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BACHELOR GRADUATES IN HUNGARY IN THE TRANSITIONAL PERIOD OF HIGHER EDUCATION SYSTEM

STRUCTURE OF HUNGARIAN HIGHER EDUCATION

The institutional system of Hungarian higher education has been traditionally formed by universities and colleges as state, private or religious institutions. Altogether 71 higher education institutions operated in Hungary in 2010 of which 19 offered only religious programmes.

Prior to the introduction of Bologna-type study programmes, universities focused on more theoretical, university-level education, while colleges provided more practice-oriented, college-level training. The typical duration of studies was five years universities and four years at colleges. In the Bologna Process, a gradual transition started in 2004 from the traditional university or college degrees a higher education system based on three phases built one on the other: BA/BSc, Master and PhD programmes. Beside the new BA/BSc and the Master programmes, single-cycle 10-12 semester programmes were preserved, where the degree level corresponds the Master degree: in veterinary medicine, architecture, forestry engineering, dentistry, pharmacy, law and medicine as well as in some arts majors and theological studies. On single-cycle education 5-6 per cents of all students are studying.

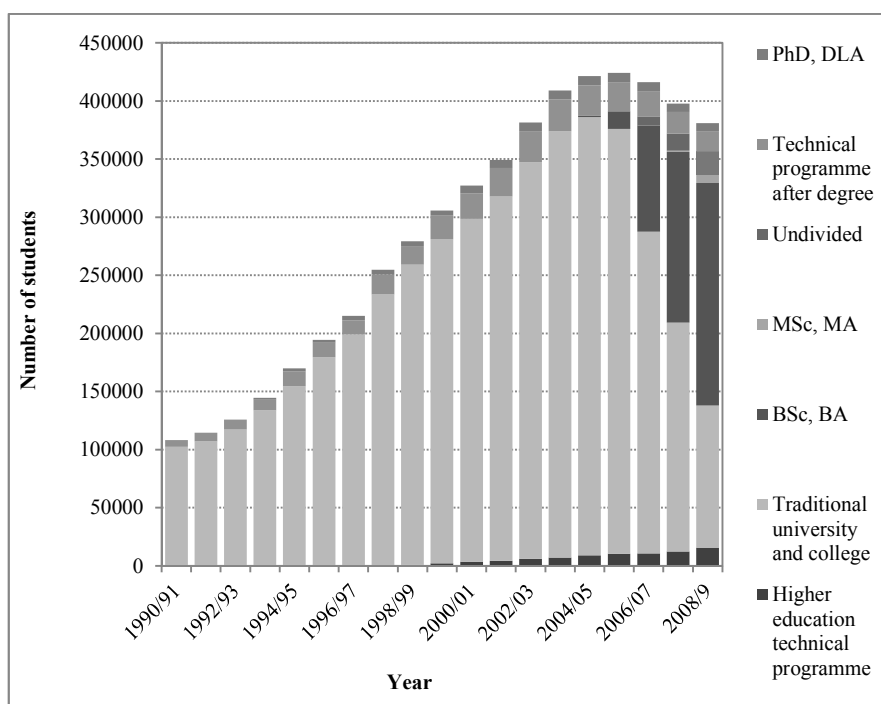
In addition to undergraduate and Master programmes, the higher education institutions in Hungary also provide postgraduate programmes: first, postgraduate specialist training programmes, which provide a new technical qualification based on a higher education degree (their duration ranges from one to three years); second, the PhD and DLA programmes leading to science degrees. The entry qualification for both programmes is a university degree or equivalent qualification obtained abroad; universities select on the basis of an entrance examination and made set other entry requirements (e.g. professional experience).

The first Bologna-type undergraduate study programmes begin in 2004 and 2005 – initially only on an experimental basis. The real transition was realized in 2006, when over 76 thousand students started their Bachelor studies. Some Bachelors require three years of study and others three-and-a-half years. Five years of study are required for a Master degree. Master programmes constituting the second level of the Bologna system followed the commencement of BA/BSc majors with some delay. In 2007, only about five hundred students, but in 2008 already more than four thousand students commenced studies in Master programmes. Master programmes became significant in 2009 when over twelve thousand new Master students were admitted to the institutions; this was facilitated

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by an increasing number of start up programmes resulting from progress in the accreditation process and the widening choice of majors as well as triggered by a substantial increase the numbers of persons graduating from the new BA/BSc programmes in that year. Although traditional university and college programmes/majors were no longer started after 2006, relatively high numbers of such students remain in Hungarian higher education.

