

STUDENT ENTREPRENEURSHIP IN THE CZECH REPUBLIC - GUESSS NATIONAL REPORTS 2018

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List of abbreviations

CZE	The Czech Republic
CzechInvest	Business and Investment Development Agency
EU	The European Union
GUESSS	Global University Entrepreneurial Spirit Student Survey
ISO	International Organization for Standardization
MPO	Czech acronym – Ministry of Industry and Trade
SMEs	Small and Medium-sized Enterprises
Q	Question
R & D	Research and Development
RVVI	Czech acronym – Research, Development and Innovation Council
UK	The United Kingdom

Introduction

- *Goal of the research and purpose of the report.*
- *The GUESSS project: key information (see GUESSS website).*
- *In the report are set out in particular the results of analysis of national data GUESSS 2018 that are meaningful comparison with the results of the investigation GUESSS 2016 and also on selected issues are compared with international data.*
- *The research methodology.*

The goal of GUESSS research is to discover unique and new perspectives on student entrepreneurship in the university environment. The research explores several topics, such as: Entrepreneurial intentions, Nascent entrepreneurship, Growth and performance of new ventures, Family firm succession, Corresponding influencing factors on different levels, such as:

- Individual level: motives, preferences, social identity
- Family level: family structure, family relationships
- University level: entrepreneurship education, entrepreneurial climate and learning
- Contextual level: culture and institutions (GUESSS, 2019a).

At the same time, each survey reflects the current state of social events in the given period. Therefore, the 2018 survey, in addition to questions about the choice of the employee and entrepreneurship, the university's relationship to entrepreneurial activity, or family business experience, also includes issues related to employment experience including possible sexual harassment, but also issues related to establishing start-ups. The main aim of the research is to find out the relationship between students and the academic environment to business, focusing on its specific forms, i.e. family business and start-up. Both these specific forms of business are a highly topical issue in the Czech Republic at the end of the twenties of the 21st century. The family business in the Czech Republic became the main topic of 2018, which was declared a year of family business by the Association of Small and Medium-Sized Enterprises and Tradesmen. As a result, the government of the Czech Republic decided in May 2019 to define a family business (MPO, 2019), see chapter 1.

Also, the start-up topic has become an important place of social interest in the Czech Republic. As the Council of the Czech Government for Research, Development and

Innovation stated on July 1, 2019: by September 2019, in connection with the implementation of the innovation strategy of the Czech Republic (for 2019-2030), a concept for the development of a national network of incubators to support and develop the start-up environment in specific regions, districts and regions (RVVI, 2019)¹.

The purpose of this report is to summarize the basic results of data analysis from the GUESSS 2018 survey conducted in the Czech Republic. Additional data analysis will be published subsequently.

From September to December 2018, a further exploration of entrepreneurship at universities was carried out, an international survey entitled "Global University Entrepreneurial Spirit Student Survey" (GUESSS, 2019a). It has been implemented since 2003 about once every two years. The research was launched at the Swiss Institute for Family Business and Enterprise at St. Gallen. Since 2016, the Faculty of Economics of the Technical University of Liberec has been providing research at universities in the Czech Republic. The 2018 data collection surpassed all previous years, with 54 countries participating in the survey and collecting 208,636 completed questionnaires.

For comparison in 2016, approximately 122,000 responses from 50 countries were obtained. 1254 students from 8 universities participated in the survey for the Czech Republic, including the Technical University of Liberec (further according to the number of respondents), from the University of West Bohemia in Pilsen, Tomas Bata University in Zlin, University of Economics in Prague, University of Hradec Kralove, VSB - Technical University of Ostrava, Masaryk University in Brno and Silesian University in Opava. We thank the institutions involved in the research. The respondents' responses to the GUESSS 2018 survey from the Czech Republic that expressed interest were drawn and the organizers sent valuable prizes to the winners.

The results of the analysis of the national survey in the Czech Republic are compared with the worldwide research output GUESSS 2018 for selected research questions. The report

¹ See: The Government Council approved the methodology for evaluating universities and supported the construction of a national network of incubators. The document is only available in the Czech language; it is possible to use the services of google translator.

containing the results of the global analysis GUESSSS 2018 is available on the website GUESSSS (2019b).

Research methodology

The International Survey is organized by the Center for Family Business at the University of St. Gallen in cooperation with EY Family Business Center of Excellence. The survey is based on completing a questionnaire available to respondents online. All university students could participate in the survey, data privacy was ensured. The preparation of the survey in different language versions for each of the approximately 50 participating countries took place in 2018 from January to August 2018. The data were collected from September to December 2018, online on the GUESSSS web portal. The questionnaire survey system allows each guarantor of the participating state to add selected questions to the GUESSSS survey.

The survey in the Czech Republic was conducted in the Czech language. In the first phase of the evaluation, descriptive statistics were prepared for the Czech Republic, which are presented in this national report GUESSSS. Subsequently, for example, the selected international context and the standard of living in the countries involved in the investigation will be evaluated. Automated procedures used to find relations in data using the data mining method were used for processing the research outputs. Data analysis was performed in IBM SPSS Modeler and IBM SPSS Statistics.

The research report is structured into eight chapters. The introduction of each chapter defines the key terms (with question number, e.g. Q1) on which the text of the chapter focuses.

1 Theoretical base

- *Student entrepreneurship*
- *Family business*
- *Start-up and spin-off*
- *Innovation ecosystem*
- *Innovation strategy*

Many young students have some dream idea or business ideas but only a few have the capacity and ability to turn it into real business. One of the reasons is that they have lack of necessary skills to run the entrepreneurial activities. Young students need motivation either through funding or other support mechanism from all stakeholders such as government, universities, family and friends. Therefore the main factors are necessary:

- motivation, opportunity,
- resources,
- entrepreneurial skills or ability.

Entrepreneurial readiness can be defined as the “*confluence of a set of personal traits that differentiates individuals with readiness for entrepreneurship as especially competent to observe and analyze their environment in such a way that they channel their high creative and productive potentials*”. (Coduras, Saiz-Alvarez, & Ruiz, 2016; Ruiz, Soriano, & Coduras, 2016). Motivation is a need or desire that energizes behaviour and directs it towards a goal (Vallerand, 2004). Another reason why the students are thinking about their future activities or entrepreneurship is the background from their families.

The **small and medium-sized enterprises** including the family businesses play a key role in regional development and employment; therefore, eminent attention should be essential. The Czech Republic like other post-communist countries has some specific problems with the development of private enterprises. These entrepreneurial traditions, especially in family businesses, were discontinued by the process of nationalization of businesses, liquidation of private business and introduction of central planning of the economy after World War II.

The authors dealt with this topic, for example, within the project “*Family business – solutions to social and economic disparities of municipalities*”, see more information about this project: <https://efis.tul.cz/td03000035/>). A large number of authors devote themselves to the definition

of **family business**; some approaches are defined by the Rydvalova et al. publication (2017). There is no single common definition at international level. The reason is also the purpose of defining the term. However, some European countries also define the term in their legislation. In the Czech Republic, the definition of family business was defined at a government meeting in May 2019. The reason was primarily the possibility of statistical monitoring, which will subsequently help to show the impact of family businesses on the economy. The exact definition of family business in the Czech Republic is as follows: *“A family business is a family business corporation or a family trade.*

1. Family Business Corporation is understood a business corporation where more than one half of its members are members of one family and at least one member of that family is its statutory body or where members of one family directly or indirectly exercise a majority of voting rights and at least one member of that family is a member of statutory body of this business corporation. Family Business Corporation is also understood a business corporation where the majority of the voting rights are exercised in favour of one family by the trust fund or its trustee provided that at least one member of the family is a member of the statutory body of trust fund or a trustee of the trust fund.

2. A family business is a business where at least two members of one family participate in their work or property, and at least one of the family members holds a trade or other similar authorization or is entitled to do business for another reason.

3. The members of one family for the purposes of family business are considered jointly working spouses or partners, or at least one of the spouses or partners and their relatives up to the third degree, persons with spouses or brothers- and sisters-in-law up to the second degree, as well as related persons in direct line or siblings. If a person, who is underage or not fully legally competent, is among them, it shall be represented in voting by a legal guardian.” (MPO, 2019).

An understanding of how family influence affects family business performance is presented in a comprehensive review article by Astrachan and Zellweger (2008). Their study is built on three dimensions - power, experience, and culture - through which the family can influence the business. These issues are also part of the research GUESSS. Other forms of business are start-ups or spin-offs.

Start-up (or startup, start-up project) is a phrase that defines the process of quick start or creation.² Characteristics are low start-up costs, short lifetime with the possibility of resale, ability to innovate in the field or ambition to achieve success in international markets, implementation of a specific product (product / service) that does not require complicated and long-term development and a quick return on investment. This eliminates some of the industries requiring mandatory tests (e.g. pre-clinical tests, etc. in the case of pharmaceuticals), compliance with ISO standards, etc. Such situations may meet the definition of the term spin-off.

Spin-off is a sign for the company, which was established by separation of staff from knowledge institutions (universities, R&D centers, technology companies). The original knowledge institution may or may not have an ownership interest in the spin-off company. Spin-off is a legally independent entity, not an organizational unit of a parent knowledge and research institution. We will marginally return to the topic of spin-off, which is part of the innovation ecosystem, in chapter 8.

The cooperation of different types companies, universities and government in some territories is very complex and is able to bring big benefits. Therefore, the academics want to define and to study this concept. This concept is called **innovation ecosystems**. The idea has started in recent years due to mainstream business books such as Feld's (2012) *Startup Communities* and work by Isenberg (2010) in the *Harvard Business Review*. These article works have popularized the idea amongst entrepreneurial leaders and policymakers. The innovation ecosystems could be seen as interdependent actors and factors coordinated in such a way that they enable productive entrepreneurship within a particular territory. The universities with their human resources potential can play a very important role in these systems. Functioning innovative ecosystems enable actors to create value for their customers that no institution could create independently. This implies the need to create a quality **innovation strategy** for such a system. The benefits of an ecosystem strategy can now be considered as proven and real. For more on the Czech Republic's innovation strategy, see chapter 8.

² Additional note: Since a negligible number of respondents (CZE) answered questions about activities in start-up companies, these answers were not evaluated.

2 Demographic information about the sample

- *Information about the study respondents (Q1) and*
- *Personal information (Q7) – Year of birth (age), gender, marital status, nationality (average/distribution)*

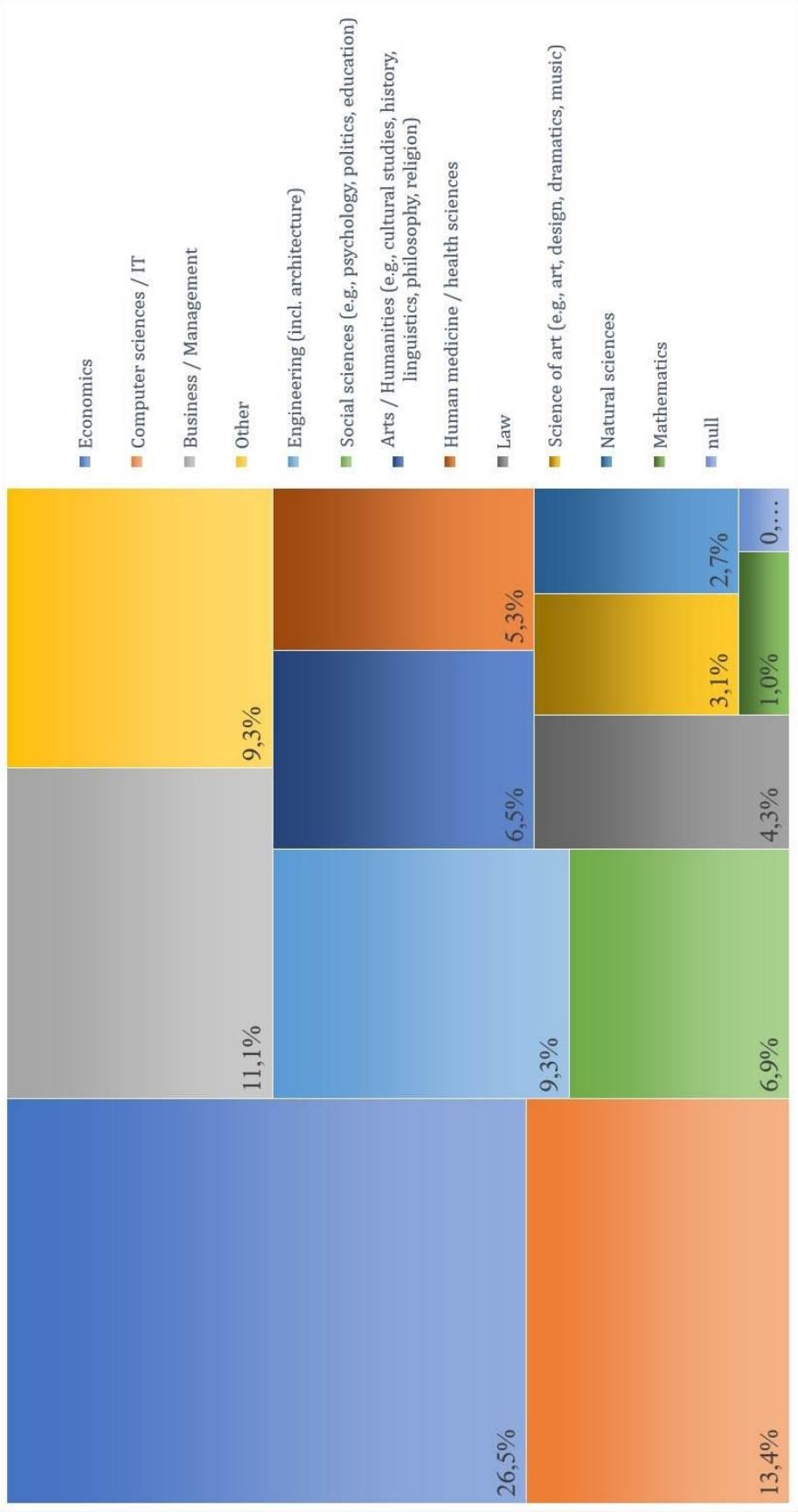
The chapter summarizes the basic demographic data on the sample of the respondent of the survey GUESSS 2018 for the Czech Republic. Table 1 shows the frequency of completed university questionnaires.

