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## INFLUENCE OF EDUCATION ON ENTREPREUNERSHIP

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### Abstract

This contribution deals with the relationship between the development of business environment and university education and with monitoring activities directed at encouraging entrepreneurship at universities. A questionnaire survey was used to identify obstacles preventing students from starting their own businesses; subsequently, recommendations have been formulated to advice universities and other institutions on activities directed at encouraging entrepreneurship. The findings show that the business environment in Czechia is similar to the situation within the EU (Czechia in 2019 amounted to approx. 96% of the EU (28) average from 2016). The monitoring of support provided by universities to entrepreneurship shows that the amount of courses directed towards the supporting of entrepreneurship is sufficient. The main shortcomings of universities regarding the support of entrepreneurship are the low chances of obtaining financial support and the insufficient fostering of entrepreneurship on the part of university educators. The contribution of this paper lies in, on one hand, identifying obstacles seen by students as preventing them from beginning their own entrepreneurial career and, on the other hand, in forming recommendations for universities. The conclusions of this study may be useful for universities and for institutions providing grants for the promotion of entrepreneurship.

*Keywords: entrepreneurship, business cycle, educations, enterprise births, self-employed, component*

**JEL Classification: L26, A22**

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## Introduction and theoretical background

Among the economic factors influencing entrepreneurial activity, specifically the formation and cessation of business entities, there are, macroeconomic indicators as for example unemployment, the overall business environment etc. On the other hand, entrepreneurial activity is also influenced by the level of preparedness on the part of future entrepreneurs, which is connected particularly with how universities and other educational institutions support entrepreneurship. The subject of business activity of aspiring entrepreneurs may vary, but their success, and therefore their prospect of remaining in business, is related to the correct setting of economic parameters.

Some previous studies (for example Altman & Hotchkiss, 2005) have also pointed out that firms are most likely to fail within three to five years of their establishment. Most of the firms in distress are SMEs. The study (Liu, 2009) recommends that national policies are advised to focus on creating and improving a fostering business climate in which new firms are encouraged to start up and develop healthily. If entrepreneurs are bank-dependent, the reduced supply of loans can result in an increase in business failures and thereby have a negative impact on the economy. The findings (Brás & Soukiazis, 2015) show an inverse relationship between entrepreneurial activity and the initial capital effort, a direct relation between entrepreneurial activity, monetary freedom, investment freedom and education; and a nonlinear concave relationship between entrepreneurial activity and the GDP per capita. The authors (Grigorescu et al., 2019) examined the relationship between the unemployment rate and the self-employment rate. They found that the unemployment rate has a push effect in the self-employment rate for adults and youth with low education level to self-employment.

This paper focuses on analysing selected economic indicators that influence entrepreneurial activity. The research focuses on the influence of young people's education and their preparedness on becoming entrepreneurs. Its aim is to point out the importance of university education and to form recommendations for universities and other institutions on activities that promote the development of entrepreneurship. Emphasis is given on opportunities for supporting entrepreneurship as part of the university curricula in economics. The first part defines the theoretical framework, i.e., the theoretical models of the decision to become self-employed. The second part deals with the methodology and data collection. The third part details the relative standing of Czechia regarding the rate of formation of business entities, compared to other EU member states. It uses the situation of Czechia as an example for analysing selected factors that influence the formation and cessation of business entities. The fourth part focuses on the educational activities of universities and on the results of a questionnaire survey among business students at a selected university in Czechia. The fifth part discusses the results and summarizes the most important conclusions.

The theoretical models regarding the decision to become self-employed are generally based on the comparison of potential earnings from being business owner and earnings from working as an employee. There are three broad macro-theoretical approaches to the study of entrepreneurship and economic growth. The first approach builds on the wealth-based theories of entrepreneurship. It proposes that as economies develop, they accumulate wealth through entrepreneurship, which promotes growth and further entrepreneurship. The second approach proposes technology-based models, in which entrepreneurs respond to incentives created by technological change. The third approach views entrepreneurship as a means of exploiting knowledge spill overs, regarded by some economists as the fundamental mechanism facilitating endogenous growth (Parker, 2018).

There are models that show that asymmetric information can induce entrepreneurs to take actions, which create or exaggerate the characteristics of economy (real business cycle) at aggregate level. For example, agency costs can potentially alter business-cycle dynamics (Bernanke & Gertler, 1989) or entrepreneurial activity can remain procyclical even if agents can share as much of the entrepreneurial risk as is compatible with incentives (Rampini, 2004) or the adverse selection of untalented entrepreneurs depress the returns to entrepreneurship (Ghatak et al., 2007).

