

1. INTRODUCTION, OBJECTIVES

One of the most important objectives of the European Union is to strengthen, in accordance with the principles of equity, impartiality and solidarity, the economic and social cohesion among regions that are at different levels of development and have various structures. The Union in the 21st Century must address new challenges such as globalization, enlargement, improving competitiveness, reducing the high level of unemployment, managing negative demographic trends, and increased coordination and improving the efficiency of external relations. Support for cohesion in the EU concentrates on three main areas: development of human resources, assistance for enterprises, and the facilitation of creating basic infrastructure. Support in all three areas influences the situation of a given region and promotes internal and external development that results in the evolution of long-term development factors.

Hungary became a Member State of the European Union 1 May, 2004. For Hungary the most important sources of funding for regional policy include Cohesion Funds and Structural Funds. Since the end of the 1970's globalization has considerably changed the conditions and characteristics of competition. Competitiveness has become a major issue, and its definition in the concepts of programmes for the support of competitiveness is based on the fundamental characteristics of globalization. From 2007 on competitiveness will gain priority over the strengthening of economic and social cohesion in the European Union.

Out of the seven Territorial Statistical Units in Hungary the North Great Plain Region lags behind the most in a number of aspects. One of the most fundamental indicators of the level of development and competitiveness is the gross domestic product; GDP per capita in the North Great Plain Region is the lowest compared to other regions in Hungary. The reasons for the backwardness of the region consisting of Hajdú-Bihar County, Szabolcs-Szatmár-Bereg county, and Jász-Nagykun-Szolnok county, include, among others, limited competitiveness of the economy of the region, the dominance of agriculture over industry and services and their less significant contribution to the economy, the lack of modern transport infrastructure, and low level of investments due to absence of capital. A high number of free workforce is available and, because of the institutions of higher education, the ratio of young people is higher than the national average, however the level of training is low, and a large proportion of highly qualified professionals leaves the region (*Development Concept of the North Great Plain Region 2002*).

One of the most successful institutions of higher education in Hungary is located in one of the most backward region of the EU. The origins of the University of Debrecen date back to the 16th Century. The re-integrated university was established in 2000, and it is one the most

prestigious institutions in North-East Hungary, and it is the centre of higher education and science (Szabó, 2003). Based on several indicators the university ranks high among institutions of higher education in Hungary. No matter what standpoints we apply, it is always among the top institutions.

The University of Debrecen, offering one of the widest scale of educational programmes in the country and having exceptionally sound financial background, is located in one of the most backward regions of Hungary, however, the university is striving to maintain its leading position in the Hungarian higher educational market and trying to become a competitor for European institutions of higher education. Based on the change of the spatial structure and following the evolution of regionality, the most important objective of a so-far single-pole country is to create several poles of competitiveness that have multiplying effects on their respective regions. Higher educational institutions, universities with significant research and development potential should serve as the base for the creation of the knowledge-based economy. The challenge the city of Debrecen and the University of Debrecen are facing is how to become the pole of competitiveness of the North Great Plain Region. The capital of knowledge is available, however if it is not exploited outside the university, i.e. in the economy, it will not have any impact, therefore the university will be forced to have a peripheral role. That is why it is important to have social capital in addition to knowledge capital, and to create cooperation with the players of the economy and society.

The University of Debrecen plays a regional and macroregional role; the higher educational potential of the region is focussed on the university, therefore it serves as a base of competitiveness and innovation.

What are the opportunities for the development of the region? What role the University of Debrecen can play in the process of development? What are the interfaces between the institution of higher education and the economy of the region? How can a higher educational institution use its resources for the development of the region? These questions are frequently asked by higher educational institutions including the University of Debrecen that is located in a regional centre. In our rapidly changing world universities must react faster and more accurately to the socio-economic changes. Forecasts and tendencies should not be the only sources to build an institutional strategy upon - own surveys and analyses may also help make successful decisions and define pathways. My objective is to assess the indicators of competitiveness in the region with a special emphasis on the situation of employment, and to analyse the responses of graduates from the University of Debrecen, the largest educational institution in the region, in relation to employment opportunities.

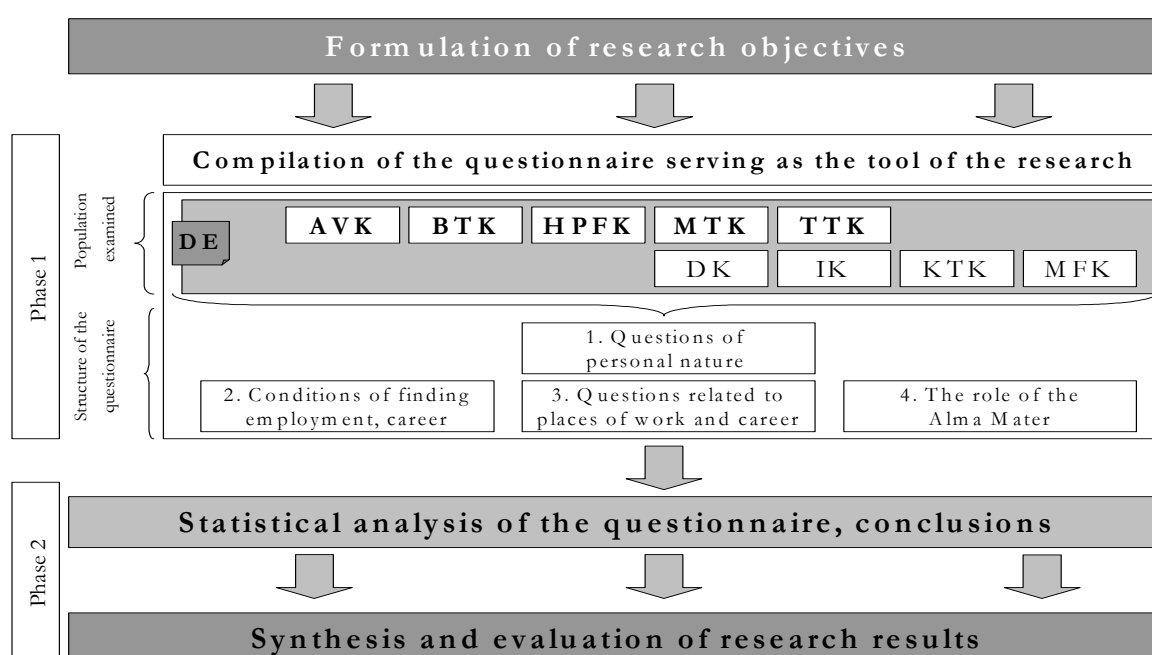
2. RESEARCH MATERIAL AND METHOD USED

I have studied the competitiveness of the North Great Plain Region with the method referred to as secondary research in research methodology, i.e. I have analysed existing, published data (Tomcsányi, 2000) using the main indicators of regional competitiveness. Then, I applied a primary research method with the involvement of students graduated from the largest institution of higher education in the region, the University of Debrecen (DE). The questionnaire survey aimed at finding out what impacts the university has on competitiveness. The information to be collected for the research was based on statistical publications about the region (Regional Statistical Yearbooks of the Hungarian Central Statistical Office (HCSO), STADAT, T-STAR, HCSO pocket-books of Hungarian regions, HCSO statistical information on counties, ATI data by the Centre for Regional Research of HAS, data from the Information Department of the Ministry of Economy) and a questionnaire compiled by the author of this paper.

2.1 Description of the Questionnaire Survey

The research results can be generalized with the correctness prerequisite for a scientific study only at the level of the hypothesis. However, we can make the plausible hypothesis that the correlations established may be useful and applicable at other universities with similar conditions.

Figure 1
Research programme



Source: Own compilation.

There are two separate phases in the research programme. In the *first phase* I compiled a questionnaire related to the objective of the research that was used to study the employment conditions of students graduated from the University of Debrecen. I studied the information on places of work and career, and I also surveyed what opinions were formed concerning the Alma Mater and the factors that influenced the opinions. The questionnaire also included questions of personal nature (e.g. gender, age, marital status), however, the analysis of the answers provided for these questions are out of the scope of this dissertation.

When the research sample was selected, a main issue was to involve students from faculties that offer majors conforming to the system of the Bologna process. The research involved 9 out of the 15 faculties of the University of Debrecen, namely: Faculty of Agroecconomics and Rural Development (AVK), Faculty of Arts (BTK), Conservatory of Debrecen (DK), Hajdúböszörményi College Faculty of Education (HPFK), Faculty of Informatics (IK), Faculty of Economics and Business Administration (KTK), Faculty of Agriculture (MTK), College Faculty of Engineering (MFK), and Faculty of Sciences (TTK).

In the course of the survey taking place between December 2005 and February 2006 4731 questionnaires were circulated of which 1314 were returned and could be evaluated. We received data from the student administration offices of the faculties mentioned above on the students graduating between 2000 and 2005. The questionnaires were sent out based on these data. The questionnaires were accompanied by a guide on how to complete the questionnaire as well as a stamped and self-addressed envelope. My original plan was to carry out a comparison related to the dates, however, the yearly distribution (*Annex 2*) of the completed questionnaires did not provide sound grounds for reliable comparisons. 39.1 p.c. of the respondents (515 persons) graduated in 2005, 21.9 p.c. (288 persons) graduated in 2000. We received responses from student graduating in 2001 (114 persons), in 2002 (110 persons), in 2003 (145 persons), and in 2004 (142 persons). For the purposes of the assessment the respondents from all the five years in question constituted the sample as one set. In order to ensure the reliability of data we studied only the faculties where the proportion of returned questionnaires exceeded 20 p.c. Therefore, we analysed the responses from students graduated from five faculties (AVK, BTK, HPFK, MTK, TTK) (*Figure 9*). Consequently, the number of entries in the sample was N=1172.

The second phase of the research served to assess and analyse the data statistically in accordance with the objectives of the study.

2.2 Methods applied in the study

In order to define the spatial location, distribution, and structure of variables, we used *descriptive statistical processes*, which processes mean the summarization of data. The evaluation of the data resulting from the surveys and experiments is aimed at the summarization of the data, and then, based on the data, we will establish conclusions in relation to the population. The tools for this are *statistical tests* or *statistical hypothesis testing*, which serve to verify certain assumptions (hypotheses) related to the population.

Out of the two basic types of statistical hypothesis tests I have conducted the non-parametric tests, in the case of which the distribution of test statistics are independent from the basic distribution (the distribution of variables) for the null hypothesis. I have applied the Kruskal-Wallis and chi-square tests of the non-parametric tests.

