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HUNGARIAN STUDENTS' CARRIER ASPIRATIONS

The article analyzes the students' carrier aspiration, right after their graduation and five years after their studies. It examines the differences arising from the students' family business background and their most important social variables (gender, age). Then the study highlights the effects of study field on the students' intention. The direct effect of education on starting an enterprise is undiscovered in the literature, the paper deals with the influence of availability and services use, offered by higher institutions.

Keywords: carrier aspirations, entrepreneurship, role of higher institutions in entrepreneurship, entrepreneurial intentions, decision-making process.

Introduction. Small and medium sized enterprises have a great influence on economic growth [7-9] particularly because of their favourable effect on knowledge spillover [1]. SMEs play a crucial role even in innovation [16]. Entrepreneurial activity decreases unemployment and has a positive impact on employment [3]. SME sector provided 85% of new jobs in the European Union between 2002 and 2010 [10], while in Hungary its contribution to employment amounted to 70%. Among SMEs the role of high-growth gazelles is very important in the afore-mentioned fields [6]. In addition they are more innovative in comparison with low-growth companies [4; 15]. Due to these facts, the promotion of start-up and especially of high growth enterprises is given high priority in national economic policy.

Analysis of the recent researches and publications. As promoting entrepreneurship is a core objective of many countries, measuring its actual level and developing models to understand its contributing factors are crucial. Several methodologies can be found in the literature, there is no consensus in this field. The Eurobarometer Survey on Entrepreneurship has been studying the development of entrepreneurship in EU Member States for over a decade in order to explain the setting up of businesses and business growth [11].

The Global Entrepreneurship and Development Index (GEDI) of the Global Entrepreneurship Monitor (GEM) regard entrepreneurship as a multidimensional concept where both individual and environmental factors are important and the institutional setup determines the individual effectiveness [19].

The Social Cognitive Theory of Bandura [5], the Entrepreneurial Event model of Shapero and Sokol [17] and the Theory of Planned Behaviour of Ajzen [2] try also to describe the above-mentioned multidimensional nature. The three models consider the value system, attitudes and impressions of the individual to be crucial, and they include the environment and the reaction of the society into the model and emphasize the interrelationship between them.

Unsolved issues as part of the problem. The future level of any entrepreneurial activity highly depends on the today's youth attitudes towards this type of activity. If the most important factors influencing attitudes are identified and the entrepreneurial intentions towards entrepreneurship are determined, the fields of intervention targeting the creation of as many new and viable enterprises as possible can be defined.

The students' personal background, namely their age and gender, determine the students' carrier aspirations. Family business background and educational background also affects the decision. **The aim of the paper** is to analyse the above mentioned factors' role on students' decision about their future carrier.

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Main material. The international research project GUESSS (Global University Entrepreneurial Spirit Students' Survey) [1] analyzes the entrepreneurial intention and activity of students. A questionnaire was used to elicit the responses. The international survey is organised by the Swiss Institute for Small Business and Entrepreneurship at the University of St. Gallen (KMU-HSG). Since the first survey in 2003, four data collections have taken place, with an increased international involvement. In 2011 already 26 countries joined the research.

In 2011 in the fifth survey altogether 93265 students took part in the survey from 502 higher institutions. As for Hungary 5677 students filled in the online questionnaire (response rate was 8%). Table 1 shows the distribution of Hungarian respondents by institution.

Table 1 –Participation data for Hungarian institutions in GUESSS 2011,
(based on own calculations)

Name of Institution	No. of students enrolled for 2009/2010	Distribution of enrolled students	No. of sent inquiries (link) ¹	No. of completed questionnaires	Distribution of completed questionnaires	Response rate
1	2	3	4	5	6	7
BME – Budapest University of Technology and Economics (Budapesti Műszaki és Gazdaságtudományi Egyetem)	23,219	8,0%	0	5	0,1%	–
BCE – Corvinus University of Budapest (Budapesti Corvinus Egyetem)	17,422	6,0%	4,800	201	3,5%	4,2%
SZE – Széchenyi István University (Széchenyi István Egyetem)	10,786	3,7%	8,900	681	12,0%	7,7%
DE –University of Debrecen (Debreceni Tudományegyetem)	30,728	10,6%	n.a.	538	9,5%	–
ME –University of Miskolc (Miskolci Egyetem)	13,940	4,8%	14,055	620	10,9%	4,4%
PTE –University of Pécs (Pécsi Tudományegyetem)	29,032	10,0%	8,400	757	13,3%	9,0%
SZTE –University of Szeged (Szegedi Tudományegyetem)	27,436	9,5%	n.a.	254	4,5%	–
PE – University of Pannonia (Pannon Egyetem)	10,125	3,5%	0	1	0,0%	–
KE – Kaposvár University (Kaposvári Egyetem)	3,244	1,1%	n.a.	38	0,7%	–
NYME – University of West Hungary (Nyugat-magyarországi Egyetem)	14,261	4,9%	7,600	291	5,1%	3,8%
ELTE – Eötvös Lóránd University (Eötvös Lóránd Tudományegyetem)	30,767	10,6%	n.a.	175	3,1%	–
SZIE – Szent István University (Szent István Egyetem)	10,786	3,7%	n.a.	166	2,9%	–
BGF – Budapest Business School (Budapesti Gazdasági Főiskola)	17,911	6,2%	13,622	620	10,9%	4,6%
BMF – Óbuda University (Óbudai Egyetem)	11,438	4,0%	0	5	0,1%	–
DF – College of Dunaújváros (Dunaújvárosi Főiskola)	4,312	1,5%	2,460	158	2,8%	6,4%
KRF – Károly Róbert College (Károly Róbert Főiskola)	11,530	4,0%	8,000	97	1,7%	1,2%

