BME STUDENT CENTER

Budapest University
of Technology and Economics

2007

employment opportunities of fresh graduates

MŰEGYETEM 1782

Survey among 2005 graduates of the BME
and follow-up of 2003 graduates

Budapest University of Technology and Economics (BME)

Employment Opportunities of Fresh Graduates

A survey among 2005 BME graduates and
a follow-up study of 2003 BME graduates

Press release

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3 November, 2007 Budapest

Prepared with the support of the Student Centre and the Youth Association of Budapest University of Technology and Economics.

BME STUDENT CENTER

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Our survey was carried out on full-time students with Hungarian citizenship receiving a degree at the Budapest University of Technology and Economics (BME) in 2005. The present follow-up examination forms part of the university's quality assurance system, in the frame of which we perform regular surveys among freshmen, graduated students and companies employing graduates.

The responses reflect the labour market experiences until 31 December, 2006 of young engineers, mathematicians, engineering physicists and technical managers graduated in 2005. We have performed our follow-up examination for the ninth time, thus we have expanding timelines available, which provide opportunity for comparison with earlier researches of a similar topic and for highlighting observed trends.

As a year ago, we have carried out an extended survey, since we have questioned the graduates of 2003 who had already been surveyed two years ago. Truly, our investigation is not tied to individuals, but our statements concerning the given year may still be of interest. In certain tables we refer to the data acquired from a second, 2007 survey of 2003 graduates as 2003S.

Abbreviation	Faculty	Graduated engineers
ÉPK	Faculty of Architecture	certified architect
ÉMK	Faculty of Civil Engineering	cert. civil engineer, cert. land surveyor and geoinformatics engineer
GTK	Faculty of Economic and Social Sciences	cert. technical manager
GPK	Faculty of Mechanical Engineering	cert. energy engineer, energy engineer (college level) cert. mechanical engineer, mechanical engineer (college level), cert. industrial designer
KSK	Faculty of Transportation Engineering	cert. mechanical engineer, cert. transportation engineer
TTK	Faculty of Natural Sciences	cert. mathematician, cert. engineering physicist
VBK	Faculty of Chemical Technology and Biotechnology	cert. bioengineer, cert. environment engineer, cert. chemical engineer
VIK	Faculty of Electrical Engineering and Informatics	cert. engineering IT specialist, cert. electric engineer

Table 1: Abbreviations of the faculties of the university

In cases where an answer category did not exist in one of the years, we apply dark background for the given cell in the table. When we received no answer in the given category, the cell got "-" mark and if the ratio of the received answers assumed the value of zero following rounding, it is indicated with "0".

The amounts spent on accommodation and when calculating revenues and income we used the exchange rate of HUF 255/€.

1. Figures, Representativity

We have reached 1618 out of the 1699 students graduated in 2005, and the number of respondents was 317, which constitutes an answer ratio of 19.6 %. We have reached 1163 out of 1242 students graduated in 2003, with the number of respondents being 206, which means an answer ratio of 17.7%. The composition of the sample in both cases was adjusted to the composition of the population according to faculty and sex with the so called weighting procedure applied in statistics. The weighting procedure ensures that our research can be regarded as representative concerning the sex of the respondents and the faculty of graduation as variables.

	FACULTIES								
	ÉMK	ÉPK	GPK	GTK	KSK	TTK	VBK	VIK	TOTAL
Number of graduates [persons]	105	236	305	116	143	32	183	579	1699
Interfaculty proportion of graduates [%]	6.2	13.9	17.9	6.8	8.4	1.9	10.8	34.1	100
Number of delivered questionnaires [persons]	102	222	292	106	134	32	174	556	1618
Number of respondents [persons]	17	35	49	24	26	10	37	119	317
Interfaculty proportion of respondents [%]	5.4	11.0	15.5	7.6	8.2	3.2	11.7	37.4	100
Proportion of respondents compared to delivered questionnaires [%]	16.7	15.8	16.8	22.6	19.4	31.3	21.3	21.4	19,6

Table 2: Headcount data of full-time students of Hungarian citizenship graduated from basic training at BME in 2005, by faculty