The *chi-square test* is one the simplest statistical methods to test whether the correlation between two variables are "real". The chi-square test uses ordinal and nominal data classified into categories and it is applied to test hypotheses related to distribution (percentage) (Hancz, 2004). This method alone does not indicate the strength of a correlation, it only shows whether there is actual correlation between variables at a specific level of probability. The data elements of the study are included in the *contingency tables*. These tables are used to study the correlations between two variables. In the course of the analysis we focus on the cells of the table. These cells provide the information on the relationship between the two variables, because the cells display the values of all combinations of the two variables (rows and columns). The percentage and numeric values in the cross table are not suitable to describe the relationship between the two variables. The independence of the row and column variables are tested by the chi-square method. The other non-parametric test used for the study was the Kruskal-Wallis test that is applied to compare three or more sets.

When rendering the results I mostly used graphical presentations to display the data and correlations. Graphical presentations are suitable to display a great number of data, and, in addition, they are quick and expressive (Petres – Tóth, 2004). In the paper I used a *bar graph* to express the frequency distribution of qualitative variables. The horizontal axis represents classes, while the vertical axis represents absolute or relative frequencies.

3. THE MAIN RESULTS OF THE DISSERTATION

3.1 The hypotheses of the questionnaire survey and the evaluation

The feedback from the labour market has increasing significance due to the facts that the number of students in higher education is growing, the roles and tasks of higher educational institutions are changing, and there is competition among universities. The image of an institution is influenced by the opinions formed in connection with the institution (*Malbotra, 2002*). The opinions of those are significant who have direct contacts with the university or college concerned. It means students and companies that will offer employment opportunities.

The research objectives of the questionnaire survey and the corresponding responses have been summarized in three categories - in accordance with the structure of the questionnaire but not taking into consideration the part for personal data.

3.1.1 The conditions for finding employment

In the course of studying the conditions for finding employment I examined where and how graduated students can find employment. In relation to graduates I studied whether students find employment that corresponds with their education, and how the university can help them find jobs (job fairs, study contracts, professional training etc.). In order to study the regional role of universities and colleges, it is important to map the vicinity of the institutions and to analyse the needs of the labour market.

Students at the University of Debrecen come mainly from the Eastern part of the country, which means the 'radius of attraction' of the institution is limited. 64.7 p.c. of the respondents participating in the study stated that their permanent residence was in the North Great Plain Region, 16.5 p.c. came from the North Hungary Region, and 10.2 p.c. came from Budapest (BP). As regards counties, Hajdú-Bihar County (HBM) accounted for 42 p.c. as the permanent residence of students, Szabolcs-Szatmár-Bereg County (SZSZB) 18.3 p.c., and Borsod-Abaúj-Zemplén County (BAZ) 12.3 p.c.

I have compared the data of residence with the responses related to places of work (*Table 1*). The ranking of the counties does not change, it is only Budapest where the figure for employment increases (13.7 p.c.). More than half of the respondents (54.5 p.c.) have found employment in the North Great Plain Region.

Table 1
Distribution of graduates by places of residence and work (county)

County	Hajdú-Bihar	Szabolcs-Szatmár-Bereg	Borsod-Abaúj-Zemplén	Budapest
Place of residence	42.0 %	18.3 %	12.3 %	10.2 %
Place of work	36.7 %	14.6 %	10.2 %	13.7 %

Source: Own compilation.

The labour market position of higher education in the North Great Plain Region is relatively unfavourable as it focuses on teacher training, while employment opportunities in this sector are stagnating or decreasing. Education for the dynamically developing industry and services is missing or not significant (*Kakukné, 2002*).

According to my hypothesis the faculty where students graduated from the University of Debrecen receive their degrees influences where they can find employment.

I have studied in which county the largest proportion of graduates had found employment (*Table 2*). Students from the faculties involved in this study found employment mainly in Hajdú-Bihar County after receiving their degrees, however, the ratio of finding employment varies by faculties. Almost 60 p.c. of graduates from the AVK, Centre of Agricultural Sciences managed to find jobs in Hajdú-Bihar County. This ratio is around 40 p.c. in the case of MTK and BTK, while the proportion of those finding employment in the case of HPFK and TTK is around 30-35 p.c. Based on the data it is mainly those with a degree in the agricultural field that find jobs in the county. Only a smaller proportion respondents from the School of Independent Faculties have found employment in this area. One-fourth of graduates from the Faculty of Arts and the Faculty of Sciences found employment in Budapest. The second largest proportion of students from the other three faculties involved in the study found employment in Szabolcs-Szatmár-Bereg County. The third place is Borsod-Abaúj-Zemplén County and Budapest.

Table 2
Employment ranking of graduates broken down by counties

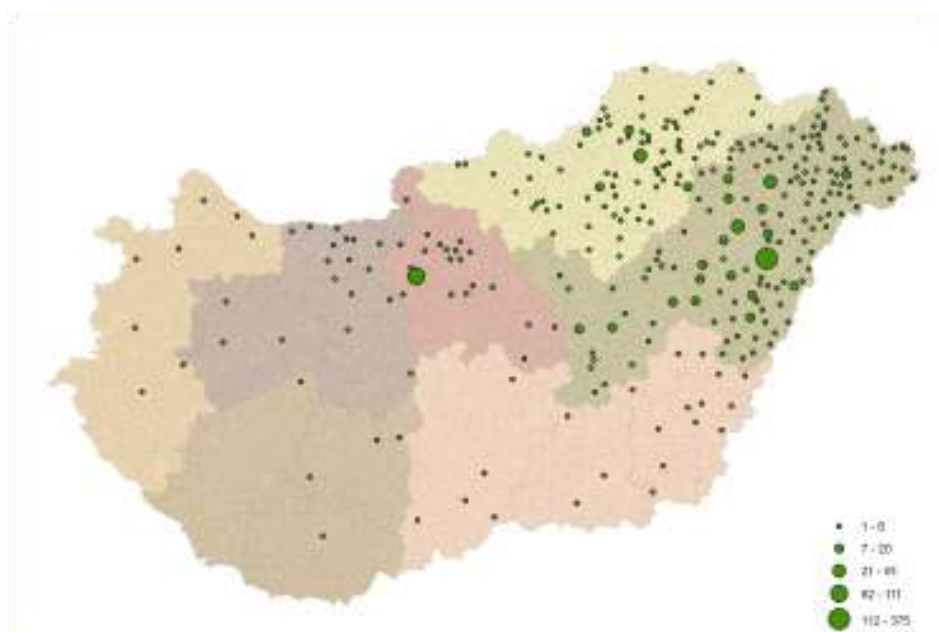
Faculty	Place of work		
	I.	II.	III.
AVK	HBM 57.8%	SZSZB 12.6%	BP 12.1%
MTK	HBM 43.8%	SZSZB 16.1%	BAZ 9.8%
BTK	HBM 40.5%	BP 25.8%	SZSZB 8.9%
HPFK	HBM 36.8%	SZSZB 24.9%	BAZ 17.0%
TTK	HBM 30.7%	BP 25.7%	BAZ 13.4%

Source: Own compilation.

If we analyse the results by faculties, we can see that more than 50 p.c. of graduates from AVK find employment in Hajdú-Bihar County, while the proportion of those engaged in Budapest and Szabolcs-Szatmár-Bereg County is almost the same. Students from MFK and HPFK received employment, in addition to Hajdú-Bihar County, in Szabolcs-Szatmár and Borsod-Abaúj-Zemplén counties, however, the proportions are not identical. The larger share of students from the classical faculties of arts and sciences (BTK, TTK) find employment in Hajdú-Bihar County; one-fourth of them is employed in Budapest, therefore, they are the ones leaving the region in the highest number.

The geographical distribution of the places of work of graduates (*Map 1*) is characterised by the fact that fresh graduates are employed mainly in the region hosting the University in Debrecen and its neighbouring areas, i.e. North-East Hungary. The high density that can be observed in and around Budapest indicates a higher number of employment.

Map 1
Geographical distribution of employment of graduates



Source: Own compilation.

I applied the Kruskal-Wallis test to answer the question whether the faculty where the students graduate from significantly influences which county/region they find employment in. According to the results of the research, the faculty where the student concerned graduate from does have significant influence ($p < 0,05$) on the place of employment. My hypothesis has been verified: there is a significant difference between graduates from each faculty as regards the counties where they find employment.

The success of students in the labour market has increasing importance for institutions of higher education. Therefore, the institutions pay more attention to career development and helping find employment. According to my second hypothesis, **the place (faculty) where students graduate from influences the way students search for employment.**

Most graduate students send a CV to their prospective place of work or apply in person (24.1 p.c.). Using contacts (22.2 p.c.) and responding to advertisements (17.98 p.c.) were also significant methods applied to find employment. Concluding study contracts is not relevant, and even though job fairs have a tradition in Debrecen, they are not widely used (5.7 p.c.), and nor are recruiting agencies (3.4 p.c.). (*Table 3.*)

Table 3
Employment ranking of graduates broken down by counties

Job search/Faculty	AVK	BTK	HPFK	MTK	TTK
Job fairs	6.2%	5.3%	2.4%	6.4%	11.4%
Classified advertisements	21.2%	18.7%	13.4%	18.1%	21.6%
Personal contacts	20.6%	24.8%	23.9%	20.2%	19.8%
Study contract	0.8%	0.3%	1.7%	1.4%	2.3%
Sending out CV's	21.7%	28.2%	24.3%	20.9%	25.1%
Recruiting agency	5.5%	5.3%	0.8%	4.9%	4.1%
Labour Centre	1.3%	8.2%	15.4%	15.9%	8.2%
Professional training	3.9%	6.9%	15.1%	8.8%	4.1%
Other	6.2%	2.4%	3.0%	3.2%	3.4%

Source: Own compilation.

Examining the responses by faculties we find that the largest share of students from all the five faculties have found employment by sending out CV's and using personal contacts. In the case of AVK and MTK the proportion of students trying to find jobs with the help of personal contacts and classified advertisements is the same as of those sending out CV's. It is a characteristic of HPFK that the place where students perform their professional training will become their first place of work, and a great number of them use the services of the Labour Centre. Study contracts are the least relevant in the case of BTK (0.3 p.c.) the reason for which is that the number of teachers trained is too large compared to employment opportunities, and a small proportion of these students find jobs corresponding to their qualifications. Half of the students from this faculty (53 p.c.) find employment by using personal contacts and sending out CV's. The largest share of those finding employment at job fairs are the graduates from TTK (11.4 p.c.). Nearly 5 p.c. of graduates from AVK, BTK and MTK have found employment with the help of recruiting agencies.

