

Female entrepreneurial activity in Romania

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Abstract. *The aim of this study is to analyse the female entrepreneurial activity in Romania. We will compare the socio-demographic characteristics, the entrepreneurial attitudes and perceptions of female early-stage entrepreneurs and the female employees in order to highlight the main differences. Using a logistic regression we will identify the main influencing factors of the probability of becoming a female early-stage entrepreneur.*

Keywords: Female Entrepreneurship; Socio-demographic Characteristics; Perceptual Variables; Influencing Factors.

JEL Classification: M13; J16; C21.

1. Introduction

Despite of female entrepreneurship represents an important engine of economic growth for developing countries (De Vita et al., 2014), there is a lack in the literature regarding the factors that influence a woman to be involved in entrepreneurship in case of developing countries.

The first articles regarding the female entrepreneurs appeared in the literature in the late 1970s. These studies provide a perspective approach to the subject. These studies reveal differences in business characteristics, motives of entrepreneurial endeavor, evaluations of main barriers to starting and maintaining entrepreneurial activities, personality traits, management style, socio-demographic characteristics, gender, and business performance.

The aim of this study is to compare the socio-demographic characteristics, the entrepreneurial attitudes and perceptions of female early-stage entrepreneurs and the female employees, respectively to answer the question regarding the differences between the female entrepreneurs and the female employees in Romania.

This article adds to the literature by analysing the characteristics of female entrepreneurs from a developing country and by emphasising the main differences between the female employees and entrepreneurs.

The paper is structured as follows. First we discuss the literature on female entrepreneurship, followed by the description of the variables and the methodology used in our analysis. Section 4 presents the empirical results. Finally are presented the conclusions of this paper.

2. Literature review

It has been shown that the role of female entrepreneurs has increased (De Vita et al., 2014). Female entrepreneurs are increasingly important contributors to entrepreneurial activity and economic growth (Brush et al., 2010; Powell and Eddleston, 2013).

Women are less inclined to select entrepreneurship which is dominated by males such that women are positioned as interlopers in the field (Ahl, 2006; Wee and Brooks, 2012; Klyver et al., 2013; Ahl and Nelson, 2015).

The nature of female entrepreneurship has often been explained in terms of household and family responsibilities (Verheul et al., 2009; Wood and Eagly, 2010; Powell and Eddleston, 2013). There is a contradiction in the literature regarding the impact of the work-life balance in case of female entrepreneurs. Some scholars consider that family responsibilities could play a pushing role in choosing entrepreneurship, since entrepreneurship could be their only way to avoid unemployment (De Vita et al., 2014), flexible working hours could be an important motive for women to engage in self-employment (Longstreth et al., 1987, Brush, 1992, Shelton, 2006), childcare concerns (Georgellis and Wall, 2005, Kirkwood and Tootell, 2008). According to the other group of researchers entrepreneurship is less attractive than employment, due to the increased

household and childcare expenses and the security of employment (Özcan, 2011; Georgellis et al. 2007; Haapanen and Tervo, 2009; Millán et al., 2014).

Therefore the analysis of the main characteristics of female entrepreneurs can be useful for developing successful entrepreneurship-related policies and for understanding a country's competitiveness and growth potential (De Vita et al., 2014).

The impact of age upon choosing entrepreneurship increases until a threshold point, after that it has a negative effect, younger people had less experience, while as people get older, they attach less value to future earnings (Euwals, 2001; Taylor 2004; Lévesque and Minniti, 2006; Block and Sandner, 2009; Verheul et al., 2009).

Education is found to be strongly associated with entrepreneurial success (Acs et al., 2007; Andersson, 2010; Block and Sandner, 2009; Van Praag et al. 2013; Millán et al., 2014). According to Barreneche García (2014) a high educational level provides individuals with the knowledge and tools necessary to create a business, while helping budding entrepreneurs identify market opportunities (Castaño et al., 2015). Educational attainment is positively linked with income for entrepreneurs, with a slightly higher impact on women (Van der Sluis et al., 2005).

Many studies show that successful entrepreneurship is more strongly related to previous entrepreneurial experience rather than formal education (Dencker et al., 2009; Martin et al., 2013; Toft-Kehler et al., 2014, Elert et al., 2015). Female entrepreneurs have less favorable perceptions of themselves and the entrepreneurial environment, as compared with male entrepreneurs (Langowitz and Minniti, 2007).