Figure 1. Number of Students in Various Types of Study Programmes at Institutions of Higher Education in Hungary 1990-2009



Source: Nemzeti Erőforrások Minisztériuma Statisztika (2008)

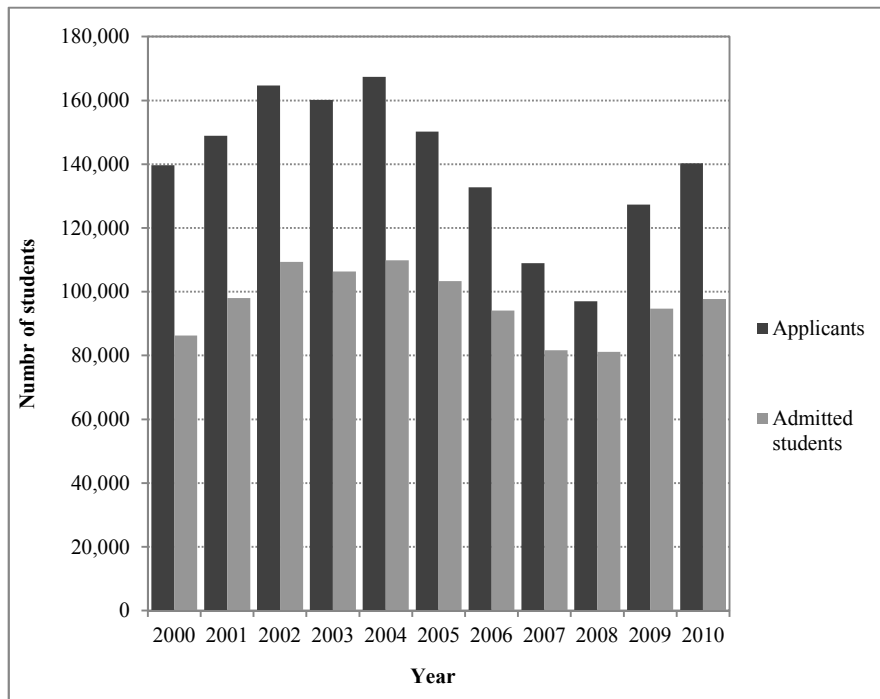
The introduction of the Bachelor-Master structure occurred at a time of rapid expansion of higher education. Around 1990, enrolment rates in higher education in Hungary were relatively low. A sudden growth in the number of students and institutions began in the mid-1990s. The increase in the number of applicants continued after 2000, reaching a peak in 2004 when a total of 167,371 people applied to higher education, 109,581 of whom were admitted to an institution. The number of applicants started to decrease from 2005 and by 2008 it had declined to 96,991 persons, i.e. 57 per cent of the number seen in 2004. Many researchers have studied the reason for the decrease, many theories and ideas have arisen about the background to the processes – the most remarkable phenomena is the rapid de-

BACHELOR GRADUATES IN HUNGARY IN THE TRANSITIONAL PERIOD

crease in the application rates of older age groups, which was also catalysed by the transformation of the training structure (temporary lack of Master programmes) after 2006 (Veroszta, 2010).

The tendency turned around in 2009, the number of applicants increased again, to a great extent due to the Bologna structure. As mentioned above, the relatively complete range of Master programmes was established by that year and the first BA/BSc students graduated in every educational field in that year, too.

Figure 2. Number of Applicants and Admitted Students* at Institutions of Higher Education in Hungary 2000-2010



* Normal procedure, programmes starting in September

Source: Educatio Public Service Non-profit Llc.

