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Review paper

# AGE AND EDUCATION AS DETERMINANTS OF ENTREPRENEURSHIP

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Abstract. Age and educational level of individuals are considered to be important determinants of entrepreneurial activity in the models of the labour market status selection (self-employment versus paid employment selection). In addition to the presentation of different results and arguments for impact of these factors on the selfemployment, the aim of this paper is to show the state and the dynamics of entrepreneurial activity, i.e. the self-employment in the Republic of Serbia in terms of age and educational structure of the self-employed. Quantitative analysis of the statistical data indicates that during the 2004-2011 period individuals aged 50-54 years were the most frequent among the self-employed in the Republic of Serbia, and that the half of the self-employed in the Republic of Serbia is over 50 years old. Analysis of the self-employed and employees educational structures in the Republic of Serbia suggests that the paid employment is the preferred employment option for more educated individuals, given the fact that the self-employment rate decreases with increasing levels of education, and that the relative share of individuals with the college and the university degree is two times higher in the structure of the employees than the share of these individuals in the structure of the self-employed.

Key Words: entrepreneurship, factors, self-employment, age, education.

### INTRODUCTION

Early theorists of subjects and activities of entrepreneurship consider entrepreneurs as active carriers of economic processes who lead the system to a higher level of development by taking the system to an equilibrium state, or moving it away from this state. Entrepreneurs implement new combinations of resources to respond to the identified but

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unexploited opportunities, using their own or borrowed funds to finance the entrepreneurial venture. In that process an entrepreneur makes decisions in an uncertain environment and takes the risk that the entrepreneurial venture will fail. The offer of entrepreneurs is limited in a society given the fact that the entrepreneurial ability and the entrepreneurial motives are not widespread (Praag, 1999). To be successful, entrepreneurs must be persistent, must have the needed experience, flexibility, confidence, determination, ability to assess (Praag, 1999, Parker, 2004). Successful entrepreneurs are competitive, with a desire for success, for proving, for social distinction, a desire for change (Praag, 1999).

In contrast to early theories of entrepreneurship, modern theories focus on entrepreneurship as one of the options that an active individual can choose in the labour market (Parker, 2004). Not dealing with the definition of entrepreneurship, these theories identify situations in which the entrepreneurship will be chosen as a labour market status. Starting from the maximization of the personal utility function as the individual's goal, modern theories are modelling the employment options choice by introducing the elements of human and social capital, gender and personal characteristics of the individual, family and macro-economic factors as the most common explanatory variables of entrepreneurship (Parker, 2004; Parker, 2009). Regardless of the differences in the dominant research aspect, and particularly in the methodological approach in relation to the modern theories, the knowledge base that is provided by the classical theories of entrepreneurship is still actual and applicable (Praag, 1999, p. 334). In that sense, modern entrepreneurship theories can be understood as a conceptual and methodological update of the classical approach to the entrepreneurship phenomenon.

Based on the understanding of entrepreneurship as a profit oriented business activity of individuals who, acting in their own name and for their own account, make decisions and take the greatest part of the risk that the venture will not succeed, the modern entrepreneurship studies mathematically model the choice of entrepreneurship as an individual's employment option. Looking at this choice as a process that is influenced by numerous factors, contemporary theories of entrepreneurship tend to identify the key determinants of entrepreneurship, the direction and intensity of their influence on the choice of the labour market status. The age and the level of education, as components of the individuals' human capital, are considered to be important factors of entrepreneurial activity by most studies of entrepreneurship (Parker, 2009).

In the studies of the state and the entrepreneurship dynamics, as well as in the models of the employment options choice, entrepreneurship is often quantitatively determined by the number of self-employed, number of company owners or number of new business entities (Gartner and Shane, 1995; Spencer and Gomez, 2004; Johansson, 2000; Parker, 2004; Parker, 2009). Given the availability of data on the number of self-employed in the Republic of Serbia, the intensity of entrepreneurship in this paper is measured by the self-employment rate, i.e. by the number of self-employed in the structure of the active population over the age of 15. The Labour Force Survey of the Statistical Office of the Republic of Serbia for the 2004-2011 period is used as a data source. The starting year of the analysed period was taken given the fact that a modified methodology is used for the implementation of the Labour Force Survey starting from 2004 (Republički zavod za statistiku, 2006, pp. 9-10). According to the methodological guidelines of the Statistical Office of the Republic of Serbia, the self-employed, employed workers and unpaid family workers are the elements of the structure of the employed persons in the Republic of Serbia. The self-employed are the individuals who work independently in their own com-