	FACULTIES								
	ÉMK	ÉPK	GPK	GTK	KSK	TTK	VBK	VIK	TOTAL
Number of graduates [persons]	96	152	215	35	88	29	150	477	1242
Interfaculty proportion of graduates [%]	7.7	12.2	17.3	2.8	7.1	2.3	12.1	38.5	100
Number of delivered questionnaires in 2005 [persons]	95	149	213	34	88	29	150	475	1233
Number of respondents in 2005 [persons]	43	46	70	7	27	6	43	132	374
Proportion of respondents compared to delivered questionnaires in 2006 [%]	45.3	30.9	32.9	20.6	30.7	20.7	28.7	27.8	30,3
Number of delivered questionnaires in 2007 [persons]	91	141	200	32	84	26	142	447	1163
Number of respondents in 2007 [persons]	15	21	36	5	16	6	29	78	206
Proportion of respondents compared to delivered questionnaires in 2007 [%]	16.5	14.9	18.0	15.6	19.0	23.1	20.4	17.4	17,7

Table 3: Headcount data of full-time students of Hungarian citizenship graduated in basic training at BME in 2003, by faculty

2. Domicile

Analysing separately the division of the graduates of 2005 and their parents according to domicile, it can be stated that migration to and from the capital remains considerable. While in the case of parents, the proportion of Budapest dwellers is 30.7%, in the case of graduates the same proportion is 67.5%. While 15.3% of students with roots in the capital left the city, 59.9% of non-Budapest dwellers left their parents' domicile. The proportion of those living in Budapest among the graduates of 2003 has decreased by 5% to 68.5% in the last two years.

Domicile of graduates	FACULTIES								
	ÉMK	ÉPK	GPK	GTK	KSK	TTK	VBK	VIK	TOTAL
Budapest	66.7	68.0	51.3	87.7	69.4	75.0	57.5	73.9	67.4
City of county rank	4.9	7.2	16.1	3.8	–	12.5	4.0	4.9	6.8
Other city	18.6	7.2	26.4	3.8	19.4	12.5	27.6	10.6	15.6
Village	4.9	5.9	2.1	–	3.7	–	7.5	3.2	3.7
Abroad	4.9	11.7	4.1	4.7	7.5	–	3.4	7.4	6.5

Table 4: Division of 2005 graduates according to own domicile, by faculty and total [%]

3. Accomodation

The 34.4% of 2005 graduates indicated that they live in their own property, which is a little lower compared to earlier years. Most live in an own property in Budapest or in smaller cities, whereas the least property owners are in villages (9.1%). Village dwellers constitute the smallest proportion of respondents, and they live with their parents more often than the average.

	FACULTIES								
	ÉMK	ÉPK	GPK	GTK	KSK	TTK	VBK	VIK	TOTAL
Lives in an own property*	23.5	41.9	28.4	46.2	23.3	43.8	46.7	32.8	34.4
	Year of graduation								
	1997.	1998.	1999.	2000.	2001.	2002.	2003.	2004.	2005.
	34	31	42	38	35	35	36	42	34

* Earlier years: "Has own flat".

Table 5: Proportion of property owners, by faculty and total [%]

The majority of those living not in their own flat lives with their parents (the 28.1% of the total number of respondents, the 42.9% of those living not in their own flat). Renting was indicated by the 30.9% of all respondents, while a few live in dormitory, some with their present partners, perhaps relatives, friends or in the flat of their parents (but not together with them). Compared to the data from last year the proportion of those living in rented flats is significantly higher (47.1% compared to the proportion of the 38.2% of last year).

On the whole the 73.6% of the respondents reported on accomodation related costs. Those reporting on exact monthly costs spent an average of 248€ in an average month (in February, 2007), which includes the rental and overhead costs. Accomodation costs add up to almost one fifth of the gross incomes on average. It is still true, that graduates living in rented flats reported on somewhat higher costs than the others. Besides, the costs of those living in their own flats also exceed the average.

Accomodation related costs	Lives in own flat	Lives with parents	Lives in rented flat	Lives under other title	Total
Max. 78 €	15.7	11.8	4.8	24.8	11.8
78-157 €	33.9	11.5	35.6	29.5	27.6
157-235 €	14.6	7.3	33.3	31.4	19.7
above 235 €	25.0	2.0	17.5	–	14.5
Indicated no cost	10.8	67.4	8.8	14.3	26.4
Average value* (€)	67 904	44 409	69 629	35 926	63 133
Deviation* (€)	118 977	66 753	113 332	13 924	106 927

* Average value was calculated among those who indicated some sort of accomodation related costs.