The increase in the number of students in higher education has become one of the central issues of labour market and higher education research (see Hrubos, 2001, 2007; Róbert, 2009). Some researchers focus on the problems of “graduate over-education” and the expected employment and work difficulties arising from “graduate oversupply” (see for example Polónyi, 2000), others investigate the sociological causes of the increase in the number of graduates, drawing parallels with entering the middle class and the spread of a middle-class mentality (see Gábor & Dudik, 2000). Research projects on the graduate labour market have not confirmed

the theory of difficulties directly arising from the increase of the number of graduates: the targeted research of the Central Statistics Office found that the employment prospects of young graduates are better than those of non-graduates (Szilágyi, 2005); moreover, their wage advantage significantly increased in the first half of the past decade compared to young people with the final school examination (see Galasi, 2004; Kertesi & Köllő, 2005).

The forecast and examination of how the labour market receives young people who have graduated in the Bologna system has become a new and important issue in research on the labour market. The interview studies conducted in recent years show that participants on the labour market, the representatives of employers, were quite uncertain about the (future) employment opportunities of Bachelor graduates (see Horváth, 2007). Considering that the first graduating BA/BSc year with higher number of students only left universities and colleges last year, the question is still open-clear perception is not easy due to the still “mixed” nature of education, the parallel of traditional and Bologna type programmes and traditional and new BA/BSc graduates freshly appearing together on the labour market. Question marks are even larger with regard to Master programmes since the first Master year with a significant number of graduates could only complete studies in 2010, this year.

THE GRADUATE CAREER TRACKING SYSTEM IN HUNGARY AND THE DATABASE OF THIS REPORT

The Act on Higher Education of 2005 requires all higher education institutions to conduct compulsory career-tracking studies in Hungary. Several such developments were started in recent years; however, these created systems of studies, that are typically separated and do not communicate with each other, work under different methodologies and appear with different processing demands (see Horváth, 2008). The special development programme known as “System level development of higher education services” was started in 2008 from European Union resources, and the application programme also announced intended to supplement these organisational and operational deficiencies. The nationwide programme conducted by Educatio Public Service Non-profit Llc. aims to operate a career-tracking system based on unified methodology although on basic conditions at institutions. In order to do so, it provides the services and professional support – in addition to unifying data collection – through which the institutions can implement and later maintain and incorporate into their operation the development of career tracking with the help of resources through tendering,² but a professional development sup-

² Representative career tracking research based on nationwide sampling was conducted in May-June 2010. The survey had a dual aim. On the one hand, as a survey conducted with a yet unique methodology in Hungary and larger sample element number than any previous studies, it will provide data about the labour market situation of new graduates; on the other hand, the nationwide survey not examining institutions but educational fields provides an opportunity to interpret the results in a wider contextual system. – More about the Hungarian graduate career tracking system: Tamás Horváth: Central system for tracking graduates’ careers. http://www.felvi.hu/diploman_tul/szakmai_tamogatás/kiadvanyok/dprl_angol

BACHELOR GRADUATES IN HUNGARY IN THE TRANSITIONAL PERIOD

porting institutional level career tracking establishing the long term operation of that.

Hungarian career-tracking data collections were based on institutional-level, overall on-line surveys. Two compulsory, unified questionnaires were developed in the central career-tracking programme, one of which is for the entire actual sphere of students, while the other is for all members of two given years of graduates (one and three years after graduation).³ Universities and colleges naturally have the opportunity of expanding the questionnaire with their own questions.

2010 was the first full year of operation of this programme, resulting in the completion of the first institutional data collections and the first national career-tracking database. The survey was conducted by using the student address lists of the institutions with an on-line questionnaire method. Institutions addressed students who graduated in 2007 and 2009 with the questionnaire.