Table 1: University by sample GUESSS 2018 – CZE

University	Count	%
University of West Bohemia	460	37
Technical University of Liberec	432	34
Tomas Bata University in Zlin	109	9
University of Economics in Prague	93	7
University of Hradec Kralove	56	4
Other_CzechRepublic	62	5
Technical University of Ostrava	33	3
Masaryk University Brno	7	1
Silesian University in Opava	2	0
SUMA	1254	

Figure 1 shows the diagram/tree map of the main study fields of GUESSS 2018 respondents in the Czech Republic. The three most common main fields (about 50 percent) are: Economics, Computer Science / IT and Business / Management. The comparison of study branches in 2016 and 2018 is shown in table 2. It is possible to state a similar representation of study fields in both surveys that took place in the Czech Republic. From the point of view of the degree of study at the university, students of the study prevailed Undergraduate (Bachelor) 66%, Graduate (Master) 31% and Doctoral (Ph.D.) 3%.

Figure 1: Tree map of respondents' main fields of study



The respondents' age was mostly up to 24 years (79% of respondents). Figure 2 shows the representation of the nationalities of the respondents, with about 90% representing Czech nationality. In the case of gender representation, about 55% were female, 44% were male and about 1% of the respondents did not specify sex.

Figure 2: Nationalities – frequency of the respondents

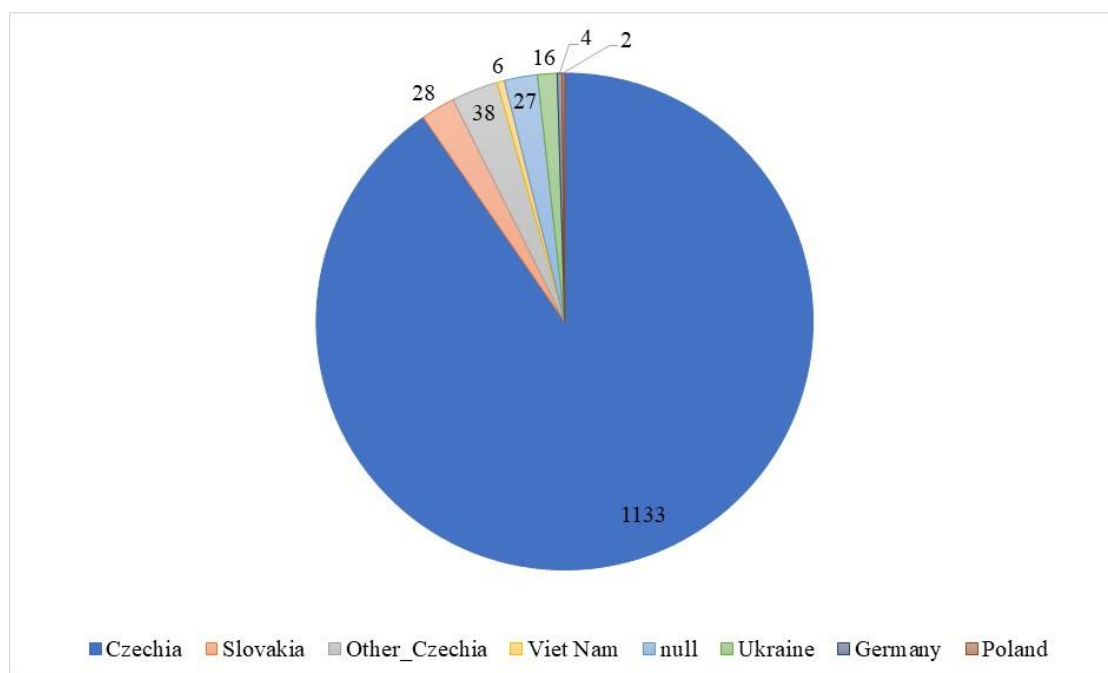


Table 2: Comparison of main study areas of respondents in the survey in 2016 and 2018 – CZE

GUESSS survey Field of study	2016		2018	
	Count	Percent	Count	Percent
Arts / Humanities (e.g. linguistics, cultural studies, religion, philosophy, history)	58	5	82	7
Engineering (incl. computer sciences and architecture)	227	20	286	23
Human medicine / health sciences	46	4	67	5
Law & Economics (incl. business sciences)	528	47	525	42
Mathematics and natural sciences	54	5	47	4
Science of art (e.g. art, design, dramatics, music)	40	4	39	3
Social sciences (e.g. psychology, politics, educational science)	28	2	87	7
Other (for instance tourism or nanotechnology...)	153	13	121	10
SUM	1134	100	1254	100

3 Career choice intentions / entrepreneurial intentions

- General overview (Q2)
- Respondents and Business (Multi-item intention question, Q4)
- Share of nascent and active entrepreneurs

First, look at the respondents' answers to the question: Which career path do you intend to pursue right after completion of your studies, and which career path 5 years later? See data for the Czech Republic in figure 3, and across countries in figure 4.

Figure 3: Career path of the respondents GUESSS 2018 – CZE

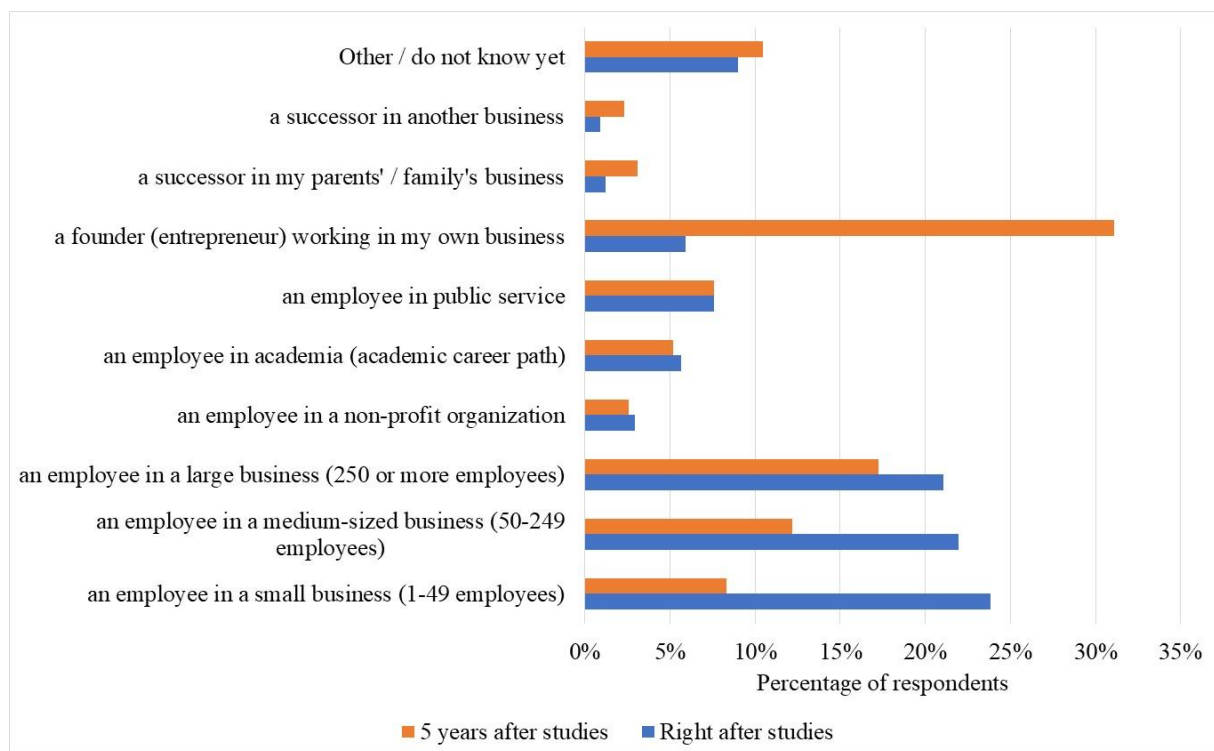
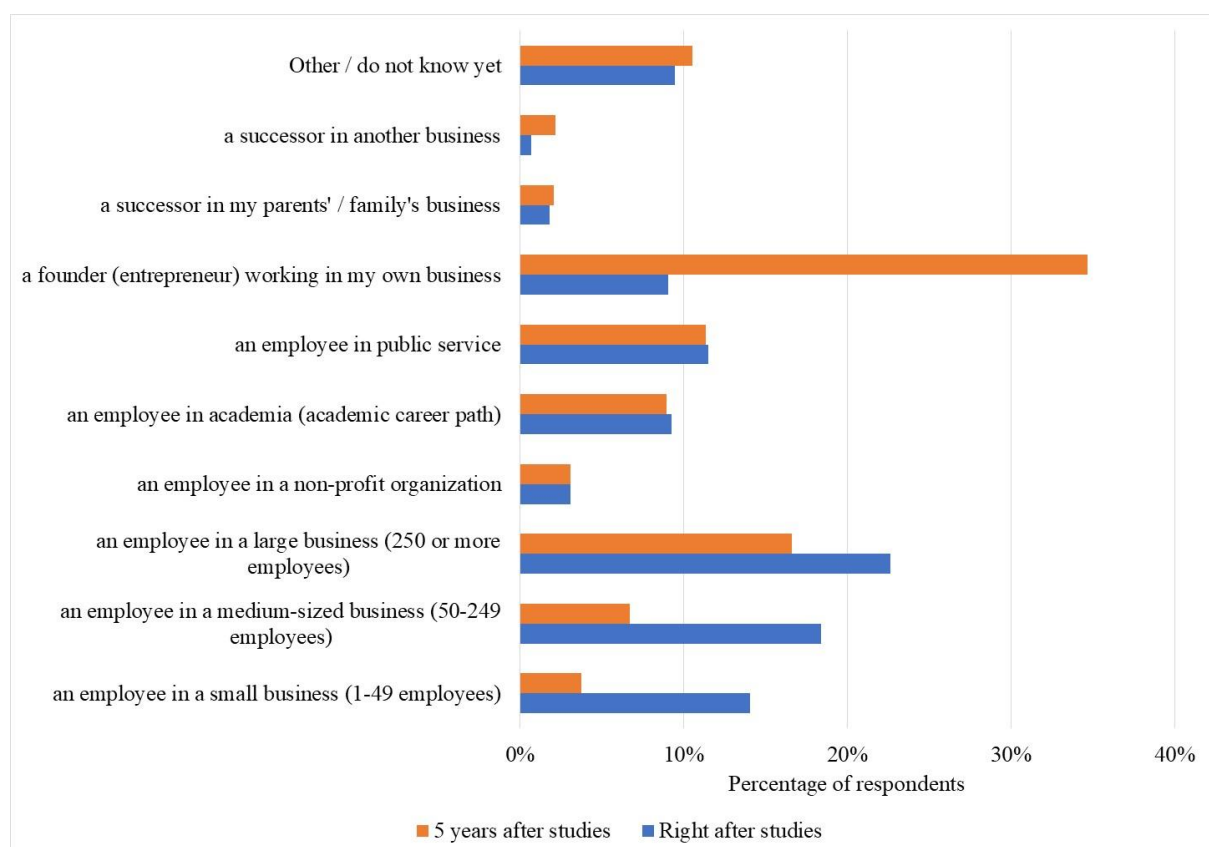


Figure 4: Career path of the respondents GUESSS 2018 – across country



In case of aggregation of data into four categories a) employee, b) entrepreneur, c) successor and d) so far undecided, it is possible to state the same idea of career in category c) and d).

As can be seen from the table 3, in the Czech Republic students choose a career as an employee rather than as an entrepreneur, both after studies and in the future (5 years after graduation), similar to other countries. Similar results were found in the GUESSS 2016 survey (Antlova, Rydvalova, 2016). The shift from previous research has only occurred in the ability to decide, in favour of employment, see table 4.

Table 3: Career path right after studies and after 5 years later in the Czech Republic and across countries (2018)

GUESSS 2018	Directly		5 years later	
	Czech Republic	Across countries	Czech Republic	Across countries
Employee (%)	83%	79%	53%	50%
Founder (%)	6%	9%	31%	35%
Succesor (%)	2%	2%	6%	4%
Other / do not know yet (%)	9%	10%	10%	11%

Source: Own processing

Table 4: Career path right after studies and after 5 years later in the Czech Republic and across countries (2016)

GUESSS 2016	Directly		5 years later	
	Czech Republic	Across countries	Czech Republic	Across countries
Employee (%)	75%	80%	52%	47%
Founder (%)	6%	9%	28%	38%
Successor (%)	1%	3%	4%	5%
Other/Do not know yet (%)	18%	8%	16%	10%

Source: Antlova et al., 2016

It is interesting that in 2016 about 10% of respondents in the Czech Republic ran their own business and 21% of students at that time tried to start their own business and wanted to become a self-employed person. In 2018, there was a slight increase in real business interest. In 2018, 11% of respondents were already studying and 25% said they were trying to start a business. So, we can say that about 36% of respondents are interested in business activities.

The table 5 below shows a comparison of the percentage of active entrepreneurs and those considering entrepreneurship at various universities in the Czech Republic in 2018. However, the results are influenced by the numbers of respondents from different universities.