Table 6: Size of monthly accomodation related costs according to means of accomodation [%,€]

Questioning 2003 graduates two years ago, we found that over one third of them had their own flat, while by this year 56.2% reported living in an own flat. It is in every sense a noteworthy improvement and indicates that the property issue has been solved 3,5-4 years after graduation considering the most of the former students.

Overally the 83.1% of the respondents indicated some sort of accomodation related costs, which is a higher proportion compared to the figures of 2005 graduates. Those having reported on exact monthly costs (asking about the month of February 2007 in the questionnaire) spent an average of 239 € on accomodation, that is on rent and overhead costs together. Accomodation costs make up almost 18.7% of gross monthly incomes, which are probably less overburdening in proportion than in the case of career starters who have just entered the labour market.

4. Financing Studies

Among the sources of financing living during tertiary level studies, family support clearly leads as the most widespread form, since 98.1% of graduates had been supported by their families. The role of state support is also substantial, the 80% of former students had received such subsidy during their studies, while 52.3% mentioned income from work.

Compared to the last year (25%) the proportion of those utilising the Student Loan during their studies grew further, 29.3% of 2005 graduates indicated that among financing sources. Since the year examined now could not utilise this financing form during the whole training period, in the future we forecast an even stronger proportion of the Student Loan in financing studies.

Family support takes the leading role not just in being the most widespread form but in sources for financing studies, although it has featured a decrease in previous years. The proportion of state support also seems to have decreased, and that of income from work has increased to the level observed in 2000. The strengthening of Student Loan is the most striking, since compared to its starting position with 1% it has been on the increase gradually year to year reaching the present 6.9% proportion, which means that not only the proportion of those using credit, but also the role of the loan in financing studies has grown.

Form of financing	Date of graduation					
	2000.	2001.	2002.	2003.	2004.	2005.
Family support	65	66	67	66.4	63.9	62.9
State support	20	19	19	17.3	17.3	14.7
Income from work	14	13	11	11.9	11.6	14.0
Student Loan			1	3.4	5.5	6.9
Other	1	2	2	1.0	1.7	1.5

Table 7: Division of coverage of costs emerging during studies, total [%]

5. Usability of University Studies

Evaluation one and a half to two years after graduation cannot obviously be complete, however, it can still provide feedback for education and training. Similarly to earlier years the answers refer to the statements on knowledge acquired during university studies as "essential" (16.2%) or "well usable" (38.3%), though the 38.7% of graduates only considers it "partly usable". If we consider the fact, that one part of the knowledge at certain majors goes out-of-date this latter statement is understandable.

Compared to earlier years change in the answers cannot really be detected, the proportion of those who consider their knowledge gained at the university as "hardly usable" or "not usable" is still on the minimum. There is no real difference about knowledge usability occurring in the answers given by those employed in the public, market or civil sectors.

Usability of studies	Average of previous years				FACULTIES								
	2001.	2002.	2003.	2004.	ÉMK	ÉPK	GPK	GTK	KSK	TTK	VBK	VIK	Total
Essential	19	17	16	19	–	33.3	16.1	12.4	7.8	14.3	16.8	14.7	16.2
Well usable	34	37	34	32	47.1	37.9	48.9	17.1	32.6	7.1	22.0	43.4	38.3
Partly usable	42	35	40	36	52.9	28.8	28.8	44.8	51.8	71.5	54.3	34.5	38.7
Hardly usable	5	5	5	5	–	–	–	8.6	3.9	–	1.7	4.9	2.7
Not usable	–	1	0	1	–	–	–	–	–	7.1	–	–	0.1
Does not know, has not yet worked in the field	–	5	5	7	–	–	6.2	17.1	3.9	–	5.2	2.5	4.0

Table 8: Usability of university studies in graduates' work, by faculty and total [%]

Architects gave the best evaluation again this year, where weak ("hardly usable" or "not usable") evaluations never occurred. Subsequent evaluation of Faculty of Economic and Social Sciences graduates remains unfavourable, since the highest proportion of weak ("hardly usable") assessment is theirs.