pany, institution, or on a farm as well as those who perform an independent professional activity or other work on their own account (Republički zavod za statistiku, 2011, p. 8). Starting from the arguments for positive and negative impact of age on entrepreneurial activity, and therefore the possibility that this relationship is not linear, what will be tested in the paper is the assumption that the self-employment rate in Serbia increases with age, but only to a certain level, after which self-employment rate decreases with further increment of age, due to the prevailing negative impact of this factor. Furthermore, in accordance with the results of meta-analysis of a large number of studies of the self-employment, i.e. the entrepreneurship in developing countries (Sluis, Praag and Vijverberg, 2005), it is expected that in Serbia relatively more people with higher levels of education would choose paid employment as an option of their work involvement.

In the first part of the paper the results of research on the impact of age on entrepreneurial activity are analysed. The state and the dynamics of the self-employment in the Republic of Serbia, in terms of the self-employed individuals' age, are analysed in the context of the presented results. Education as a determinant of entrepreneurship is examined in the second part of the paper. Furthermore, an overview and an analysis of the self-employment in the Republic of Serbia, in terms of the level of education, are provided. Certain concluding remarks are summarized at the end of the paper.

### 1. AGE AS A FACTOR OF ENTREPRENEURSHIP

There are different opinions on the effect of age on individual choice of self-employment as a labour market status. The rationale of the positive impact of age on self-employment is based on the view that the quantity of the financial and human capital that one possess and that are necessary for starting and conducting the business increases with age (Johansson, 2000; Arum and Müller, 2004; Parker, 2009). Furthermore, social and business networks that older people have developed can ease the realisation of their entrepreneurial venture. Since self-employment offers greater ability to control the content and pace of the work, this may be preferable working option for older people (Parker, 2009). This theoretical argument is supported by studies that find that the probability of self-employment increases with age (Carr, 1996; Blanchflower, 2000; Blanchflower, 2004). However, given the fact that self-employment is assessed as a more risky employment option (Boden, 1999; Parker, 2004), and as an option that often means longer working hours (Blanchflower, 2004), it can be assumed that the self-employment can also be the less desirable option for older people (Johansson, 2000). Namely, it is estimated that the risk aversion increases with age (Parker, 2009). The willingness to sacrifice the current incomes, i.e. the earnings in the sector of paid employment, for uncertain realization of financial returns in the future, i.e. for entrepreneurial profit, also decreases with age (Lévesque and Minniti, 2006; Parker, 2009). According to Lévesque and Minniti (2006) the present value of future incomes decreases as individuals become older. Therefore, the willingness to allocate the available time on the activity, i.e. entrepreneurial venture, whose financial benefits are expected in the future, will decrease with age. Time is a less scarce resource for younger individuals. Therefore, the rate at which younger individuals discount future cash flows is lower, so for them the present value of future returns is higher than for the older individuals.

Differences in the interpretation of the impact of age on self-employment can be explained by separating the two aspects of this relationship. According to *Praag* and *Ophem* (1995), a distinction between the willingness (desire) and the possibility to be an entrepreneur should be

made. An individual who is ready, i.e. motivated for this option will become an entrepreneur in a favourable environment. If both or one of the conditions is not met, either willingness or possibility, an individual will not choose the self-employment option. If age is taken as a determinant of the size of the financial, human and social capital that an individual has (Arum and Muller, 2004; Parker, 2009), it can be assumed that the possibility to become an entrepreneur will increase with age (Praag and Ophem, 1995). On the other hand, the willingness of individuals to be self-employed decreases with age (Praag and Ophem, 1995). Therefore, while the seniors have more possibility to become self-employed, young people have a greater desire to be so (ibid). *Praag* and *Ophem* (1995) found that more people are willing to be self-employed relative to those who are able to become so. If everyone who wants to be an entrepreneur had the opportunity to be one, the number of new companies would be up to seven times higher (ibid). Thus, the barriers for self-employment are more on the side of possibilities, and less on the willingness to be self-employed.

