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# **EDUCATION** AND ENTREPRENEURSHIP IN THE SME SEGMENT IN ECONOMIC TRANSFORMATION

**ABSTRACT.** The issue of business environment for small and medium-sized enterprises is a very actual area of scientific research. Currently, the great importance is given to research people's personal and knowledge preconditions for conducting business. The aim of this article was to examine the relationship between education of entrepreneurs and several aspects of entrepreneurship in the SME segment.

Our own research was conducted in the selected regions of the Czech Republic and Slovakia through a questionnaire survey. A total of 449 owners of small and medium-sized companies have been reached. The sample of respondents was divided into two groups: entrepreneurs with and without a university degree. To reach an above mentioned aim, Pearson statistics for a data count, series of 5000 Monte Carlo replication as well as tools of descriptive statistics have been used.

Our results have showed that there are significant differences in the attitudes of these two categories of entrepreneurs in their motives for starting business and the knowledge of the lending criteria of commercial banks. On the other hand, the differences in other fields, such as the evaluation of the commercial banks approach, the change of their companies' profitability, the ability to manage financial risks and the assessment of the academic knowledge usefulness were not confirmed by our research.

G21

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# Introduction

The relationship between education and entrepreneurship is now being taken as a serious issue in the field of enterprise research due to increased competition in the market from both locally and internationally, availability of new technology, and consumer demand

for new products and so on. To be aware of all those affects to the firm one needs to acknowledge the changes in consumer demand, the use of new technologies and analysis of the market competition from different approaches. Thus, education can enhance one's ability to know more in-depth about all those issues and this can create a competitive advantage for the business. Nevertheless, entrepreneurial success and selection of entrepreneurship as an employment can be influenced by various factors, including easy availability of finance sources (Carter *et al.*, 2003; Orser *et al.*, 2006), gender equality (Chowdhury and Audretsch, 2014), entrepreneur education level (Rauch and Rijsdijk, 2013; Naude *et al.*, 2008), social mobility and structure (Lim and Envick, 2011), government support (Elam and Terjesen, 2010), Self-skills and confidence (Minniti and Nardone, 2007; Wilson *et al.*, 2007). However, among the above variables, one factor can easily be identified as an entrepreneurial idiosyncratic quality, which can affect the choice between self-employment (being an entrepreneur) and other employment opportunities, is education.

Researchers, while dealing with the importance of human capital in doing business found out that, entrepreneurs' education can have a positive impact on the entrepreneurship selection and performance (Lafuente and Vaillant, 2013; Naude *et al.*, 2008; Bonte *et al.*, 2007). It is also noticeable that, the formal education can increase the managerial ability of an individual and that can lead a person to become an entrepreneur. However, as argued by Velez (2009) and Mengistae (2006) education is not free of cost and for which it may then lead an individual to become a safe waged earner; since, the return from the enterprise is not guaranteed as like as the employed worker. Mamman (2014) and Oosterbeck *et al.* (2010) further argue that, the education system is not so well developed in many developing countries which can increase the self-confidence of an individual to start an own business. Hence, previous empirical researches in this area are not providing any conclusive answer about the relationship between education and entrepreneurship in the segment of the SME.

There are several studies exist on the business environment of SMEs in the Czech Republic and Slovakia. For example, Belás, Bilan, Demjan and Sipko (2015) compare objective motivational factors of SMEs, status in the society, relationship to the state, level of the corruption, approach to loan financing, and business optimism in the business environment in selected regions of both countries, as like as Belás, Demjan, Habánik, Hudáková, and Sipko (2015), which analyze regional aspects of the level of the corruption, current business risks, and approach to loan financing.

The objective of this paper is to examine the possible relationship between education and entrepreneurship in the selected regions of the Czech Republic and Slovakia. Because, to the best of our knowledge, this would be the first empirical analysis and an only attempt so far to explore this issue on this market. Moreover, if higher education can lead one to become an entrepreneur rather than a waged earner, then it would have possible reasons for this choice. On the other hand, if not, this research will be able to find out the negative externalities for which education cannot be related to entrepreneurship.