With the help of a hypothesis test (Kruskal-Wallis test) I checked whether the method for searching for jobs is influenced by which faculty students graduate from. *Based on the results of*

the research, my hypothesis has been verified, the faculty where students graduate from does have a significant influence ($p < 0,05$) on the selection of the methods they use to search for jobs.

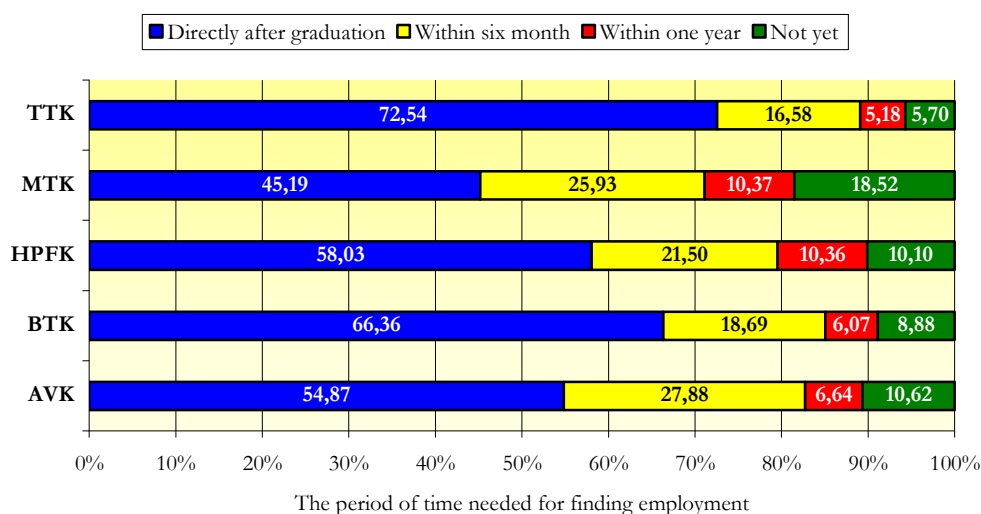
The recognition of an institution is influenced by how successful their graduates are on the labour market. The more up-to-date and advanced knowledge students have, and the more practical skills they have, the easier they can find employment. **My starting point was the assertion that the time period until employment is found is influenced by which faculty of the University of Debrecen the respondents have received their degrees.**

The results of the test conducted for the whole population indicate that more than half of the graduates (59.4 p.c.) became employed right after graduation, however, 10.7 p.c. of them have not found employment ever since. 22.1 p.c. of fresh graduates found employment within 6 months, while 7.7 p.c. became employed within 12 months after graduation.

In the European Union less than half of fresh graduates manage to find a job within one year after graduation. As regards employment rate within the first year Hungary ranks first (87 p.c.) followed by the Netherlands (73 p.c.), Denmark (62 p.c.), Germany (61 p.c.) and Great Britain (61 p.c.). In other member states the employment ratio of fresh graduates within the first year after graduation is less than 50 p.c. (EUROSTAT, 2004).

I studied the periods until finding employment by faculties (Figure 2). 89 p.c. of students from TTK, 85.1 from BTK, and 82.8 p.c. from AVK managed to find a job immediately or within 6 months after graduation. These figures are 79 p.c. and 70 p.c. in the case of students graduated from HPFK and MTK respectively.

Figure 2
The period of time needed for finding employment



Source: Own compilation.

As regards the period of time needed for finding employment, it is the students from MTK who are in the most unfavourable situation compared to other faculties participating in the study as more than half of them cannot find employment immediately after graduation. A strikingly high number (18.52 p.c.) is still in search of a job after one year. 10 p.c. of students graduated from AVK and HPFK did not succeed to find employment, while this ratio is 8.88 p.c. for BTK and 5.7 p.c. for TTK. If we compare these results with the results related to the locations where employment is found, we can see that a longer period of time is needed to find employment for students from faculties that search for jobs in the North Great Plain and North-Hungary regions. My study did not include tests to determine whether those unemployed had actually searched for jobs or they voluntarily did not take up any employment.

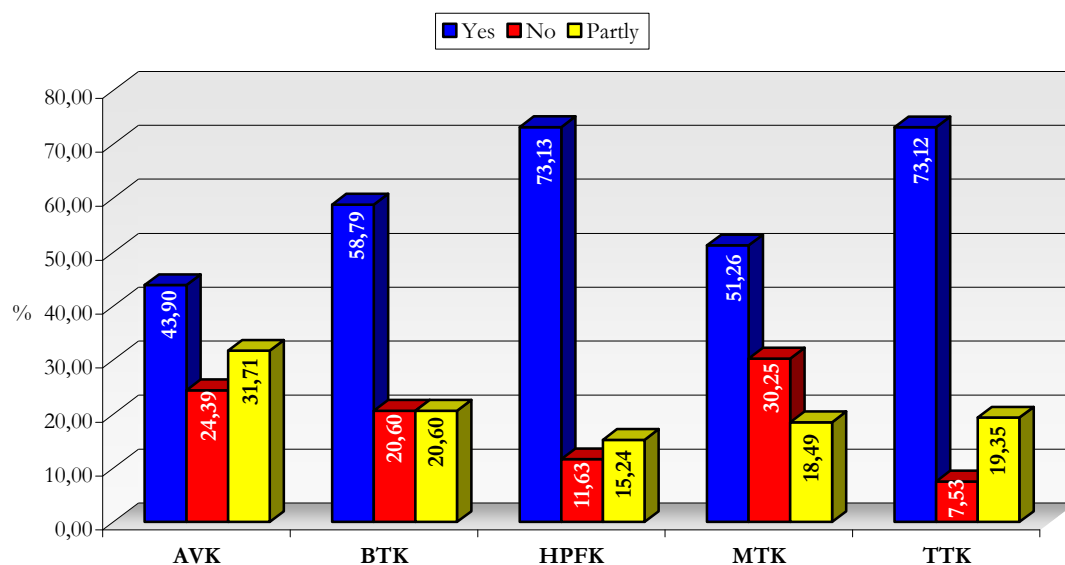
My hypothesis has been verified: the Kruskal-Wallis test conducted for the whole population (5 faculties) ($p < 0,05$) proved that the faculty students graduate from significantly influences how fast they can find employment.

While the question 'what would I like to be' is the most important for students applying to study at an institution of higher education, it is replaced by 'what could I be' after graduation. It is important how the level of training of graduates searching for jobs corresponds with the needs of employers. Supply and demand are not completely in line with one another, which could be improved by a better flow of information between the stakeholders and also by the correction of the training structure, i.e. training should be more in harmony with the objectives and requirements of economic development (Kakukné, 2002).

After graduation not everyone can or intends to find employment in their profession (Falusné, 2002). In addition to the demand for a profession in the labour market, it is also important how the knowledge generated during the training period can be exploited, or how specific the knowledge and skills are. **According to my hypothesis the faculty where students graduate from influences what degree the employment found corresponds with the training of the students.**

My research results show 60 p.c. of students graduated from the University of Debrecen find jobs that correspond with their education. The proportion of those whose qualification partly corresponds with the employment found (21.2 p.c.) is similar to those whose educational background does not correspond with the job found (18.8 p.c.). Examining the research results by faculty we find (Figure 3) that students graduated from TTK and HPFK have found jobs corresponding with their qualification at a ratio higher than the university average (73.1 p.c.).

Figure 3
Ratio of employment in relation to qualifications by faculties



Source: Own compilation.

More than half of the students from BTK and MTK find employment that is in line with their university degree. Out of the two faculties of the Centre of Agricultural Sciences, it is MTK that has the most students whose jobs do not correspond with their qualifications (30.25 p.c.), while 31.7 p.c. of the graduates from AVK have jobs that are partly in line with their university degrees. In the case of BTK the proportion of those whose qualification partly corresponds with the employment found is the same as of those whose educational background does not correspond with the job found (20.6 p.c.). The hypothesis test has shown that there are significant differences between the faculties as regards finding employment corresponding to qualifications.

My hypothesis has been verified: the Kruskal-Wallis test conducted for the whole population (5 faculties) ($p < 0,05$) proved that the faculty students graduate from significantly influences whether they can find employment corresponding to their qualifications.

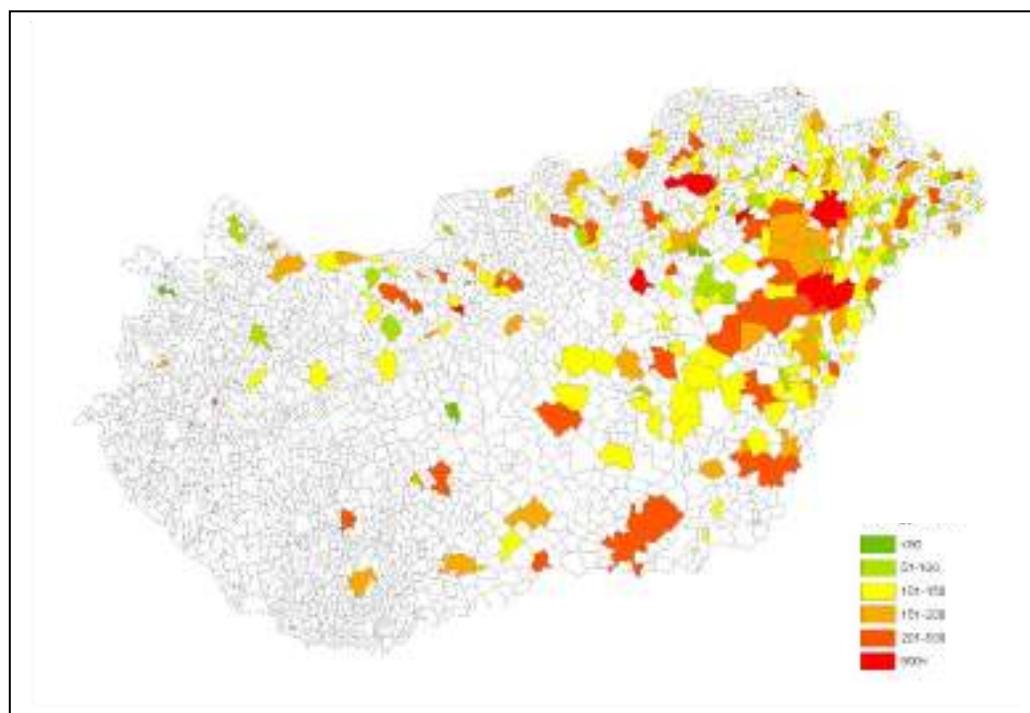
3.1.2 Hypotheses related to places of work and career

By analysing the responses to the questionnaire I studied what career opportunities the graduates from the University of Debrecen have, what positions they may have, and what income of a recently graduated student can have.