The social network is an important factor in fostering entrepreneurship. Female entrepreneurs tend to have less industry-related experience, less access to financial capital (Brush et al., 2006), and less influential social networks (Morris et al., 2006). Andersson (2010) showed that social networks are a key mechanism for acquiring entrepreneurial resources (Jayawarna et al., 2015).

Fear of failure can dominate the choices of individuals, potential entrepreneurs decide first whether to enter into risky entrepreneurship or opt for a safe employment wage (Morgan and Sisak, 2016). Female entrepreneurs are more risk-averse and have lower job creation rates (Boden and Nucci, 2000; Burke et al., 2002; Marlow and Swail, 2014).

Opportunity identification implies that entrepreneurs use creative processes to perceive new ideas and to put them into action (Dimov, 2007; Gielnik et al., 2012). Opportunity recognition skill is inevitable for an entrepreneur who wishes to create ventures that outlive the entrepreneur (Wasdani and Mathew, 2014).

This article tends to fulfill the gap in the literature regarding of socio-demographic characteristics and perceptions of female entrepreneurs and female employees based on empirical data.

3. Methodology and data

The individual level data were collected from Global Entrepreneurship Monitor (GEM) Romanian Adult Population Survey (APS) database on 2011-2012 time periods. Our representative sample contains 1735 adults from Romania aged between 18 and 64 years, from which 110 are early-stage entrepreneurs. The definition of early-stage entrepreneur according to GEM is identified as nascent (individuals who are actively planning a new venture) or young business entrepreneurs (entrepreneurs who at least partly own and manage a new business that is between 4 and 42 months old and have not paid salaries for longer than this period).

In order to identify the main influencing factors of becoming an early-stage entrepreneur, we used logistic regression. The functional form of the regression is the following:

$$\pi(X) = \frac{e^{g(X)}}{1 + e^{g(X)}}$$

where $\pi(X) = P(Y = 1|X)$ is the conditional probability, Y is the dependent variable, X is the vector of the explanatory variables, and $g(X) = \beta_0 + \beta_1 x_1 + \dots + \beta_n x_n$ is the linear combination of the explanatory variables.

The explanatory variables can be grouped in two categories: socio- demographic factors and perceptual factors (entrepreneurial attitudes and perceptions). Table 1 presents the analysed explanatory variables.

Table 1. *The socio-demographic and the perceptual variables*

Socio-demographic variables		
EDUC	Educational attainment	1=some secondary; 2=secondary degree; 3=post secondary; 4=graduate experience
HHINC	Household income	1= lower 33%, 2= middle 33%, 3= upper 33%
AGE	Age category	1=18-24; 2=25-34; 3=35-44; 4=45-54; 5=55-64
Perceptual variables		
KNOWEN	Knows someone who started a business in the last two years.	0=no; 1=yes
OPPORT	Sees good opportunity for starting a business in the next six months.	0=no; 1=yes
SUSKILL	Has the required knowledge and skills to start a business.	0=no; 1=yes
FRFAIL	Fear of failure prevents from starting a business.	0=no; 1=yes
EQUALI	Most people prefer that everyone had a uniform standard of living.	0=no; 1=yes
NBGOOD	Most people consider starting a new business a desirable career choice	0=no; 1=yes
NBSTAT	Those successful at starting a new business have a high level of status and respect.	0=no; 1=yes
NBMEDI	There are many stories in the public media about successful new businesses.	0=no; 1=yes

Source: Elaborate by the authors based on GEM Adult Population Survey.

4. Empirical results

The total early-stage entrepreneurial activity rates for women are highest in factor-driven economies where GDP per capita is low, rates decrease in efficiency-driven economies as GDP per capita increases. This could be attributed to expanding industrialization. Large established firms play an increasingly important role in the economy, providing stable employment for a growing number of people as a viable alternative to self-employment, thus displacing potential entrepreneurial activity (Kelley et al., 2015).

Table 2 presents the distribution of the female employees and early-stage entrepreneurs by age, household income and educational attainment in Romania in the analysed 2011-2012 time period.

Table 2. *The distribution of the female employees and early-stage entrepreneurs by age, household income and educational attainment, 2011-2012 (%)*

		Employee	Early-stage entrepreneur
Age category	18-24 years	17.39	12.02
	25-34 years	24.38	39.36
	35-44 years	18.77	19.08
	45-54 years	21.91	23.57
	55-64 years	17.55	5.97
Household income	Lower 33%	36.17	13.89
	Middle 33%	37.81	35.25
	Upper 33%	26.02	50.85
Educational attainment	Some secondary	32.07	9.29
	Secondary degree	39.89	34.05
	Post secondary	24.14	37.72
	Graduate experience	3.90	18.94

Note: The significant differences are highlighted with bold.