Table 5: Czech Universities by nascent and active entrepreneurs

University	by nascent entrepreneurs % (SUM 306 respondents) *	by active entrepreneurs % (SUM 142 respondents) **
Technical University of Liberec	36	31
University of West Bohemia	35	30
University of Economics in Prague	9	12
Other Czech Republic	7	10
Tomas Bata University in Zlin	6	8
University of Hradec Kralove	4	4
Technical University of Ostrava	3	3
Silesian University in Opava	-	1
Masaryk University Brno	0	1

** To the question: Are you currently trying to start your own business / to become self-employed? 76% (948 respondents) answered negatively and 24% (306 respondents) answered positively.*

*** To the question: Are you already running your own business / are you already self-employed? 89% (1112 respondents) answered negatively and 11% (142 respondents) answered positively.*

Respondents and Business (Multi-item intention question)

Only the students who stated in the previous section that they are already doing business or are preparing to do business have commented on the following questions. Next two figures (5 and 6) bring the answers about the plans of the students after graduation and ideas about the ability or the determination to reach the goals in business. Figure 5 is an overview of the statement of compliance with the statements in which respondents define themselves to be an entrepreneur (1 = strongly disagree, 7 = strongly agree). A businessman is defined as someone who creates a new business. Figure 6 shows what it means for the respondents to become an entrepreneur (1 = strongly disagree, 7 = unequivocally agree)³. Both graphs are dominated by non-consensus assessments.

³ Notice: 1 – strongly disagree; 2 – pretty disagree; 3 – rather disagree; 4 – equal; 5 – rather agree; 6 – pretty agree; 7 – strongly agree

Figure 5: Respondents and Business – the determination

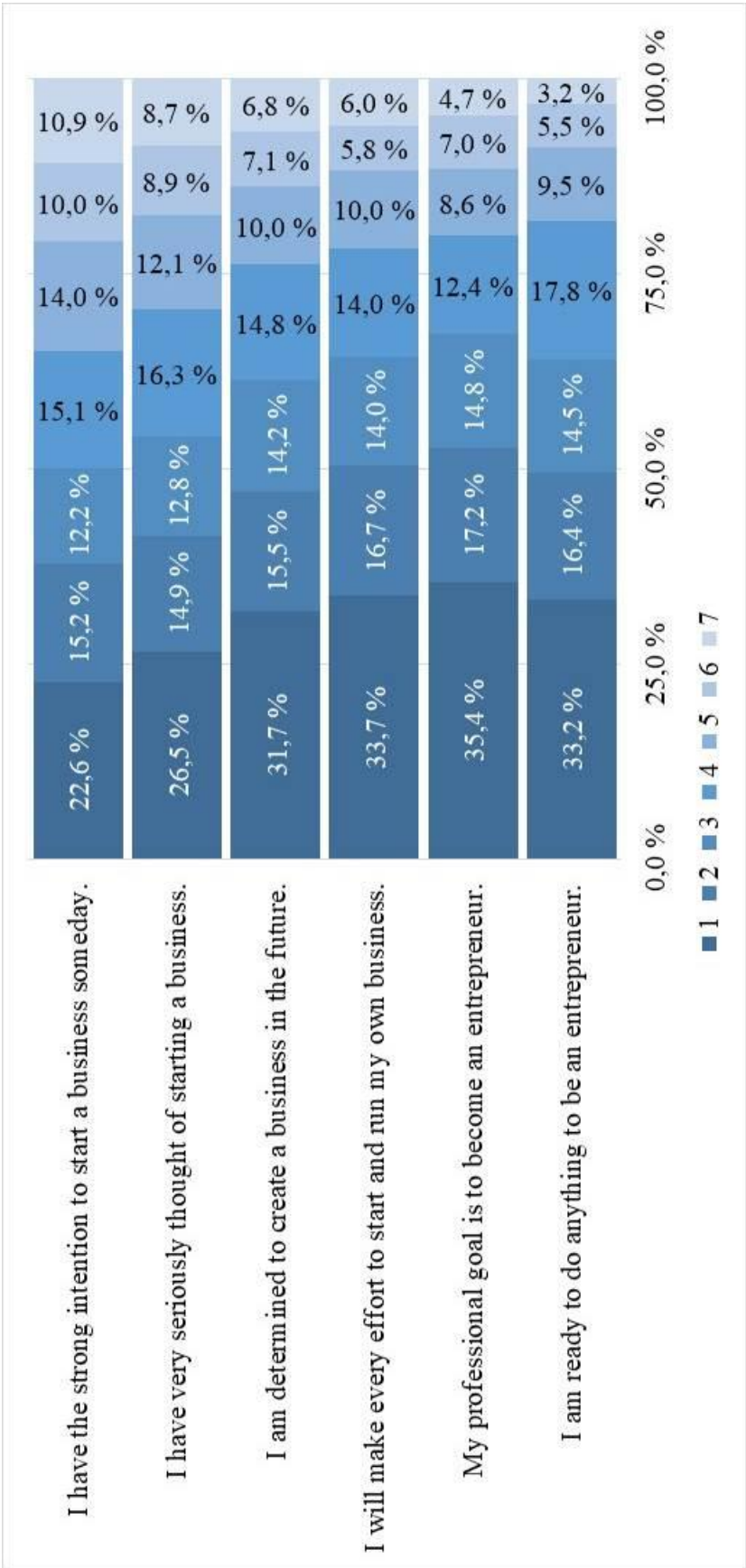


Figure 6: Respondents and Business – ideas about the ability

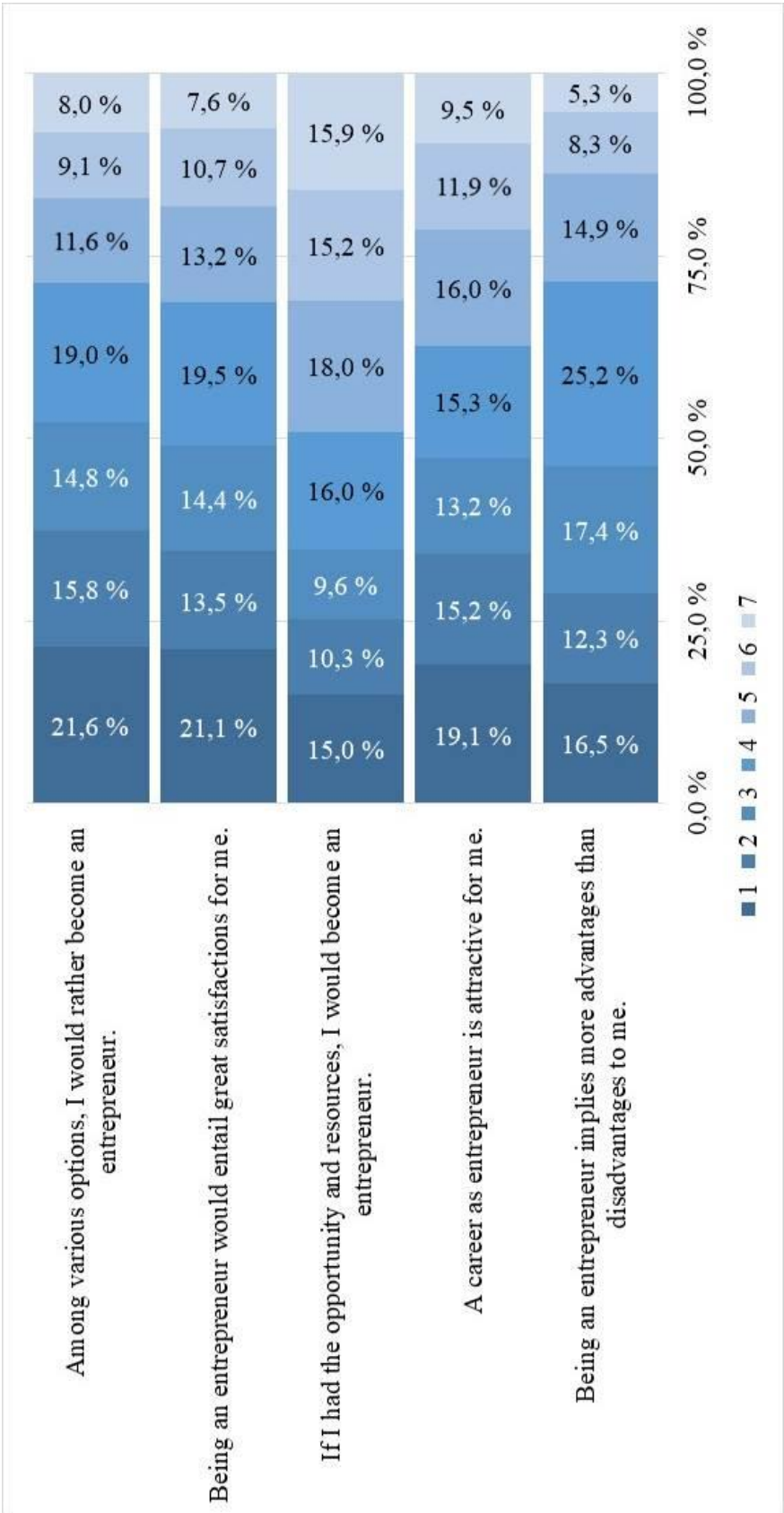


Figure 7: Business and level of competence

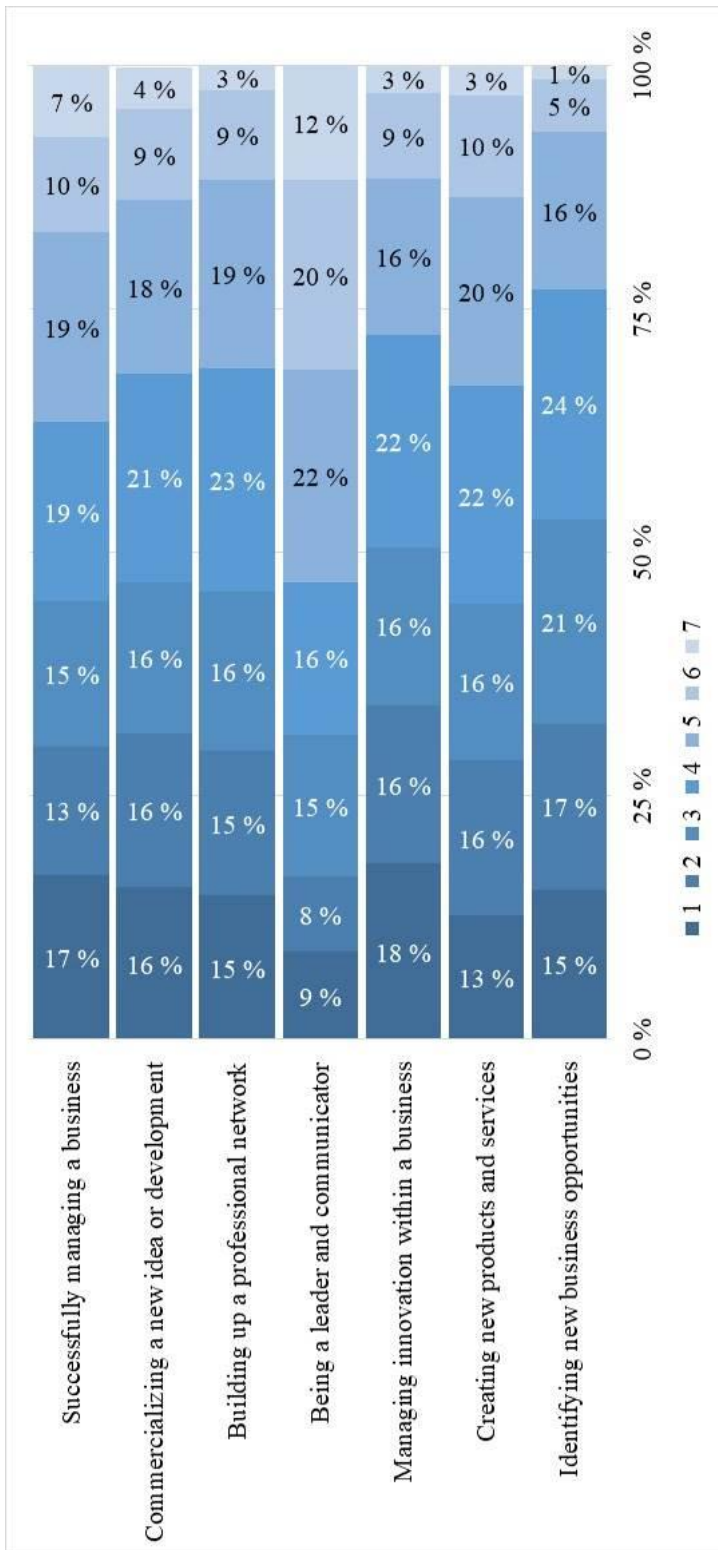
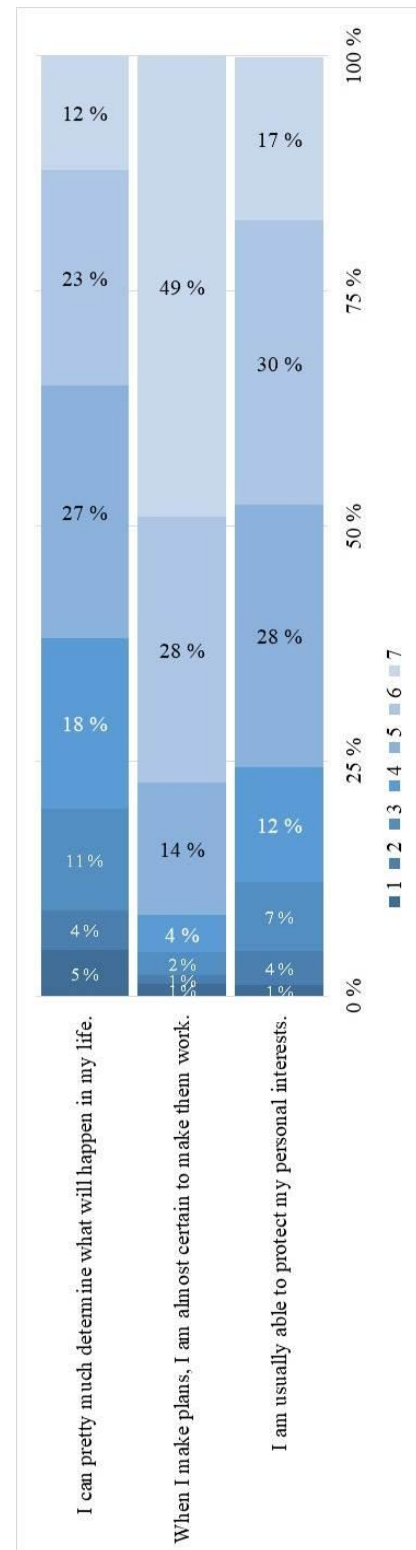