Table 1. Types of Degrees of the 2009 Graduates Surveyed from Institutions of Higher Education in Hungary in Comparison to National Graduate Statistics

Degree	National data (HEIS)		Sample data		Response rate per cent
	Number of	per cent	Number of	per cent	
Bachelor	17,061	34	2,898	30	17
University	11,769	23	3,176	33	27
College	20,541	41	3,075	32	15
Single-cycle	712	2	215	2	30
Master	509	1	241	3	47
Total	50,592	100	9,605	100	19

Source: Hungarian Graduate Survey 2010

The following analysis concentrates on 2009 graduates, where information was obtained with the help of 28 institutions of higher education institutions from 9,605 graduates (response rate of 19 per cent). Of the respondents, actually 6,251 had graduated from traditional higher education programmes (3,176 of them from university programmes and 3,075 from college programmes), 2,898 from Bachelor programmes, and only 241 from Master programmes. A further 215 graduated from new single-cycle programmes (see table 1). A weighting process ensuring representativeness was performed on the available sample.

The Hungarian Graduate Survey 2010 does not address international mobility. According to another survey of 2007 graduates from traditional study programmes, altogether have studied abroad during their course of study or within three years after graduation.

³ The English version of the questionnaire blocks can be read at the following web page: http://www.felvi.hu/diploman_tul/szakmai_tamogatas/online_kerdoivek/online_kerdoivek_angolul

SOCIO-DEMOGRAPHIC BACKGROUND OF GRADUATES

68 per cent of the 2009 Bachelor graduates in Hungary are women. This high rate is close to that among all graduates surveyed (66 per cent) as well as that among graduates from the new single-cycle programmes (69 per cent). It is higher among graduates from traditional college programmes (72 per cent) than among graduates from traditional university programmes (58 per cent).

The average age of Bachelor graduates is 27.8 years at the time of obtaining the pre-degree certificate. This is close to the average of all graduates surveyed (28.0 years). Bachelor graduates are somewhat older on average than university graduates (27.2 years) while they are younger than the college graduates (29.1 years). It might be added that the small numbers of new single-cycle graduates was about 27 years and that of Master graduates about 29 years on average upon graduates

Obviously, the relatively high average age of Bachelor graduates cannot be viewed as being primarily determined by the duration of the study programme itself, since the traditional university programmes have the longest educational cycle. The average age is related to the composition of students according to educational background: a higher rate of students at colleges study in non full-time programmes, potentially alongside work or not directly after the final examination. Among the new Bachelor, we note the backgrounds of both the traditional university students and college students. In considering, however, that the Bachelor programmes are shorter in principle, we have to identify further causes for the relatively high average age of Bachelor graduates. It is most probably caused by specific conditions related to the period of transition to the two-cycle system. In the great wave of the establishment of new BA/BSc programmes in the Hungarian higher education around 2006, also many students from the age groups could enrol who took their final school examinations earlier and jointed the new study programmes after having waited for several years; this is also supported by the figure that the average age of students admitted to BA/BSc programmes is between 22 and 23 years.⁴ Moreover, the average age of graduates may also be quite high that planning of study was complicated in the period of the inauguration of the new programmes. Finally, some programmes could not really be completed within six semesters, for example due to the fact that a compulsory professional practice semester was not integrated into the six-semester schedule.

⁴ The average age of students admitted is “pulled up” by correspondent students – the average age of student admitted to correspondent programmes was 27.5 years, while the average age of students admitted to regular programmes was only 19.6 years. Source: *Jelentkezési és felvételi adatok 2005; Jelentkezési és felvételi adatok 2006* (Application and admittance data 2005; Application and admittance data 2006). Budapest: Educatio Public Service Non-profit Llc.

TRANSITION TO EMPLOYMENT AND FURTHER STUDY

The transition of Bachelor graduates from study to employment deserves special attention, since the first degree obtained in the two-cycle system offers an option for continuing studies or stepping out onto the labour market. We should bear in mind that the Bachelor graduates surveyed here graduated in the year 2009, when Master programmes started in large numbers in the Hungarian higher education system. On the one hand, we observe the first year of Bachelor graduates who have a realistic option of embarking into Master programmes. on the other hand, the establishment of new Master programmes was not yet complete in 2009; therefore, we might expect a further increase of the proportion of Bachelor students continuing study from 2010 onwards.

