romanian established entrepreneurs all started and learned how to lead their businesses in the 90's, after the socialist period of the country, in an unfavorable macroeconomic environment, resulting a special age structure of the Romanian established entrepreneurs. On the other hand, the sign of the EQUALI variable indicates that established entrepreneurs have the belief that the people in Romania would prefer everybody to have a similar life standard, pointing to a negative influence of the social environment on the entrepreneurial activity. The general explanatory power of the model is acceptable, according to the McFadden pseudo  $R^2$  0.1114.

The results of the estimation in case of both models indicate high values of the of the area under ROC curve, 78.92% for the first model (early stage entrepreneurs) and 83.96% for the second model (established entrepreneurs), with both values above the 75% reference limit, supported also by the form of both ROC curves, as it can be seen in Appendix 2. The concavity of these curves emphasize that the variables chosen in the two

<sup>1</sup> 18-64 years old

models have sufficiently high explanatory powers in order to allow a proper ranking of the Romanian people by the probability of being an<sup>1</sup> entrepreneur.

### Conclusions

One of the lowest rates of early-stage entrepreneurial activity was found in Romania (4.0%). Near Russia and Latvia this rate is one of the lowest among middle and low income countries, who attended the global survey. Only 6.5% of the population is in different stages of engagement in owner-managed businesses. However, almost a half of them are nascent entrepreneurs (2.9% of population). The share of young business owners in population is (around 2%) is the lowest among the middle and low income countries. These low rates can be explained by the lack of entrepreneurial tradition, activity and education before the 90s during the socialist period, the unfavorable entrepreneurial environment in the transition period of the 90s, as well as the population's acceptance regarding the less risky jobs offered by big firms in the period of economic growth after 2000.

Starting from these facts, this paper aimed to emphasize the factors which influence the status of early stage and established entrepreneurship in Romania. The significant variables maintained in the logistic regression model were: the household income, knowing other entrepreneurs, age, perception on the appreciation of the society regarding the principle of equality in life standard and opportunity perception in case of established entrepreneurs and household income, knowing other entrepreneurs, perception regarding the trust in own entrepreneurial skills and perception on the proper promotion of entrepreneurial successes by the mass media in case of the early stage entrepreneurs.

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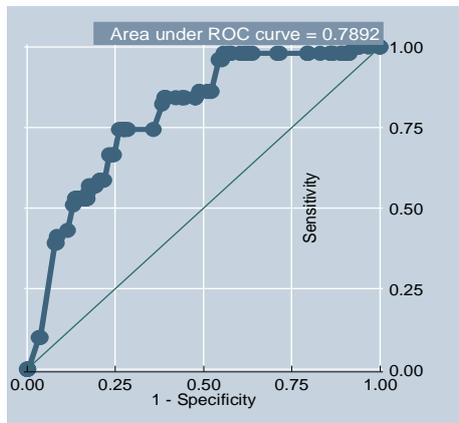
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<sup>1</sup> Early stage or established.

## VARIABLES USED IN THE MODEL

Notation	Name	Description	Values
TEA (dependent variable for model 1.)	Early stage entrepreneur	Actively involved in starting a business or owner/manager of a business which is active and younger than 3.5 years	Yes/No
EB (dependent variable for model 2.)	Established entrepreneur	Owner/manager of an active business for more than 3.5 years	Yes/No
GEND	Gender	The gender of the questioned person	Woman/Man
AGE	Age	The age of the questioned person	Age
EDUC	Education	The education of the questioned person	None/ Primary / Secondary / Post-Secondary/ Superior
HHINC	Household income	The questioned persons were categorized in one of the 3 categories, on basis of how they appreciating their own financial situation.	In the upper 33%/ Average, 33-66%/ In the lower 33%
WSTAT	Work status	The work status of the questioned person	Working / Not working / Retired / Student
KNOWEN	Knowing other entrepreneurs	The questioned persons answered if they know personally somebody who started a business in the last 24 months	Yes/No
OPPORT	Opportunity perception	The questioned persons answered if they see good business opportunities for the next 6 months	Yes/No
SUSKILL	Perception regarding the trust in own entrepreneurial skills	The questioned persons answered if they consider that they have all the necessary knowledge to set and manage an own business	Yes/No
FRFAIL	Perception of fear of failure	The questioned persons answered if they consider that fear of failure stops them in starting a business	Yes/No
EQUALI	Perception on the appreciation of the society regarding the principle of equality in life standard	Respondents were asked if they consider that people generally think that everybody should have a similar life standard	Yes/No
NBGOOD	Perception on the appreciation of the society regarding the entrepreneurial career 1.	Respondents were asked if they consider that people generally think that being an entrepreneur is a good career choice	Yes/No
NBSTAT	Perception on the appreciation of the society regarding the entrepreneurial career 2.	Respondents were asked if they consider that people generally think that successful entrepreneurs are appreciated by the society	Yes/No
NBMEDI	Perception on the proper promotion of entrepreneurial successes by the mass media	Respondents were asked if they consider that successful entrepreneurial initiatives are properly promoted by the mass media	Yes/No

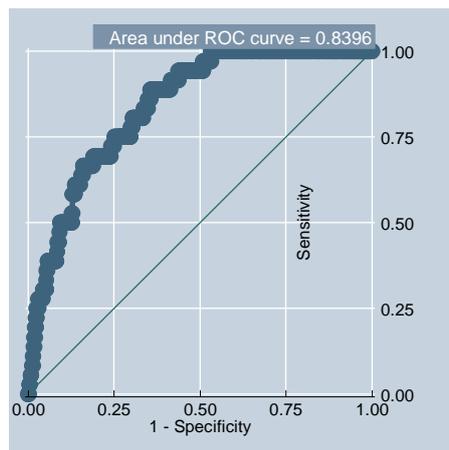
**ROC CURVE – LOGISTIC MODEL, EARLY STAGE ENTREPRENEURS**



**Figure 1**

*Source:* Own calculations in STATA on basis of GEM Adult Population Survey for Romania, 2007

**ROC CURVE – LOGISTIC MODEL, ESTABLISHED ENTREPRENEURS**



**Figure 2**

*Source:* Own calculations in STATA on basis of GEM Adult Population Survey for Romania, 2007