Table 1 (continued)

1	2	3	4	5	6	7
AVF – Budapest College of Management (Általános Vállalkozási Főiskola)	2,949	1,0%	n.a.	147	2,6%	–
GDF – Dennis Gábor College (Gábor Dénes Főiskola)	2,720	0,9%	n.a.	182	3,2%	–
EJF – Eötvös József College (Eötvös József Főiskola)	1,634	0,6%	1,350	65	1,1%	4,8%
BKF –University of Applied sciences Budapest (Budapesti Kommunikációs és Üzleti Főiskola)	2353	0,8%	0	1	0,0%	–
KJF – Kodolányi János University of Applied Sciences (Kodolányi János Főiskola)	6,673	2,3%	n.a.	423	7,5%	–
MÜTF – College for Modern Business Studies (Modern Üzleti Tudományok Főiskolája)	2,073	0,7%	1,200	145	2,6%	12,1%
SE – Semmelweis University, (Semmelweis Egyetem)	3,173	1,1%	330	65	1,1%	19,7%
Others	–	0,0%	–	42	0,7%	–
Total	289,336	100,0%	70,717	5,677	100%	8,0% (average)

¹⁾ – Sent inquiry (link) – the number of students that received the internet link for filling in the GUESSS questionnaire. 0 means that the institution has not made the questionnaire available for its students either through its internal system or in any other form

Regarding nationality 97,9% of the respondents were Hungarian, 8 students dual citizenship. The rest respondents were Slovakian (36,9%), Romanian (24,3%) and Ukrainian (12,6%). Persons, who chose Hungarian educational institutions, take into account the geographical distance (for example Slovakian students usually prefer Győr or Miskolc, while a large proportion of Romanian students choose Debrecen, because these cities are close to their home town). Considering the major students the largest proportion of respondents studied Business and economics (43,8%). They were followed by students of social sciences with 36% and natural sciences with 19,4%. 13 MBA and 7 postdoc students also filled in the questionnaire. The vast majority of respondents did their BSc studies. While the MSc students amounted to 13,4%. Only 62 PhD, 13 MBA and 7 postdoctoral students filled the questionnaire. Regarding the respondents' gender, our sample contains larger female ratio compared to male (59,4%). The male-female ratio reflects the gender characteristics of the Hungarian higher education. The average age of the respondents was 25. About 32,3% of all respondents were born in 1990's, so they were younger than 22 at the time of the survey. The students who were younger than 30 (and born later than 1980) accounted for 87% of the sample. As younger age groups are represented in the sample, most of asked students are single. According to age profile most respondents were single (85,5% of the students).

The students were asked about their carrier aspirations. The responses to this question and its additional variable contain four attributes – “employee”, “founder”, “successor”, “other”, and compute from the original question highlighted the differences in carrier aspirations arising from three partially significant variables.

These are the gender, the field of study and the family business background. Different carrier choice intentions of students are shown in Figure 1. The aggregated results illustrate that a significant proportion of the students (2896 students) would like to work either for a large or a small and medium sized company. The public service employment is also attractive among respondents.

All in all 56,4% of the students want to be employed. Due to the question about their plans

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after five years, majority of the respondents think about setting up their own business. The number of responses, concerning employment by other companies, is decreased.



Figure 1 – Carrier aspirations after graduation and five years after study, people, (based on own calculations)

Gender. It is common knowledge that entrepreneurship is a predominantly male field. This specific feature of entrepreneurship is reflected in our results. Figures 2, 3 show the differences in carrier choice intentions by gender of the respondents.