Source: Own calculations based on GEM Romania, APS, 2011-2012.

We can observe that there is a significant difference between the percentage of female employees and entrepreneurs aged between 25-34 years, respectively 55-64 years. The female early-stage entrepreneurs are more prevalent in 25-34 age category, and less prevalent in 55-64 age category. This result is in accordance with the findings of Levesque and Minniti (2006), Block and Sandner (2009), Verheul et al. (2009). The female employees are almost equally distributed among age categories. The household income of female early-stage entrepreneurs is significantly higher than of female employees. More than a half of the early-stage entrepreneurs have at least post secondary degree, while this proportion in case of female employees is only around a quarter.

Table 3 presents the perceptions and attitudes of female employees and female early-stage entrepreneurs toward entrepreneurial environment. The entrepreneurial network of the early-stage entrepreneurs is significantly bigger than of the employees, 61.07% of early-stage entrepreneurs affirm that knows someone who started a business in the last

two years before the survey. Half of the early-stage entrepreneurs consider that there are good opportunities for starting a business in the area they live. The opportunity recognition of female early-stage entrepreneurs is significantly higher than of female employees. Almost three quarters of female early-stage entrepreneurs consider that they possess the required skills and knowledge to start a new venture. The self confidence of female employees is significantly lower. Female employees consider the entrepreneurial environment more favorable. There is no significant difference between the risk aversion of female early-stage entrepreneurs and female employees, almost half of them consider that fear of failure prevents them from starting a business.

Table 3. *Perceptions regarding the entrepreneurial environment, 2011-2012 (%)*

	Employee	Early-stage entrepreneur
Knows someone who started a business in the last two years.	20.87	61.07
Sees good opportunity for starting a business in the next six months.	31.57	50.23
Has the required knowledge and skills to start a business.	28.40	74.38
Fear of failure prevents from starting a business.	48.87	48.09
Most people prefer that everyone had a uniform standard of living.	66.23	62.98
Most people consider starting a new business a desirable career choice	71.38	61.16
Those successful at starting a new business have a high level of status and respect.	75.56	60.15
There are many stories in the public media about successful new businesses.	58.29	49.13

Note: The significant differences are highlighted with bold.

Source: Own calculations based on GEM Romania, APS, 2011-2012

Table 4 shows the result from the logit model. The probability of becoming an early-stage entrepreneur is influenced by the educational level, the size of the entrepreneurial network, the opportunity recognition, respectively the self-confidence of individuals.

Table 4. *Logit model of the probability of becoming an early-stage entrepreneur, 2011-2012*

	Coefficient	p-value
GEMEDUC	0.425	0.004
KNOWEN	1.051	0.000
OPPORT	0.550	0.027
SUSKIL	1.513	0.000
Constant	-5.005	0.000
Nagelkerke R ²	0.228	
Correctly classified rate	92.5%	

As it can be seen, a few variables exhibit a strong influence on the probability of becoming an early-stage entrepreneur. Each influencing factor has a positive sign, which means that if the individual has a higher educational attainment, knows persons who started a business in the previous two years of the survey, sees good opportunities for starting a business and consider that he/she possess the required skills and knowledge for

start a new venture, than the individual will become with a higher probability an early-stage entrepreneur.

The estimated regression suggests that the model correctly classify 92.5% of the early-stage entrepreneurs in our sample. Hosmer and Lemeshow test indicate the goodness-of-fit of the model with p-value greater than 0.05. Therefore, the model adequately describes the data.

5. Conclusions

Despite the fact, that the role of female entrepreneurs is increasing, there is a lack in the literature regarding the differences between the female entrepreneurs and female employees. This study fulfills this gap in the case of a country which is relatively neglected in the literature of female entrepreneurship.

Our research show that the typical female early-stage entrepreneur in Romania is aged between 25-34 years, with household income in upper tertile, has high educational attainment and rich entrepreneurial network, recognize the opportunities for starting a business, and considers that he/she possess the required skills and knowledge for starting a business.

In comparison with employees, female early-stage entrepreneurs have higher educational level, have bigger entrepreneurial network, have better opportunity recognition, and are more self-confident regarding the skills and knowledge to start a business. We found no significant differences between the risk aversion of female early-stage entrepreneurs and female employees in Romania.