Entrepreneurial activities are very important for the economy and bring different benefits to it, depending on the motive for the creation of business activities. We might need to distinguish two kinds of entrepreneurship, namely, that driven by necessity and that driven by opportunity. The first stems from the belief that creating one's own business will give its owner greater utility, because there is no better work option (Block et al., 2015). The second stems from the identification of an opportunity arising from an innovative idea (Valdez et al., 2011).

A similar view on the reasons for running a business, known as Push and Pull theory, is mentioned by Jirovská (2003). Push-theory arises from the fact that a person is pushed into business activities by negative events and dissatisfaction with employment, risk of unemployment and lack of growth opportunities. On the other hand, pull-theory is based on the idea that future entrepreneurs are attracted by the existing attractive, success promising economic opportunities. The pull view is more common in the Czech Republic, and the majority of entrepreneurs were motivated by the existence of a market opportunity at the time they came up with their ideas about forming a start-up (Jirovská et al., 2003).

The formation and cessation of business entities is influenced by external economic influences. The factors influencing the number of formed and defunct economic entities can be macroeconomic ones (Real Gross Domestic Product growth, Unemployment and others) or related to the business environment in different countries.

If entrepreneurs start a business due to unemployment, i.e., in less favourable circumstances, they will have a different strategy from those entrepreneurs who have carefully planned their business and take advantage of market opportunities.

Specific economic situations and business motivation lead the founders of new ventures to choose different strategies. Block et al. (2015) show that necessity entrepreneurs are more likely to pursue a cost leadership strategy and less likely to pursue a differentiation strategy.

The macroeconomic environment (real gross domestic product, unemployment etc.) correlates positively with the entrepreneurial process. During an economic downturn, the propensity to start new firms declines. Government authorities should design policies to counterbalance this trend, since entrepreneurship creates new and, at times, long-term jobs (González-Pernía et al., 2018).

A recent study by Santos et al. (2017) discussing the impact of economic crises on business activity in Europe shows that before the crisis (i.e., in 2008), lower-income Southern European countries (i.e., Spain, Portugal and Greece) had a higher level of entrepreneurial activity than their northern counterparts (i.e., Sweden, Norway and Finland). However, after 2008, this trend reversed. The northern regions were more willing to start businesses during the recession than those in Southern Europe. Vegetti and Adăscăliței (2017) explain this phenomenon by arguing that the decrease in entrepreneurial activity was more marked in those European countries that had less access to financing (i.e., particularly southern EU member states). This means that access to financing is another important factor influencing the establishment of business entities.

Every year, hundreds of thousands of people start their own businesses, but many fail. One of the common causes of start-up failure is a lack of preparation. People come to the entrepreneurial path from various backgrounds. Some start right after college, most come to entrepreneurship right after having been an employee. Many of them experiment with their would be business before they take the plunge completely, testing ideas on the side, while maintaining a day job (Entrepreneur Media, 2015)

For new entrepreneurs, there are state-sponsored business development programs also available, which are updated every year and are usually made public. The agency responsible for support of SMEs in Czechia specifically is the Business and Investment Development Agency CzechInvest, which is a state contributory organization supervised by the Ministry of Industry and Trade of the Czech Republic. It supports starting-up small and medium innovative entrepreneurs, business infrastructure and innovation. As Czechia is part of the EU, it is also useful to watch programs offered elsewhere in the EU („Agentura pro podporu podnikání a investic“, 2020).

Letonja et al. (2021) reveal that there is positive correlations between the innovativeness of successors (before they get involved in family business) of family businesses and their early inclusion into meetings with business partners and strategic planning in companies.

Human capital qualifications (the educational level) are essential for promoting entrepreneurial activities. This is in line with the original ideas of the theory of endogenous growth (Barro, 1990) stating that human capital is the engine of economic growth.

Education for entrepreneurship is considered very important. The supporting of entrepreneurship education is one of the EU's priorities, as it allows to boost economic growth and employment creation.

If it is to make a success of the Lisbon strategy for growth and employment, Europe needs to stimulate the entrepreneurial mindset of young people, encourage innovative business start-ups, and foster a culture that is friendlier to entrepreneurship and to the growth of small and medium-sized businesses (European Commission, 2008). Entrepreneurship education should promote creativity, innovation and self-employment, and may include the following elements:

- developing personal attributes and skills that form the basis of an entrepreneurial mindset and behaviour;
- raising the awareness of students about self-employment and entrepreneurship as possible career paths;
- working on concrete enterprise projects and activities;
- providing specific business skills and the knowledge of how to start a company and run it successfully.