Therefore, surveys are of interest here which examine the intentions of Bachelor students with regard to further study and training (see for example Verosta 2009) motivations of BA/BSc students. According to the data of the Student Motivation Survey conducted by Educatio Non-profit Llc in 2009 within the GCT programme (Educatio Public Service Non-profit Llc., 2010b), 66 per cent of BA/BSc graduates obtaining Bachelor degrees plan to study on a Master programme. A survey conducted in 2005 of the students of new Bachelor programmes had shown that 50 per cent certainly wanted to continue study and an additional 27 per cent consider further study.

Table 2 shows that actually only 44 per cent of the 2009 Bachelor graduates from higher education institutions in Hungary continued study. More precisely,

- 28 per cent of Bachelors graduates continued study solely,
- 16 per cent combined further study and work,
- 39 per cent worked solely, and
- about one sixth did neither work nor study at the time the survey was undertaken.

Actually, Master study comprised less than half of the further study options of the 2009 Bachelor graduates. Only 18 per cent embarked on Master programmes (14 per cent as study only and 4 per cent with concurrent work).

Bachelor graduates from colleges officially have the same rights to continue to study as Bachelor graduates from universities. Table 2, however, shows, as one might expect, that more Bachelor graduates from universities continue to study without concurrent employment (32 per cent as compared to 18 per cent). In contrast, graduates from colleges more often opt for employment only or study along employment.

Table 2. Employment and Further Study One Year after Graduation of 2009 Bachelor Graduates from Higher Education Institutions in Hungary

	Total		University		College	
	Per cent	Number	Per cent	Number	Per cent	Number
Master study (only)	14	434	17	400	6	36
Master study and (full-time) employment	4	123	4	103	3	21
Other further study (only)	14	433	15	356	12	75
Other further study and (full-time) employment	12	377	11	257	19	119
(Full-time) Employment (only)	39	1,184	38	917	43	267
Neither study nor (full-time) Employment	15	467	15	363	17	104
Total	100	3,018	100	2,396	100	622

Source: Hungarian Graduate Survey 2010

It might be added here that about 70 per cent of the graduates each of the traditional university and traditional college programmes transfer to employment after graduation. Among graduates from new single-cycle programmes, this rate is even higher (80 per cent). But higher transition rates from these programmes are to be expected.

This notwithstanding, the rate of less than half of the Bachelor graduation transferring to employment is clearly lower than expected. Several factors might explain that. As already pointed out, the situation in 2009 was exceptional because the establishment of new Master programmes was not yet fully completed. It is also interesting to note that more than half of the new Master students were graduates from traditional study programmes (Educatio Public Service Non-profit Llc., 2009), because many students of the first large Bachelor generation, starting to study in 2006, had not yet completed their study.

Moreover, the transition from graduation to further study might be long, because there is a specific characteristic in Hungary of a period between the award of a provisional degree certificate and the actual award of the degree. There might be requirements for the award of the degree which are fulfilled after the study period, i.e. primarily language certificates. The provisional award does not prevent the graduation to transfer to employment, but does not allow them to continue study immediately. According to the previously mentioned nationwide central survey of graduates (of traditional programmes) conducted in 2007, 16 per cent of graduates did not receive their degrees immediately after their final examination due to the lack of language certificates; however, 76 per cent of them stated that this has not affected their opportunity of transferring to employment (Educatio Public Service Non-profit Llc, 2010a). Accepting the above named facts, we expect that the rate of BA/BSc graduates participating in Master programmes will grow in the near future, which will most probably not reach the rates explored in the motivation surveys.

BACHELOR GRADUATES IN HUNGARY IN THE TRANSITIONAL PERIOD

PROFESSIONAL SUCCESS OF BACHELOR GRADUATES

The professional success of Bachelor graduates can be measured worked with objective and subjective success criteria. As regards objective criteria, information on the length or the transition I worth to be taken into consideration. According to the data from the national career-tracking survey conducted in 2007, the average time of seeking employment at the end of higher education studies (of the traditional programmes is 3-4 months (Educatio Public Service Non-profit Llc., 2010b).

In calculating annual gross income as another objective success indicator, we only take full-time employed graduates into consideration and adress the gross monthly income (calculated from information provided on net income with the help of available information on progressive tax rates), thereby including the monthly average amount of benefits, extras and salary bonuses. The amount of Euro reported was calculated with a 0.00348 multiplier for the Hungarian currency according to the data of 31st August 2010.