Taking into account the arguments for and the argument against the positive impact of age on self-employment, it is argued that there is an age limit, after which the willingness of individuals to start their own entrepreneurial ventures decreases (Lévesque and Minniti, 2006), and that is most likely that the individuals who are in the middle of their careers will become self-employed (Moore and Mueller, 2002; Arum and Müller, 2004; Parker, 2009). The non-linear dynamics of the self-employment rates in relation to the age should be analysed in the context of certain studies that found that the probability to be self-employed increases with age, but only to a certain limit, after which it decreases, or stabilizes (Bates, 1995; Robson, 1998; Blanchflower, 2004).

The age structure of the self-employed in the Republic of Serbia in the 2004-2011 period (Table 1) indicates that during each year of the period at least one in ten self-employed was in one of the four central age groups (40-44, 45-49, 50-54 and 55-59). In each year a quarter or even a third of the self-employed is in the 50-59 years age group.

**Table 1.** Age structure of the self-employed in the Republic of Serbia for the 2004-2011 period (in %)

	2004	2005	2006	2007	2008	2009	2010	2011	Average
15-19	0.5	0.8	0.7	0.6	0.7	0.5	1.0	0.6	0.7
20-24	2.1	2.2	2.4	1.8	2.4	2.2	2.7	3.0	2.3
25-29	6.2	4.8	5.7	4.3	4.8	4.9	4.6	4.1	4.9
30-34	8.0	7.9	7.8	8.4	7.4	7.2	8.0	7.2	7.7
35-39	9.8	10.4	9.4	11.7	9.1	9.2	9.7	9.9	9.9
40-44	11.8	10.8	12.6	11.8	10.2	10.7	10.5	11.5	11.3
45-49	11.0	12.6	12.5	11.3	11.7	11.7	13.3	13.3	12.2
50-54	12.5	14.1	15.3	14.4	15.3	14.5	13.5	15.1	14.3
55-59	9.5	10.0	12.3	12.7	14.1	13.7	13.6	15.0	12.6
60-64	8.5	7.6	6.8	6.8	7.0	9.2	9.2	9.3	8.1
65-69	8.6	7.4	6.9	7.0	7.4	6.3	5.8	4.7	6.8
70-47	7.2	6.3	4.2	4.4	5.6	4.9	4.2	3.5	5.0
75+	4.3	5.0	3.4	4.7	4.3	4.9	3.9	2.6	4.1

Calculated upon Republički zavod za statistiku (2006a, 2006b, 2007, 2008, 2009, 2010, 2011, 2012)

On average, during the analysed period the most self-employed were 50 to 54 years old (Table 1). Relative participation of the older self-employed is increasing up to this age group, while after it, the further increment in age reduces the relative share of older self-employed in the structure of total self-employed in the Republic of Serbia. However, this age structure of self-employed in the Republic of Serbia is not sufficient to draw conclusions about the nature of the relationship between self-employment and age. Namely, given the fact that the self-employment rate in Serbia increases with age (Figure 1), it can be noted that the share of the self-employed in the structure of the active population increases with age. This means that in each successive age group the number of self-employed increases, relative to the number of active population in the specific age group. The biggest leap of the self-employment rate is recorded in the 60-64 and the 65-69 age groups. A reduced number of other employment options, as well as the possibility of greater control of the work content and the dynamics may explain the higher self-employment rates for older people in the Republic of Serbia.