Compared to earlier years we have significantly changed the part of questionnaire examining the strength and weaknesses of education. This time we asked the respondents to give their opinion on training in connection with 8 statements (all could have been assessed on a 1-5 scale), then they were asked to write the strengths and weaknesses of BME training with their own words. The data gained from the questionnaires of 2005 graduates have reinforced the results of earlier years, since the majority of graduates have agreed with the statements on professional attitude and strong theoretical basis, and only few formed a different view. The opinion of respondents on knowledge usable in practice was more diverse, however, compared to earlier years less consider professional knowledge inadequate or obsolete. Theory and practice does not seem successfully related, since one third of the respondents agreed on the point that "professional training opportunities were low".

Reception of statements on a five-point scale*	FACULTIES								
	ÉMK	ÉPK	GPK	GTK	KSK	TTK	VBK	VIK	Total
Training provided well usable knowledge in practice.	3.09	3.40	3.33	2.69	3.08	3.22	3.15	3.10	3.16
Training ensured professional attitude and way of thinking.	4.33	3.77	4.06	3.93	3.86	4.19	3.94	4.35	4.10
Training provided strong theoretical basis.	4.33	3.92	4.12	3.47	3.70	4.02	3.67	4.28	4.04
The knowledge taught at the university was inadequate or obsolate.	2.48	3.21	2.33	2.29	3.03	2.46	2.26	2.37	2.52
During the training the instruction of professional knowledge was insufficient.	2.58	2.93	2.78	2.61	2.84	2.03	2.42	2.43	2.61
During the training information spread exceeding the boundaries of strictly interpreted professional materials was weak or little.	3.15	3.19	2.86	2.22	2.80	2.95	2.64	3.10	2.94
Professional training opportunities were low.	3.42	3.98	3.49	4.25	3.82	2.90	3.30	3.62	3.64
Language learning opportunities were on a low level or they were proved not to be sufficient.	3.19	2.98	3.03	2.78	2.73	2.11	3.14	2.61	2.84

* Average values, where 1=never true, 5=true in every sense.

Table 9: The assessment of university training, by faculty [average values]

6. Strengths, Shortcomings and Weaknesses of Training

The 83.4% of the respondents mentioned at least one from the strengths of the training, 42.8% at least two, while 13.6% registered three or more elements. Adding up the first three answer-elements we find that the element used in earlier years as "strong theoretical basis" was marked as strength by the third of the respondents (33.1%), while "professional (engineer) attitude and way of thinking" was found in the 28.8% among the answers. 11.2% of the respondents referred to the talented, experienced and excellent teachers, and nearly same amount praised the professional subjects and the training itself (10.7%).

Answers strongly connected to this highlighted the fact that the professional material is "up-to-date, modern", (4.1%), it provides "versatile, variable, horizontal knowledge" (10.1%), and "the opportunity for high-standard language training" is also given (2.4%). Taking all these answers into consideration, it can be stated that the greatest strength of BME training according to graduates is partly coming from the professional (engineer) attitude and from the high-level, modern, versatile professional and extensive knowledge provided by the training.

The 82.6% of the graduated students indicated some sort of "insufficiency, weakness in connection with the training". The majority (31.5%) emphasized the "deficiency of professional training opportunities in practice", the second most frequent answer indicated that the training is "not practice oriented enough" (21.8%). The one tenth of answers criticized "obsolete knowledge, or inadequate technologies being taught" (10.4%), while 2.7% called the attention to the "superfluous subjects" as part of training. A rare answer suggested the "absence of exact professional subjects or knowledge" in the training (4.6%), however, there were students who would include not necessarily professional subjects but "certain skills (e.g.: communication) to be improved" (2.9%). The response concerning the existence of "too many theoretical subjects" was given by the 6.9% of the graduated students.

7. Moral and Financial Recognition of the Profession

Compared to the values of last year we have received a little more favourable results both in the matter of moral and financial recognition. The last year result of two-third proportion has increased to become this year nearly three-fourth with respondents regarding that their profession – concerning its moral prestige – is the most recognised, or belongs to the well recognised professions. This year also, the graduates of the Faculty of Electrical Engineering and Informatics considered their profession suiting this criteria, while the graduates of the Faculty of Economic and Social Sciences considered it the least so.