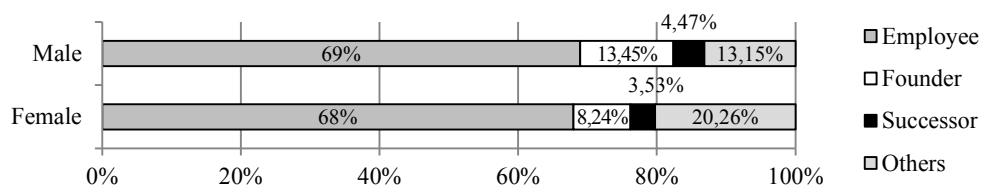


Figure 2 – Carrier aspirations right after study by genderin, %

The gender variations in the two figures remains the same: the women's intention to find their own business or take over a firm is lagging behind men; almost the same ratio of woman would like to be an employee as men, however women prefer working in civil service sector at large companies; more female respondents chose the another options than men. This can be explained by a larger ratio of woman to choose other carriers (such as not professional carrier, family).

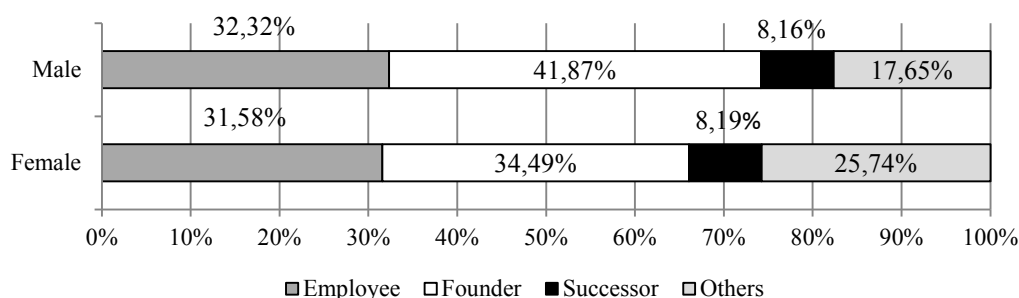


Figure 3 – Carrier aspirations five years after study by gender in %

Independently of gender we found that the employee status attractiveness is decreased and the appealing force of business life was increased five years later in both gender. The ratio of students who have chosen the “other” option is increasing especially in case of women. This can be explained by traditional woman roles (such as taking care of children). Remarkable differences may be seen in evaluation of public service and no professional careers (e.g., travelling, family, etc.).

The ratio of female respondents who favour working in public service right after graduation is to 76,4 and those who would choose this carrier five years later accounted for 70,4.

According to the survey women who chose no professional carriers amount to 75,3 of the total respondents right after their study and account for 76,1 after five years.

Figure 4 compares the distribution of the given answers (the top bar chart shows the right-after-graduation-data and the bottom bar chart shows the situation after five years).

After having analyzed the frequency of the particular answers, women distributions were subtracted from the men's correspondent data.

It may be clearly seen from figure 4 that there is also a large difference between the ratio of female and male respondents who chose work at large firms, which amount to 10 percentage points.

Analysing gender distribution only within this category we cannot see this bias (50,5% of the total answers were given by woman). The bottom chart illustrating the situation in five years time shows considerable difference only between female and male respondents only those who chose non-professional carrier. This might be explained by the conventional role of woman played in the family, family planning, child care. Further differences are observed in responses related to entrepreneurship next to the employment in a large companies and public service sector.