One of the most interesting aspects of the survey was the question of salaries. I assumed that the reason for young, educated professionals leaving the region is that much higher salaries

are offered for them in more developed regions, therefore a dominant factor in the selection of a place of work is the income that can be generated (*Map 2*). The analysis of salaries completely verified this hypothesis.

Map 2



Employment and salaries by location

Source: Own compilation.

All this underlines that less developed regions may advance only if they provide an

environment that is attractive for the young and trained labour force in order to direct their attention from Budapest and Transdanubia to the Eastern regions (*Kakukné, 2002*).

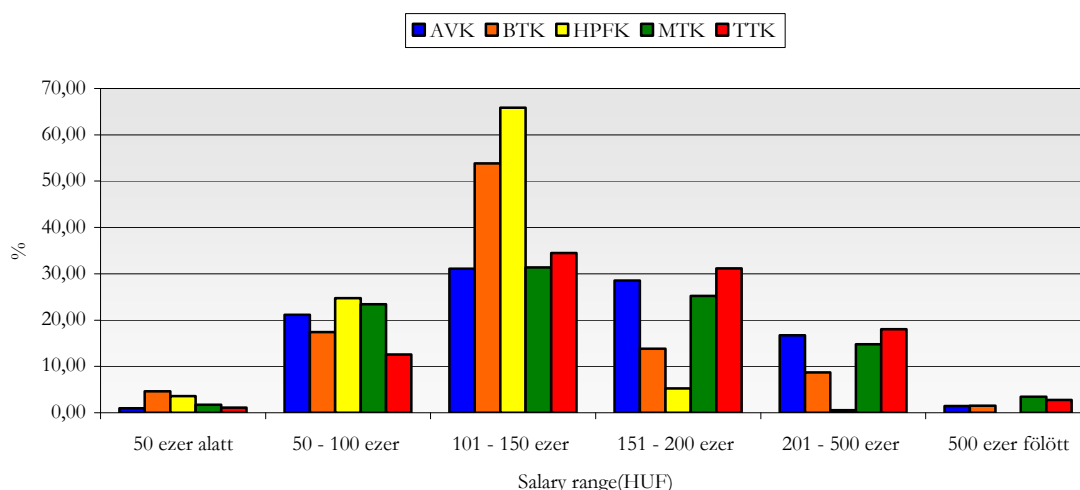
Concerning average monthly salaries there are great differences as regards regions, level of education, position, and employers (*Net7*). The income of a young graduate at the beginning of his/her career is influenced by several factors. In addition to the general level of incomes in a region, the demand for a specific profession is also an important factor. Consequently, there may be significant differences between the incomes of graduates from the University of Debrecen depending on which faculty they have graduated from.

According to my fourth hypothesis the faculty where students graduate from influences what salaries they are offered.

Most graduates involved in this study have a monthly salary level of HUF 100-150 000. The average monthly gross salary of graduates from the University of Debrecen exceeded the average monthly salary of those employed in the region in 2004 (HUF 115 447). This value is 18 p.c. lower than the average monthly gross salary of those employed full-time in Hungary (*KSH, 2004*).

Graduates in the two extreme ranges (less than HUF 50000 and more than HUF 500000) is less than 5 p.c. (*Figure 4*). The lower extreme (less than HUF 50000) is more significant in the case of students from BTK (4.62 p.c.) and HPFK (3.58 p.c.), while the upper extreme (more than HUF 500000) is more significant in the case of students from MTK (3.48 p.c.) and TTK (2.73 p.c.).

4figure
Income of graduates by faculties.



Source: Own compilation.

More than half of the students from AVK have a salary range of HUF 50-150 000, while 16.75 p.c. of them have a salary range of HUF 201-500 000. 71 p.c. of students receiving their degrees from BTK have a monthly salary range of HUF 50-150 000, and only 10 p.c. of them have salaries higher than HUF 150 000. 90 p.c. of students with a college-level degree issued by HPFK have a salary range of HUF 50-150 000. More than half of the students graduated from MTK, and 47 p.c. of the students from TTK have a salary range of HUF 50-150 000. One-third of the students receiving their degrees from the Faculty of Sciences, and one-fourth of the graduates of the Faculty of Agriculture have a salary range of HUF 150-200 000. Salaries over HUF 200 000 can only be boasted by 18.2 p.c. of graduates of MTK and 20.7 p.c. of TTK. The salary ranges are the closest in the case of the two agricultural faculties, the differences are not significant.

The Kruskal-Wallis test has verified my hypothesis for the whole population, i.e. the five faculties. ($p < 0,05$) The faculty where students graduate from significantly influences the level of income of the respondents.

It is very exciting for an institution to examine how the professionals they train can achieve their goals after graduation, how the knowledge capital accumulated can be exploited, and how

the social capital of the lecturers and students of a university can help graduates advance (Ferenczi, 2003). One of the indicators to measure a career and the exploitation of knowledge is the position a person fills.

In order to fill a position, including leading positions, employers precisely define their requirements: education, skills, psychical and physical qualities (Czuczor, 2006). Professional experience also has increasing importance. Therefore, it is significant whether students receive practical training in addition to the advanced professional knowledge they generate, and it is also important what gender of students are trained in a larger number.

According to my hypothesis the faculty where students graduate from influences what positions they fill after graduation. 1.4 p.c. of graduates are managing directors (Table 4). They are the ones who manage one-person-enterprises or smaller companies. Such positions are filled mainly by students with a degree in the agricultural field (MTK 3.4 p.c., AVK 2.4 p.c.). The ratio of top managers is low, i.e. 4 p.c. at university-level, which is normal, as these young people graduated only a few years ago.

Table 4
The ratio of positions filled by graduates from various faculties

Faculty	The ratio of positions filled by graduates (%)				
	AVK	BTK	HPFK	MTK	TTK
Managing director	2.4	1.0	0.6	3.4	0
Top-level manager	7.3	2.6	1.7	5.2	3.2
Senior-level manager	9.8	5.8	5.4	14.7	8.6
Junior-level manager	3.9	3.1	5.1	6.9	5.4
Non-managerial position	72.7	81.7	82.8	60.3	73.1
Other	3.9	5.8	4.5	9.5	9.7

Source: Own compilation.

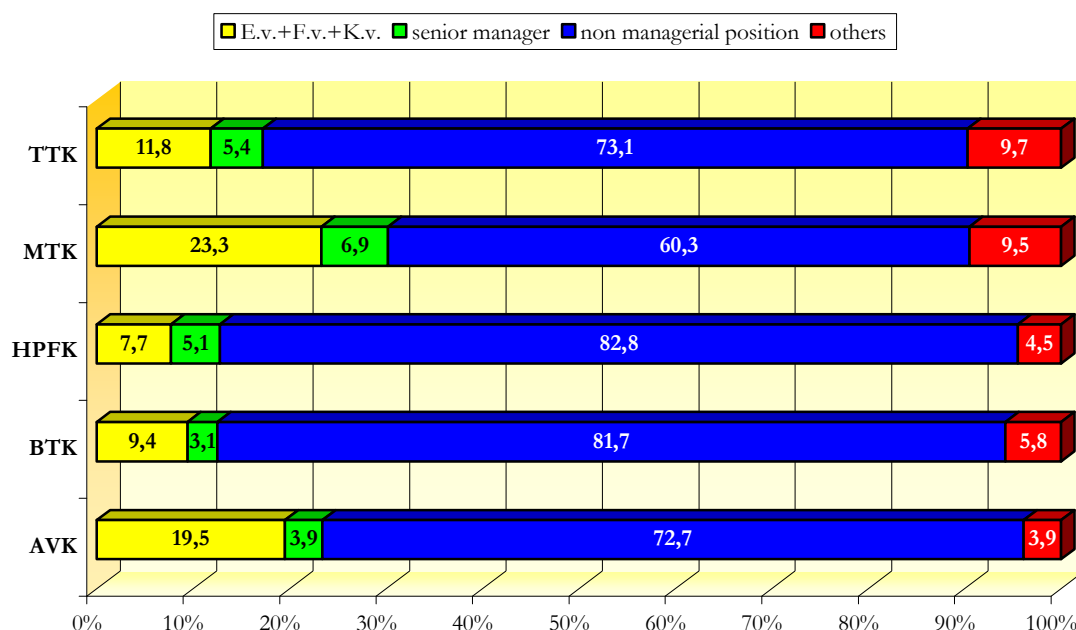
Positions with more responsibilities are filled mainly by graduates from the agricultural centre, however the ranking of the two faculties have changed. 7.3 p.c. of graduates from AVK are top-level managers, while this ratio in the case of MTK is 5.2 p.c. The largest share of senior-level managers come from MTK (14.7 p.c.). Such positions are filled by 9.8 p.c. of AVK graduates and 8.6 p.c. of TTK graduates. The average value at the level of the university is 8.87 p.c.

An average of 14.3 p.c. of graduates from the University of Debrecen has managed to take up managerial positions. 23.3 p.c. of graduates from MTK, 19.5 p.c. from AVK, 11.8 p.c. from TTK, 9.4 p.c. from BTK, and 7.7 p.c. from HPFK are top-level managers /F.v./, senior-level managers /K.v./, or managing directors /E.v./. A larger share of graduates from the university are junior-level managers (an average of 4.8 p.c.) than top-level managers (Figure 5).

In this category the largest proportion of graduates come from MTK (6.9 p.c.) followed by TTK (5.4 p.c.) and HPFK (5.1 p.c.).

74.1 p.c. of graduates are employed in non-mangerial positions. This is true mainly in the case of students from BTK (81.7 p.c.) and HPFK (82.8 p.c.) followed by TTK (73.1 p.c.), AVK (72.7 p.c.), and MTK (60.3 p.c.).

Figure 5
Proportion of positions filled by graduates from the University of Debrecen by faculties



Source: Own compilation.

In summary we can state that graduates from the Faculty of Agriculture are the most successful in their careers as one-third of them fill managerial positions. Students from BTK and HPFK are employed mainly in non-mangerial positions, and only 12 p.c. of them have taken up managerial positions.

My hypothesis has been verified: the Kruskal-Wallis test conducted for the whole population (5 faculties) ($p < 0,05$) proved that the faculty students graduate from significantly influences what positions they fill.