Level of recognition	Previous years' average			FACULTIES								
	2002.	2003.	2004.	ÉMK	ÉPK	GPK	GTK	KSK	TTK	VBK	VIK	Total
Recognised to the greatest extent	7	9	9	–	21.2	8.2	4.7	–	31.3	7.5	16.3	11.8
Well recognised	59	58	56	85.6	47.7	69.2	20.8	57.5	68.7	58.0	69.0	61.7
Moderately recognised	29	29	30	14.4	15.8	20.5	53.8	38.8	–	23.6	13.1	20.6
Badly recognised	4	3	4	–	11.7	2.1	16.0	3.7	–	10.9	1.6	5.1
Recognised to the least extent	1	1	1	–	3.6	–	4.7	–	–	–	–	0.8

Table 10: Graduates' opinion on the moral recognition of their profession, by faculty and total [%]

The total proportion of those giving a positive report on the financial recognition of their profession is 50.6%, which indicates a much higher value compared to the 39.1% among the 2004 graduates, however, it indicates a much smaller value than the proportion of those evaluating moral recognition as positive. We saw a positive deviation of these two variables in the Faculty of Electrical Engineering and Informatics, where the former students are satisfied in respect of both aspects. Graduates of the Faculty of Economic and Social Sciences assessed their profession going together with somewhat more favourable financial appreciation than the average, but they felt it more often that the financial recognition was not accompanied by moral recognition. Architects and graduates of the Faculty of Civil Engineering gave account on the different values in an opposite way: although they sensed the moral prestige of their profession as good, most of them gave an average evaluation concerning financial recognition.

Level of recognition	Previous years' average			FACULTIES								
	2002.	2003.	2004.	ÉMK	ÉPK	GPK	GTK	KSK	TTK	VBK	VIK	Total
Recognised to the greatest extent	3	4	5	–	–	–	13.2	7.8	–	1.7	16.3	7.3
Well recognised	38	40	34	33.7	10.8	46.9	41.5	28.7	25.0	21.8	68.1	43.3
Moderately recognised	43	44	47	52.4	44.2	44.9	36.8	47.2	43.7	59.9	14.0	35.9
Badly recognised	14	11	13	13.9	37.8	8.2	8.5	16.3	31.3	14.9	1.6	12.3
Recognised to the least extent	2	1	1	–	7.2	–	–	–	–	1.7	–	1.2

Table 11: Graduates' opinion on the financial recognition of thier profession, by faculty and total [%]

Those working in the civil sector feel their profession somewhat less recognised, especially concerning financial recognition, the two thirds of them evaluate the financial recognition of their profession as maximum moderately recognised.

8. Further Training

The 65.6% of 2005 graduates participated or still participates in some sort of further training. The repeatedly high proportion of those utilising further training opportunities year by year is remarkable, and it ensures that the majority of graduates will, not only in the distant future but practically in the period of starting their job, demand a supplementation or extension of their existing knowledge or their employer regarded that a necessity. Also, the 92.0% of the respondents did claim a need for further training at the time of the questionnaire having been answered.

The demands were not primarily influenced by the fact whether the given respondent had already taken part in any sort of extensive training. It even seems to be true that those not participating in such a training, prove a lower inclination to do so in the future, since among them 83.7% indicated their demand, however the 95.6% of those who had already taken part in some sort of extensive training and 97.5% of those who are now being involved in such trainings emphasized their present and future demand. The 82.2% of 2003 graduates reported on taking part in or having taken part in some kind of further training since they gained their degrees. In spite of the high number of realized extensive training opportunities, the 89.3% of the respondents still consider their further training as a necessity.

The greatest motivation for post-graduate studies among the 2005 graduates was the realization of their career objectives (53.1%), and the update of their knowledge (35.0%). Further training was more frequent among those who are employed in leading positions and among those who foresee perspectives for leadership in the forthcoming years.

The 12.3% of those having taken part in extensive trainings indicated that their further training opportunities since their graduation were free for them, and for the rest of the respondents it was also true that their trainings were covered rather by their companies. Taking the cost of all trainings so far as 100%, the privately covered cost was 26.7% on average, while the corporate-covered cost was estimated to be 64.2% and other cost takers were indicated to be around 9.1%. A year ago the responses show the greatest demand for extensive trainings targeting professional growth (49.2%), but the demand for trainings aiming at the improvement of management and economic knowledge was (27.3%) and the demand for language trainings was indicated by 13.0%. According to the responses given by 2005 graduates the trainings which had already been realized and the ones under realization gave the same fields and results in similar proportions with the difference of language trainings having a much greater realization ratio than the demand which was measured during the earlier years among the graduates of those years. This latter fact refers to the tendency of the majority who start their further training when entering the labour market in order to make up for their weaknesses or to supplement the knowledge gained at the university.