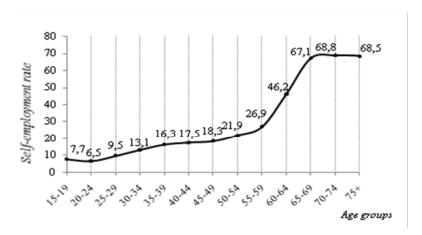


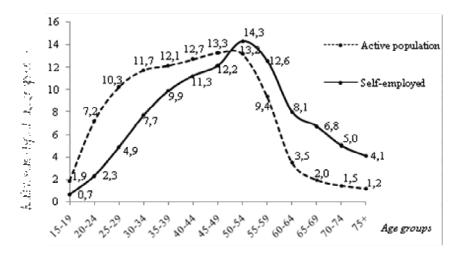
Fig. 1. The self-employment rate in different age groups in the Republic of Serbia, on average for the 2004-2011 period (calculated upon Republički zavod za statistiku (2006a, 2006b, 2007, 2008, 2009, 2010, 2011, 2012)

Therefore, the most self-employed in the Republic of Serbia are 50-59 years old. Up to the 50-54 years age group the relative share of certain age groups in the age structure of the self-employed increases with age. After this age group, the relative share of each subsequent group is decreasing. The described dynamics of the share of certain age groups in the structure of the self-employed correspond to the dynamics of the age structure of the total active population in Serbia (Figure 2).

Figure 2 shows that the population aged 50-54 years is the most represented both in the group of the self-employed and in the group of active population<sup>1</sup> in Serbia. The fact that half of the self-employed (50.9%) in the Republic of Serbia are 50 and over, while

<sup>&</sup>lt;sup>1</sup> There is almost an equal share of individual aged 45-49 and those aged 50-54 in the group of active population.

less than a third of the active population is older than 50 (30.8%), also indicates that older people have higher participation in the group of self-employed in the Republic of Serbia. It can be noticed that there is a pronounced decrement of the active population over 55 years old, as opposed to the structure of the self-employed.



**Fig. 2.** Age structure of the active population and the self-employment in the Republic of Serbia, on average for the 2004-2011 period (calculated upon Republički zavod za statistiku (2006a, 2006b, 2007, 2008, 2009, 2010, 2011, 2012)

The impact of age on the survival rates of the entrepreneurial ventures is examined within the population of entrepreneurs (Evans and Leighton, 1989, Cooper et al., 1992; Le, 1999). While Le (1999) indicates that the probability of survival is the highest for the 45-54 age group, after which it decreases, Evans and Leighton (1989) and Cooper et al. (1992) found that older individuals remain longer in this employment status. According to Cooper et al. (1992), because there are fewer other employment options for older individuals, a larger number of them will remain self-employed. According to the cited authors, the dissolution of a company is in most cases seen as a failure and a result of poor business performances. However, an analysis of a company's survival should include the variable of personal choice of the business owner, in addition to business venture's performances. The inclusion of this subjective component means recognizing that the dissolution of a company is its owners' decision made after comparing company performances with their expectations, i.e. with their threshold of expectations. Therefore, the owners of two companies that have the same level of performances can make a different decision concerning the survival of their enterprises. The threshold of the personal expectations of the owner will affect the decision – and this threshold may be determined by the expected income, other employment options that are available, and the like. Just because fewer other employment options are available for older people, their threshold of expectations may be at a lower level causing them to remain longer in the self-employment status.

#### 2. EDUCATION AS A FACTOR OF ENTREPRENEURSHIP

Similar to the age impact, there are no uniform research results regarding the impact of education on the self-employment, i.e. on the entrepreneurship. Certain studies suggest that there is a positive impact of education on the self-employment probability (Evans and Leighton, 1989; Carr, 1996; Robson, 1998; Blanchflower, 2000; Moore and Mueller, 2002; Ritsilä and Tervo, 2002; Blanchflower, 2004), while others find that the probability for choice of entrepreneurship as an employment option decreases with increasing levels of education (Johansson, 2000; Blanchflower, 2004, more in Parker, 2009 and Le, 1999). There are also studies that find that level of education does not affect the probability of self-employment (Praag and Ophem, 1995). Comparing the results of 117 econometric studies of the effects of education on entrepreneurship, *Parker* (2009, p. 108) points out that most of them (69) find a positive impact of education on entrepreneurship. However, the results are not unique since there are studies whose results indicate the negative effects (21), and the lack of effects of education on entrepreneurship (27) as well. These results are related to the developed countries, while the tendency is different in the developing ones. Meta-analysis of 87 studies carried out in the 1980-2002 period conducted by Sluis, Praag and Vijverberg (2005) suggests that the first choice for a bigger part of more educated individuals in the developing countries is paid employment, followed by self-employment and ultimately by engagement in agriculture.