3.1.3 The Role of the Alma Mater

The quality assurance of education is the responsibility of each faculty and department of the university. The management and decision-making bodies of the university have expressed their commitment to quality assurance. The university has prepared its Quality Assurance Manual in accordance with EU norms and the objectives of the Bologna Process. The self-assessment of the University of Debrecen for the purpose of accreditation has been prepared based on this

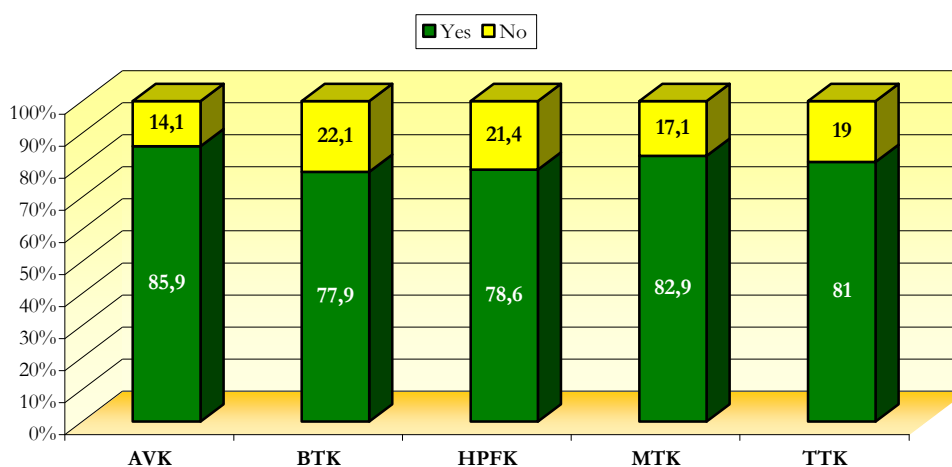
document. Higher educational institutions provide the knowledge they consider important, and they shape and develop the skills professionals can apply to solve problems they encounter at their places of work (*Ferenczi, 2003*). For this approach it is substantial to monitor the feedback from employed graduates and to consider the opinion they form on various factors of the educational process.

The professional recognition of the University of Debrecen is high. Most graduates consider the knowledge received useful and applicable. According to my hypothesis, **the faculty where students graduate from influences whether they would choose again the University of Debrecen as their place of study.** The responses are also influenced by how soon graduates can find employment and how much the employment corresponds with their qualifications. Other factors include the income they have, what career opportunities they have in their profession, and how useful and applicable they consider the knowledge they generated at the university.

80.9 p.c. of respondents answered 'yes' and 19.1 p.c. answered 'no' to the question: "Would you choose the University of Debrecen again as your place of studies?" (*Figure 6*).

Out of the five participating faculties it is the two agricultural faculties, MTK (82.9 p.c.) and AVK (85.9 p.c.) whose students are the most satisfied with their Alma Mater, as the largest proportion of affirmative responses came from them. More than 80 p.c. of graduates from TTK said 'yes', and four-fifth of BTK and HPFK graduates would study choose again the University of Debrecen.

Figure 6
The proportion of graduates who would choose again the University of Debrecen as their place of studies



Source: Own compilation.

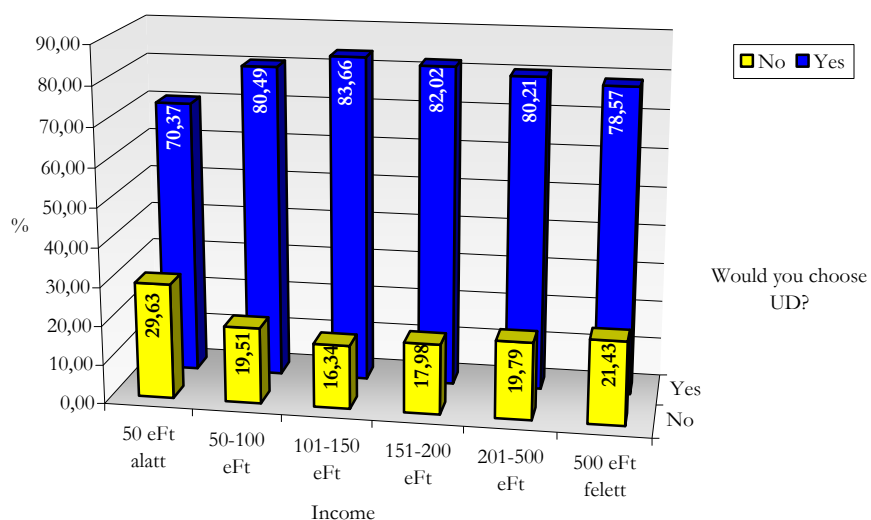
I have determined that the faculty where students graduate from does not influence the answers of respondents. The hypothesis test (Kruskal-Wallis test) ($p > 0,05$) verified that the answers of respondents are not influenced by which faculty they graduated from.

I used correlation tests to analyse the factors that contributed to the satisfaction of students, and what factors influenced their responses. I studied the variables of employment opportunities (see in detail above) in relation to the level of satisfaction of students. I examined whether the *income of respondents*, the *period of time needed to find employment*, and the *employment corresponding with qualifications* influenced the answers of graduates.

The real examination students have to take comes after graduation. It is the labour market that decides what jobs and incomes are offered in exchange of the knowledge and skills students gain at the university. Therefore, my assumption was that, among other factors, the larger salary a fresh graduate is offered, the more satisfied he/she is with the university issuing his/her diploma. The higher the satisfaction level is, the more probable they would choose the university again as their place of studies. I studied the responses of students in relation to income ranges (Figure 7).

Figure 7

Does the income of students have influence on whether they would choose again the University of Debrecen



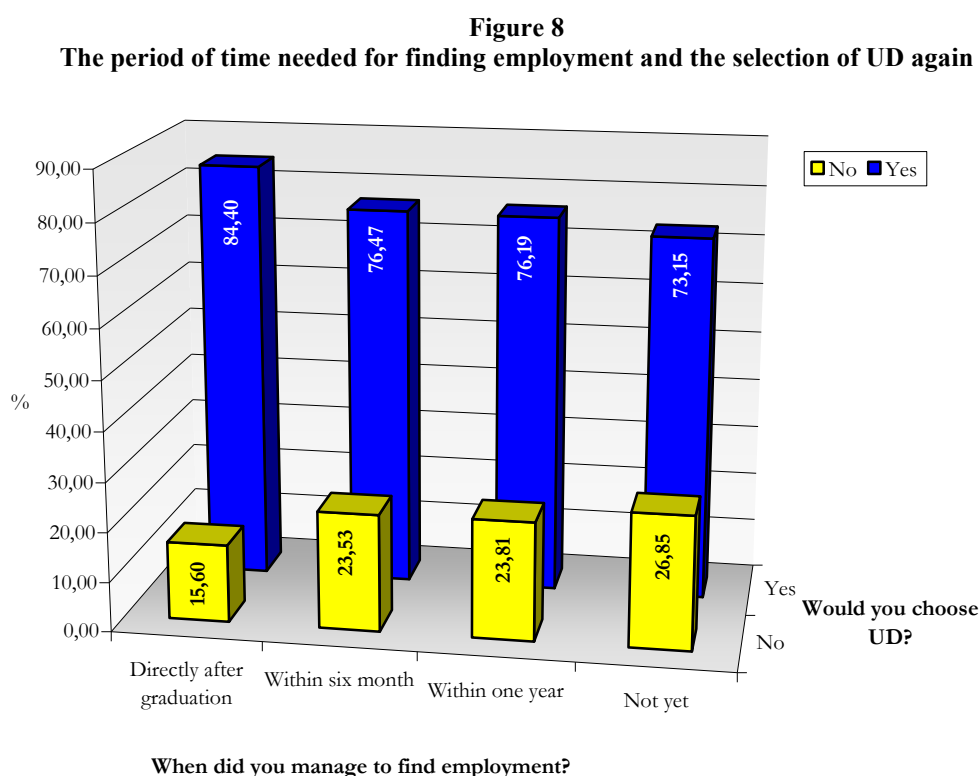
Source: Own compilation.

Graduates with monthly incomes in the range of HUF 100-150 000 are the most likely to choose the University of Debrecen again as their places of study (83.66 p.c.). In summary we can state there is no significant differences between the responses as regards salary ranges,

however, the proportion of those that would choose the University of Debrecen gradually decreases in the salary range exceeding HUF 150 000. Negative responses came mainly from graduates with incomes less than HUF 50 000 per month (29.63 p.c.), followed by those whose monthly income exceeds HUF 500 000 (21.43 p.c.). There is an increasing tendency among those in the salary ranges exceeding HUF 150 000 and less than HUF 100 000 who would not choose the university again.

I used the Kruskal-Wallis test to verify the hypothesis. The results of the statistical tests unambiguously proved that the level of satisfaction (i.e. positive response to the question related to the probability of choosing the University of Debrecen again) *is not influenced by the monthly income* young graduates have ($p > 0,05$). *Therefore, my hypothesis has not been verified.*

The level of a young graduate at the beginning of his/her career is influenced by how soon he/she can find employment after graduation. I studied (Figure 8) how the period of time needed for finding employment influences the responses to the question related to the probability of choosing the University of Debrecen again.



Source: Own compilation.

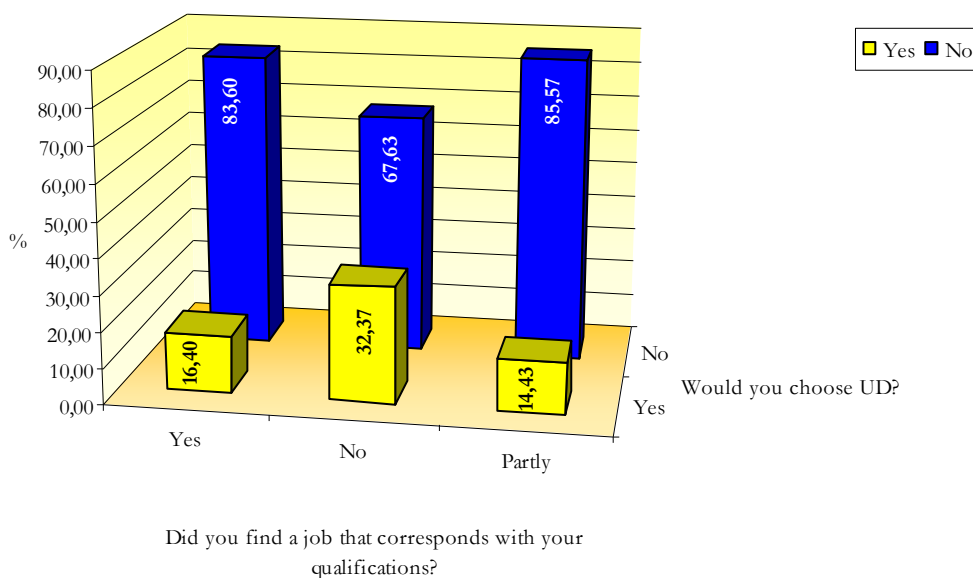
84.4 graduates who found employment soon after graduation would choose the University of Debrecen as their place of studies, while almost three-fourth of graduates who

have not found a job yet would choose again their old alma mater. 76.6 p.c. of those who found employment within 6 months or 12 months after graduation would prefer to choose UD.