As further research it should be a great interest the difference between female entrepreneurial employees and other female employees, respectively how can be improved the opportunity recognition of female entrepreneurial employees and female early-stage entrepreneurs?

References

- Acs, Z.J., Armington, C. and Zhang, T. (2007). The determinants of new-firm survival across regional economies: The role of human capital stock and knowledge spillover. *Regional Science*. 86(3). pp. 367-391.
- Ahl, H. (2006). Why research on women entrepreneurship needs new directions. *Entrepreneurship: Theory and Practice*. 30(5). pp. 595-622.
- Ahl, H. and Nelson, T. (2015). How policy positions women entrepreneurs: A comparative analysis of state discourse in Sweden and the United States. *Journal of Business Venturing*. 30 (2). pp. 273-291.

- Andersson, P. (2010). Exits from Self-Employment: Is there a native-immigrant difference in Sweden? *International Migration Review*. 44(3). pp. 539-559.
- Barreneche García, A. (2014). Analyzing the determinants of entrepreneurship in European cities. *Small Business Economics*, 42(1). pp. 77-98.
- Block, J. and Sandner, P. (2009). Necessity and opportunity entrepreneurs and their duration in self-employment: evidence from German micro data. *Journal of Industry, Competition and Trade*. 9(2). pp. 117-137.
- Boden, R.J. and Nucci, A.R. (2000). On the survival prospects of men's and women's new business ventures. *Journal of Business Venturing*. 15(4). pp. 347-362.
- Brush, C.G. (1992). Research on women business owners: Past trends, a new perspective and future directions. *Entrepreneurship Theory and Practice*. 16(4). pp. 5-30.
- Brush, C.G., Carter, N.M., Gatewood, E.J., Greene, P.G. and Hart, M.M. (Eds.) (2006). *Growth-oriented Women Entrepreneurs and Their Businesses: A Global Research Perspective*. Edward Elgar. Cheltenham, UK.
- Brush, C.G., de Bruin, A., Gatewood, E.J. and Henry, C. (Eds.) (2010). *Women Entrepreneurs and the Global Environment for Growth: A Research Perspective*. Edward Elgar. Cheltenham, UK.
- Burke, A.E., FitzRoy, F.R. and Nolan, M.A. (2002). Self-employment wealth and job creation: The roles of gender, nonpecuniary motivation and entrepreneurial ability. *Small Business Economics*. 19(3). pp. 255-270.
- Castaño, M.-S., Méndez, M.T. and Galindo, M.-Á. (2015). The effect of social, cultural, and economic factors on entrepreneurship. *Journal of Business Research*. 68 (7). pp. 1496-1500.
- De Vita, L., Mari, M. and Poggesi, S. (2014). Women entrepreneurs in and from developing countries: Evidences from the literature. *European Management Journal*. 32(3). pp. 451-460.
- Dencker, J.C., Gruber, M. and Shah, S.K. 2009. Pre-entry knowledge, learning, and the survival of new firms. *Organization Science*. 20(3). pp. 516-537.
- Dimov, D. (2007). Beyond the single-person, single-insight attribution in understanding entrepreneurial opportunities. *Entrepreneurship Theory and Practice*. 31(5). pp. 713-731.
- Elert, N., Andersson, F.W. and Wennberg, K. (2015). The impact of entrepreneurship education in high school on long-term entrepreneurial performance. *Journal of Economic Behavior & Organization*. 111 (1). pp. 209-223.
- Euwals, R. 2001. Female labour supply, flexibility of working hours, and job mobility. *Economic Journal*. 111(471). pp. C120-C134.
- Georgellis, Y. and Wall, H. (2005). Gender differences in self-employment. *International Review of Applied Economics*. 19 (3). pp. 321-342.
- Georgellis, Y., Sessions, J.G. and Tsitsianis, N. (2007). Pecuniary and non-pecuniary aspects of self-employment survival. *Quarterly Review of Economics and Finance*. 47(1). pp. 94-112.
- Gielnik, M.M., Frese, M., Graf, J.M. and Kampschulte, A. (2012). Creativity in the opportunity identification process and the moderating effect of diversity of information. *Journal of Business Venturing*. 27(5). pp. 559-576.
- Haapanen, M. and Tervo, H. (2009). Self-employment duration in urban and rural locations. *Applied Economics*. 41(9). pp. 2449-2461.
- Jayawarna, D., Jones, O. and Marlow, S. (2015). The influence of gender upon social networks and bootstrapping behaviours. *Scandinavian Journal of Management*. 31 (3). pp. 316-329.