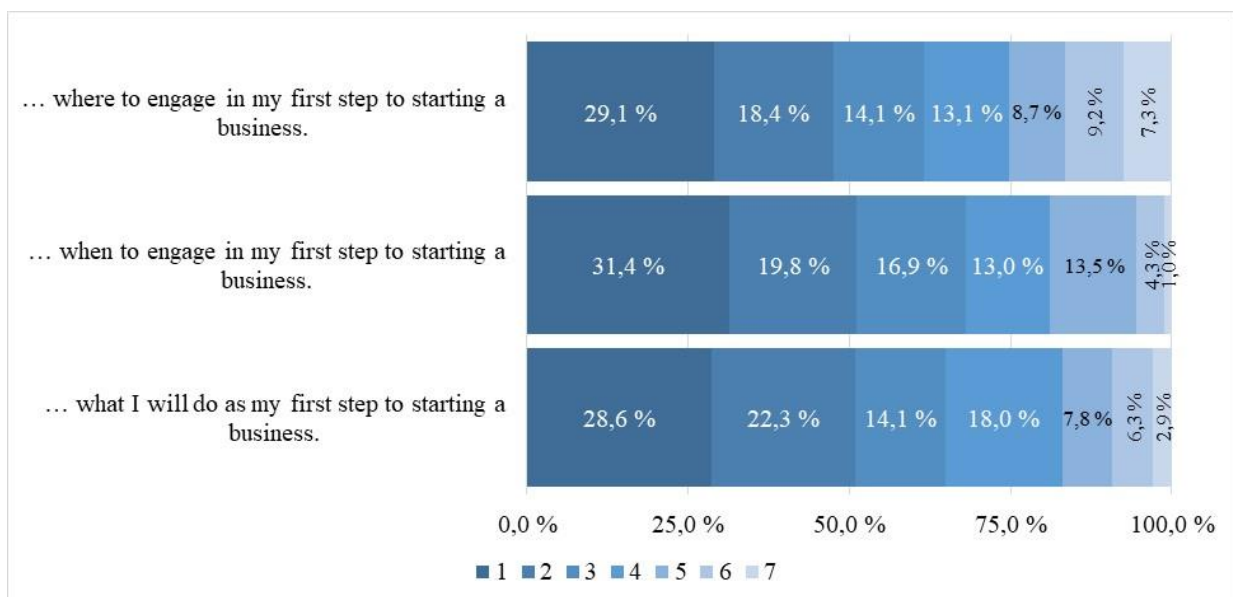
Figure 8: Business and statements



In the next question, respondents commented on their competence in performing the tasks of the Entrepreneurial self-efficacy (1 = very low competence, 7 = very high competence)⁴, see figure 7. Best with competence: “Being a leader and communicator”. Figure 8 shows an assessment of the ability to implement their plans by identifying their acceptance of control statements (1 = strongly disagree, 7 = unequivocally agree). As shown in the graph, positive expression prevails.

If the students said in choosing their career that (Q2a,b – “...a founder (entrepreneur) working in my own business”, see figure 3), and the entrepreneur had not yet begun, the question was: “Please indicate your level of agreement with the following statements (1=strongly disagree, 7=strongly agree). I have already planned precisely...”. This question is based on the findings that: The target indicates what it will do, the implementation specifies when, where, and how it will do (Ziegelmann et al., 2006; Golwitzer et al., 2015). The graph in the figure 9 shows that these implementation students have not really started yet.

Figure 9: Implementation Intention



⁴ Notice: 1 – very low competence; 2 – pretty low competence; 3 – rather low competence; 4 – equal; 5 – rather high competence; 6 – pretty high competence; 7 – very high competence

4 Drivers of entrepreneurial intentions

- *University context (Q3)*
- *Family background (Q5)*
- *The society as a whole (Q6)*

The research defined factors that formulated the motivation for entrepreneurship among university students (Sieger et al., 2016). In addition to personal abilities and skills of students, it is a university and family environment, social and cultural influences.

4.1 University context

Universities play a very important role for innovations as knowledge - producing and dissemination in society. Another key factor is the government responsible for taxes policy and business climate; the third part of the innovation process belongs to the companies. In the Czech Republic we can say that almost all the universities are trying to increase the students' entrepreneurial activities, are establishing different learning hubs (or innovation centres) which are supporting the innovation ideas and have the module of entrepreneurship in their curricula. Big companies also start to support these activities such as some competition, for instance "hackaton days". All these activities are very convenient alternatives to classic ways of teaching. Here, the students can realize their start up activities and meet the experienced entrepreneurs and business angels.

First, the questions of the university environment were examined, followed by whether students attended the business courses offered by the university. Therefore, the next questions (see figure 10, figure 11 and figure 12) were about the universities' environment and courses.

In terms of assessing the environment at universities in the Czech Republic, it is possible to say that about 40% of respondents perceive the environment at their university rather as not inspiring to entrepreneurship, as an environment where there is no favorable climate to become an entrepreneur or to engage in business activities. On the other hand, around 70% of students say they have not yet attended a course on entrepreneurship.

Figure 10: About the university environment

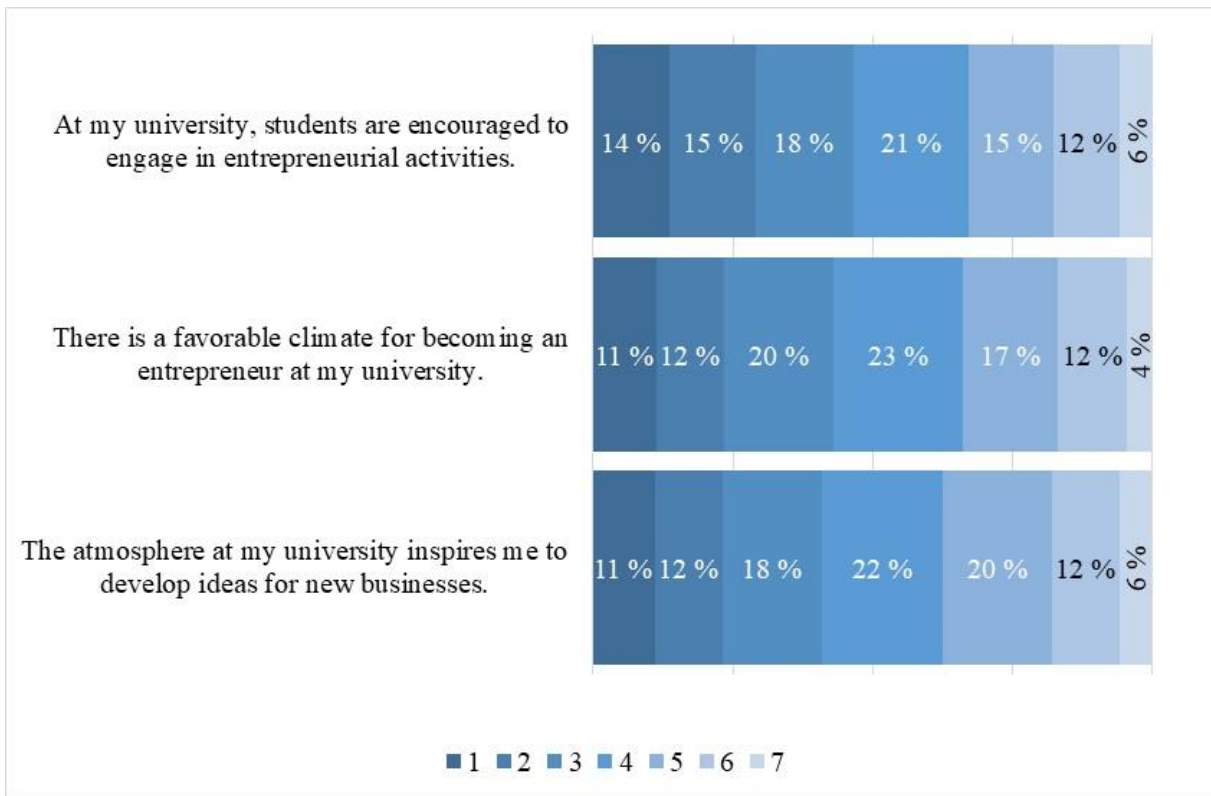


Figure 11: About studies

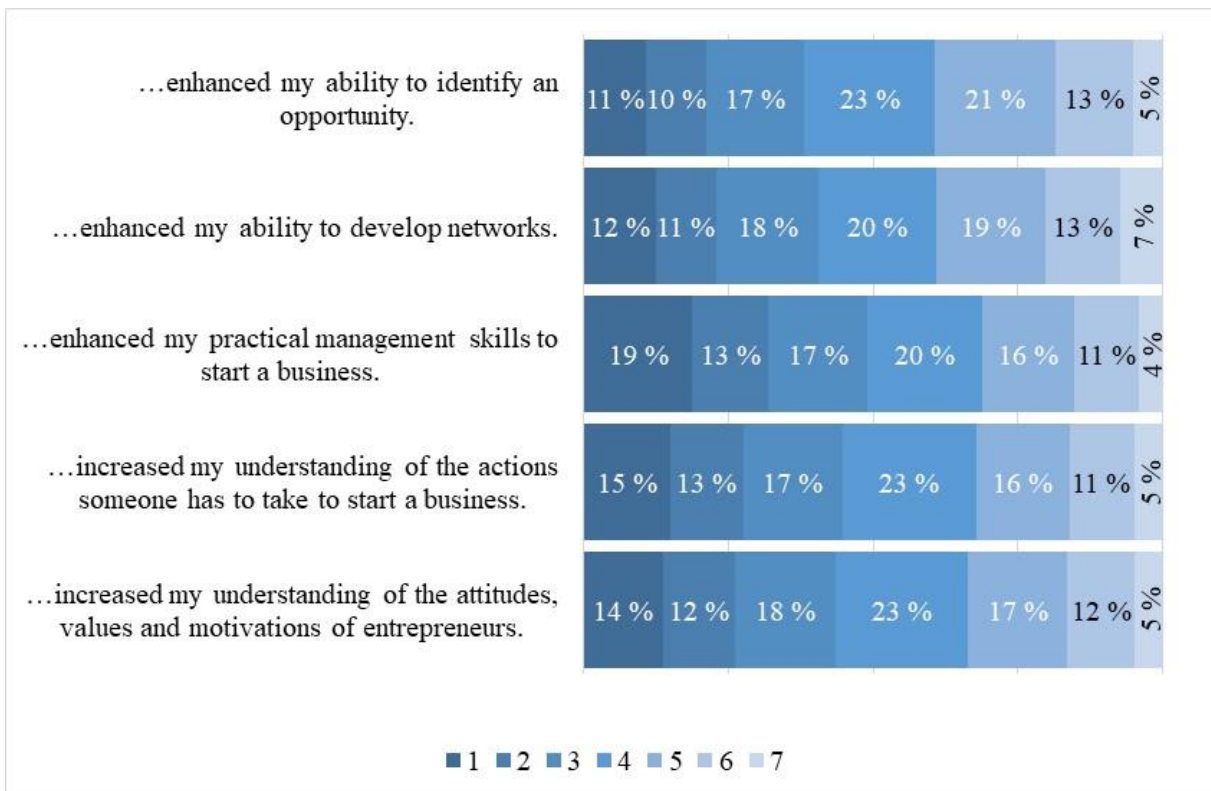
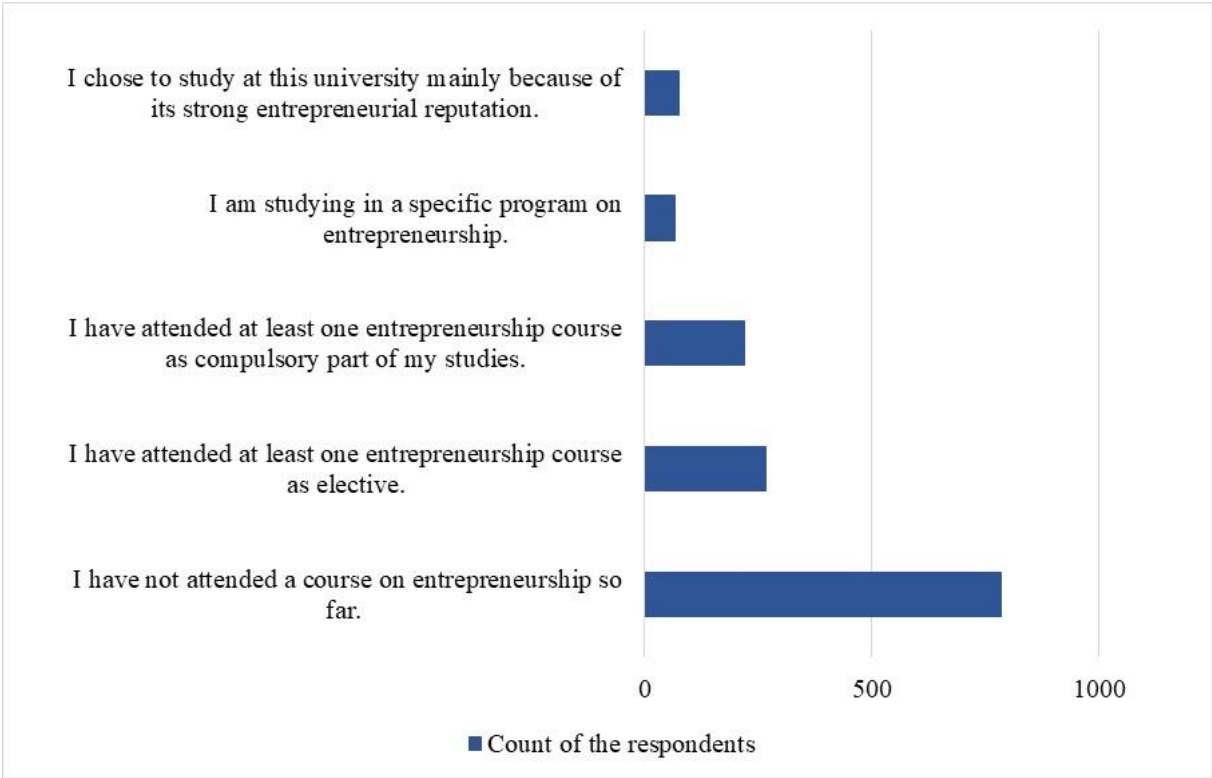