# 1. Theoretical background

The role of education in the selection of entrepreneurial choice has been a topic of debate for many years. There are researches explored that, entrepreneurs education, family background, and previous experiences affect the individual intends to become an entrepreneur rather than being a waged earner. Some authors found out that, entrepreneurs' education can positively affect the performance of the firm and which also gives the firm a more sustainable position in the market. The performance of the firm can be more linked with the formal education of the entrepreneurs and their past experiences which is gained from any relevant jobs (Barker and Mueller, 2002). Empirical research also shows that, entrepreneur education

and knowledge about the business plays an important role in creating competitive advantage in the marketplace (Hsu *et al.*, 2007). Beierse (2000) argues that, an educated entrepreneur can differentiate his enterprise from the competitors by offering different types of products that can positively affect the performance of the company.

Velez (2009) shows that, people with less than a college education and people with a higher than college or more education are more interested to become entrepreneurs. Since, higher educated people are more interested to have their own business, rather than only wage earning workers. It is also noticeable that, people with less than the college education or high school education prefer to be a wage-earning worker. However, one-third of the entrepreneurs within the area of agriculture, transportation, or constructions come from less than college or high school educated individuals. On top of that, business related to finance, manufacturing, professional services, and communications services comes from the people of higher than college or more education.

Arenius and Minniti (2005) also find that, secondary and higher education is a significant factor in explaining the entrepreneurship process in their empirical analysis about 28 countries. However, they also argue that, the education and entrepreneurship can be more pronounced in the developed countries rather than developing countries. They have reasoned that, in the developing countries, an educated individual is more interested to become a wage earner due constrained sources of finance. As opposed to that, Bonte *et al.* (2007) do not find any relevant relationship between education and entrepreneurship in their analysis in the German market.

Lafuente and Vaillant (2013) reveal that, those with the college education or more than a college education in management, they are significantly interested to open their business to their counterparts with less than a college education. The results show that, individuals with a college education in management are 3.35% more likely to be involved with pre-startups than the individuals with lower education.

Naude *et al.* (2008) also finds a positive relation between education and entrepreneurship in the South Africa. They have argued that, an educated individual can look for more opportunities in the market to start-up new business and which may not be possible for an uneducated or least educated person.

Millian *et al.* (2014) find that, an educated entrepreneur can attract more educated worker to the business and an educated worker can positively affect the output as well as productivity of the business by having updated knowledge gained from their tertiary and a higher secondary level of education. They have also found out that, an entrepreneur with tertiary or at least first level of tertiary education can drive the enterprise more successfully by having more technical knowledge in the relevant field than an entrepreneur with less than the secondary or primary level of education.

Mengistae (2006) shows that, an entrepreneur with higher schooling can survive with his business more than those with less than a secondary or a primary education. The paper states that the average level of education is lower in the garments and textile industry and in this industry the business survival is also lower. The author's argue that for the business survival and growth an entrepreneur schooling, as well as previous management experience play an important role.

Rauch and Rijsdik (2013) find that, people with higher education, such as any vocational training or higher school certificate are positively related to business growth. They have reasoned that, people with higher education can actively seek for new opportunities which are positively related to higher growth. On top of that, the opportunity cost of formal education is higher than work related experience or previous entrepreneurial experience. Hence, entrepreneurs with higher education will try to generate more revenues to compensate the educational opportunity cost by having higher growth. The paper also reveals that, people

with higher education and industry specific experience can prevent any negative outcome of the business with their updated knowledge gained from the education and experience.

Wilson *et al.* (2007) argue that, formal education can enhance self-confidence of the individual to have their own business. Their results show that, MBA education can give the women more confidence to become an entrepreneur to the age group of 25-34 who are actively seeking to start their career as an entrepreneur. A later study by Chowdhury and Audretsch (2014) also find that, the higher education can increase the internal motivation of the females to be more self-confident and to have their own business rather than working for others.

Mamman (2014) examined the issue of entrepreneurship education in capacity building for entrepreneurship in the selected regions of Nigeria among 500 individuals from college, universities, and poly technique institutions from 1987-2014. The results show that, entrepreneurship education does not have any significant effect on capacity building to the youths or new graduates to have their own business. He argues that, the entrepreneurship education was included in the curriculum, but it was not well planned, this finding is very similar to the findings of Van der Sluis *et al.* (2005). On top of that, after knowing the indepth analysis of the business and riskiness of the business establishment, graduates get demotivated to have their own business.