The most wanted further training opportunities according to the last two years' data targeted a new degree (the third of respondents claiming further training indicated so), which was followed by the in-company trainings.

Extensive training in the form of PhD or DLA was marked by over one tenth of the respondents. The weight of corporate trainings was much greater among the realized trainings than that of the trainings targeting a new degree. This fact is probably tied to the period of such trainings: those finishing at a university not necessarily join another long tertiary education, however, after a couple of years passed and having some work experience they might feel the need for such a training.

From among the further trainings realized or being under realization the professional trainings are also the most popular with the 2003 graduates. In the last four years considering the realized further trainings, it is still corporate trainings which have the most significant weight, however, considering all the trainings run within tertiary education (new degree, professional training, PhD and MBA), we find that every second graduate reported on having been involved in some sort of further training in the frame of tertiary education.

9. Labour Market Status, Placement

The proportion of those employed (employed in labour relation or by subcontract or entrepreneurs) among 2005 graduates was 90.5%, the proportion of students (PhD and full-time students) was 7.8%), the proportion of those unemployed being 1.1%, and the proportion of those otherwise inactive was 0.6%. It was the first time that we have examined those employed in labour relation according to the fact of being part-time or full-time employed. In only two faculties did we find part-time employment (exclusively men), so the ratio added up in the university takes up only 0.6%. The proportion of the unemployed is 1.1%, which is almost the same figure as in the last year. Mechanical engineers, transportation engineers and technical managers marked themselves as unemployed. For informative purposes, we must state that the national unemployment rate of university graduates in the 4th quarter of 2006 was 2.2% and in the 1st quarter of 2007 it was 2.1%.[1]

The generally known phenomena that is characterised by searching for a place at the initial phase of a career, the temporary postponing of entering into the labour market and the development of more stable labour market positions later can also be seen in the case of 2003 graduates. The proportion of those employed has increased by 5.2%, that of those employed in a labour realization has increased by 8.2%, while the proportion of students (full-time students, PhD students) has dropped. The 3.8% of women were on maternity leave at the time of the questionnaire being taken.

10. Channels Supporting Placement

One fourth of the respondents (only those had to answer questions relating placement and a work place concerning whom the question was interpretable) found a job with the help of friends, so that remained the most successful jobseeking channel, though, the role of this channel in finding employment has decreased substantially compared to the previous years. The proportion of the utilisation of contacts as such was characteristic to nearly the same extent in the Faculty of Transportation Engineering, the Faculty of Civil Engineering, the Faculty of Architecture and the Faculty of Economic and Social Sciences.

The number of advertisements published in the press and its weight in placement have both been outweighed by those of online job seeking sites. The role of these sites in the placement of BME graduates has become six times greater in the last five years, while the success rate of the printed media has decreased to the third of the value measured among the graduates of 2000. The capital dwellers used twice greater proportion the electronic job seeking sites compared to those living in the countryside. At the same time, among country dwellers the proportion of placement finding through press-advertisements is three times higher. The reason for this may lie in the national internet penetration being capital centred. What we stated a year ago is still valid: women use online job agencies significantly more often, and men prefer making use of job fairs and contact capital.

1 Source: http://portal.ksh.hu/pls/ksh/docs/hun/xftp/idoszaki/munkero/munkero072.pdf

Channels supporting placement	FACULTIES								
	ÉMK	ÉPK	GPK	GTK	KSK	TTK	VBK	VIK	Total*
With the help of friends, family	34.2	31.7	26.1	33.4	35.7	23,1	18.1	16.9	24.9
With the help of online job sites and agencies	10.1	19.1	15.3	21.2	7.8	23,1	38.5	15.9	17.8
With the help of university contacts	20.2	21.5	10.9	9.1	20.1	15,4	12.3	17.7	16.3
With the help of jobfairs	–	–	12.7	13.1	3.9	15,4	4.3	25.0	12.8
Via newspaper adverts	–	11.5	13.1	–	12.4	23,0	11.6	3.6	7.8
Based on educational contracts	25.3	–	4.4	4.0	–	–	–	3.6	4.0
With the help of the Labour Centre	–	–	–	–	–	–	4.3	1.8	1.0
With the help of career centres at universitis	–	3.8	2.2	–	–	–	–	–	0.9
With the help of personnel consultants	–	–	–	–	–	–	–	1.0	0.3
Other ways	10.2	12.4	15.3	19.2	20.1	–	10.9	14.5	14.2
– professional training	5.1	2.4	8.7	10.1	12.3	–	2.2	5.5	6.1
– personal contact seeking	5.1	3.8	2.2	9.1	7.8	–	2.2	4.5	4.3
– other	–	6.2	4.4	–	–	–	6.5	4.5	3.8