There are many recent studies that analyse the impact of entrepreneurship student education on entrepreneurship outcomes.

Bergmann et al. (2018) found that students in general are usually not informed well on how their university supports entrepreneurial thinking and acting. Universities that wish to create a favourable entrepreneurial climate for their students should encourage undergraduates to take part in entrepreneurship courses. The authors also call on universities to deal with entrepreneurial climate as an indicator in their strategic decision-making processes.

Guerrero et al. (2016) evidenced a higher contribution of universities on regional competitiveness. They found that informal factors (e.g., attitudes, role models) have a higher influence on university entrepreneurial activity than formal factors (e.g., support measures, education and training).

Gianiodis and Meek (2019) explained how universities build entrepreneurial capital to impact their regional economy. They also discussed utilizing the commercialization of technologies and made suggestions for evaluation metrics.

Bergman et al. (2018) examine the drivers of students' perceptions of the entrepreneurial climate at their university.

According to a survey by the Czech Chamber of Commerce and the Research Institute of Business and Innovation, conducted at Czech universities in 2019 as part of a world-wide project, 40% of respondents were thinking about becoming entrepreneurs. Respondents perceive the environment at their university rather as an environment where there is no favourable climate motivating them to become an entrepreneur or to engage in business activities. On the other hand, around 70% of respondents had not yet attended a course on entrepreneurship (Sieger et al., 2018).

According to a survey conducted by Raiffeisenbank, 35 % of students think about becoming entrepreneurs, these being more males than females and are predominantly 21 or younger. The main obstacle to starting a business, according to Raiffeisenbank, are finances. Students want to finance their own business primarily using their own funds or earn the starting capital as employees, with only secondary reliance on banks or family loans. Young people are being prevented from starting their own business not only by the absence of good entrepreneurial ideas but also by the lack of risk-taking willingness and finances; 40 % also admit to fears of the amount of responsibility and stress that would await them. International research by the Eurochambres (which included Czechia) identified growing labour costs, the lack of qualified labour and excessive administrative burden as the main obstacles to business development in Czechia (Hospodářská komora ČR, 2020; Ipsos, 2017; Rybová, 2017; Výzkumný ústav pro podnikání a inovace, 2020).

Dvorský et al. (2019) shape the entrepreneurial propensity of university students and create the entrepreneurial propensity index in the Czech Republic, Slovakia and Poland. This Index reached a higher aggregated value in the Czech Republic than in Slovakia and Poland.

Entrepreneurs are the crucial sources of innovation, economic growth and employment creation in modern economies, it is therefore important to measure and monitor indicators related to entrepreneurship. The methodology for creating these indicators must enable comparisons not only between individual regions but also over time in a time series. The Eurostat-OECD entrepreneurship indicator programme (EIP) was created in 2007. It aims to develop a list of indicators and standard definitions and concepts to facilitate the collection of statistics on entrepreneurship. In total, the 18 most important indicators were created and are currently being monitored. As a main result, an employer business demography data collection was set up, which is regulated by a law in the European Statistical System and forms the most important data source for entrepreneurial performance indicators. Other important sources are high growth and high-growth young enterprises (gazelles) data collections, which are still mostly voluntary (Lunati, 2010)

## Material and methods

The objective of this paper is to point out the context of real business cycles concerning the establishment or closure of business entities and to highlight the importance of education at universities in the field of entrepreneurship. The other objectives are finding links between the development of the business environment

and university education, monitoring activities aimed at promoting entrepreneurship at universities, identifying, by means of a questionnaire survey, the obstacles students face in starting their own businesses, and forming recommendations for universities and other institutions on activities that promote the development of entrepreneurship.

The first research question the authors formulated was whether Czechia has a similar ratio of newly established businesses than other EU member states, i. e. whether the ratio of newly established businesses in Czechia is lower or higher than the average ratio of newly established businesses in the EU. Then the authors found out the standing of Czechia regarding the rate of business entity establishments relative to other EU states (28 members) in 2009 and in 2019, when the economies of individual states were in different stages of the business cycle. The data were provided by the Eurostat database. Next, we analysed economic indicators including an indicator relating to university graduates in connection with starting entrepreneurial activities in Czechia. By means of this analysis, the authors try to answer the research question whether education and professional training are important for encouraging entrepreneurial thinking and conduct, i.e. whether the growth of economically active entities in Czechia depends on the increase of the number of university graduates or whether it is rather influenced mainly by macroeconomic indicators.