Van der Sluis and Van Praag (2008) conducted a Meta-analysis about the effect of education and entrepreneurship and the results show that, education does not have any significant effect on entrepreneurship choice. Yet, they have also shown that, the effect of education for entrepreneurship is only supporting US market rather than any other markets. They also argued that, this can be a reason of advanced curriculum or training provided by the school to become an entrepreneur, which is absent in the developing countries. They have also revealed that, higher level of education such as university or college level education is significantly related to higher performance of the entrepreneurship when it is calculated for sales or profitability and which is also true for sustainability.

Carter *et al.* (2003) show that, women with at least graduation or more than that, education can possibly use more equity funding from external area to those who are less educated. Thus, more access to finance from outside sources can lead them to become more self-oriented. Orser *et al.* (2006) also confirms this result in the Canadian market. They find that, women with higher education can get easy access to finance in contrast to women with lower level of schooling from banks and that can lead them to be an entrepreneur.

Kato *et al.* (2015) finds that, the entrepreneurs' generic human capital such as education or previous experience is positively affecting the entrepreneur's investment into the R&D projects with any kind of business. They have shown that a graduate entrepreneur can easily find the different sources of capital and by which she can invest in research and development that can increase the innovation of the small business from the specific market.

Van der Sluis *et al.* (2005) discover that a marginal year of schooling increases the performance of the enterprise by 5.6% in the developing economies, which is very close to the return of the industrial economies. They have also shown that, entrepreneurs with upper secondary schooling generate more return than those with primary education. On top of that, people with higher levels of education they want to be more self-independent than the regular wage earners. Entrepreneurship not only provides higher earnings than the paid employment, but also provides independence which is one of the major advantages of self-employment.

Oosterbeck *et al.* (2010) examined the effect of entrepreneurship education in skills generation to become an entrepreneur in the Netherlands by having SMC (Student mini company) project. They have shown that the entrepreneurship education does not have any significant effect on the graduates of skills generation to have their own business. On top that, it is found that in some cases the probability to become an entrepreneur after the SMC

program near zero. After the SMC program, the intention to become an entrepreneur also went down significantly. Moreover, in some cases the probability can become negative due to the advanced knowledge gain from the program about the difficulty to maintain own businesses.

Omerzel and Antoncic (2008) find that advanced level of education can increase the techniques and skills of an entrepreneur that can be utilized by the firm, which will also increase the performance of the enterprise. Moreover, a number of studies point out that, entrepreneurial success not only depends on the entrepreneurial education, but also depends on different practical skills, knowledge about the business environment and solving problems which can be gathered from the past work experience (O'Gorman and Terjesen, 2006).

It is also noticeable to see that, an entrepreneur with college or university education can manage the firm-specific financial risk better than the secondary or primary educated entrepreneurs (Wang, 2012). Terungwa (2012) argues that, when a firm is financially well organized it can likely to get easier access to bank loans than the other firms those are not; hence, it can affect the sustainability and growth of the firm. Thus, this is suggesting that, education of the entrepreneur is related to better financial management of the firm and which is subsequently leading to access to external finance that can lead to the growth of the firm.

According to the available literature, the effect of education on the choice of entrepreneurship or any other employment opportunities is complex due to various externalities. Yet, it is possible to see that, higher education can provide an individual with a certain advantage over an individual who is having lower levels of schooling to being an entrepreneur. On the other hand, these advantages are also increasing the opportunity costs for a higher educated person, who can easily find an outside job with regular payments.

By keeping in mind the costs and benefits of education and entrepreneurship, this paper aims to answer the possible reasons that can drive an educated individual to become an entrepreneur and also to what extent education can be linked to entrepreneurship in the segment of the SME.

# 2. Research aim, methodology and data

The aim of this article was to examine the relationship between education of entrepreneurs and entrepreneurship in segment SME.

The research was conducted in selected regions of the Czech Republic and Slovakia through questionnaire investigation in 2013. A total of 449 owners of small and medium-sized companies have joined our research, of those 180 from Zlin region (Czech Republic), 164 from Žilina region (Slovakia) and 105 from the Trencin region (Slovakia).

Despite the fact that these regions belong to two different countries, they share many common characteristics, because they are neighbors with each other, have similar conditions for their development and intensively trade together. Therefore, it is assumed that this sample is homogeneous. The selection of respondents was conducted by a random selection and sample size is considered as representative enough.

The Zlin region has an area of 3,964 km<sup>2</sup> and about 600,000 inhabitants. In 2012, the GDP per capita was about 11,720 EUR, and the unemployment rate was about 8%.