The statistical test (Kruskal-Wallis test) verified that the period of time needed for finding employment significantly influences ($p > 0,05$) whether graduates would choose the University of Debrecen again.

The value of a university degree depends on whether there is a need for a specific qualification, knowledge in the labour market, in other words, can a young graduate find employment in the field of his/her profession. 60 p.c. of graduates from the University of Debrecen can find jobs corresponding to their qualifications. 85.57 p.c. of those who found employment corresponding in part to their qualifications and 83.6 p.c. of those who found employment corresponding to their qualifications would choose again their old higher educational institution (Figure 9). 16.4 p.c. of those who found employment corresponding to their qualifications would choose another institution of higher education to study. 14.43 p.c. of young graduates at the beginning of their careers who found employment corresponding only in part to their qualifications, and 32.37 p.c. of those whose place of work is not at all in line with their qualifications would not choose the University of Debrecen to study.

Figure 9
Employment corresponding with the qualifications of students



Source: Own compilation.

The test carried out with the Kruskal-Wallis method verified that the employment corresponding with the qualifications of students significantly influences ($p > 0,05$) whether graduates would choose the University of Debrecen again to study. The level of satisfaction of graduates with the institution where they received their education depends significantly on how soon they managed to find a job, how

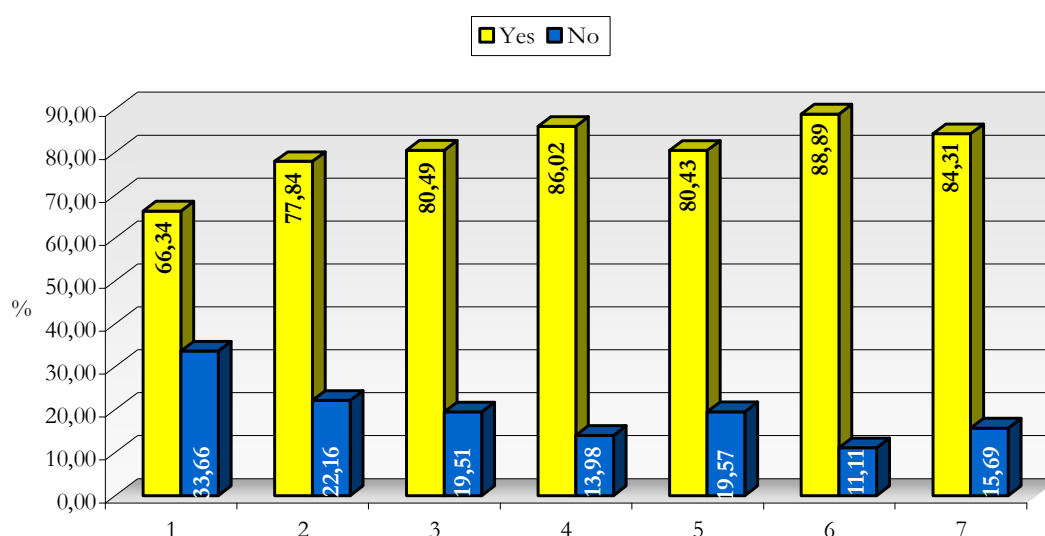
much these jobs correspond with their qualifications, but it does not depend on the income they generate.

The questions related to the role of the alma mater were aimed at exploring the personal perceptions and impressions of our graduates. We examined what they think, based on their brief experience in the labour market, of *their career opportunities in their professions* and *how useful and valuable they consider the knowledge they received at the university*. Within the study I also examined if there are any differences between the responses as regards various faculties, and whether graduates would choose the University of Debrecen again to study. My hypothesis concerning this issue is described above. Graduates marked their answers on a scale from 1 to 7 (where 1 means lowest extreme, and 7 means the highest extreme).

The statistical analysis has shown that the period of time needed for finding employment significantly influences the perception of career opportunities. I also studied how much monthly gross salaries influence perception data in this area. There was a significant difference detectable, i.e. the income influences how important respondents consider career opportunities in their professions. Graduates in higher salary ranges marked career opportunities as more important than those in lower salary ranges.

There is a strong correlation between the perception of professional career opportunities and the selection of the University of Debrecen anew (*Figure 10*).

Figure 10
Graphical presentation of the correlation between career opportunities and the selection of the University of Debrecen anew



Source: Own compilation.

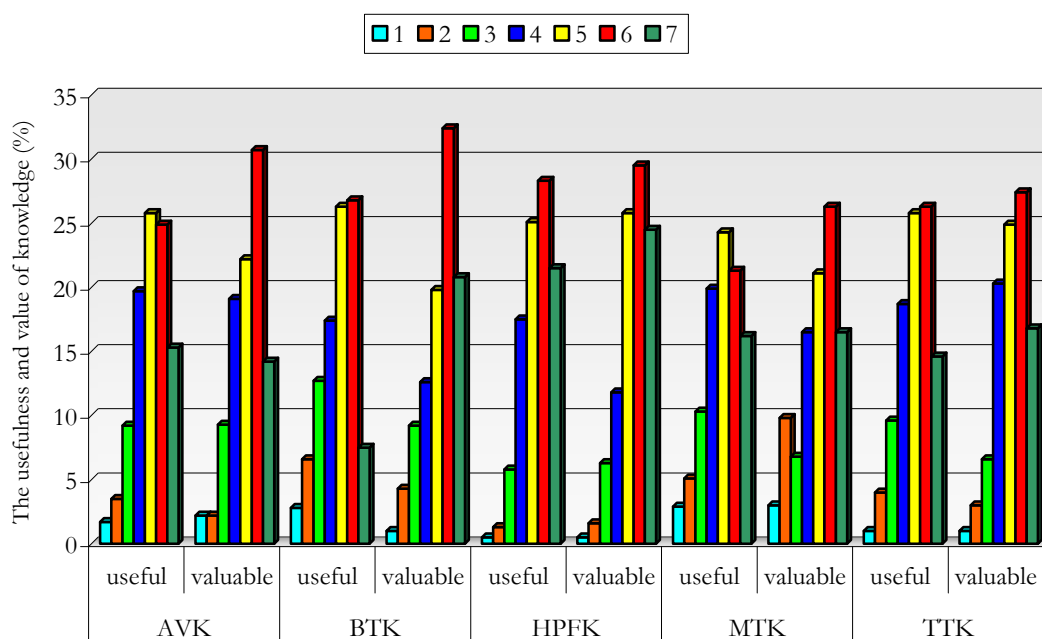
Near the upper end of the scale there is a higher proportion of those who would choose the University of Debrecen again, and the proportion answering in the negative is decreasing. The highest proportion of negative answers are from those with little career prospects.

The Kruskal-Wallis non-parametric test verified my assumption ($p < 0,05$) according to which the perception of career opportunities of respondents influences their answers to the question related to the probability of their choosing the University of Debrecen again.

The other set of questions related to the role of the Alma Mater served to examine how **useful and valuable graduates consider the knowledge they received at the University of Debrecen**. The usefulness, or applicability of the knowledge can be judged by the feedback from third parties. However, the value of the knowledge according to young people reflect how important it is for them. Consequently, if one finds the knowledge generated at the university useful, it does not necessarily mean he/she considers it valuable, and vice versa.

In the first step of the analysis I examined if there is a significant difference between the faculties as regards this issue. According to the findings of my hypothesis test (chi-square test), students graduated from different faculties of the university form different opinions ($p < 0,05$) on how useful and valuable the knowledge made available for them at the university is (Figure 11).

Figure 11
Appreciation of the usefulness and value of the knowledge made available at the university
- according to students from faculties participating in the study



Source: Own compilation.

Students from HPFK ($\bar{x}_{HPFK,usefulness} = 5,36$) consider the knowledge received at the university the most useful, and they are followed by the students from TTK ($\bar{x}_{TTK,hasznossag} = 5,02$). Concerning the two faculties of the Centre of Agricultural Sciences, almost the same proportion of students from AVK ($\bar{x}_{AVK,hasznossag} = 5,0$) and MTK ($\bar{x}_{MTK,hasznossag} = 4,86$) found the knowledge they generated useful. Students from BTK ($\bar{x}_{BTK,hasznossag} = 4,68$) considered the knowledge made available for them during their training the least useful.

The value of knowledge received is considered the most favourably by students from HPFK ($\bar{x}_{HPFK,value} = 5,47$). Among the students having received their degrees from the classic faculties of arts and sciences it is the students from BTK ($\bar{x}_{BTK,hasznossag} = 5,26$) who consider their knowledge more valuable than useful, while students from TTK ($\bar{x}_{TTK,hasznossag} = 5,14$) think the usefulness and value of their knowledge is just the same. Graduates from AVK ($\bar{x}_{AVK,hasznossag} = 5,06$) and MTK ($\bar{x}_{MTK,hasznossag} = 4,88$) consider the knowledge made available for them at the university the least valuable. Based on the results of Kruskal-Wallis test, the appreciation of the usefulness and value of the knowledge made available at the university significantly differs by faculties ($p < 0,05$).