We used a correlation matrix of the chosen economic indicators with a significance level of 0.05, which allows to determine the tightness and the direction of dependence of the tested factors (Montgomery & Runger, 2011). For the correlation matrix we selected those measurable economic indicators, which can be expected to relate to the formation or closure of business entities. These are the following: unemployment rate, GDP growth rate, the growth rate of self-employed, share of university graduates in the population, share of active businesses in the businesses registry, number of active businesses, new businesses (%), closed businesses (%).

We focused in more detail on the development of self-employment in Czechia in the time period of 12 years (2007-2019). We studied the year-on-year self-employment growth rate. The data were obtained from the public database of the Czech Statistical Office („Database of National Accounts“, 2020).

In the next step, we focused on the education of future entrepreneurs specifically provided by Czech economic universities, and we examined the projects and support provided by these universities towards the development of their students' entrepreneurial skills. Business students should be the ones to be able to found and run business entities successfully regardless of the field of business activity.

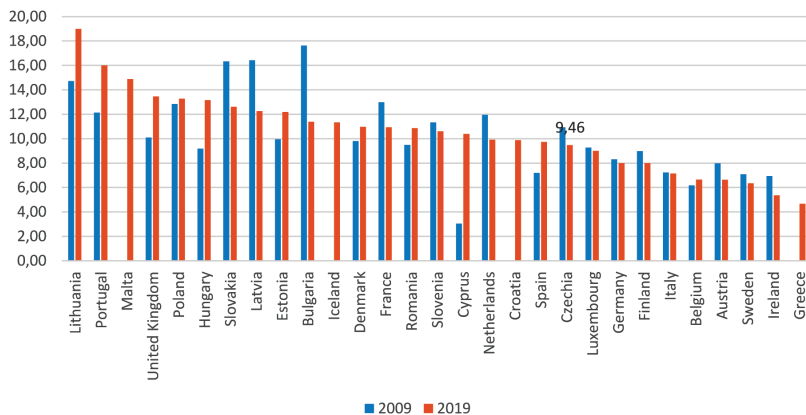
Concurrently, with our research, a questionnaire survey was conducted in 2019 at the Faculty of Economics of the University of South Bohemia in České Budějovice involving 324 students of all years and from all fields of study. Its aim was to discover what kind of knowledge students considered important for starting up businesses as well as to identify obstacles or skill deficiencies that prevent students from establishing their own businesses, and how their universities could help them overcome them. An important question therefore was: What prevents young people from beginning their own entrepreneurial activity? The authors presumed, based on current research (see the Literature Review section), that the main obstacle for students at the Faculty of Economics of the University of South Bohemia to starting their own businesses was insufficient knowledge and experience.

## Results and discussion

### The standing of Czechia regarding entrepreneurship compared to other EU countries

We first determined the relative standing of Czechia among EU countries (28 countries) especially from the point of view of establishing new businesses. Figure 1 illustrates the ratio of the number of newly established businesses to the total number of active businesses for 2009 (the year of global crisis) and for 2019, when the economies of the EU countries experienced stable growth.

Figure 1 Birth rate: number of enterprise births in the reference period (t) divided by the number of enterprises active in t – percentage



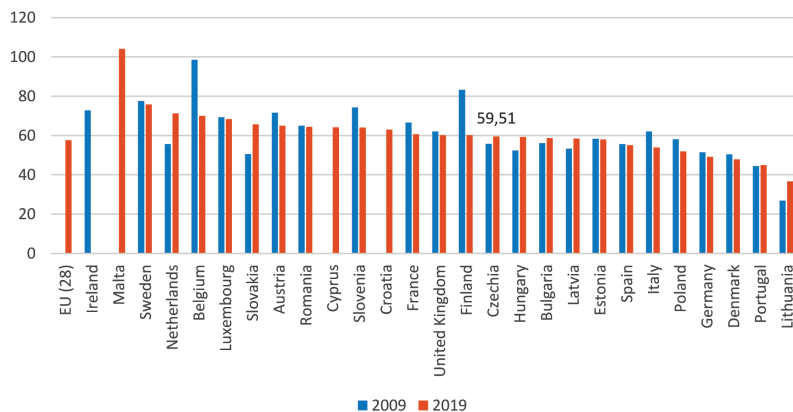
Source: Own findings based on the data of Eurostat