As a higher level of education may indicate a greater ability of individuals to identify profitable opportunities, to understand the market and entrepreneurial processes, to efficiently and effectively perform entrepreneurial activity in general, or in some specific areas such as ICT, biochemistry, and the like, it can be assumed that the higher level of formal education will have a positive effect on entrepreneurship (Casson 1995, according to Parker, 2009; Johansson, 2000). According to *Lucas's* model of labour market status choice, the influence of education on self-employment can be explained if one accepts that a higher level of education increases the individual's management skills, and thus influences the choice of the self-employment option (Le, 1999). On the other hand, it is possible that a higher level of education increases the chances for employment in the sector of paid employment, thus reducing the likelihood of self-employment (ibid). In addition, a higher level of education increases the earning potential of an individual in the sector of paid employment, and higher wages in this sector mean higher opportunity costs of the self-employment (Johansson, 2000). Therefore, it is less likely that the more educated individual will become self-employed.

The largest number of the self-employed in the Republic of Serbia has completed high school, the second group of the self-employed has completed primary school, while in third place there are self-employed with incomplete primary education, in each year of the analysed period (Figure 3).

Almost half of the self-employed in the Republic of Serbia were on average with a high school degree (Figure 4). If this number is added to the number of individuals who have completed primary school, as well as to the number of those who have not completed primary school or have no education, the data show that about 90% of the self-employed in the Republic of Serbia are positioned at the bottom of the educational scale.

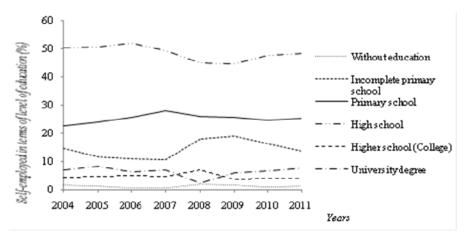


Fig. 3. The self-employed educational structure in the Republic of Serbia for the 2004-2011 period (calculated upon Republički zavod za statistiku (2006a, 2006b, 2007, 2008, 2009, 2010, 2011, 2012)

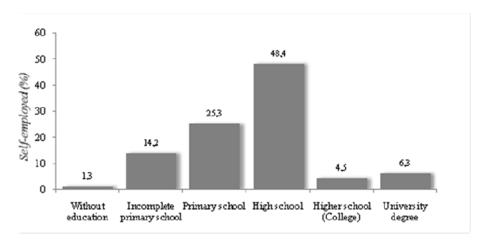
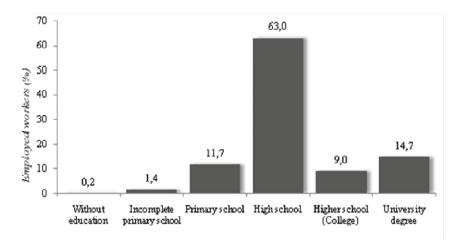


Fig. 4. Educational structure of the self-employed in the Republic of Serbia, average values for the 2004-2011 period (calculated upon Republički zavod za statistiku (2006a, 2006b, 2007, 2008, 2009, 2010, 2011, 2012)

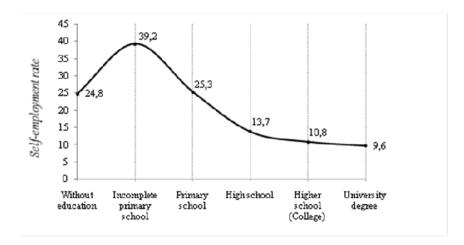
The dominant share of individuals with secondary level of education can be found in the population of the employed workers in the Republic of Serbia as well (Figure 5). Examining the impact of education on self-employment, *Johansson* (2000) concludes that there are arguments to support the theory according to which entrepreneurship or self-employment are the choices of individuals with low human capital, or of those who have problems in finding a job in the sector of paid employment. In that context one should interpret the data according to which there is a significantly lower share of individuals without a fully completed primary school, as well as those with primary school in the total number of the employed workers, in relation to their participation in the structure of the

self-employed in Serbia. Furthermore, in the total number of employed workers there is a greater participation of individuals with college and university degrees, compared to their relative number in the structure of the self-employed.