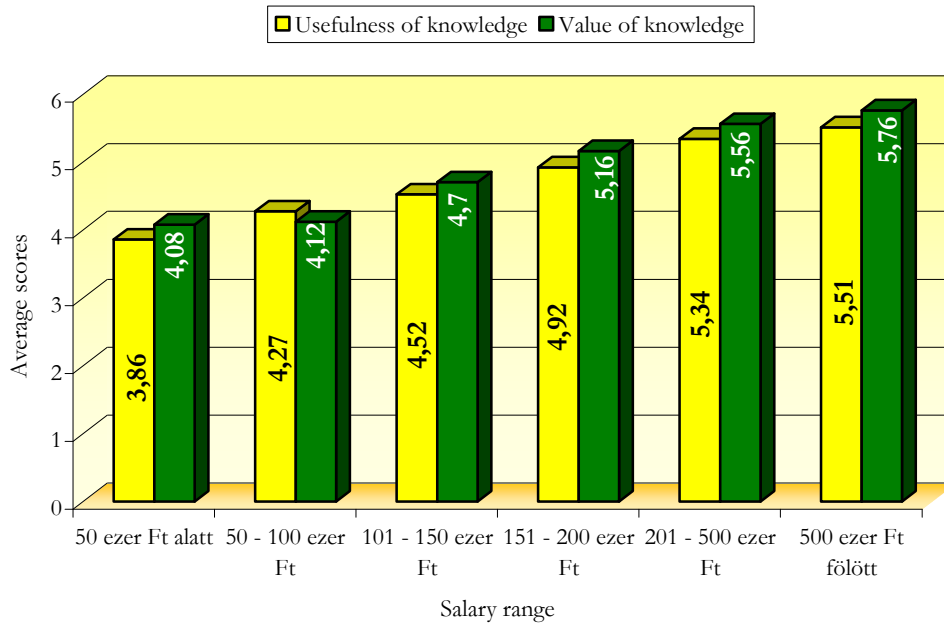
Using the Kruskal-Wallis test (*Figure 13*) I examined how much the period of time needed for finding employment and the level of income influence the responses.

The period of time needed for finding employment and the level of income significantly influences how useful and valuable graduates consider the knowledge received at the university. The average grade for the usefulness of knowledge is 5.16 in the case of those who found employment without any delay, while the value of the knowledge has received an average score of 5.23. The corresponding data received from those employed within six months after graduation: $\bar{x}_{t_useful,2} = 4,69$ and $\bar{x}_{t_valuable,2} = 4,93$; the scores from those finding employment within one year after graduation: $\bar{x}_{t_hasznos,3} = 4,44$ and $\bar{x}_{t_értékes,3} = 4,86$. The average scores of those who did not manage to find a job: $\bar{x}_{t_hasznos,4} = 3,78$ and $\bar{x}_{t_értékes,4} = 3,86$.

The appreciation of the usefulness and value of the knowledge is also influenced by the level of the monthly gross salaries (*Figure 12*). The average score for the two variables becomes higher as we move towards higher salary ranges. In the case of all salary ranges the knowledge was considered to be more valuable than useful. The situation was the other way round for

those with a salary range of HUF 50-100 000 who considered knowledge more useful ($x_{i_useful}=4,27$) than valuable ($x_{i_valuable}=4,12$).

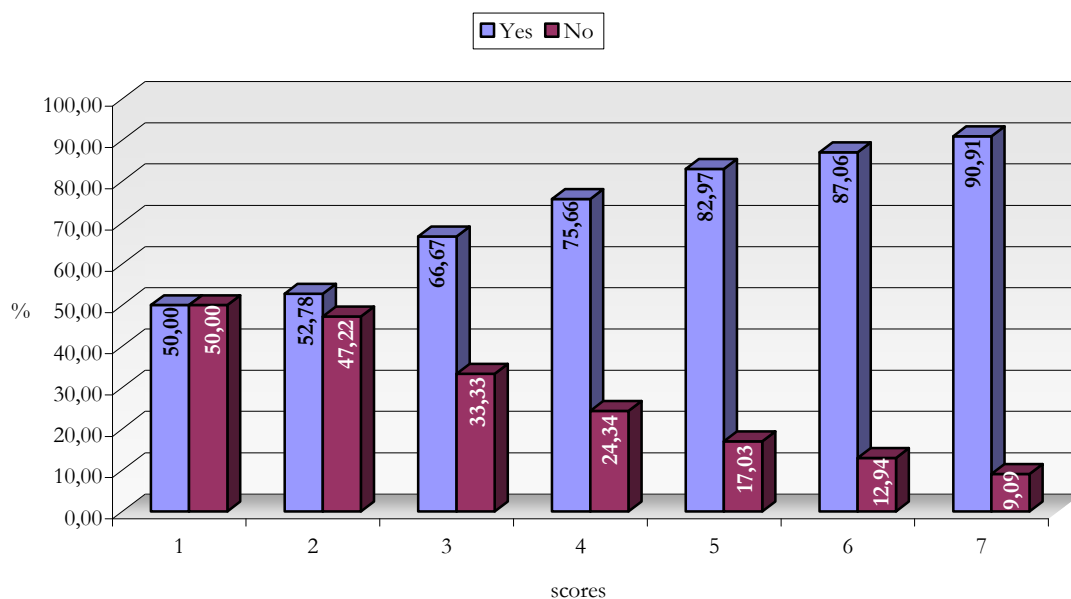
Figure 12
Average scores for the usefulness and value of the knowledge
in relation to salary ranges



Source: Own compilation.

The appreciation of the usefulness and value of the knowledge also significantly influences the answers to the question whether they would choose the University of Debrecen again as the place of their education. The correlation between the usefulness of knowledge and the selection of the university again is shown on Figure 13. A larger proportion of those who gave high scores for the appreciation questions tended to say 'yes' to the question related to the selection of the university again, while the scores are lower in the case of those who say 'no'. The more useful young graduates consider the knowledge, the more likely they would choose their old alma mater to study at.

Figure 13
Graphical presentation of the correlation between the usefulness of knowledge and the selection of the University of Debrecen again



Source: Own compilation

Based on the contingency test (*Table 14*) related to the analysis of the two variables 'the value of knowledge' and 'would you choose the University of Debrecen again', we can reach the same conclusion as what we had in the case of the usefulness of knowledge.

The higher a respondent scored the value of knowledge, the more likely we will receive a positive answer to the question related to the selection of the University of Debrecen again as the place to study at. The proportion of negative answers tends to be higher in the case of those who considered the knowledge received from the university less valuable. With higher scores the ratio of those saying 'no' is decreasing. Based on the significance value ($p > 0,05$) resulting from the chi-square test we can state that the two variables are not independent from each other, consequently, the appreciation of the value of the knowledge significantly influences whether the respondents would choose the University of Debrecen again.

Based on the research results I determined that my hypothesis has been verified in part. The results of the statistical tests unambiguously proved that the level of satisfaction with the university is not influenced by which faculty the respondents graduated from. The level of satisfaction, however, depends significantly on how soon they managed to find a job and how much these jobs correspond with their qualifications, but it does not depend on the income they generate. The statistical analysis has shown that the period of time needed for finding employment and the level of income significantly influence how important respondents

consider the career opportunities. Students from different faculties have different opinions on the usefulness and value of the knowledge made available at the university. However, the perception of the two variables significantly influences whether the respondents would choose the University of Debrecen again to study at.

3.2. Expectations, opinions of employers

Several analyses study the prospective employment and opportunities of graduates (*Balcsók, 2005; Czuczor, 2006; Fábri, 2001b; Györgyi, 2004; Majó, 2000; Rezsőfi 2004; Selmeczy, 2006; Teperics, 2002*), and in addition to the analyses, mutual contacts have been initiated between the players of the economy and scientific centres, institutions of higher education. Besides the common research, cooperation and consortiums established within innovation projects, universities also as training institutions have to find contacts with the players of the labour market. In addition to the questionnaire survey for students, another questionnaire survey entitled ‘Opinions of enterprises/institutions’ was conducted in the framework of phone interviews with the leader staff of GAMMAKONT Kft, TQ 2000 Bt, Hosszúpályi Kindergarten, APEH Hajdú-Bihar County and National Instruments.

The respondents mainly employ the graduates from the faculties studied in our research (AVK, BTK, HPFK, MTK, TTK). Small companies select their prospective staff on the basis of curricula vitae and with the assistance of contacts. The Kindergarten has notified that it selects its staff from the graduates from HPFK performing their professional training with them. The National Instruments select its techniques for publishing job vacancies in accordance with the duty and position to be filled among which the employment of young people recommended by contacts and found by recruitment agencies is also used. The respondents had the same position on that in addition to the professional and theoretical knowledge of applicants, they consider the high-level communicational and problem-solving skills highly important.

All the respondents consider the University of Debrecen as a dominant institution in the region in terms of the unique wide range of educational programmes, the scientific, intellectual basis and its activities in the field of research and development. In the answers to the question ‘how and in what directions the existing educational structure can be/should be developed’ the respondents recommended the enhancement of practical trainings, education of adequate knowledge of languages, improvement of communicational skills and syllabus developments in

collaboration with the players of the economy. These are the fields the development of which during the university education did not receive higher than the grade of four on a scale of one to seven, however, all the leaders of companies graded the university highly considering the professional approach, professional knowledge and the treatment of people. The value of knowledge received from the University of Debrecen was graded higher than its usefulness, however, the difference is not significant and both the variables received high scores (6,7).

Mainly the participation in postgraduate education, courses and trainings provided by companies (communicational and professional) is recommended to the new staff and financed as well, in the implementation of which companies rely on the assistance and cooperation of universities.

The answers to the questions and the positive approach show that the players of the economy are open to the dialogue and cooperation with the University of Debrecen also considering the development of training programmes. In accordance with the regulation of the Higher Education Act that came into force in March 2006 universities have to monitor the career development which inform them on the opportunities and employment experience of graduates and not least on how university is considered as a training institution. This picture is modified and specified by a survey conducted with the involvement of the players of the labour market in which the survey and evaluation of the experience, expectations and demands of employers are realized.

5. CONCLUSIONS, RECOMMENDATIONS

One of the characteristics of the employment situation in Hungary is that the rate of the graduates and employees with secondary education does not or hardly lags behind the relevant OECD averages. The unemployment rate in Hungary has been low since 2001, however, it increases. When breaking down this, the ratio of unemployed young people starting out on their careers, among them the ratio of the registered unemployed young people starting out on their careers with relatively higher education increases while the employment rate of registered unemployed people has decreased. The number of young people attending institutions of higher education in Hungary increased considerably during the one and a half decades after the change of regime. Consequently, the number of graduates became 1.5 times more than it was one and a half decades earlier, and this year in one-third part it practically consists of graduates finished their studies after 2000. Although Hungary before the change of regime lagged behind the countries of EU and OECD in several aspects, this rapid uplift was considered to be exaggerated and it was not in line with the structure of workforce demand of the Hungarian economy.

‘Education and economy’, and ‘higher education and users’ was one of the most important pairs of concepts in the European education policy during the last period. It became a dominant factor of knowledge, education, innovation ability, economic performance and the individual career. In this way there is a growing demand made on universities and colleges that they should give market-conform knowledge and skills to students and their intellectual potential should be involved in the economy. The expectation of users i.e. the labour market made on graduates is mainly the recruitment of well-qualified professionals, the demand on practise-oriented and problem-solving experts with general professional knowledge. The expectation of people starting out on their careers is an economy available which can involve them. This means that employments of adequate quality and quantity and environment suitable for starting enterprises should be provided exactly with the conditions that are, in the opinion of graduates, in accordance with the value of employees in the labour market. There will be many kinds of demands to be against each other and it will be the duty of training institutions to make these demands met each other. In addition to the traditional education and research, contacts with companies, appearance in the economy and being market-oriented has also become dominant in the activity of universities. The proportion of applications to institutions of higher education is not in line at all with the prospective demand of labour market while

universities are not interested in reducing the number of students as they are normatively financed. Remarkably, undergraduates are not aware of the situation of the labour market that who can get jobs easily and what professions are worth choosing to learn.