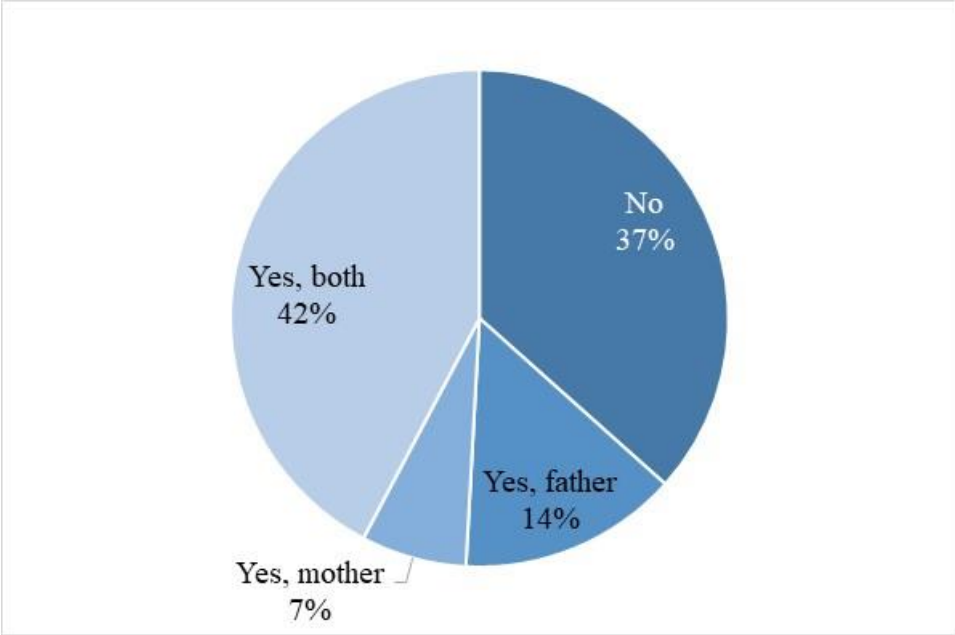
Figure 12: Interest in complementary business courses



4.2 Family Background

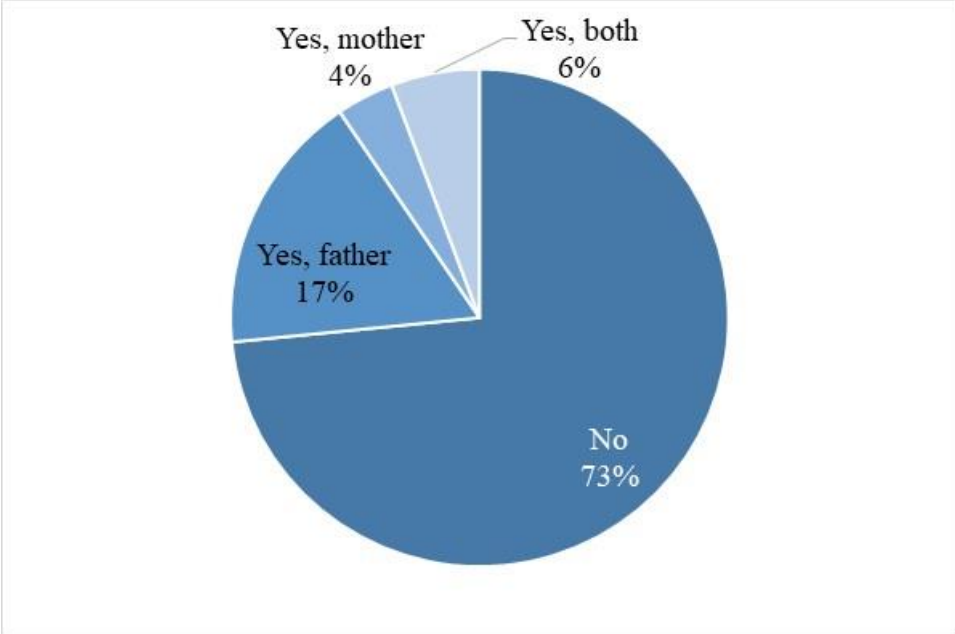
In the subchapter we will focus on the family background of students. We were wondering first whether either one of the parents or both were self-employed as natural persons. 37% of respondents in the Czech Republic stated that neither parent was doing business. 42% said both parents were doing business. If one of the parents did business, it was more often the father. See figure 13. This corresponds to research results across countries.

Figure 13: Question: Are your parents self-employed?



We can say that parents are taking more as individuals than as owners of companies. In the case of ownership of companies, only about 26% of respondents in the Czech Republic reported this situation. See figure 14.

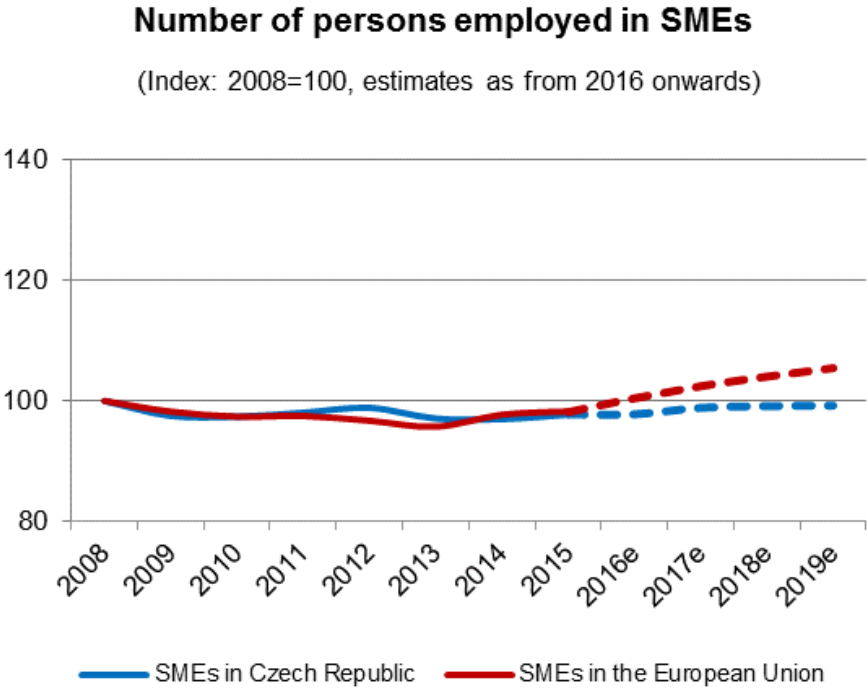
Figure 14: Question: Are your parents majority owners of a business?



4.3 The society as a whole

As stated in the report (fact sheet and scoreboard), which is prepared by the European Commission under the Small Business Act for Europe⁵, SMEs contribute significantly to the Czech ‘non-financial business economy’, as is average in the EU as a whole, figure 15. Czech SMEs generate 54.7 % of total value added, slightly lower than the EU average of 56.8 %, and 67.2 % of total employment, a little higher than the EU average of 66.4 %. The productivity of Czech SMEs, calculated as value added per person employed, is around EUR 22 800, slightly more than half the EU average of EUR 43 900. SME value added grew significantly, by 22.1 %, in 2013-2017, roughly in line with large firms. However, during the same period, the increase in SME employment was weak, at 1.8 %. Most recently, in 2016-2017, SME value added grew by 7.7 % and SME employment by 1.1 %. In 2017-2019, SME value added is expected to increase by 15.7 %. At the same time, SME employment is likely to stagnate, with an estimated rise of only 0.4 %.

Figure 15: Number of persons employed in SMEs in Czech Republic

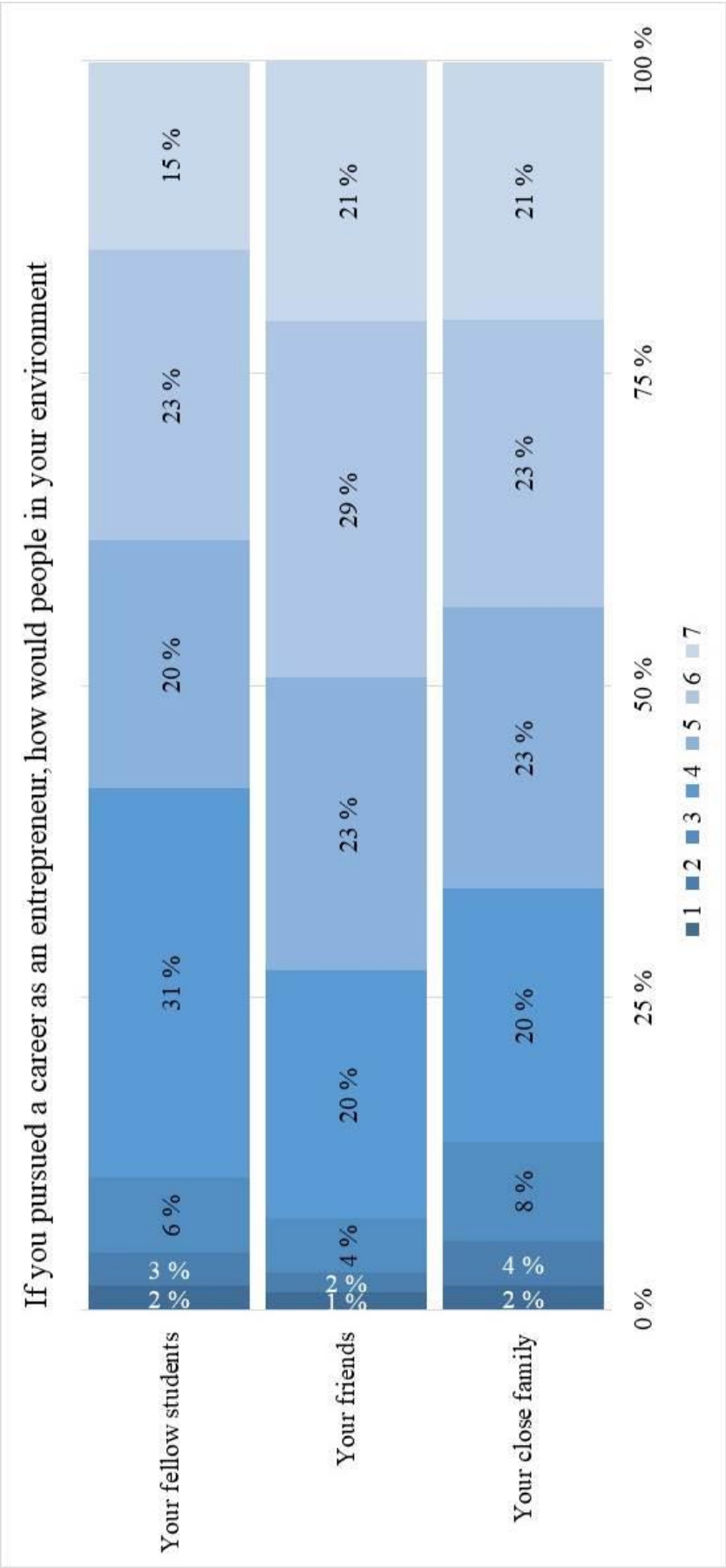


Resource: EC, 2019.

⁵ The SBA is a flagship EU policy initiative to support small and medium-sized enterprises (SMEs).

In the research of the social factor of business, we focused on the question: If you pursued a career as an entrepreneur, how would people in your environment react? Respondents answered the scale of 1=very negatively, to 7=very positively. The results of respondents' answers in the Czech Republic are presented in the figure 16. From the figure can be seen as rather positive reactions among classmates, friends and family. More than 80 to 90% of respondents chose a rating of 4 (average) and better.

Figure 16: Question: How is reacting students' environment?