Actually, the 2009 Bachelors from higher education institutions in Hungary earn one year after graduation, as [table 3](#) shows, on average 26 per cent less than graduates from traditional university programmes. This is less than the average income of graduate from traditional college programmes, who earn 22 per cent less than graduates from traditional university programmes.

Table 3. Annual Gross Income One Year after Graduation of 2009 Full-time Employed Graduates from Institutions of Higher Education in Hungary (in Euro)

	Bachelor	Traditional university	Traditional college	Single-cycle	Total
Arithmetic mean	8,884	11,958	9,327	10,166	10,254
Median	7,099	10,231	7,099	8,143	7,726
N	1,294	2,022	1,789	145	5,250

Source: Hungarian Graduate Survey 2010

The differences shown in [table 3](#) are affected by the composition of fields: Graduates from medical fields are included in the graduates from traditional university programmes, but not in the Bachelor graduates (who are among the single-cycle graduates of the new system). Moreover, no distinction is provided here between Bachelor graduates from universities und colleges. This notwithstanding, the income of Bachelor graduates is on average remarkably low.

The new Bachelor graduates in Hungary are professionally very successful, as far as the their occupational category is concerned about a year after graduation. 62 per cent are in manegerial and professional occupations, i.e. as many as graduates from the traditional university programmes and slightly more than graduates from traditional college programmes (58 per cent). As [table 4](#) shows, a further 29 per cent of Bachelor graduates are active as associate professionals, and only 9 per cent in other occupations.

Table 4. Occupational Category One Year after Graduation of 2009 Full-time Employed Graduates from Institutions of Higher Education in Hungary (per cent)

	Bachelor	Traditional university	Traditional college	Single-cycle	Total
Managerial and professional occupations (ISCO 1-2)	62	62	58	76	61
Associate professional Occupations (ISCO 3)	29	31	34	22	31
Other occupations	9	7	9	2	8
Total	100	100	100	100	100
N	692	751	816	41	2,300

Source: Hungarian Graduate Survey 2010

As a first subjective category, a respective question addressed the relationship between work and level of educational attainment. Graduates were asked: “To what extent does your present/last main activity match your qualification?”; the responses are shown in [table 5](#). Actually, 61 per cent of the Bachelor graduates from Hungarian institutions of higher education stated that they note a match either completely or to a great extent. In comparison to other countries, this can be viewed as a high proportion. It is slightly higher than the respective proportion among graduates from traditional programmes at colleges (59 per cent), but it is considerably lower than among graduates from traditional programmes at universities (76 per cent) and even more so than among graduates from the new single-cycle programmes (94 per cent). The graduates from single-cycle programmes stand out in various respects, as one might expect, because they are mostly the privileged group of those from medical fields.

Table 5. Extent of Match between Qualification and Current or Last Main Work Activity of 2009 Graduates from Higher Education Institutions in Hungary (per cent)

	Bachelor graduates	Traditional university graduates	Traditional college graduates	Single-cycle graduates	Total (N=6,421)
Not at all	19	8	17	1	14
To a small extent	20	17	24	5	20
To a great extent	29	31	27	23	29
Completely	32	45	32	71	38
Total	100	100	100	100	100

Source: Hungarian Graduate Survey 2010

Finally, graduates were asked to rate their job satisfaction. [Table 6](#) shows the extent of satisfaction (5 means “very satisfied”) with various aspects of employment

BACHELOR GRADUATES IN HUNGARY IN THE TRANSITIONAL PERIOD

and work conditions. Accordingly, differences between graduates from the various types of study programmes and institutions are small in most cases. However, graduates from traditional university programmes are somewhat satisfied as regards the opportunities for professional progress and the professional prestige. Surprisingly, graduates from single-cycle programmes are least satisfied with income and benefits: As they income, as shown above, is close to the average, the findings shows that these graduates (mostly in medical fields) have higher expectations as regards income, as it is realized at this stage of their career.