The Zilina region has an area of 6,800 km<sup>2</sup>. The total population is approximately 700,000 and the population density is 102 inhabitants per km<sup>2</sup>. The unemployment rate increased to 11.91% in 2011. The GDP per capita that year was 10,794 EUR.

The Trencin region has an area of 4,502 km2 and has about 600,000 inhabitants. The GDP per capita reached 10,744 EUR in 2010 (88.57% of the average GDP per capita in Slovakia), and the registered unemployment rate was at 10.89% in 2012 (significantly below the national average of 14.44%).

The following hypotheses have been defined:

- H1: There are statistically significant differences in the motive for starting business between the entrepreneurs with and without a university degree.
- H2: There are statistically significant differences between the entrepreneurs with and without a university degree in the knowledge of lending criteria of commercial banks.
- H3: There is no statistically significant difference between the entrepreneurs with and without a university degree in the perception of the commercial banks' approach towards financing of SME.
- H4: There are statistically significant differences between the entrepreneurs with and without a university degree in their ability to manage financial risks of their companies.
- H5: There is no statistically significant difference between the entrepreneurs with and without a university degree in the change of the company profit after the last crisis.
- H6: There are statistically significant differences between the entrepreneurs with and without a university degree in their perception of the academic knowledge usefulness.

The associations in contingency tables were analyzed by Pearson statistics for count data. In the cases, where asymptotic requirements for the test were violated series of 5000 Monte Carlo replications from original data has been conducted. P-value is being compared with standard 5% confidence level. P-value that is lower than confidence level leads to rejection of the null hypothesis. The null claims there is no association between variables. Calculations have been performed in statistical packages XL Statistics and R. The tools of descriptive statistics have been used such as percentages and averages too.

# 3. Results and discussion

The results of our research on the evaluation of motives for starting business are presented in *Table 1*. The entrepreneurs were divided into two groups: the entrepreneurs with and without a university degree (UD.YES/UD.NO). Afterwards, the relative proportions of single responses were compared between these two groups.

Table 1. Motivation for Starting Business

What was your motive for starting business?	UD.YES (%)	UD.NO (%)	p-value
1. Money	34.3	36.9	0.56868
2. I perceive it as a mission	20.7	10.2	0.00194
3. I wanted to have a job	20.2	32.2	0.03980
4. I had no choice	8.5	10.2	0.53526
5. Other reasons (independence, flexibility etc.).	16.4	10.6	0.06876

Source: own source.

As it is obvious from the table, statistically significant differences were found between the entrepreneurs with and without a university degree in two responses, namely "I perceive it as a mission" and "I wanted to have a job". Thus, the *Hypotheses 1 can be partially confirmed*. The entrepreneurs with a university degree stated twice as often as the entrepreneurs without a university degree that they had started their own business because they perceive it as a mission. On the other hand, there were 12% more entrepreneurs without a university degree than the entrepreneurs with a university degree that started their own business because they wanted to have a job. It leads to a conclusion that whereas for the entrepreneurs with a university degree the entrepreneurship is their choice, the entrepreneurs

without a university degree were more-less forced to start their own business by circumstances. As they could not find a job in the relatively high-unemployment-rate environment, they had to establish their own companies to earn for living.

Motives to start business in the Czech Republic are different like those motives in Slovakia. Entrepreneurs in Slovakia significantly more stated that the money is the most important motive for starting business. Entrepreneurs in the Czech Republic compared to entrepreneurs in Slovakia reported significantly more about the motive of an own mission. (Belás, Demjan, Habánik, Hudáková, and Sipko, 2015).

The result of our findings can also be interpreted in this way that, if university educated individual perceived entrepreneurship as their mission than it is possible that education does enhance their self-confidence to have an own business. Although, there was not measured the value of self-confidence directly through higher education. However, the eagerness of becoming an entrepreneur can be a result of updated knowledge gained from the university degree and which gives them self-steam to become an entrepreneur rather than waged earner. It can also be seen that, a higher number of individuals without university degree, they wanted to have their job and hence they become an entrepreneurs. Thus, it could be stated that, outside job opportunities are more concentrated for the higher educated individual and they can look for different opportunities for employment, but which is not possible for an individual without university degree.