**Fig. 5.** Educational structure of the employed workers in the Republic of Serbia, average values for the 2004-2011 period (calculated upon Republički zavod za statistiku (2006a, 2006b, 2007, 2008, 2009, 2010, 2011, 2012)

The dynamics of the self-employment rates in relation with different levels of education in Serbia also indicates that the self-employment is primarily the choice of less educated individuals (Figure 6). As it can be noticed, the self-employment rate is highest in



**Fig. 6.** The self-employment rate in relation with the level of education in the Republic of Serbia, average values for the 2004-2011 period (calculated upon Republički zavod za statistiku (2006a, 2006b, 2007, 2008, 2009, 2010, 2011, 2012)

the group of those with incomplete primary education, and with each next level of education the self-employment rate decreases, reaching its minimal value in the group of individuals with a university degree. These data can be interpreted in the context of the studies which find that paid employment is the first choice for a greater number of educated individuals in the developing countries and in Europe compared to the U.S. (Blanchflower, 2004; Sluis, Praag and Vijverberg, 2005).

Studies of the importance of education and work experience for entrepreneurship are in most cases aggregate for a wider group of entrepreneurs, not taking into account the differences between various occupations, or industries. The results of those researches may not be accurate since they can blur the differences that exist between different industries and are related to the impact of education on entrepreneurial activity (Bates, 1995). The entrepreneurship, i.e. the self-employment should therefore be seen as a process influenced by personal characteristics and resources of individuals, but also by the features of the industry (ibid, p. 144). What will be the effect of education depends on the industry, and on the entrepreneur's occupation. *Bates* (1995) finds a statistically significant positive effect of education on entrepreneurial involvement in the so-called professional services, and a significant negative effect of education in the construction. The third group of activities explored by *Bates* (1995) are capital intensive ones and activities with economies of scale – production and wholesale. The lowest number of entrepreneurs is engaged in these industries. When it comes to entrepreneurial involvement of individuals, unlike the previous two groups of activities, in this case the level of education has no explanatory power.

A higher level of education can positively affect the success of entrepreneurial ventures (Praag, 1999), bearing in mind the aforementioned possibility that higher levels of education indicate a greater ability of individuals to identify opportunities, to understand market processes, to make appropriate decisions and the like. However, if the success of an entrepreneurial venture is measured by its survival, then it is possible to expect that a higher level of education will negatively affect the probability of the entrepreneurial venture's survival. Namely, the level of education and management experience are an entrepreneur's resources that can enhance the success of the entrepreneurial venture, but can also increase the opportunity costs of entrepreneurship measured by potential earnings in the sector of paid employment (Cooper et al., 1992). Higher opportunity costs of entrepreneurship imply higher entrepreneurial incomes that can be expected by educated entrepreneurs. This will mean that individuals with higher levels of education and management experience have a higher threshold of expectations for their business ventures. Therefore, a lower level of venture's business performances will cause more educated entrepreneurs to quit their ventures sooner, i.e. earlier than less educated entrepreneurs would. In that context one should interpret the results that indicate that there is no positive relationship between the level of education and the experience of business owners and the rate of business success, i.e. the survival of companies.

## CONCLUSION

Age and educational level are introduced as explanatory variables in most models of choice of entrepreneurship as a work engagement option. However, there are no unique results about the intensity and the direction of impact of these components of human capital on