Figure 1 shows that the largest percentage of newly established businesses was recorded for Lithuania in 2019 (a ratio twice as large as the EU (28) average found only in 2016 - 9.78%), Portugal, Malta, United Kingdom, Poland, Hungary, Slovakia, Latvia, Estonia and Bulgaria. On the contrary, the lowest percentage of newly established businesses in 2019 was recorded for Belgium, Austria, Sweden, Ireland and Greece. Czechia was slightly below the EU (28) average from 2016 (9.46%). In 2009 during the global crisis, when the founding of new business entities might have been expected due to higher unemployment, only some countries showed larger increase than in 2019; namely Bulgaria, Slovakia and Latvia, but also France and Netherlands, Czechia, Finland, Austria, Sweden and Ireland. In some countries, the formation rate is approximately the same in both years (e. g. Italy, Belgium and Germany) and some countries even saw higher formation rates in 2019 than in 2009 (Lithuania, Portugal, United Kingdom). This fact, makes it evident that aside from the unemployment rate or the real business cycle, there are many other factors influencing the founding of new economic entities, e.g., availability of loans, business environment, education, etc.

Figure 2 illustrates, how many newly established businesses were able to survive three years later, i.e., number of those established three years prior to, and still economically active in, 2009 and 2019 respectively. It is evident that in some countries

which saw a large increase in newly established businesses (e.g., Lithuania, but also Portugal), the percentage of businesses that lasted over 3 years is low. Czechia is approximately at the EU average.

Figure 2 Number of enterprises in the reference period (t) newly born in t-3 having survived to t divided by the number of enterprise births in t-3 – percentage



Source: Own findings based on the data of Eurostat

Figures 1 and 2 indicate the relative standing of individual countries within the 28 EU member states.

### Selected factors influencing formation of business entities in Czechia

We have focused on the analysis of factors or measurable economic indicators, which could be expected to relate to the percentage increase in newly established business entities. We have created a correlation matrix (table 1).

Table 1 The correlation matrix of chosen economic indicators

rate (%)	Birth businesses %	Death businesses %	Unemployment	Growth rate of GDP (%)	Growth rate of self-employed (%)	Share of university graduates in the population (%)	Share of active B on the register B (%)	Number of active businesses
Birth businesses %	1,00	-0,06	0,37	-0,34	0,65*	-0,50	0,05	-0,52
Death businesses %	-0,06	1,00	0,34	-0,58	-0,58	0,27	0,30	0,13



<b>Unemployment rate (%)</b>	0,37	0,34	1,00	-0,57	0,01	0,41	0,61	0,10
<b>Growth rate of GDP (%)</b>	-0,34	-0,58	-0,57	1,00	0,08	-0,27	-0,54	-0,18
<b>Growth rate of self-employed (%)</b>	0,65*	-0,58	0,01	0,08	1,00	-0,40	-0,22	-0,33
<b>Share of university graduates in the population (%)</b>	-0,50	0,27	0,41	-0,27	-0,40	1,00	0,74*	0,90*
<b>Share of active B on the register B in %</b>	0,05	0,30	0,61*	-0,54	-0,22	0,74*	1,00	0,72*
<b>Number of active businesses</b>	-0,52	0,13	0,10	-0,18	-0,33	0,90*	0,72*	1,00

Notes: \*  $p < 0.05$  statistically significant; B = businesses  
Source: Own calculations based on the data of Eurostat

Table 1 shows, as expected, that the percentage increase in newly established entities is related to the growth in self-employment. Business ownership may provide an important alternative to unemployment for many individuals facing poor labour market conditions. Slack labour market conditions are a key determinant of business creation. One positive by-product of the recent severe recession is that a wide range of eventually-successful firms might emerge and contribute to the economy in the long-run (Fairlie, 2013).

Furthermore, it is evident that the ratio of active economic entities to all registered economic entities grows in direct proportion to unemployment rate, but also to the percentage of university graduates in the whole population. The correlation matrix shows that the number of economically active entities is dependent on the growth in numbers of university graduates (correlation coefficient- 0,9). Fairlie (2013) has also confirmed a relationship between entrepreneurship and education. Entrepreneurship rates tend to decline with total family income. Santos et al. (2017) also emphasize the importance of education and training to promote entrepreneurial mindset and attitude.

The correlation matrix (table 1) reveals statistically insignificant dependence between GDP growth and the formation of economic entities, as corroborated also by Konon (2018). Analysis suggests that favourable macroeconomic conditions in terms of high GDP might not be germane for start-ups.

According to Global Entrepreneurship Monitor (Bosma, Jones, Autio, & Levie, 2007) there is wide agreement on the importance of entrepreneurship for economic development. Entrepreneurs drive innovation: they speed up structural changes in the economy and force old incumbent companies to shape up, thereby making an indirect contribution to productivity.

For more detailed analysis, Table 2 was created, which reflects the structure of both formed and defunct economic entities in Czechia classified by their status as either natural or legal persons.