Table 2. Knowledge of Lending Criteria of Banks

Do you know the criteria which banks assess in their lending process?	UD.YES (%)	UD.NO (%)	p-value
1. Yes	44.3	39.8	0.33204
2. No	10.4	17.8	0.02510
3. I have some idea	45.3	42.4	0.53526

Source: own source.

Table 2 presents the results of our research in the field of knowledge of the banks' criteria in the lending process. As the only difference between the entrepreneurs with and without a university degree was found in the No response to this question, the *Hypothesis 2 can be confirmed only partially*. In details, there were 7% more entrepreneurs without a university degree than the entrepreneurs with a university degree that stated they did not know the banks' criteria for lending. It is supposed that entrepreneurs with a university degree have a certain (higher) level of economic knowledge thus they should be at least a little bit familiar with a lending process of banks. Moreover, people with a higher education are expected to be more rational customers thus their interest in the conditions of loans is logical. On the other hand, it is possible that, individuals with university education will be looking for more opportunities in the market for expansion of their business. Thus, the issue of availability of finance will be a primary concern for them to expand the business. Therefore, they would be more interested to know more about the rules and regulations of the banks for lending than the individuals without university degree.

In this context, for example Behr and Güttler (2007) see the solution on companies' part that understood banks' approach within the evaluation of creditworthiness and also they were able to evaluate their expected probability of default (PD) using rating model. This fact could help firms to understand their position from the bank's position. Also this fact would lead to provision of the necessary document about themselves for better assessment of their creditworthiness and also it would lead to the possibility of further negotiations between the

bank and the company about credit conditions. According to the author, knowledge of an own PD also allows to increase transparency in credit process. As well as it allows potential use for searching of external funding sources. If SMEs have knowledge about their creditworthiness, they may affect management decisions in favor of new sources of external funding due to the expanding range of financing options.

Table 3. Evaluation of the Approach of Commercial Banks to Finance SME

How do you assess the banks' approach to the financing of SME?	UD.YES (%)	UD.NO (%)	p-value
Banks fully accept our needs and meet our requirements	3.3	3.0	0.84930
2. Banks behave appropriately	31.5	30.5	0.82588
3. Banks behave unfriendly	12.7	9.3	0.25428
4. Banks use too harsh criteria for lending	33.3	34.7	0.74896
5. I cannot judge	19.2	22.5	0.40654

Source: own source.

The evaluation of the approach of commercial banks by different groups of entrepreneurs can be found in *Table 3*. None of the calculated p-values was lower than 0.05, thus the *Hypothesis 3 was confirmed*. There were no statistically significant differences between the entrepreneurs with and without a university degree in the perception of the commercial banks' approach towards the financing of SME. None of the two examined groups of entrepreneurs is more critical towards the banks than the other one. The assessment of the commercial banks' approach is not influenced by the education of an entrepreneur, it is more influenced by the proper relationship between an entrepreneur and his/her bank. Moreover, it is also possible that, commercial banks give more emphasis to variables like asset size, current level of debt, business experience of the entrepreneur or entrepreneurs' character rather than only education of the entrepreneurs while lending to this segment. Although, in this research we did not explore any of these possibilities for lending to SMEs, but it can be a good topic for future research in the selected segment of SMEs (Jahur and Quadir, 2012).

Research by Belás, Bartoš, Habánik, and Novák (2014) confirmed the fact that there are differences between opinions of entrepreneurs in the Czech Republic and Slovakia. Entrepreneurs in the Czech Republic are more convinced that banks behave appropriately than entrepreneurs in Slovakia who are more convinced that banks use too harsh criteria.

Table 4. Evaluation of the Ability to Manage Financial Risks

Do you think you can manage financial risks in your company?	UD.YES (%)	UD.NO (%)	p-value
1. Yes	32.2	31.9	0.94420
2. To some extent	58.8	61.7	0.52870
3. No	1.9	0.9	0.33706
4. I cannot judge	7.1	5.5	0.49020

Source: own source.

Table 4 contains the results of our research in the question of the ability of entrepreneurs to manage the financial risks in their companies. The majority of both examined

groups think they can manage the risks to some extent. Almost one third think they can fully manage the risks; other responses were declared only marginally in both groups. As it is obvious from the proportions and calculated p-values, there are no statistically significant differences between the entrepreneurs with and without a university degree in their evaluation of their ability to manage financial risks. Consequently, the *Hypothesis 4 was not confirmed*. Our assumption was that entrepreneurs with a university degree have a certain level of theoretical knowledge which could help them managing the risks in their companies. However, as the research results showed, the education has no effect on the ability to manage risks. It indicates that the ability to manage financial risks depends more on experience and personal features of entrepreneurs and not on the level of education.