the choice of the labour market status. It can be expected that financial and social capital of individuals, as well as their work experience will increase with age, which can positively affect the probability of their entrepreneurial engagement. On the other hand, a greater risk aversion is a characteristic of the elderly. This can reduce the probability of choosing selfemployment as a riskier employment option. Furthermore, the net present value of future and uncertain entrepreneurial incomes for seniors is lower than the net present value of these future financial benefits for younger persons, because time is a particularly limited resource for older individuals. Taking both arguments, it can be argued that the possibility of selfemployment increases with age, but that the desire or willingness for this kind of work engagement decreases. The non-linear relationship between age and entrepreneurial engagement is manifested as a parallel increment of age and self-employment rates to a certain level, after which further increase in age leads to lower self-employment rates. This direction of the average self-employment rates dynamics in relation to age was not observed in the Republic of Serbia during the 2004-2011 period. The largest number of the self-employed in Serbia is 50-54 years old (14.3%), while every other self-employed is 50 or over. Self-employment rate increases with each subsequent age group. A reduced choice of other employment options, as well as the preference for the autonomous control of the content and the pace of work that self-employment can offer, are some of the possible reasons for higher selfemployment rates among the elderly in the Republic of Serbia. Given the characteristics of the business environment in Serbia, as in most transition economies, it seems that the limited number of work engagement options for older labour market participants is a key factor of their self-employment. With the aim to create a younger age structure of employees, the management of newly privatized firms often offers so-called social programs through which older workers leave their companies for certain compensation per year of work. Thus, self-employment often becomes the only employment options for older individuals who become unemployed (fired or leave voluntarily) after the privatization or closure of large public companies.

There is a dual possibility of impact of education on the entrepreneurship. A higher level of education indicates better quality of the human capital needed to start and to be successful in one's own business venture. In that sense, it is reasonable to expect that a higher level of education will have a positive effect on the probability to be self-employed. However, higher levels of education may mean higher opportunity costs of this option of work engagement as an owner of the high-quality human capital has a wider range of choices and a greater earning potential in the sector of the paid employment. Unlike the U.S. where a higher level of education is a significant and positive determinant of entrepreneurial activity, in Europe and in the developing countries, more educated individuals primarily choose paid employment as their status in the labour market. Regarding the Republic of Serbia, individuals with a high school level of education are the most common educational group in the structure of the self-employed and in the structure of employed workers as well. However, the relative share of individuals with college and university degrees in the structure of employed workers is double in relation to the participation of these educational groups in the structure of self-employed. Furthermore, starting from a group of individuals with incomplete primary school, the self-employment rate decreases with each successive increased level of education. Only one in ten active citizen of Serbia with a university or college degree chooses self-employment as his/her status in the labour market. A wider range of work engagement options that can be selected, higher earnings and job security are possible reasons for preferring the paid employment by more educated individuals in the Republic of Serbia.