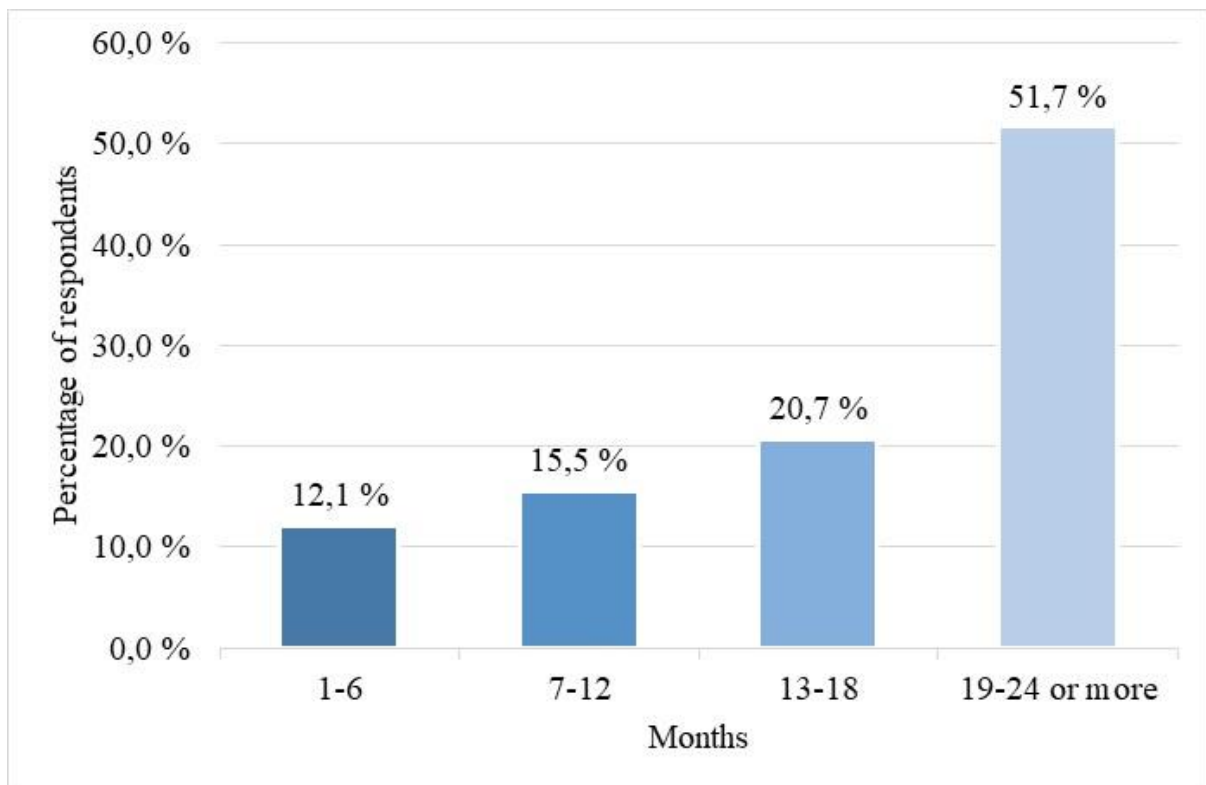


5 Nascent entrepreneurs

- *Descriptive analysis (Q8)*
- *Characteristics*

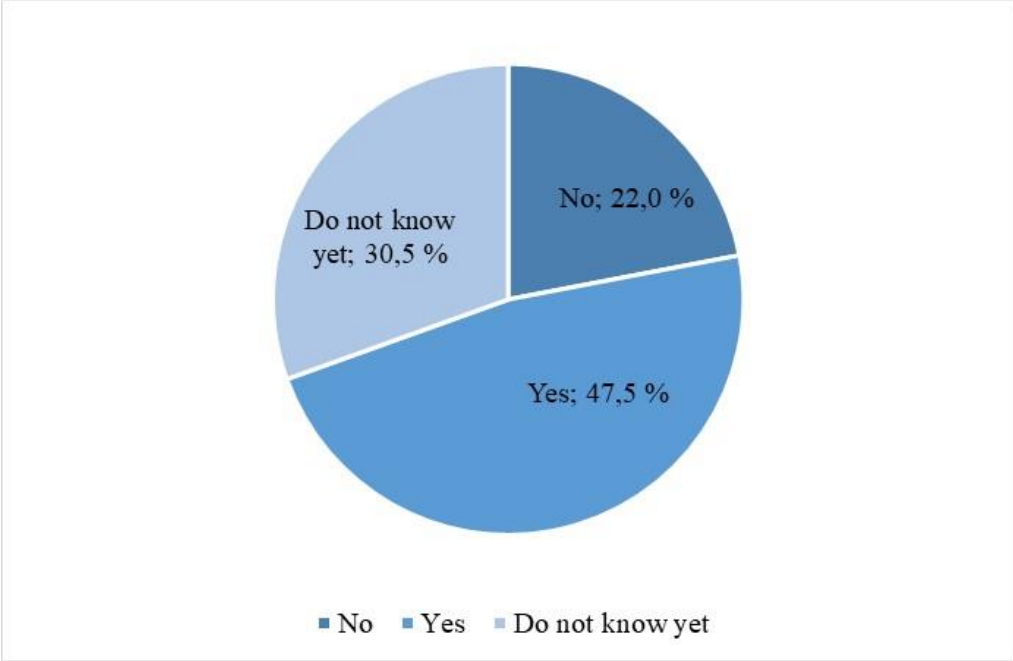
In the Czech Republic many students work and study at the same time. Many international companies operating in big cities are interested in hiring students who speak more than one or two languages. Usually after the second year of the university course, students start looking for a job. Most of them are employed by the biggest Czech companies after graduation. Just a small part of them is becoming an entrepreneur (see table 3). Therefore, we were interested in how those who decide to start a business think about their business, we called them nascent entrepreneurs. First, the question was asked: In how many months do you plan to found your business? Responses for the Czech Republic are shown in the figure 17. This question was answered by only less than 5% of all respondents in the Czech Republic. As can be seen, about 52% of respondents plan to complete the establishment of the company in about two years. Across the countries, about 40% of respondents chose this option.

Figure 17: Time horizon of nascent entrepreneurs - CZE



Almost 50% of them expect that entrepreneurship will become their main source of income after graduation. See answers (Figure 18) to question: Do you want this business to become your main occupation after graduation?

Figure 18: Business (Nascent) – main occupation after graduation



We got interesting answers to the question whether they want to start their own business or in a team. Only 32% of respondents said they wanted to start their own business (all across the country), see figure 19. Around 27% said they would like to involve co-founders but have not found them yet. Again, consistent with the results across all countries (here it was about 20%). Training in teamwork and networking is clearly in place. Another question was how the teams were formed, see figure 20.

Figure 19: Number of co-founders of nascent entrepreneurs

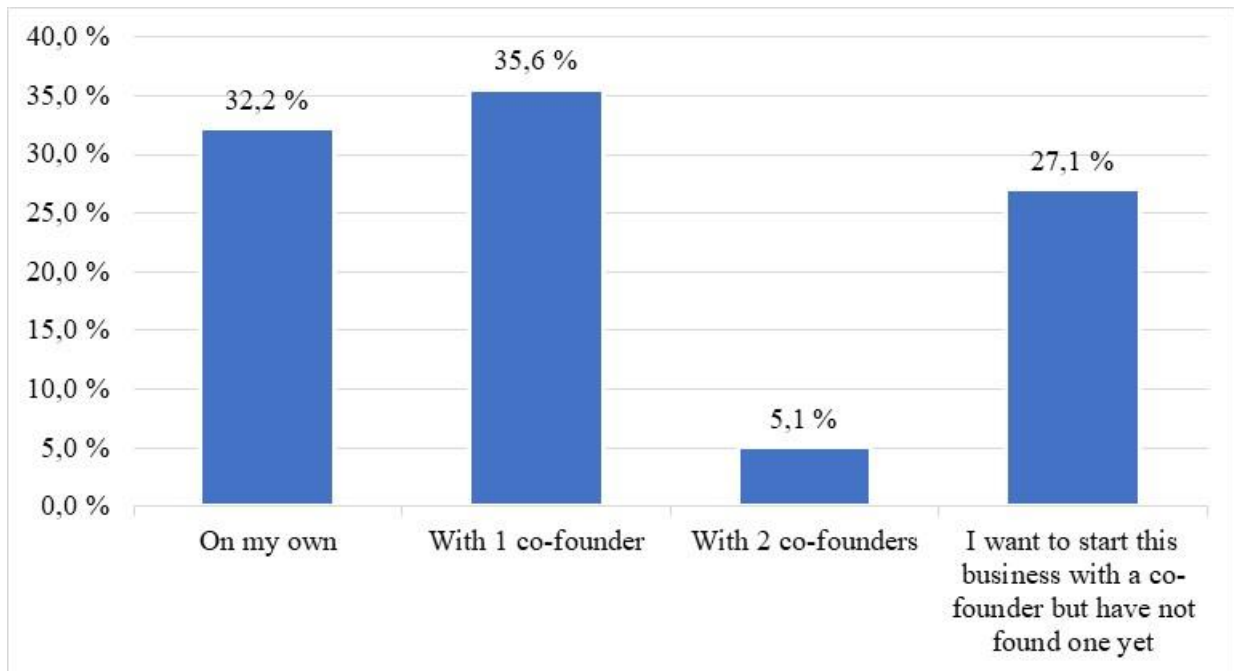
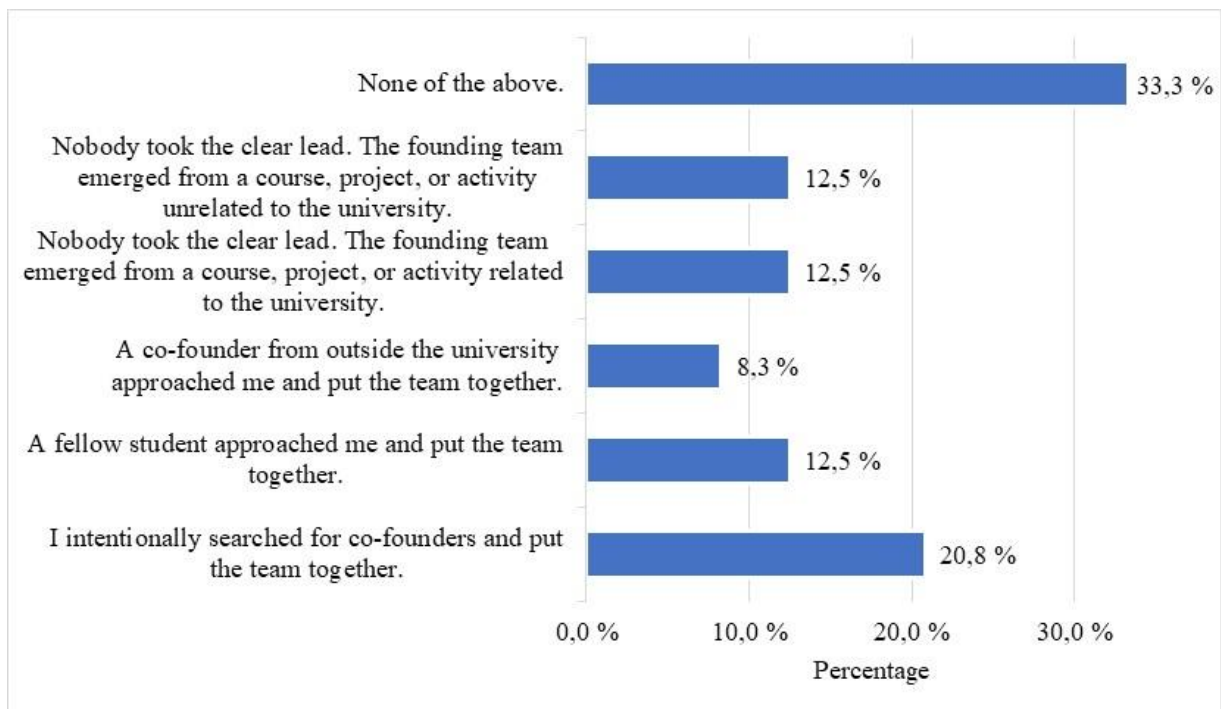


Figure 20: Formation of entrepreneurial teams



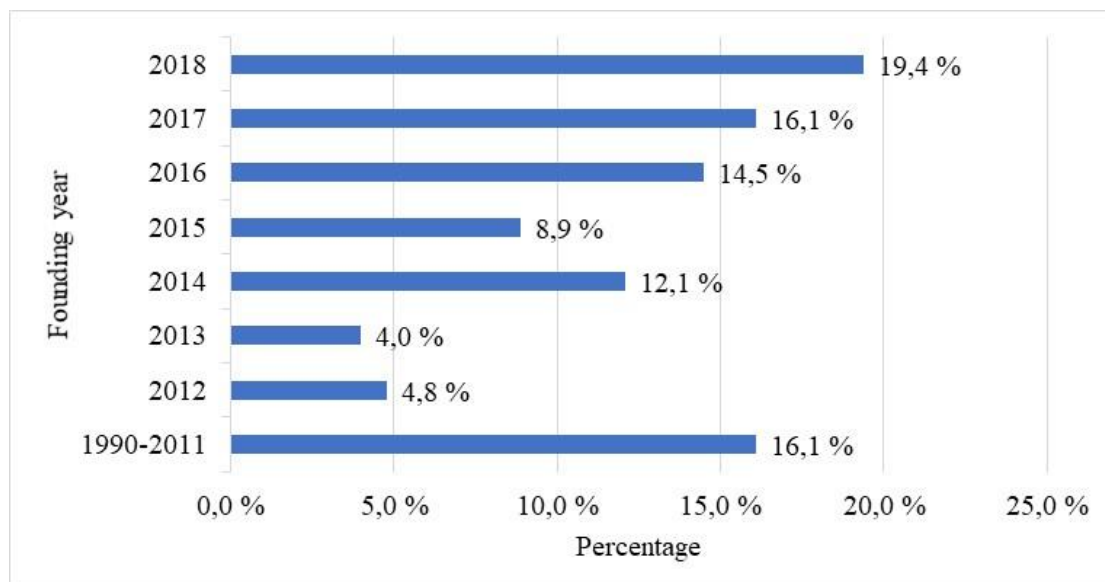
6 Active entrepreneurs

- *Descriptive analysis (Q9)*
- *Characteristics*

An analysis conducted by NimbleFins ranked the top 12 countries in Europe for startup businesses, with the indicators being economic health, cost of doing business, business climate, and the quality of labor force. Germany, the UK, and Ireland rank in the top 3 respectively, while Czech Republic ranks 6th – behind Switzerland and Estonia. (CzechInvest, 2019). Do students perceive the Czech Republic as a favorable country for start-up companies?

In chapter 5, we looked at those students who were at the beginning of their business career. In chapter 6 we are interested in those who, from the initial idea through the start-up phase, have reached the phase of an active entrepreneur. Approximately 10% of respondents expressed their opinions in this category of questions. Next question of the survey was: In which year did you start your business? See figure 21.