Point estimation of the proportion of the Czech entrepreneurs who believe they are able to manage financial risk properly, is 96.11%. In Slovakia (Zilina region) it was 90.85%. (Belás, Demjan, Habánik, Hudáková, Sipko, 2015).

Table 5. The Change of Profitability Compared to the Pre-crisis Period

How has your firm's profitability changed compared to the pre-crisis period?	UD.YES (%)	UD.NO (%)	p-value
1. It has decreased substantially (more than 20 %)	27.8	25.8	0.63122
2. It has slightly decreased (0-20 %)	37.1	35.6	0.74896
3. It has not changed	21.5	21.9	0.91240
4. It has slightly increased (0-20 %)	10.2	13.3	0.32218
5. It has increased substantially (more than 20 %)	3.4	3.4	0.99202

Source: own source.

The distribution of responses to the question about the change in the companies' profitability compared to the pre-crisis period is shown in Table 5. None of the calculated pvalues is higher than 0.05 thus we can accept the Hypothesis 5: there is no statistically significant difference between the responses of entrepreneurs with and without a university degree in the field of the change of their profitability. As expected, university degree has no effect on the company's results. Although it can provide precious theoretical knowledge, doing business is more about practice and personal characteristics of an entrepreneur (such as being target-driven, not afraid of risk, persevering etc.). So if an entrepreneur does not have these important personal features, a university degree will not guarantee them a success in their business. On the other hand, if higher education cannot ensure a higher level of performance of the business, then it is possible that firm performance in the selected regions are more influenced by the macro variables like unemployment, economic growth or inflation rate than the idiosyncratic quality of the entrepreneur. Hence, it can be said that, university educated entrepreneurs cannot be in superior position than those of the entrepreneurs without university education unless, he/she can take advantage of the macroeconomic variables and find suitable opportunities that can differentiate the business from others.

In this context, Belás *et al.* (2014) state that, the average performance decrease is represented by 15.80% in the Czech Republic and 18.78% in Slovakia.

Table 6. Possibility to Apply the Theoretical Knowledge in the Business

Do you think that academic field provides useful solutions for business?	UD.YES (%)	UD.NO (%)	p-value
1. No, because it is detached from the real life	38.2	39.4	0.79486
2. Some findings are useful to us	51.9	52.5	0.88866
3. In my business I use a lot of theoretical knowledge	9.9	8.1	0.49020

Source: own source.

Finally, Table 6 represents the results of the research in the field of the academic knowledge usefulness according to different groups of entrepreneurs. It was supposed that entrepreneurs with a university education would appreciate the academic knowledge more than their counterparts. Nevertheless, as the calculated p-values show, there were not found any statistically significant differences in the responses. Thus, the Hypothesis 6 could not be confirmed. The entrepreneurs with their own university degree have not proved to be more tolerant towards the academic field. In both groups, more than a half of entrepreneurs stated they use some findings in their business. But almost 40% in both cases think the academic field is completely detached from the real life, i.e. practically useless. In this context our findings are very similar to those with the findings of Mamman (2014), Levesque and Minniti (2006), as these authors argue that, education without practical business knowledge and updated curriculum will not be helpful to apply these ideas in the context of real business environment. Hence, a university educated individual will not be in superior position in operating the businesses than the individual who has no university degree, if the education system is lacking of practical knowledge of the business condition. This finding points out to the gap between the needs of companies' owners and the academic field offer. It has been known for some time that the university graduates from the Czech Republic and Slovakia are not well prepared for the labor market. Entrepreneurs in both countries complain they cannot find qualified labor force due to inappropriate university education of the graduates. The first problem is the high proportion of humanistic graduates, the second one are the insufficient skills of the technical graduates. The academic field does not communicate with the entrepreneurs about their needs and so a gap arises between what students learn at universities and what entrepreneurs require from them. Our research also confirmed such dissatisfaction of entrepreneurs with the academic field.