#### REFERENCES

- Bates, T. (1995). Self-employment Entry across Industry Groups. *Journal of Business Venturing*. 10: 143-156.
- 2. Blanchflower, D. (2000). Self-employment in OECD countries. Labour Economics. 7 (5): 471-505.
- 3. Blanchflower, D. (2004). Self-employment: more may not be better. Forthcoming Swedish Economic Policy Review.
- Boden, R. (1999). Flexible Working Hours, Family Responsibilities, and Female Self-Employment. *American Journal of Economics and Sociology*, 58 (1): 71-83.
- Carr, D. (1996). Two paths to self-employment? Women's and men's self-employment in the United States, 1980. Work and Occupations. 23 (1): 26–53.
- 6. Casson, M. (2003). The Entrepreneur. Cheltenham: Edward Elgar Publishing Limited.
- Cooper, A., Folta, T., Gimeno-Gascon, J., Woo, C. (1992). Entrepreneurs' Exit Decisions: The Role of Threshold Expectations. Academy of Management Best Paper Proceedings. pp. 75-79.
- 8. Evans, D., Leighton, L. (1989). Some Empirical Aspects of Entrepreneurship. *The American Economic Review*. 79 (3): 519-535.
- 9. Gartner, W., Shane, S. (1995). Measuring Entrepreneurship over Time. *Journal of Business Venturing*. 10 (5): 283-301.
- Johansson, E. (2000). Self-employment and Liquidity Constraints: Evidence from Finland. Scandinavian Journal of Economics. 102 (1): 123-134.
- 11. Le, A. (1999). Empirical Studies of Self-employment. Journal of Economic Surveys. 13 (4): 381-416.
- Lévesque, M., Minniti, M. (2006). The Effect of Aging on Entrepreneurial Behavior. *Journal of Business Venturing*, 21(2): 177-194.
- Moore, S., C., Mueller, R. (2002). The transition from paid to self-employment in Canada: the importance of push factors. Applied Economics. 34 (6): 791-801.
- Müller, W., Arum, R. (2004). Self-Employed Dynamics in Advanced Economies. In Arum, R., Müller, W. (Eds.) Reemergence of Self-Employment: A Comparative Study of Self-Employment Dynamics and Social Inequality. New Jersey: Princeton University Press. pp. 1-35.
- Parker, S. (2004). The Economics of Self-Employment and Entrepreneurship. Cambridge: Cambridge University Press.
- 16. Parker, S. C. (2009). The Economics of Entrepreneruship. Cambridge: Cambridge University Press.
- Praag, M., Ophem, H. (1995). Determinants of Willingness and Opportunity to Start as an Entrepreneur. Kvklos. 48 (4): 513-540.
- 18. Republički zavod za statistiku (2006a). Anketa o radnoj snazi, 2004. Beograd.
- 19. Republički zavod za statistiku (2006b). Anketa o radnoj snazi, 2005. Beograd.
- 20. Republički zavod za statistiku (2007). Anketa o radnoj snazi, 2006. Beograd.
- 21. Republički zavod za statistiku (2008). Anketa o radnoj snazi, 2007. Beograd.
- 22. Republički zavod za statistiku (2009). Anketa o radnoj snazi, 2008. Beograd.
- 23. Republički zavod za statistiku (2010). Anketa o radnoj snazi, 2009. Beograd.
- 24. Republički zavod za statistiku (2011). Anketa o radnoj snazi, 2010. Beograd.
- 25. Republički zavod za statistiku (2012). Anketa o radnoj snazi, 2011. Beograd.
- Ritsilä, J., Tervo, H. (2002). Effects of Unemployment on New Firm Formation: Micro-Level Panel Data Evidence from Finland. Small Business Economics. 19 (1): 31-40.
- 27. Robson, M. (1998). Self-employment in the UK regions. Applied Economics. 30 (3): 313-320.
- Sluis, J., Praag, M., Vijverberg, W. (2005). Entrepreneurship Selection and Performance: A Meta-Analysis of the Impact of Education in Developing Economies. *The World Bank Economic Review*. 19 (2): 225-261.
- Spencer, J., Gomez, C. (2004). The relationship among national institutional structures, economic factors, and domestic entrepreneurial activity: a multi-country study. *Journal of Business Research*. 57(10): 1098-1107.

# GODINE STAROSTI I NIVO OBRAZOVANJA POJEDINCA KAO DETERMINANTE PREDUZETNIČKE AKTIVNOSTI

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Godine starosti i nivo obrazovanja pojedinca se u modelima izbora statusa na tržištu rada (preduzetništvo, odnosno samozapošljavanje versus plaćena zaposlenost) smatraju bitnim determinantama preduzetničke aktivnosti. Uz prikaz različitih rezultata istraživanja i argumentacije uticaja ovih faktora na samozapošljavanje pojedinaca, cilj rada je da se prikaže stanje i dinamika preduzetničke aktivnosti, odnosno samozaposlenosti u Republici Srbiji sa aspekta starosne i obrazovne strukture samozaposlenih. Kvantitativna analiza statističkih podataka ukazuje na to da su u periodu 2004-2011. godine osobe starosti 50-54 godine bile najzastupljenije u grupi samozaposlenih u Republici Srbiji, dok je polovina samozaposlenih u Republici Srbiji starija od 50 godina. Analiza obrazovne strukture samozaposlenih i zaposlenih u Republici Srbiji ukazuje na to da je plaćena zaposlenost preferirana opcija obrazovanijih pojedinaca, budući da se sa povećanjem nivoa obrazovanja smanjuje stopa samozaposlenosti, kao i to da je relativno učešće osoba sa višom i visokom stručnom spremom u strukturu zaposlenih duplo veće u odnosu na učešće obrazovanijih pojedinaca u strukturi samozaposlenih.

Ključne reči: preduzetništvo, faktori, samozaposlenost, godine starosti, obrazovanje.