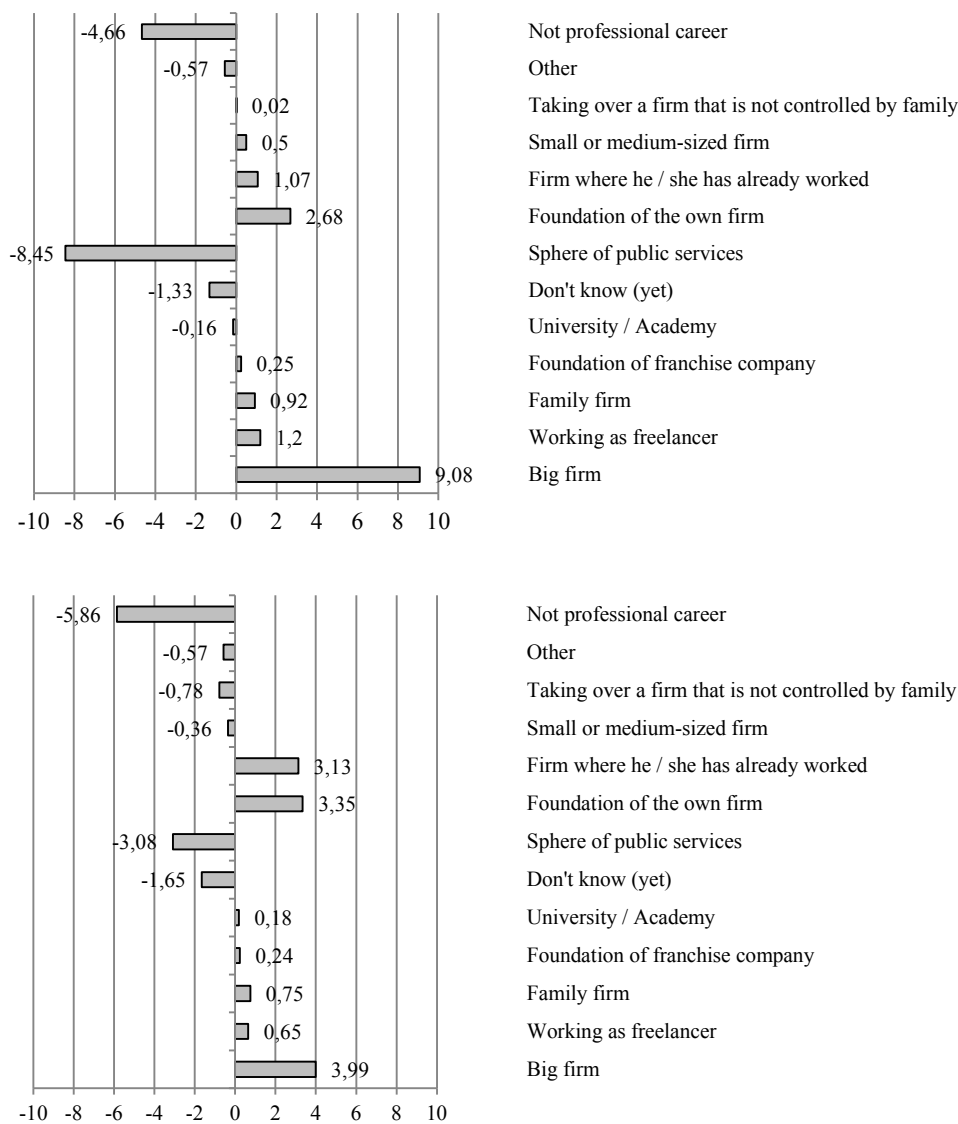


Figure 4 – Percentage point differences in carrier aspirations of women and men

Family business background. Family business background (Figure 5, 6) also has a considerable effect on carrier aspirations. We found that the family business background increased the probability to become an entrepreneur either as a founder or as a successor independently of time horizon. If students come from a family which had no previous business experience his chances of favouring employment status over being an entrepreneur is increased. Furthermore this fact enhances the possibility of uncertainty (do not know answer) regarding their future carrier plans.

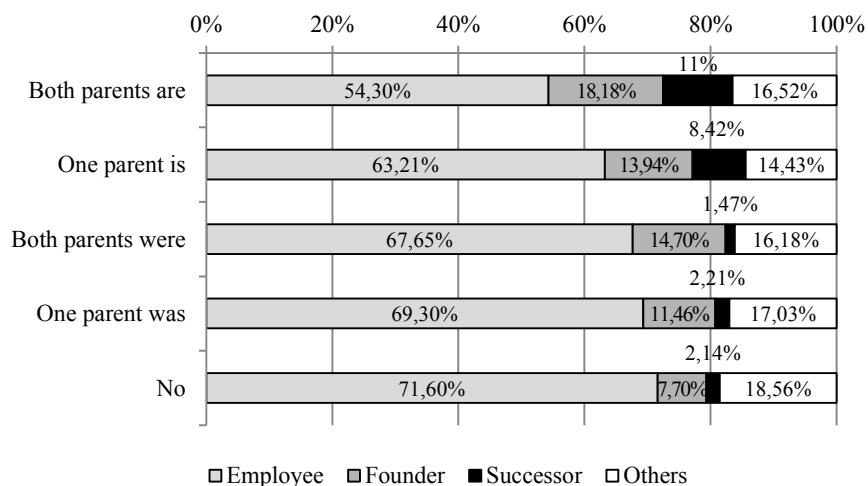


Figure 5 – Carrier aspirations after study by family business background

Entrepreneur-non-entrepreneur family background greatly influenced the respondents' carrier aspiration, which is why the difference in carrier aspirations measured five years after studies remained the same as right after studies.

Differences by the field of study. Education may also play an important role in growth orientation of companies [12], but their direct effect on starting an enterprise is undiscovered. The relationship between the field of studies and carrier aspiration is evident. A higher proportion of students who major in business studies can be expected to start a business of their own than that of natural sciences. Besides this, availability and quality of services offered by higher institutions can influence the decision of students.