Belás, Bartoš, Habánik, and Novák (2014) indicate that the opinions of the Czech and Slovak entrepreneurs in this sector were not different. Most often, entrepreneurs thought that some of the lessons learned at the university are useful to them. It has been calculated that in both countries, fewer than 20% of businessmen thought that in their practice they are using a lot of theoretical knowledge.

# Conclusion

The aim of this article was to examine the relationship between education of entrepreneurs and several aspects of entrepreneurship in the SME segment.

The results of our study have showed there are significant differences in the attitudes of these two categories of entrepreneurs in their motives for starting business and the knowledge of the lending criteria of commercial banks. On the other hand, the differences in other fields, such as the evaluation of the commercial banks approach, the change of their companies´ profitability, the ability to manage financial risks and the assessment of the academic knowledge usefulness were not confirmed by our research.

Thus it could be concluded that the university graduates more often start their own business because they perceive it as a mission whereas the entrepreneurs without a university degree are more often forced to start their own business by circumstances. As they cannot find a job they decide to start a company to make their living.

Moreover, the entrepreneurs without a university degree declare more often they do not know the lending criteria of commercial banks. This can be due to being less demanding and rational as a customer.

Finally, our research confirms the entrepreneurs are not satisfied with the academic field work, no matter their educational level. Almost 40% of entrepreneurs think the findings of the academic sphere is practically useless which points out to the gap between what the entrepreneurs would like to get and what they really get from the universities in the Czech Republic and Slovakia.

Our study has some limitations because it was performed on a limited sample of respondents and has a regional character. Nevertheless, we think it brings interesting scientific findings in this area.

In the future we would examine selected quality factors of business environment in the SME sector and measure the intensity of their individual action and would also quantify the impact of the quality of the business environment for credit risk. The anticipated results of the research should significantly enrich the theoretical knowledge and contribute to the optimization of the parameters of the loan process in a commercial bank.

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### References

- Arenius, P., Minniti, M. (2005), Perceptual variables and nascent entrepreneurs, *Small Business Economics*, 24, pp. 233-247.
- Barker, V. L. III., Mueller, G. C. (2002), CEO characteristics and firm R&D spending, *Management Science*, 48(6), pp. 782-801.
- Behr, P. Guettler, A. (2007), Credit Risk Assessment and Relationship Lending: An Empirical Analysis of German Small and Medium-Sized Enterprises, *Journal of Small Business Management*, 45(2), pp. 194-213.
- Beijerse, R. P. (2000), Knowledge management in small and medium-sized companies: knowledge management for entrepreneurs, *Journal of Knowledge Management*, 4(2), pp. 162-179.
- Belás, J., Bilan, Y., Demjan, V., Sipko, J. (2015), Entrepreneurship in SME Segment: Case Study from the Czech Republic and Slovakia, *Amfiteatru Economic*, 17(38), pp. 308-326.
- Belás, J., Demjan, V., Habánik, J., Hudáková, M., Sipko, J. (2015), The business environment of Small and medium-sized companies in selected regions of the Czech Republic and Slovakia, *E+M. Ekonomie a Management*, Vol. 18, Issue 1, pp. 95-110.
- Belás, J., Bartoš, P., Habánik, J., Novák, P. (2014), Significant attributes of the business environment in Small and medium-sized enterprises, *Economics and Sociology*, Vol. 7, No 3, pp. 6-18.
- Belás, J. a kol. (2014), Business risks and the level of entrepreneurial optimism of SME in the Czech and Slovak Republic, *Journal of competitiveness*, Vol. 6, Issue 2, pp. 30-41.
- Bonte, W., Falck, O., Heblich, H. (2007), Demography and innovative entrepreneurship, *The Jena Economic Research Papers*, 2007-084.