Table 2 Birth and death of businesses from registered businesses in Czechia (%)

	Birth businesses in %			Death businesses in %		
	from registered businesses	incl. by legal form		from registered businesses	incl. by legal form	
		natural persons	legal persons		natural persons	legal persons
2007	4.18	2.43	1.75	2.03	1.77	0.26
2008	4.56	2.69	1.87	1.96	1.68	0.28
2009	4.56	2.68	1.89	3.92	3.59	0.33
2010	4.57	2.91	1.65	2.23	1.88	0.35
2011	4.35	2.77	1.59	1.94	1.56	0.38
2012	3.85	2.41	1.44	2.12	1.63	0.49
2013	3.68	2.28	1.4	5.56	3.88	1.68
2014	3.36	2.24	1.12	2.23	2.01	0.23
2015	3.48	2.27	1.21	2.27	1.97	0.3
2016	3.49	2.19	1.3	2.23	1.86	0.37
2017	3.57	2.2	1.38	2.38	1.88	0.5
2018	3.48	2.19	1.29	2.31	1.77	0.55
2019	3.49	2.25	1.23	3.61	2.99	0.62

Source: Own findings based on the data of Czech statistical office

Table 2 indicates that more entities are formed every year than cease to exist. During the downturn (2009), more businesses were registered than during the period of stable growth. But also, in 2009 and again in 2013 (another period of economic downturn), the largest number of economic entities, particularly natural persons, became defunct; in 2013 there was also larger percentage of legal persons that became defunct (1.68%). Another factor that may have influenced the number of defunct entities in Czechia was the introduction of electronic registration of sales in 2018. Table 2 makes it apparent that this factor was rather unimportant.

It is therefore very important that new businesses regardless of their subject of business activity be established by people who leave school not only with the necessary economic knowledge, but who have also had the opportunity to try some form of entrepreneurial activity during their university studies as parts of various projects. In this way, students are able to find out if they have what it takes to become entrepreneurs (i.e. have personal qualities and skills necessary for entrepreneurial success).

### Entrepreneurship and its support at various universities in Czechia

Research was conducted into Czech universities which provide Economic Programmes that support their students in entrepreneurship. Czech universities consider the support of entrepreneurship important and are devoted to it. Each institution pursues the support of entrepreneurship through their syllabi, institutes and

centres, where students can attend various specialized seminars but also locate their own businesses, and through various events and competitions.

The availability of courses focusing on encouraging entrepreneurship is a common feature and also the best covered topic of the above. Czech universities offer courses as e. g. Opportunity recognition and business model development, Managing the growth of a new business, Business Planning, Enterprises in real life, Business Academy, Running of small and medium-sized enterprises etc. Another form of supporting beginner entrepreneurs are various start-up competitions and weekly business schools, where students can meet top real-life businesspersons (e. g. Start-up Festival, Invest Day, Best start-up TUL (Technical University of Liberec), Weekly business school, University for entrepreneurship etc.). Important support is provided first of all by business incubators and student clubs, which facilitate smoother entry into business thanks to perfectly equipped facilities made available for students. Examples include Xport Business Accelerator, Centre for Entrepreneurship, Centre for the Creative Industries UPPER, Student business Club and Sustainability Research Institute for Sustainable Business. However, not all universities have such facilities available, and the room for improvement on part of Czech universities is therefore significant. We can state that University of Economics, Prague is among the best universities in Czechia in regard to the support of entrepreneurship, a fact also attested by the GUESSS research, which mentions that the greatest interest in entrepreneurship in Czechia is among the students of University of Economics in Prague, followed by University of Hradec Králové and Technical University of Liberec (Rydvalová et al., 2016).

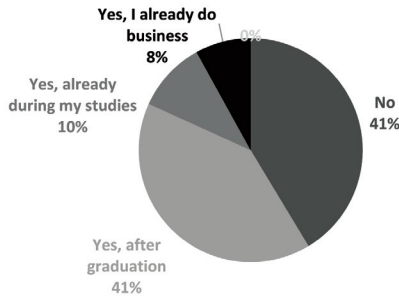
Universities and other institutions involved, both in Czechia and elsewhere, should keep an eye on current research and learn from the world's best. In 2019, the prestigious Outstanding Entrepreneurial University 2019 - THE Awards was won by Loughborough University. "The highlights include associate deans for enterprise in every faculty, recognition in all staff contracts, year-long placements for more than 1,500 students, placements for those who wish to start up a business and Loughborough's engagement in regional enterprise." In 2018 the award was won by King's College London thanks to the activities of an accelerator which, within one year, helped 20 teams gain 380 hours of mentoring by professionals. These teams invested a total of 430 000 GBP, gained 227 000 GBP of profit, created 20 jobs with 6 entrepreneurs gaining a national award. The world's best universities focus on incubators and provide facilities, but often also financial resources, which are lacking in Czechia. They organize competitions and offer mentoring and special workshops, all of which we can also find in Czechia. The difference is mainly in the scope of what is on offer and in the fact that the best universities firmly incorporate the supporting of entrepreneurship into the organizational structure of all their faculties, which is rather exceptional in Czechia. There is also significant support for educators who are specifically trained in this area (Outstanding Entrepreneurial University Award 2020)