The dominant part of the higher education reform in Hungary, the two-cycle training system introduced on the basis of the Bologna Process will make it possible to create more practice-oriented bachelor study programmes, and master-level fields based on bachelor programmes will offer a wide range of study programmes for students. The content of trainings is in the process of being developed in which competences required by the labour market have to be involved. In the academic year 2006/2007 except for the training of doctors and lawyers, all young people admitted can start their education in three-year bachelor fields. We do not have any direct experience of the Bologna Process and therefore we do not have any knowledge of its influences on the labour market either.

The national and international types of cooperation realized the most frequently between universities and employers i.e. the contribution of experts working for companies to state examinations and preparation of theses and PhD theses in collaboration with different companies are applied practices at several faculties of the University of Debrecen. Cooperation in the field of research and development (R&D, Cooperative Research Centre), scholarships established by companies, the system of guest lecturers and the exchange of theoretical and practical professionals can be tools in order to enhance the practice-oriented education. Several examples of these are realized at the University of Debrecen especially at the faculties which offer education requiring practical training.

The Debrecen Development Pole Programme (DFP) is the second phase of the planning of regional development poles. One of the key projects of this programme is the Human Resource Development and Business Knowledge Centre, which, if implemented, will bring together all stakeholders involved in education, recruitment, related counselling, applied research and product development. The goal is to establish a regional knowledge management centre, an innovation centre with the initiation of the university which can provide a basis for the human resource, organization-development and business activities of companies. As a part of the programme the university plans to develop a monitoring system managing the feedback of companies. By means of this the institution can be continuously informed on the changes in market demands on the basis of the feedback of companies. This way the university will be able to change its education structure in accordance with the market demands, which makes the University of Debrecen more effective and more popular as well (*DFP, 2006*).

There is already a career office in most of the institutions of higher education where graduates are supported in finding employment with publications, organization of job fairs, recruitments and other organized programmes (*Tóth, 2006*). This activity has been also appeared at the University of Debrecen, however, its experience and results are not published as required and do not give assistance in executive decision-making of the university either. There is only few feedback on their effectiveness. The university has projects funded in this subject /(INTERREG), Regional Operational Programme (ROP)/but these only resulted in periodic and rather theoretical than practical outcomes. Several organizational units do activities which are similar to the career office's (PONT Iroda, Mental hygienic Centre, Department of Sociology) but there is no contacts among these units. They work parallel to each other and none of them carry out tasks completely aiming at monitoring the career development and assisting in finding jobs.

The labour centres also give considerable support to the employment of young people starting out on their careers. There is a good contact with the Hajdú-Bihar County Regional Labour Centre which focusses on the organization of common events, however, using the expertise of the staff of the labour centre, the development of joint programmes, establishment of a consulting system and organization of trainings and lectures could be useful.

At the University of Debrecen there are traditions and experience of contacts to be developed with the players of the labour market and several types of cooperation have been realized in many fields. The implementation of the Human Resource Development and Business Knowledge Centre will make it possible for the University of Debrecen to meet the requirements of the labour market as a service-providing university being established on the generated knowledge. There have been initiatives to survey the experience of graduates (projects, activities of organizational units, alumni, etc.) and to give assistance to graduates in finding employment, however, they function independently from each other and by this means their effectiveness decreases. The following would be needed: monitoring the career development of students, university-level coordination of the activities aiming at assisting students in finding jobs, central registration of data linked to the Neptun-system, and analyses to help executive decision-making e.g. in a structure that is similar to the quality assurance system of the university. This way the University of Debrecen can meet not only the demands of the labour market but also the expectations of students it educates

5. NEW AND MODERN SCIENTIFIC ACHIEVEMENTS

1. On the basis of the results of my research I stated that the faculty where students graduate from significantly influences the employment of the graduates from the University of Debrecen. More than half of the students graduated from AVK are employed in Hajdú-Bihar County, they find employment in Budapest and Szabolcs-Szatmár-Bereg County almost in the same proportion. In addition to Hajdú-Bihar County, the students from MTK and HPFK find employment in Szabolcs-Szatmár and Borsod-Abaúj-Zemplén Counties in different proportion. One-fourth of the students graduated from the traditional faculties of the university (BTK, TTK) are employed in Budapest and as a consequence they are the ones who live the region in the largest number.

2. On the basis of the results of our research I stated that the place (faculty) where students graduate from influence the methods selected by graduates for job searching. From all the five faculties most of them find employment with sending out curricula vitae, personal request and the assistance of a contact. It is a characteristic of HPFK that the place where students perform their professional training will become their first place of work, and a great number of them use the services of the Labour Centre. Study contracts are the least relevant in the case of BTK (0.3 p.c.) the reason for which is that the number teachers trained is too large compared to employment opportunities, and a small proportion of these students find jobs corresponding to their qualifications. The largest share of those finding employment at job fairs are the graduates from TTK (11.4 p.c.

3. Based on the analyses I determined that the period of time needed for finding employment is significantly influenced by which faculties students graduated from. The largest proportion of students who found employment directly or within six months after receiving their degrees graduated from TTK, BTK, and AVK. Two-third of students graduated from HPFK managed to become employed directly or within six months after graduation. As regards the period of time needed for finding employment, it is the students from MTK who are in the most unfavourable situation compared to other faculties participating in the study as more than half of them cannot find employment immediately after graduation. A longer period of time needed for students who search for jobs in the North Great Plain and North Hungary regions.

4. Based on the findings of the research I determined that the faculty where students graduate from significantly influences how much the employment found

corresponds with the training of the students. Students graduated from TTK and HPFK have found jobs corresponding with their qualification at a ratio higher than the university average. More than half of the students from BTK and MTK find employment that is in line with their university degree. Out of the two faculties of the Centre of Agricultural Sciences, it is MTK that has the most students whose jobs do not correspond with their qualifications, while one-third of the graduates from AVK have jobs that are partly in line with their university degrees.

5. Research results verified that the faculty where students graduate from influences what salaries they are offered. The lower extreme (less than HUF 50000) is more significant in the case of students from BTK and HPFK, while the upper extreme (more than HUF 500000) is more significant in the case of students from MTK and TTK. More than half of students from AVK and almost 75 p.c. of students from BTK have a salary range of HUF 50-150000. 90 p.c. of students with a college-level degree issued by HPFK have a salary range of HUF 50-150 000. More than half of the students graduated from MTK, and 47 p.c. of the students from TTK have a salary range of HUF 50-150 000. Salaries over HUF 200 000 can only be boasted by 18.2 p.c. of graduates of MTK and 20.7 p.c. of TTK.

6. Based on the analysis of the responses from students I determined that the faculty where students graduate from influences what positions they fill after graduation. Such positions are filled mainly by students with a degree in the agricultural field. The ratio of top managers is low, which is normal, as these young people graduated only a few years ago. 7.3 p.c. of graduates from AVK are top-level managers, while this ratio in the case of MTK is 5.2 p.c. The largest share of senior-level managers come from MTK (14.7 p.c.). Such positions are filled by 9.8 p.c. of AVK graduates and 8.6 p.c. of TTK graduates. Students from BTK and HPFK are employed mainly in non-managerial positions, and only 12 p.c. of them have taken up managerial positions.

7. The results of the statistical tests unambiguously proved that the level of satisfaction with the alma mater is not influenced by which faculty of the University of Debrecen the respondents graduated from. The level of satisfaction, however, depends significantly on how soon they managed to find a job and how much these jobs correspond with their qualifications, but it does not depend on the income they generate. The period of time needed for finding employment and the level of income significantly influence how important respondents consider the career opportunities. Students from different faculties have different opinions on the usefulness and value of the knowledge made available at the university. **The appreciation of the usefulness and value of the**

knowledge received at the University of Debrecen as well as the perception of career opportunities significantly influence the answers to the question whether they would choose the University of Debrecen again as the place of their education.

8. PUBLICATIONS RELATED TO THE TOPIC OF THIS THESIS

- 1) **Rőfi M.:** A múlt jövője, a jövő múltja – Egyetemalapítás Debrecenben. *Acta Andragogiae et Culturae* 18. szám szerk: Éles Csaba, Kálmán Anikó Debrecen, 2000. 82-87.
- 2) **Rőfi M.:** A felsőoktatás kihívásai Európában és Magyarországon. *Acta Andragogiae et Culturae* 20. szám szerk: Rudovszky Kálmán Debrecen, 2005.
- 3) **Rőfi M.:** Új kihívások előtt a magyar felsőoktatás Erdei Ferenc III. Tudományos Konferencia Kecskemét, 2005. augusztus 23-24.
- 4) Vincze Sz. – **Rőfi M.** – Széles A.: Az Észak-alföldi régió versenyképességének statisztikai elemzése Erdei Ferenc III. Tudományos Konferencia Kecskemét, 2005. augusztus 23-24.
- 5) **Rőfi M.:** Felsőoktatási intézmény a régió fejlődésének szolgáltatása XLVII Georgikon Napok Keszthely, 2005. szeptember 29-30.
- 6) **Rőfi M.:** A Debreceni Egyetem interregionális kapcsolatai. In: Baranyi B. szerk: Közelítések. MTA Regionális Kutatások Központja Debrecen 2005.
- 7) Vincze Sz. – **Rőfi M.:** Az Észak-alföldi régió versenyképességének statisztikai szempontú megközelítése. In: Baranyi B. szerk: Közelítések. MTA Regionális Kutatások Központja Debrecen 2005.
- 8) **Rőfi M.:** Az Észak-alföldi régió versenyképességének vizsgálata néhány alapmutatón keresztül. *Agrártudományi Közlemények*. Debrecen 2005.
- 9) **Rőfi M.** – Hajdú Z.: The role of University of Debrecen in improving the competitiveness of the North Great Plain region in Hungary. 4th International Scientific Symposium, Oradea, 2006. – Print in
- 10) **Rőfi M.:** Tudásközpontra épített régiófejlesztés az Észak-alföldön. In.: Baranyi B. – Nagy J. szerk.: Közelítések II. – Print in