- Carter, N. M., Brush, C. G., Greene, P. G., Gatewood, E., Hart, M. M. (2003), Women entrepreneurs who break through to equity financing: the influence of human capital, social and financial capital, *Venture Capital*, 5(1), pp. 1-28.
- Chowdhury, F., Audretsch, D. B. (2014), Institution as looting apparatus: impact of gender equality and institutions of the female entrepreneurship, *Euro Asian Business Review*, 4, pp. 207-225.
- Elam, A., Terjesen, S. (2010), Gendered institutions and cross –national patterns of business creation for men and women, *European Journal of Development Research*, 22, pp. 331-348.
- Hsu, R. C., Lawson, D., Liang, T. P. (2007), Factors affecting knowledge management adoption of Taiwan small and medium-sized enterprises, *International Journal of Management and Enterprise Development*, 4(1), pp. 30-51.
- Jahur, M. S., Quadir, S. M. N. (2012), Financial distress in small and medium enterprises (SMEs) of Bangladesh: determinants and remedial measures, *Economia Seria Management*, 15(1), pp. 46-61.
- Kato, M., Okamuro, H., Honjo, Y. (2015), Does founder human capital matter for innovation? Evidence from Japanese start-ups, *Journal of Small Business Management*, 53(1), pp. 114-128.
- Lafuente, E. M., Vaillant, Y. (2013), Age driven influence of role-models on entrepreneurship in a transition economy, *Journal of Small Business and Enterprise Development*, 20(1), pp. 181-203.
- Lim, S., Envick, E. R. (2011), Gender and entrepreneurial orientation: a multi country study, *International Entrepreneurship and Management Journal*, 9, pp. 465-482.
- Mamman, A. (2014), Effect of entrepreneurship education on capacity building in small and medium scale enterprises (SMEs) in Nigeria, *International Journal of Social Sciences and Entrepreneurship*, 1(11), pp. 1-11.
- Mengistae, T. (2006), Competition and entrepreneurs' human capital in small business longevity and growth, *Journal of Development Studies*, 42(5), pp. 812-836.
- Millian, J. M., Congregado, E., Roman, C., Van Praag, M., Van Stel, A. (2014), The value of an educated population for an individual's entrepreneurship success, *Journal of Business Venturing*, 29, pp. 312-632.
- Minniti, M., Nardone, C. (2007), Being in someone else's shoes: the role of gender in nascent entrepreneurship, *Small Business Economics*, 28, pp. 223-238.
- Naude, W., Gries, T., Wood, E., Meintjiess, A. (2008), Regional determinants of entrepreneurial startups in a developing country, *Entrepreneurship and Regional Development*, 20, pp. 111-124.
- O'Gorman, C., Terjesen, S. (2006), Financing the celtic tigress: venture financing and informal investment in Ireland, *Venture Capital*, 8(1), pp. 69-88.
- Omerzel, D. G., Antoncic, B. (2008), Critical entrepreneur knowledge dimensions for the SME performance, *Industrial Management and Data System*, 108(9), pp. 1182-1199.
- Oosterbeek, H., Van Praag, M., Ijsselstein, A. (2010), The impact of entrepreneurship education on entrepreneurship skills and motivation, *European Economic Review*, 54, pp. 442-454.
- Orser, B. J., Riding, A. L., Manley, K. (2006), Women entrepreneurs and financial capital, *Entrepreneurship Theory and Practice*, 30(5), pp. 643-665.
- Rauch, A., Rijsdijk, S. A. (2013), The effects of general and specific human capital on long-term growth and failure of newly founded businesses, *Entrepreneurship Theory and Practice*, 37(4), pp. 923-941.
- Terungwa, A. (2012), Risk management and insurance of small and medium scale enterprises (Smes) in Nigeria, *International Journal of Finance and Accounting*, 1(1), pp. 8-17.

- uit Beijerse, R. P. (2000), Knowledge management in small and medium-sized companies: knowledge management for entrepreneurs, *Journal of Knowledge Management*, 4(2), pp. 162-179.
- Van der Sluis, J., Van Praag, M. (2008), Education and entrepreneurship selection and performance: a review of the empirical literature, *Journal of Economic Surveys*, 22(5), pp. 795-841.
- Van der Sluis, J., Van Praag, M., Vijverberg, W. (2005), Entrepreneurship selection and performance: a Meta-Analysis of the impact of education in developing countries, *The World Bank Economic Review*, 13(2), pp. 225-261.
- Velez, C. M. (2009), The probability of transition to entrepreneurship revisited: wealth, education and age, *Annals of Finance*, 5, pp. 421-441.
- Wang, W. (2012), How the small and medium-sized enterprises' owners' credit features affect the enterprises' credit default behaviour? *E3 Journal of Business Management and Economics*, 3(2), pp. 090-095.
- Wilson, F., Kickul, J., Marlino, D. (2007), Gender, entrepreneurial self-efficacy and entrepreneurial career intentions: implications for entrepreneurship education, *Entrepreneurship Theory and Practice*, 31(3), pp. 387-406.