Most of the existing programs are limited to the period of university attendance, and any support beyond graduation, outside of the limited capacity of incubator units, is deemed beyond the university's remit (Galloway & Brown, 2002). Many believe that only a long-term view of the entrepreneurial potential of graduate entrepreneurship is feasible as new graduates lack the resources, skills and experience necessary for the sustainability and growth of ventures.

A questionnaire survey among students of economics in Czechia inquired, if students considered the possibility of becoming entrepreneurs at all during their economically active life (Figure 3). The figure shows that almost 59 % of them did so or indeed were already in business (8 %). A similar survey made among 125 students in

2019 found 67.2 % of them giving serious consideration to becoming entrepreneurs at the time.

Figure 3 Students' perspective on the possibility of doing business in their working life

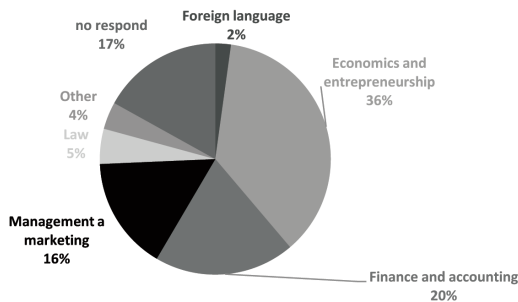


Source: Own findings

As we saw earlier, the long-term survival of a business on the market (over 3 years) is influenced by several factors among which we could count students' education and their preparedness for becoming entrepreneurs. The questionnaire survey among students also allowed us to find out which school subjects or projects within these subjects students regarded as useful and especially which were considered useful by those who were already running their own businesses while attending school or who wanted to start businesses later in their studies or after graduation (Figure 3).

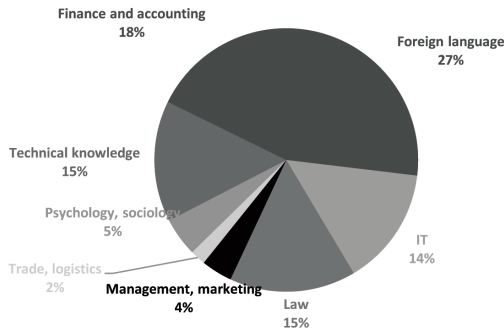
In particular, students who were seriously considering becoming entrepreneurs perceived as most important the following areas of study: economics and entrepreneurship (36 %), finance and accounting (20 %) and management and marketing (16 %). Figure 4 shows that students considered crucial to deepen their knowledge of economics and entrepreneurship in order to get a successful start in business. They also stated that they had insufficient knowledge of foreign languages and in the area of finance and accounting. Another finding of this questionnaire survey was that business students also lack technical knowledge. This makes it apparent that it would be beneficial to create projects that would encourage entrepreneurial activities across all university faculties. Involving faculties of various branches would result in more opportunities for developing real entrepreneurial skills.

Figure 4 The most important subject for business



Source: Own findings

Figure 5 The biggest shortcomings in education for students who want to do business



Source: Own findings

A study by Bowley et al. (2019) analysed, by using data from LinkedIn network, the level of employment success of Dutch university graduates broken down by line of work, and the geographic mobility of graduates with the main motivator for migration being employment. The graduates of Dutch third level institutions are most likely to list skills in Business Management, Foreign Languages, Digital Literacy, Project Management and Research, regardless of the type of institution. Understanding the first experience is key to understanding the ability of education and training systems to promote labour market readiness.

As the greatest obstacle to starting their own business they saw the lack of funds (Table 3).

Table 3 What prevents you from starting your own business?