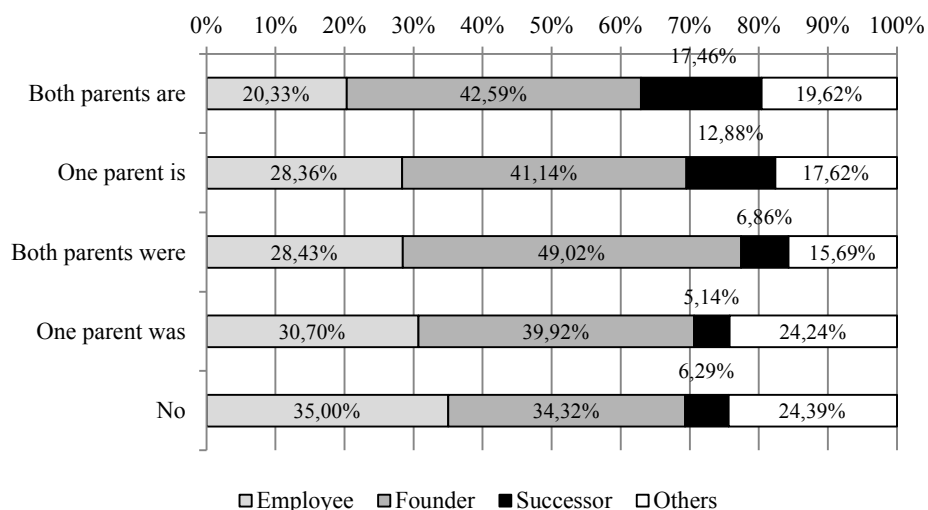


Figure 6 – Carrier aspirations five years after study by family business background

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The findings of GUESS research show that the role of the conventional solutions (courses) remains also important [12; 13]. Analysing the carrier aspirations by field of study we found that after graduation there are no significant differences in being a founder or successor. After 5 years the ratio of students who were planning to set up a company increased in every field of study, but students from the business and economics fields become more entrepreneurial. Independently of the time horizon, the ratio of students choosing no professional careers or the proportion of students having no clear intentions is significantly higher in social sciences compared to business and economics and well as natural sciences. The aggregated data don't show the differences in judgement of employment status. While social science students prefer the carrier of a public servant, a higher ratio of business students would like to become an employee in a company. This difference in preferences remains even after five years.

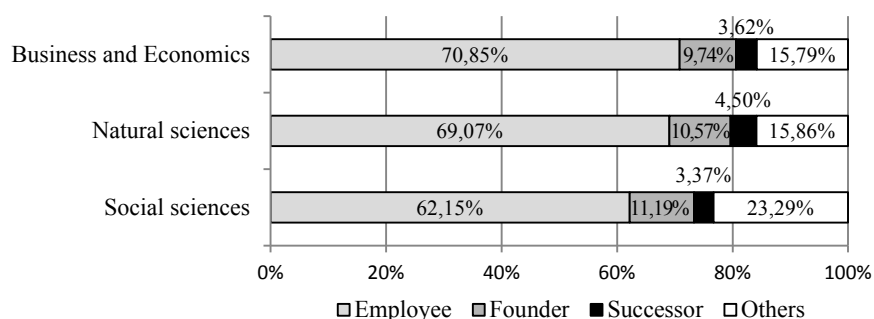


Figure 7 – Carrier aspirations right after graduation by field of study

The questionnaire measured the availability and exploitation of courses (Entrepreneurship in general; Family firms; Financing entrepreneurial ventures; Technology entrepreneurship; Social entrepreneurship; Entrepreneurial marketing; Innovation and idea generation; Business planning.), services (Workshops /networking with experienced entrepreneurs; Contact platforms with potential investors; Business plan contests /workshops; Mentoring and coaching programs for entrepreneurs; Contact point for entrepreneurial issues) and resources (Technology and research resources, Seed funding / financial support) offered to students.

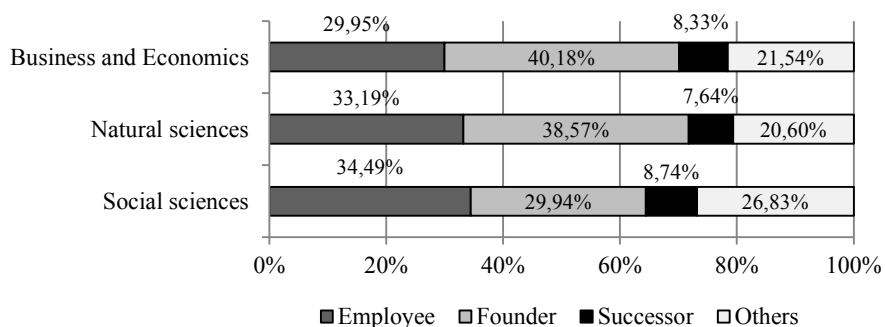


Figure 8 – Carrier aspirations five years after graduation by field of study

Table 2 summarizes the average availability and utilization of courses, services and resources offered by universities. Three new variables were created for this reason; the three indexes show the number of offered courses and services (the variables have the values 0-8 in case of courses, 0-5 in case of services and 0-2 in case of resources). The utilization of each service is expressed by the ratio of utilization measured in percentage.