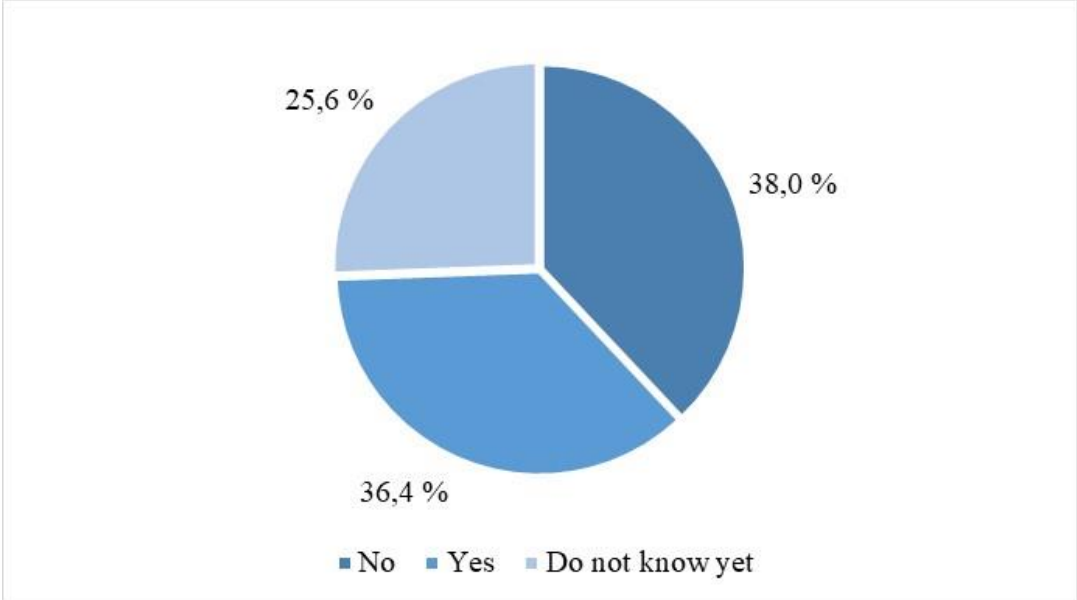
Figure 21: Year of the establishing own business



Across the countries, a sample of about 11% of respondents. Similarly, in the Czech Republic, these are rather young companies, some of them were established in 2018. Most of them are small businesses in terms of the number of employees (55% have no employees, then around 2). Next figure 22 explains if the business is becoming the main occupation after

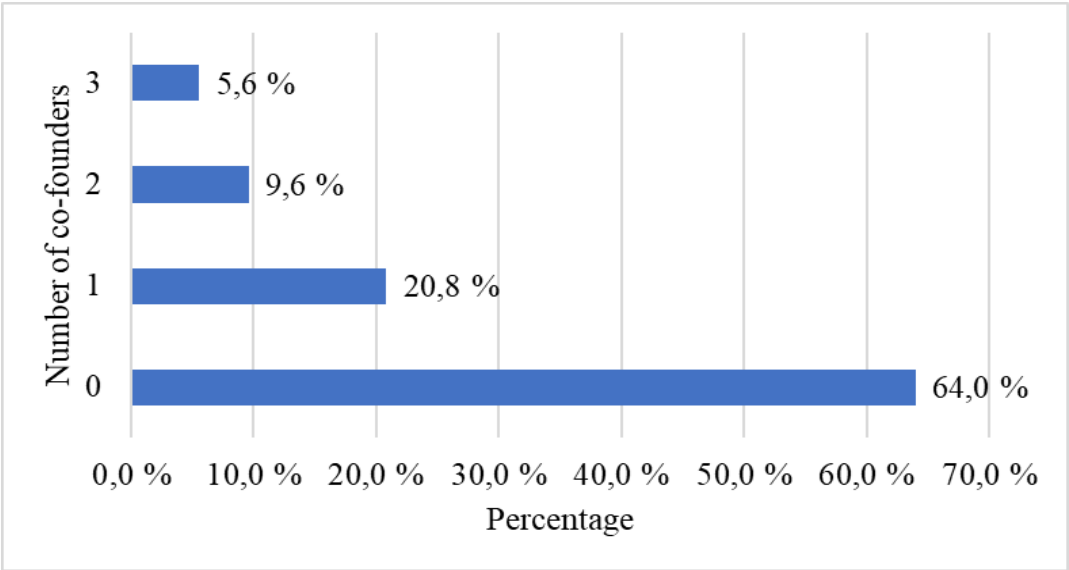
graduation. Surprisingly, around 38% (up to 44% across countries) of active entrepreneurs said that entrepreneurship would not be their main source of income after graduation.

Figure 22: Business (Active) – main occupation after graduation



As in the case of nascent entrepreneurs, we asked the number of business team members for active entrepreneurs. As you can see from the figure 23, business without partners prevails (64%). This shows the difference of respondents in the Czech Republic with the average across countries, where only 35% of active entrepreneurs carry out individual business.

Figure 23: Number of co-founders of active entrepreneurs



7 Parents' Business

- *Descriptive analysis (Q11)*
- *Characteristics*

We have stated that family business has its own specifics, which can cause different when we compare them with un-family companies. These differences can be seen in (Ramadani, Hoy, 2015):

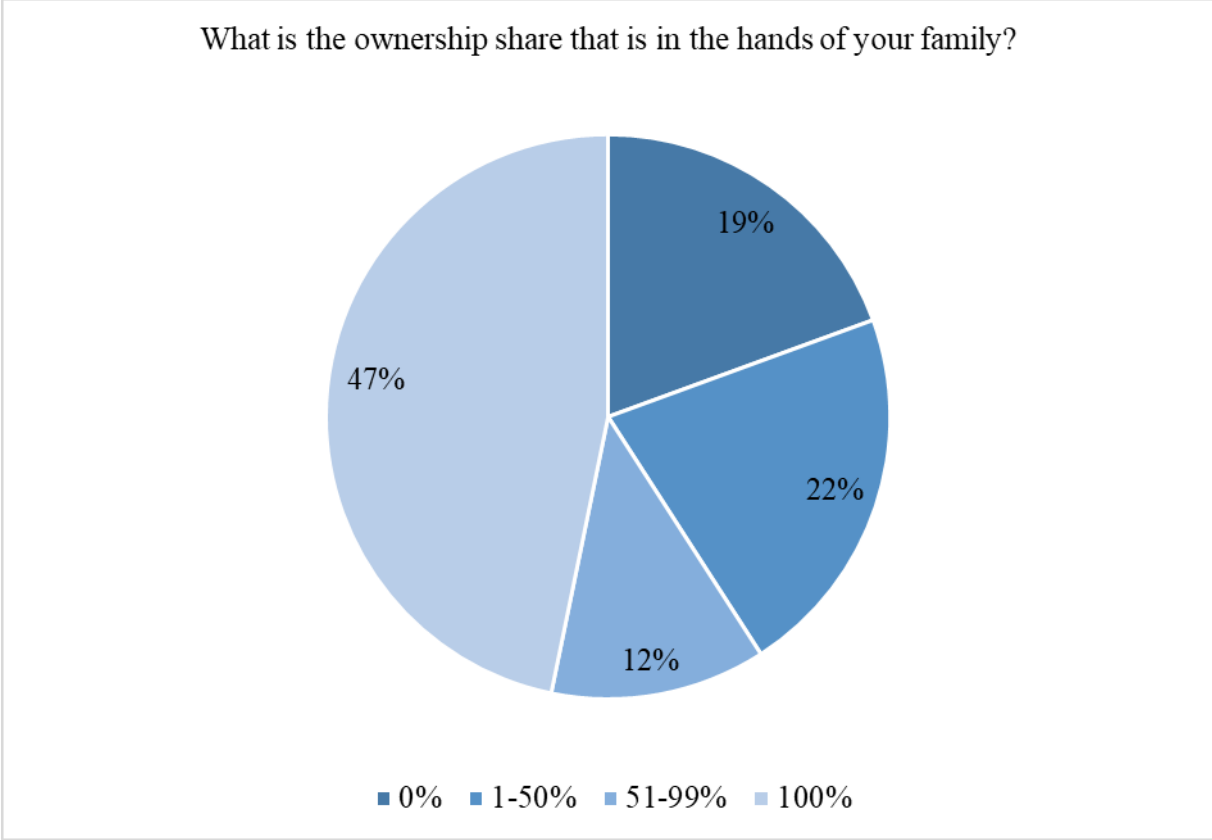
- Governance (in the center of the firm is family – formally or informally/directly or indirectly influencing the firm).
- Factor of economic and non-economic sustainability or long-term family income (stability) as well as family satisfaction, this is the reasons of reinvestment into the company.
- Transfer among generations is connecting with the sustainability over the life time of the enterprise and also is connecting with the family relationship.
- Business goal orientation or competitive strategy – it is quality, long reputation, long-term relationships.
- Company climate it can be described as familiarity, trust, cohesion, involvement, commitment, engagement, enthusiasm, informality.
- Satisfaction of internal and external stakeholders (mainly family, clients, employees, local community).

As mentioned in chapter 4, entrepreneurship of parents can be an incentive for student entrepreneurship. In case the respondents stated that at least one of their parents is involved in entrepreneurial activities, either as a self-employed person or as a majority owner of a business as a legal entity, they were asked for data on this business. If the parents were the owners of more companies, the respondents were to describe the largest one. In this report we will focus only on selected basic data. Section 4.2 shows that at least one parent (or both) of about 63% of the respondents do business as natural person, and 26% of respondents said that they do business also/or as legal person.

Approximately 500 students answered questions related to the business of parents; the number of respondents was different. E.g. 33% of students (416) commented on the year of starting their business, which may be due to ignorance of such data; 41% of students answered the question "Do you regard this business as a 'family business'?" (518).

Only selected answers are listed below. As can be seen from the figure, 59% stated that parents own more than 50% of the company's assets (figure 24). However, only about 43% consider the parents' business as a family business.

Figure 24: Family ownership share



Approximately 6% of the respondents claimed ownership of the company with parents. About 26% of students reported that they had ever worked in their parents' company.

Consent (rating 4+) to the statement "I am ready for anything to take over my parents' business", said 29% of respondents, see figure 25. Not all of them have taken over their parents' business as their professional goal, only 22% chose a rating of 4 or more, see figure 26.

Figure 25: I am ready to do anything to take over my parents' business

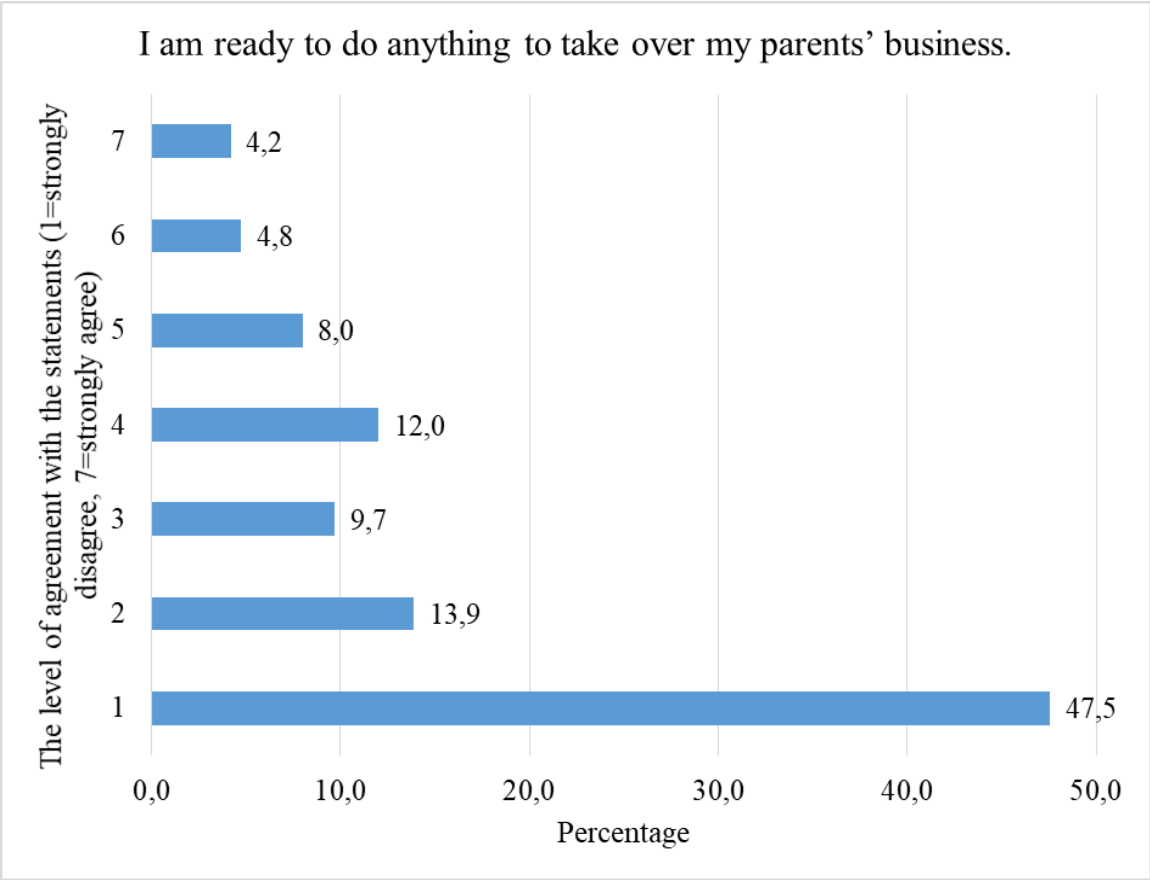
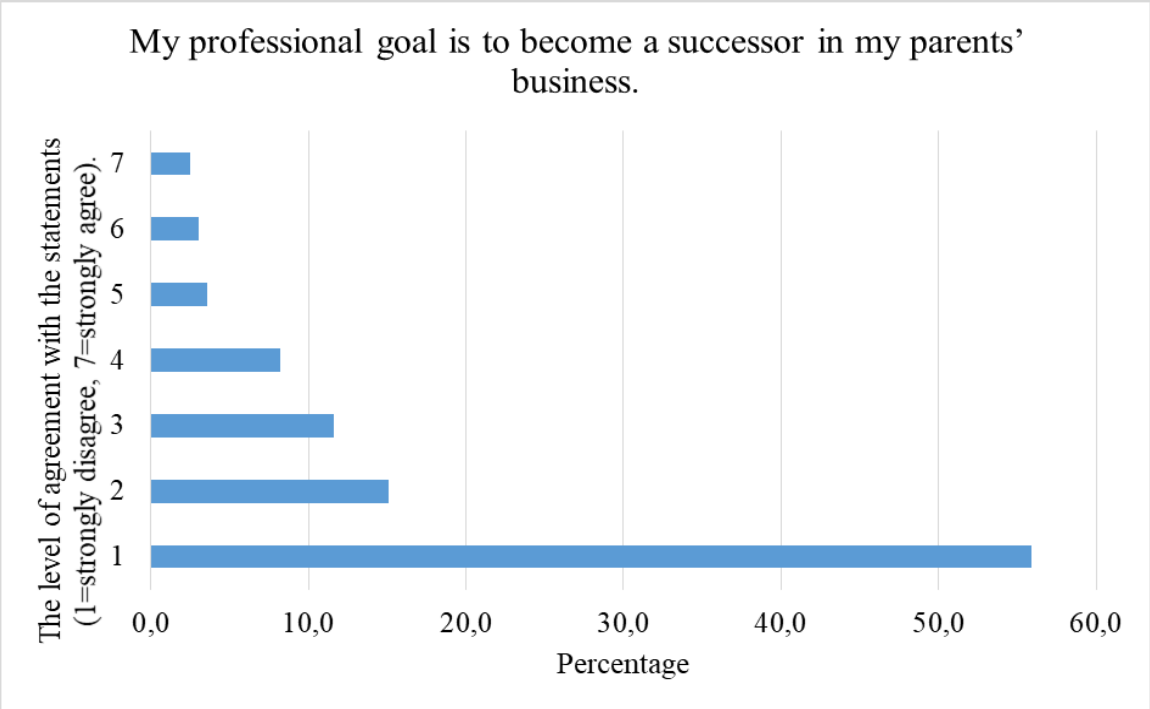