- Kelley, D., Brush, C., Greene, P., Herrington, M., Ali, A. and Kew, P. (2015). Women's Entrepreneurship 2015.
- Kirkwood, J. and Tootell, B. (2008). Is entrepreneurship the answer to achieving work-family balance?. *Journal of Management & Organization*. 14 (3). pp. 285-302.
- Klyver, K., Nielsen, S. and Evald, M. (2013). Women's self-employment: An act of institutional (Dis) integration? A multilevel cross county study. *Journal of Business Venturing*. 28(4). pp. 474-488.
- Langowitz, N. and Minniti, M. (2007). The entrepreneurial propensity of women. *Entrepreneurship Theory and Practice*. 31(3). pp. 341-364.
- Lévesque, M. and Minniti, M. (2006). The effect of aging on entrepreneurial behavior. *Journal of Business Venturing*. 21(2). pp. 177-194.
- Longstreth, M., Stafford, K. and Mauldin, T. (1987). Selfemployed women and their families: Time use and socioeconomic characteristics. *Journal of Small Business Management*. 25(3). pp. 30-37.
- Marlow, S. and Swail, J. (2014). Gender, risk and finance: why can't a woman be more like a man?. *Entrepreneurship & Regional Development: An International Journal*. 26(1-2). pp. 80-96.
- Martin, B.C., McNally, J.J. and Kay, M.J. (2013). Examining the formation of human capital in entrepreneurship: a meta-analysis of entrepreneurship education outcomes. *Journal of Business Venturing*. 28(2). pp. 211-224.
- Morris, M.H., Miyasaki, N.N., Watters, C.E. and Coombes, S.M. (2006). The dilemma of growth: understanding venture size choices of women entrepreneurs. *Journal of Small Business Management*. 44 (2). pp. 221-244.
- Millán, J. M., Congregado, E. and Román, C. (2014). Persistence in entrepreneurship and its implications for the European entrepreneurial promotion policy. *Journal of Policy Modeling*. 36(1). pp. 83-106.
- Morgan, J. and Sisak, D. (2016). Aspiring to succeed: A model of entrepreneurship and fear of failure. *Journal of Business Venturing*. 31(1). pp. 1-21.
- Özcan, B. 2011. Only the lonely? The influence of the spouse on the transition to self-employment. *Small Business Economics*. 37(4). pp. 465-492.
- Powell, G. and Eddleston, K.A. (2013). Linking family-to-business enrichment and support to entrepreneurial success: Do female and male entrepreneurs experience different outcomes?. *Journal of Business Venturing*. 28 (2). pp. 261-280.
- Shelton, L.M. (2006). Female entrepreneurs, work-family conflict and venture performance: new insights into the work-family interface. *Journal of Small Business Management*. 44 (2). pp. 285-297.
- Taylor, M.P. 2004. Self-employment in Britain: When, who and why?. *Swedish Economic Policy Review*. 11(2). pp. 139-173.
- Toft-Kehler, R., Wennberg, K. and Kim, P.H. (2014). Practice makes perfect: entrepreneurial-experience curves and venture performance. *Journal of Business Venturing*. 29(4). pp. 453-470.
- Van der Sluis, J., Van Praag, M. and Vijverberg, W. (2005). Entrepreneurship selection and performance: A meta-analysis of the impact of education in developing economies. *World Bank Economic Review*. 19. pp. 225-261.
- Van Praag, C.M., Van Witteloostuijn, A. and Van der Sluis, J. (2013). The higher returns to formal education for entrepreneurs versus employees. *Small Business Economics*. 40(2). pp. 375-396.

- Verheul, I., Carree, M. and Thurik, R. (2009). Allocation and productivity of time in new ventures of female and male entrepreneurs. *Small Business Economics*. 33(3). pp. 273-291.
- Wasdani, K.P. and Mathew, M. (2014). Potential for opportunity recognition along the stages of entrepreneurship. *Journal of Global Entrepreneurship Research*. 2(7). pp. 1-24.
- Wee, L. and Brooks, A. (2012). Negotiating gendered subjectivity in the enterprise culture: Metaphor and entrepreneurial discourses. *Gender, Work and Organisation*. 19(6). pp. 573-591.
- Wood, W. and Eagly, A.H. (2010). Gender, In: Fiske, S.T., Gilbert, D.T., Lindzey, G. (Eds.), 5th edition, *Handbook of Social Psychology*. Vol. 1. Oxford University Press. New York. pp. 629-667.