Table 2 – Courses and services which are provided by higher education institutions

Courses and services	Amount	Average	Standard deviation
Number of all lectures and seminars	5677	2,77	2,07
Number of all networking and coaching offerings	5677	1,08	1,37
Number of provided resources	5677	1,07	0,75
Number of attended lectures and seminars	5677	1,58	1,70
Number of utilized networking and coaching offerings	5677	0,29	0,74
Number of utilized resources	5677	0,73	0,71
Ratio of attended lectures and seminars	4508	56,69	38,50
Ratio of utilized networking and coaching offerings	2818	26,12	38,62
Ratio of utilized resources	4260	69,98	41,89

The study of courses and services provided by higher education institutions can be useful in understanding the students' start-up decision. The national average of business courses available for students in Hungary amounted to 2,77 (according to the students' information). The average number of attended courses was 1,58, which represents an average exploitation of 56,69%. The average value of networking and mentoring services accounted for 1,08, the national average of utilized services was 0,29 (26,11%). The provided resources national average was 1,07, the average number of exploited resources was 0,73 and the rate of exploitation was 69,97%.

Table 3 shows the relationship among the carrier aspirations right after studies and in five years and courses and services provided by higher education institutions. Except the Number of all networking and coaching offerings there are significant correlations between the analysed variables. The findings show that the role of the conventional solutions (courses) and other services offered by institutions also positively affect students' entrepreneurial intentions. In both cases the role of students' participation and involvement is of utmost importance.

Table 3 – Courses and services provided by the higher education institutions by carrier aspirations of the students (average), (based on own calculation)

Courses and services	Career aspirations right after studies		Career aspirations 5 years after studies	
	Cramer V	Sig.	Cramer V	Sig.
Number of all lectures and seminars	.065	.000	.071	.000
Number of all networking and coaching offerings	.032	.273	.042	.012
Number of provided resources	.067	.000	.047	.000
Number of attended lectures and seminars	.055	.001	.069	.000
Number of utilised networking and coaching offerings	.043	.007	.055	.000
Number of utilised resources	.052	.000	.039	.009

Figures 9 and 10 show the exploitation of the offered courses and services according to carrier-aspirations of students.

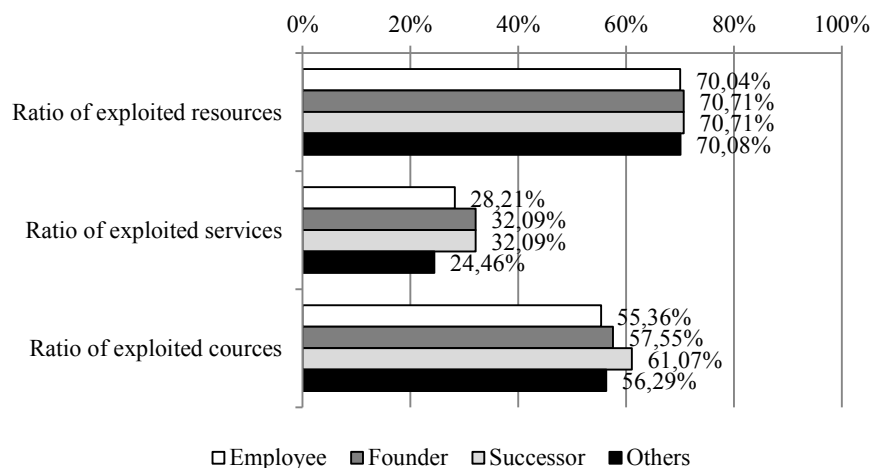


Figure 9 – Exploitation of offered courses and services according to carrier aspirations of students' right after graduation, (based on own calculations)

As for provided courses and services, founders and successors already exploited the available courses and services at a higher ratio than employees. Such correlation in terms of resources was not observed. The possible correlation between the exploitation of courses and services and business start-up intentions remains significant if the field of study is a control variable.