*Table 6. Satisfaction with Various Aspects of Employment and Work on the Part of 2009 Graduates from Higher Education Institutions in Hungary (mean)**

	Graduates from				Total
	Bachelor programmes	Traditional university programmes	Traditional college programmes	Single-cycle	
Professional, contextual part of work	3.7	3.8	3.7	3.7	3.7
Professional progress, career building	3.1	3.3	3.1	3.3	3.2
Professional prestige	3.2	3.4	3.2	3.4	3.3
Income, benefits	3.0	3.1	3.0	2.7	3.0
Personal working conditions	3.7	3.8	3.6	3.5	3.7
Objective working conditions	3.6	3.7	3.5	3.4	3.6
N	1,696	2,455	2,320	177	6,649

* Mean on a scale from 1 = "not satisfied at all" to 5 = "completely satisfied"

Source: Hungarian Graduate Survey 2010

In response to a questions about the overall satisfaction, a high extent of satisfaction (scale point 4 and 5 of a five-point scale) was expressed by 82 per cent of the graduates surveyed, among them

- 81 per cent of Bachelors graduates,
- 84 per cent of graduates from traditional university programmes,
- 79 per cent of graduates from traditional college programmes and
- 77 per cent of graduates from single-cycle programmes.

Bachelor graduates are obviously highly satisfied. This holds true both in comparison to graduates from other types of study programmes and institutions in Hungary, where the differences are small, as well as in comparison to Bachelor graduates from other countries addressed in this publication. As shown above, Bachelor graduates in Hungary report a professional success that could be viewed as very similar to that of graduates from traditional university programmes similar in some respects, but as lower in other respects. As the overall extent is more or less identical, we can infer that Bachelor graduates consider some differences in their career

from that of universities as normal given the shorter overall study period and thus the level of educational attainment, but concurrently believe that their employment and work situation is relatively good.

SUMMARY

The introduction of the Bologna system has been practically completed in Hungary in a very short time mostly between 2006 and 2010. Almost all initial study programmes were transferred into BA/BSc study programmes. However, since most Master programmes have been established since 2009, there are not yet any reliable data available about the differences of employment and work between the Bachelor graduates and the new Master graduates.

The proportion of 2009 Bachelor graduates opting for continued study – either solely or along employment – is relatively small in comparison to the other European countries addressed in this publication: less than half of the graduates. The 2009 figures are certainly influenced by the fact that the new Master system was incompletely established at that time; therefore, an increase of this proportion is to be expected, but it might be possible that a smaller transition quota than in other countries will become customary in Hungary. This can be seen in accordance with the basic idea of the Bologna reform that Bachelor programmes should serve both the transition to the world of work and the continuation of study towards advanced levels.

As far as the the employment and work success is concerned, the situation for the Bachelor graduates is somewhat more subtle. It is a great success for them in Hungary in comparison to other European countries that the majority are employed in managerial and professional occupations, and this quota is even as high as among graduates from traditional university programmes. Bachelor graduates, again report a relatively frequent link between qualification and level of job, though less often than graduates from traditional university programmes. In those respects, the new Bachelor graduates are closer to the graduates of the traditional college programmes. In one respect – the income – Bachelor graduates fare substantially worse than graduates from from traditional university programmes and even somewhat worse than from traditional college programmes.

In terms of satisfaction with their work, however, Bachelor graduates assess their situation almost as positive as graduates from traditional university programmes. This seems to reflect the successes named above as well as the insight that graduates from the first cycle of studies cannot end up as a rule on the same level of positions and income as the graduates from the second level.

In sum, if we wish to position Hungarian BSc graduates, we can say that the labour market and the new study programmes are still in the process of accommodation, whereby the position of the new Bachelors seems to become closer to that of the graduates from traditional college programmes form than to that of graduates from traditional university programmes of education are still feeling their way towards each other, but the first signs of matching show a similar pattern to that of the college qualification. The Bachelor degree is comparable to the

traditional college degree on the labour market in several respects. However, the Bachelor degree might more clearly differ from that of the traditional college degree in one respect, i.e. in the larger rates transferring to further study.

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