Figure 26: My professional goal is to become a successor in my parents' business

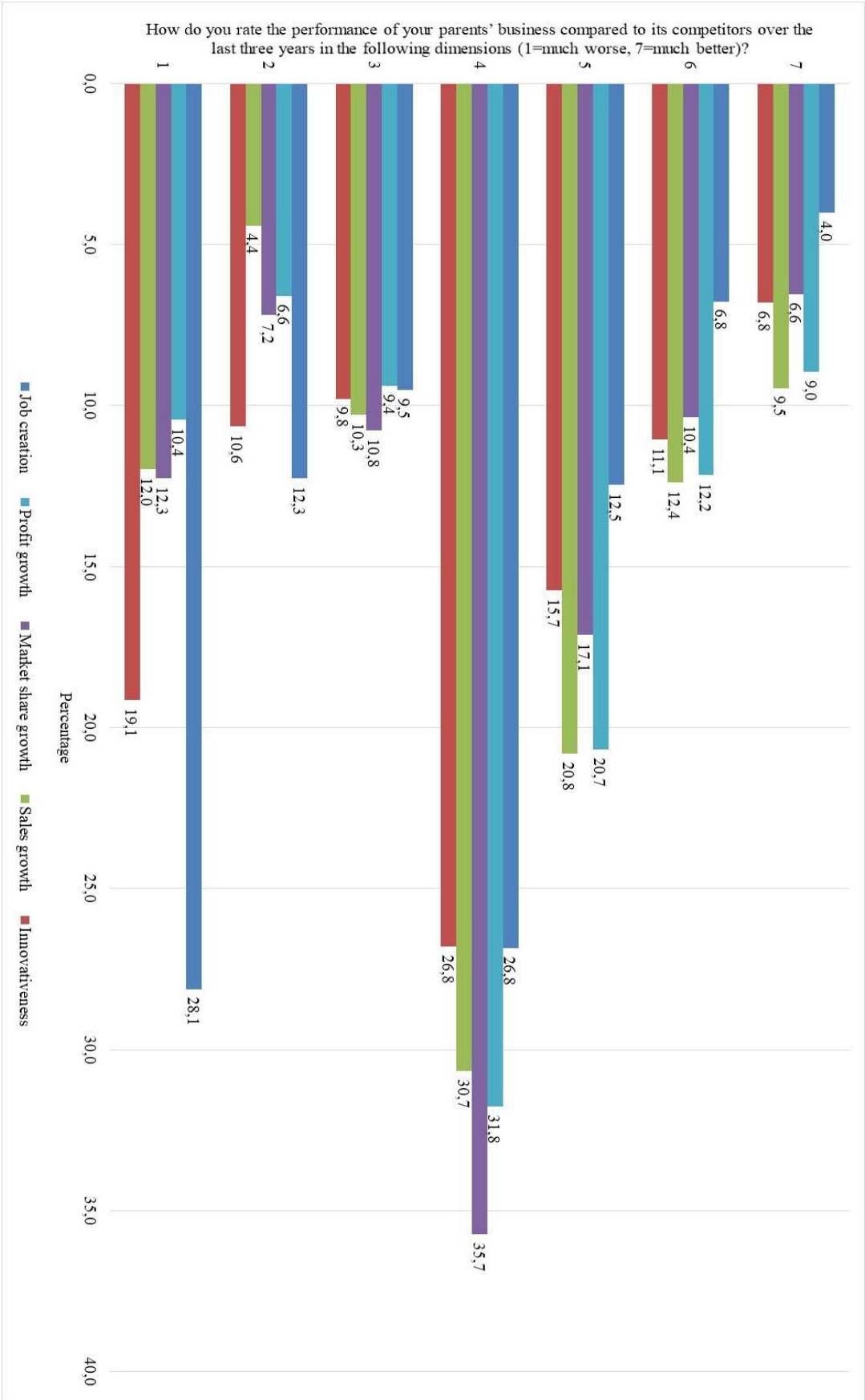


In this context, the respondents were asked about the assessment of the performance of the company of their parents. Students should rate on a scale of 1 to 7 (1=much worse, 7=much better):

- Job creation: How do you rate the performance of your parents' business compared to its competitors over the last three years?
- Profit growth: How do you rate the performance of your parents' business compared to its competitors over the last three years?
- Market share growth: How do you rate the performance of your parents' business compared to its competitors over the last three years?
- Sales growth: How do you rate the performance of your parents' business compared to its competitors over the last three years?
- Innovativeness: How do you rate the performance of your parents' business compared to its competitors over the last three years?

The creation of new jobs and innovativeness were rated worst. Growth in market share, sales and profits was higher. A rating of 4 or more was chosen by about 70% of respondents, see figure 27.

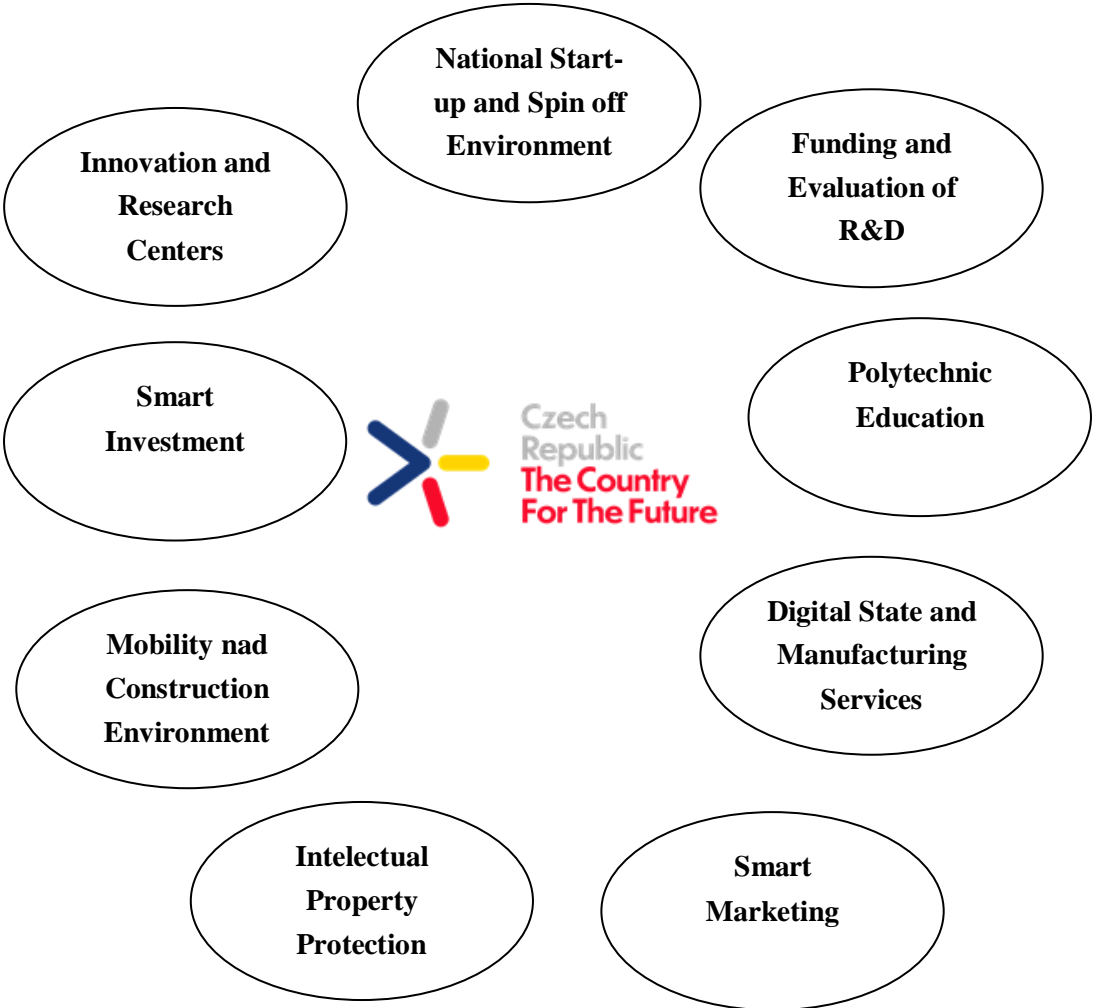
Figure 27: Performance of the parents' business



8 Innovation strategy for the future (2019–2030) of the Czech Republic and innovative ecosystem

The Czech government published a new innovation strategy for the future (2019-2023) based on nine ambitious goals consistent with the international requirements of a number of innovative Scoreboards (see next figure 28). The universities and companies have to implement these ideas into their strategies.

Figure 28: Innovation strategy for future (Czech Republic)



Recourse: RVVI, 2019

In the Czech Republic there is a weaker investment environment to incentivize the creation and financing of new projects. On the other hand, there is partial support for start-up projects

through the state CzechInvest agency and through incubation and acceleration programmes. However, there is a lack of a comprehensive national concept for their establishment, development and funding. Universities support the emergence of start-ups/spin-offs haphazardly because they are generally considered to be risky in the academic environment. From the point of view of business practice, there is insufficient motivation to use academic outputs, and in the Czech Republic the approach of corporations and small and medium-sized firms to cooperation with start-ups is inflexible. From the point of view of young Czech innovative companies themselves, their ability to expand abroad is lower due to low internationalization. Next goals can help to improve the above-mentioned situation:

- Create specific support elements for the establishment and support of start-ups and spin-offs at national level and link these elements with regional and international support.
- Create a comprehensive funding programme with national support for the start-up segment.
- Create a start-ups map to link them up with investors and support providers.
- Ensure an exchange of information and best practice between start-ups at national level.
- Create an environment of interest for foreign start-ups and technology teams for the long-term development of their activities in the Czech Republic.
- Prepare a Czech Technology Agency targeted programme for start-ups and spin-offs.
- Introduce training for entrepreneurship as part of teaching at all levels of education.
- Introduce monitoring and benchmarking of incubators, hubs and accelerators.

Implications and summary

The Czech Republic's overall performance is in line with the EU average. The country performs better than the EU average in the areas of access to finance and skills & innovation. In addition, the Czech Republic is the third best performing country in the EU on state aid & public procurement (measured in the context of the SBA indicators exclusively). However, in four areas: entrepreneurship, "responsive administration", single market and internationalization the Czech Republic performs below the EU average. The performance in "second chance" and environment is in line with the EU average. The country's performance in single market and environment has deteriorated from the previous reference period.

The Czech Republic's main challenges are the need to support SMEs in expanding their trade internationally within and outside the single market and to reduce SMEs' regulatory burdens. While a number of e-government services to carry out administrative online procedures are now available to SMEs, the roll-out needs to accelerate. Further measures to support entrepreneurship are needed as some groups, such as women, young people or unemployed people have not benefited yet from such support measures. Future policy efforts should consider continuing support to facilitate business transfers. The country is still lacking "business angel" funds and venture capital funds that would allow SMEs access to alternative financing as well as allow them to scale-up. Furthermore, no policy initiatives have been adopted for encouraging and supporting honest bankrupt entrepreneurs to re-start and there is neither an early warning nor help-desk mechanism to prevent entrepreneurs from going into bankruptcy in the first place.

In terms of the results of the GUESSS 2018 survey found in the Czech Republic, it can be stated that they are around the overall findings across the countries surveyed. Similarly, it can also summarize recommendations for all three parties involved.

From the **students' point of view**, it is possible to say that they perceive entrepreneurship as an attractive and prospective option of their future career, both in terms of establishing their own business career or taking over the business activities of parents. What students have trouble with is building a team for their business. Those who are active entrepreneurs most often choose individual business or partnerships to a maximum of three partners. What is striking is that although universities are opportunities for education courses in

entrepreneurship, the students do not attend sufficiently. The question is why? The results also show that active entrepreneurial students are satisfied with the performance of their businesses. This could be a challenge for those students who are hesitant to start their business.

The basic thematic areas of university activities include education, research and development and other creative activities, including commercialization (the so-called third role of the university). **Universities** can be recommended to improve the offer of entrepreneurship education and to promote it openly. Obviously, the main role of academics is more in research and education, which we certainly do not want to dispute! However, the third role of the university has an important place, and students draw their knowledge best by example. Universities can therefore be encouraged to work with all components of the innovative ecosystem. Every university does not need to have its own incubator to motivate students to do business. In connection with this, it is necessary to begin to eliminate not only administrative barriers, but also the traditional perception of the closed environment of universities.

Finally, **society, the family and the business environment** as such play their part. As it is evident how entrepreneurship will be presented by the family, how entrepreneurial behavior will evolve, how entrepreneurship will be publicized, it has a further impact on university students' interest in carrying out their innovative activities through entrepreneurship.

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