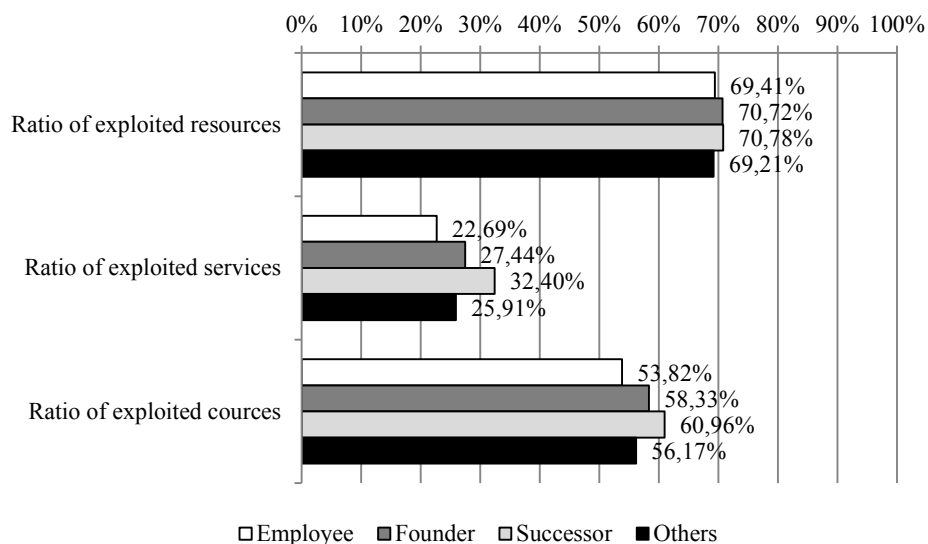


Figure 10 – Exploitation of offered courses and services according to carrier aspirations of students' five years after graduation, (based on own calculations)

Conclusions and directions for further researches. Fostering entrepreneurship has become priority for economic policy makers. It is very important to identify the factors that shape the students' entrepreneurial intentions. In this paper we find that both social variables and family business background influence the intention of students. The women's intention to find a business of their own or to take over a firm is lagging behind men's. The older the respondents are, the higher the probability to start an enterprise is. The survey shows that a family business background increases the probability to become an entrepreneur either as a founder or as a successor independently of the time horizon.

Higher institutions can also contribute to the decision. The universities play an important role, because here we can channel the students' entrepreneurial intentions in a positive direction. The proportion of business students who want to start a business of their own or plan to do it in the future is higher than that of natural sciences. Courses and services provided by higher institutions play a crucial role in students' decisions. In both cases the role of students' participation and involvement is of utmost importance. The students who actively attend courses and events are not only aware of them, are more entrepreneurial. The aim is not to widen the choice of services and courses, but to increase students' participation in them.

Understanding the factors and their characteristics influence the decision-making process of students (Can we influence the decision at all? If yes, what is the time requirement?) may help to design business practices which shift the entrepreneurial activity to positive directions for individuals, societies and economies.

1. Acs, Z.J., Audretsch, D.B., Braunerhjelm, P., & Carlsson, P. (2005). The Knowledge Spillover Theory of Entrepreneurship. *Working Paper*. Retrieved from <http://www.indiana.edu/~idsspea/papers/ISSN%2005-11.pdf> [in English].
2. Ajzen, I. (1991). The Theory of Planned Behavior. *Organizational Behavior and Human Decision Processes*, 50(2), 179-211 [in English].
3. Audretsch, B.D., Carree, M.A., & Thurik, A.R. (2001). Does entrepreneurship reduce unemployment? *Tinbergen Institute Discussion Paper 074/3*. Retrieved from <http://repub.eur.nl/res/pub/6857/2001-0743.pdf> [in English].
4. Autio, E., Kronlund, M., & Kovalainen, A. (2007). *High-Growth SME Support Initiatives in Nine Countries: Analysis, Categorization, and Recommendations*. Helsinki: Edita Publishing Ltd [in English].
5. Bandura, A. (1977). *Social Learning Theory*. Englewood Cliffs, New Jersey: Prentice-Hall [in English].
6. Békés, G., & Muraközy, B. (2012). Magyar gazellák: gyors növekedésű vállalatok jellemzői és kialakulásuk elemzése Magyarországon (Hungarian gazelles: what makes a high-growth firm in Hungary?) *Közgazdasági Szemle (Economic Review - monthly of the Hungarian Academy of Sciences)*, 2012, 59(3), 233-262 [in Hungarian].
7. Blanchflower, D.G. (2000). Self-employment in OECD Countries. *National Bureau of Economic Research, Working Paper 7486* [in English].
8. Carree, M., Stel, A., Thurik, A.R., & Wennekers, S. (2002). Economic Development and Business Ownership: an Analysis using Data of 23 OECD Countries in the Period 1976-1996. *Small Business Economics*, 19(3), 271-290 [in English].
9. Carree, M.A. & Thurik, A.R. (2010). *The Impact of Entrepreneurship on Economic Growth*. Zoltan Acs and David Audretsch (Eds.). *International Handbook of Entrepreneurship Research*, 2nd ed. (pp. 557-594). New York: Springer [in English].
10. de Kok, J., Vroonhof, P., Verhoeven, W., Timmermans, N., Kwaak, T., Sniijders, J., & Westhof, F. (2011). Do SMEs create more and better jobs? *EIM Business & Policy Research*. Retrieved from http://ec.europa.eu/enterprise/policies/sme/facts-figures-analysis/performance-review/files/supporting-documents/2012/do-smes-create-more-and-better-jobs_en.pdf [in English].
11. EC (2012a). *Entrepreneurship in the EU and Beyond. Flash Eurobarometer 354*. European Commission, Directorate-General for Enterprise and Industry, Brussels [in English].
12. Gubik, S.A. (2013). A magyar hallgatók vállalkozásindító szándékát befolyásoló tényezők