Reason	Frequency of answers	
	Absolutely (number)	Relatively (%)
Insufficient funds	95	32.76
Insufficient knowledge/experience	53	18.28
I cannot come up with ideas/thoughts	46	15.86
Fear of failure/risk	37	12.76
Insufficient motivation for entrepreneurship	25	8.62
No time to spare	19	6.55
Other	14	4.83
Not meeting requirements for trade license	1	0.34
<b>Total</b>	<b>290</b>	<b>100.00</b>

Source: Own calculations

A concrete example of well working cooperation between the private and academic sector are the activities of Junior Achievement Europe („Junior Achievement

| ManpowerGroup s.r.o.", 2020). The goal of this organization is to create connections between elementary school, secondary school and university students and businesses, which allows students to develop their entrepreneurial skills and become aware of what is necessary for success in the business world. The cooperation focuses mainly on participating in real-world projects, where students can acquire skills as problem solving, teamwork, organizing, communication or leadership. They can simultaneously use the theoretical knowledge gained in their studies.

## Conclusion

This contribution deals with the relationship between the development of business environment and university education and with monitoring activities directed at encouraging entrepreneurship at universities. A questionnaire survey was used to identify obstacles preventing students from starting their own businesses; subsequently, recommendations have been formulated to advice universities and other institutions on activities directed at encouraging entrepreneurship.

The authors investigated, whether Czechia has a similar ratio of newly established businesses compared to other EU member states, i.e. whether the ratio of newly established businesses in Czechia is lower or higher than the average ratio of newly established businesses in the EU. We have found that the number of newly formed entities in Czechia amounted to approx. 96% of the EU average (from 2016). In some countries (notably in Lithuania and Portugal), the percentage of newly formed entities was high (for example, in Lithuania it reached 192% of the EU average); however, these entities proved to be less sustainable over the following three years (e.g., Lithuania was at 64% of the EU average).

The correlation analysis confirmed some linear dependencies (independencies) between economic indicators, namely whether the growth of economically active entities in Czechia is dependent on the increase in the number of university graduates or whether it is rather influenced more by other macroeconomic indicators. The findings showed statistically insignificant influence of GDP growth on the growth rate of self-employed and the number of active businesses. However, there was a statistically significant influence of the employment rate on the growth rate of the number of self-employed (the higher employment rate, the higher growth rate of self-employed). The correlation analysis revealed another statistically significant factor influencing the number of economically active entities, namely the increase in the number of university graduates. This partial conclusion is corroborated also by (Vodá & Florea, 2019), whose study notes that it is important that the educational system offers support in enabling students to experience entrepreneurship in practice and to create the pre-conditions favourable for fostering entrepreneurial minds.

The monitoring of the support given by universities to entrepreneurship shows that the availability of courses directed towards the supporting of entrepreneurship is adequate. Universities also offer start-up competitions to their students and provide a supportive environment in the form of business incubators. Universities should constantly follow trends and learn from the best, both in Czechia (University of Economics in Prague) or from Loughborough University as suggested by international comparison. The authors recommend incorporating entrepreneurship support into the organizational structure of individual faculties (by appointing vice-deans for entrepreneurship), but also deepening cooperation between different faculties. As the survey shows, business students see their lack of technical knowledge as a major

disadvantage, among other things, therefore it is important to support interdisciplinary teams, which would help create more viable business concepts. This conclusion is supported by the European Commission. In a document they specify that the real challenge is to build inter-disciplinary approaches, making entrepreneurship education accessible to all students, and where appropriate creating teams for the development and exploitation of business ideas, mixing students from economic and business studies with students from other faculties and with different backgrounds (European Commission, 2008).

Another contribution of this paper lies in identifying obstacles that prevent students from beginning their own entrepreneurial career. The authors presumed, based on current research (see the Literature Review section), that the main obstacle for students to starting their own businesses was insufficient knowledge and experience. However, the results of the questionnaire survey conducted among students show that the main obstacle are primarily the lack of funds and the lack of knowledge and experience.

Universities should not direct their attention solely to their students during their studies, but also to spreading entrepreneurial knowledge among groups who do not partake in university education or among graduates of different specializations (e.g. successors in family businesses), as confirmed by Dawson (2009). The connection between the formation of business entities and education reveals that market-directed 'opportunity' entrepreneurship is more strongly correlated with higher educational attainment. On the other hand, those joining family businesses do not appear to value prior educational attainment. Consequently, public policy to promote entrepreneurship needs to be tailored carefully to different groups.

As the questionnaire survey has revealed, students often decide whether they want to become entrepreneurs in the future while they are still at university. The contribution of this paper points out instruments available to universities for supporting their current students' entrepreneurial activities and also notes that this support during university studies is an important part of preparing students for entering the world of business.

The conclusions of this study may also be useful for institutions providing grants for the promotion of entrepreneurship. These new insights can be used by policymakers for forming effective education and labour market decisions.

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