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modellje: Ajzen tervezett magatartás elméletének kiterjesztése (Model of the Hungarian students' business start-up intention influencing factors – Extending of Ajzen's Theory of Planned Behavior). *Vezetéstudomány (Budapest Management Review)*, 44(7-8), 18-29 [in Hungarian].

13. Gubik, S.A., & Farkas, Sz. (2014). Entrepreneurial Activity of Hungarian Students. *Management, Enterprise and Benchmarking (MEB) Conference (30-31 May)*. Budapest [in English].

14. KSH (2011). A kis- és középvállalkozások helyzete a régiókban (The situation of small and medium sized companies in the Hungarian regions). *Központi Statisztikai Hivatal (Hungarian Central Statistical Office)*. Retrieved from <http://www.ksh.hu/docs/hun/xftp/idoszaki/regiok/gyorkkv.pdf> [in Hungarian].

15. Papanek, G. (2010). A gyorsan növekvő magyar kis- és középvállalatok a gazdaság motorjai (Rapidly growing small and medium-sized firms as the driving force behind the Hungarian economy). *Közgazdasági Szemle (Economic Review-monthly of the Hungarian Academy of Sciences)*, 57(4), 354-370 [in Hungarian].

16. Papanek, G., András, Z., Borsi, B., Farkas, L., Némethné Pál, K., & Viszt, E. (2009). *A mikro-, kis és közepes vállalatok növekedésének feltételei (Growth conditions of the micro-, small and medium sized companies)*. GKI Gazdaságkutató Zrt [in Hungarian].

17. Shapero, A., & Sokol, L. (1982). The social dimensions of entrepreneurship. C.A Kent, D.L. Sexton, & K.H. Vesper (Eds.). (pp. 72-90). *Encyclopedia of entrepreneurship* Prentice-Hall, Inc., New Jersey: Englewood Cliffs [in English].

18. Storey, D.J. (1994). *Understanding the Small Business Sector*. London: Routledge [in English].

19. Szerb, L., Aidis, R., & Ács, Z.J. (2012). *The comparison of the Global Entrepreneurship Monitor and the Global Entrepreneurship and Development Index methodologies: The case of Hungary. Entrepreneurship in Hungary in the 2006-2010 time period: The role of individual and institutional variables*. Retrieved from http://www.gemconsortium.org/assets/uploads/1337684852GEM_GEDI_Hungary_2006-2010_Report.pdf [in English].

20. Szirmai, P., & Csapó, K. (2006). Gyakorlati vállalkozásoktatás - Diákvállalkozások támogatása a Budapesti Corvinus Egyetemen (Entrepreneurship education – promoting of students' enterprises at the University of Corvinus). *Új pedagógiai szemle (New Pedagogical Review)*, 56(4), 72-83 [in Hungarian].

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Кар'єрні прагнення студентів Угорщини

У статті проаналізовані кар'єрні прагнення студентів після закінчення навчання та через п'ять років після навчання. Автором розглянуті відмінності у баченні студентами своєї майбутньої кар'єри залежно від бізнесу їх родини та їх соціальних характеристик (стать, вік). Дослідження кар'єрних прагнень студентів є особливо цінним у ході планування пропозиції спеціальностей вищими навчальними закладами.

Ключові слова: кар'єрні прагнення, підприємництво, роль вищої освіти в підприємстві, підприємницькі наміри, процес прийняття рішення.

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Карьерные стремления студентов Венгрии

В статье проанализированы карьерные стремления студентов после окончания ими обучения и через пять лет после обучения. Автором рассмотрены отличия в видении студентами своей будущей карьеры в зависимости от бизнеса их семьи и их социальных характеристик (пол, возраст). Исследование карьерных стремлений студентов является особенно ценным в ходе планирования предложения специальностей высшими учебными заведениями.

Ключевые слова: карьерные стремления, предпринимательство, роль высшего образования в предпринимательстве, предпринимательские намерения, процесс принятия решения.

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