* We have changed the question asked between 1997-2004 "How did you find employment?" to "How did you find a placement as freshly graduated, at the first occasion?"

Table 12: Methods of placement, by faculty [%]

11. Time of Placement

The average time of finding first jobs in the past four years has dropped from 2.4 to 1.6 months. The 57.7% of the respondents have managed to find employment during their studies, furthermore the proportion of those who found placement within a month was 60.3%, which is 6% lower than the figure of a year before. In the last four years the proportion of those who could not find a placement within half a year is the lowest (4.8%). Men need on an average 6 weeks, women need 9 weeks to find a job. Looking at the past four years retrospectively, the time needed for finding placement has decreased only in the case of the graduates from the Faculty of Mechanical Engineering and the Faculty of Electrical Engineering and Informatics, and the graduates from the Faculty of Chemical Technology and Biotechnology required a considerably longer than average period of time to get employed.

Before finding the first workplace only the 56.6% of graduates had participated in some kinds of selection procedure (e.g.: interview, assessment centre), and more than half of them did it with 1-2 companies.

Year of graduation	FACULTIES								
	ÉMK	ÉPK	GPK	GTK	KSK	TTK	VBK	VIK	Total
	All students*								
2002.	1.4	1.6	3.2	2.7	2.0	9.0	2.0	3.1	2.4
2003.	1.7	1.3	2.1	3.0	2.6	5.9	2.2	2.1	2.1
2004.	0.9	0.8	1.6	1.8	1.9	1.4	3.7	1.5	1.6
2005.	1.0	1.1	1.6	1.7	1.3	2.8	4.0	1.4	1.6
	Those not finding placement during university								
2002.	3.1	3.9	5.2	3.5	4.1	18.0	3.3	5.5	4.5
2003.	3.5	3.5	3.3	6.7	3.8	15.0	3.2	4.7	4.0
2004.	2.1	2.2	3.8	3.7	3.1	3.5	5.7	3.3	3.5
2005.	5.0	2.6	3.0	5.7	2.9	5.1	5.0	4.5	3.9

* We have taken the time needed for emloyment into consideration as 0 month in the case of those students who have found placement during their university years.

Table 13: Average time of finding the first job, by faculty [months]

12. Sources of Help Expected for Placement

The 92.1% of graduates found it a necessity that the university provides help concerning job seeking and placement. For four years it is the architects who require help the least. The 63.9% of graduates stated that they did not gain help from the university, however, in the last four years it gives the lowest proportion. Those who were helped with placement mentioned the organization of BME Job Fair the most frequently, and then came the frequency of reports on a recommendation of some department or teacher. The respondents expected different kinds of help. It is observable that the importance of job interview preparation (including job interview and AC simulations) has been on the increase continuously.

Form of help	Year of graduation			
	2002.	2003.	2004.	2005.
Job exchange and placement	25.2	22.0	17.9	18.9
Corporate presentations, factory visits	18.5	19.9	21.2	18.4
Publications helping jobseeking	10.9	9.4	8.8	13.7
Job interview preparations	10.1	12.6	12.8	13.0
Mock interviews, simulated ACs	7.8	9.8	9.8	10.5
Personality development trainings	8.7	9.9	9.9	9.1
Individual career planning	11.9	7.7	9.9	7.2
Writing motivational letters	4.8	6.6	7.6	7.1
Others	2.1	2.1	2.1	2.1

Table 14: Help expected from the institution, according to year of graduation [%]

13. Changing Jobs, Second Jobs

Nearly 60% of those with a job worked at their first workplace at the time of the survey. In the last nine years it was observed that in the same given period the career starters had tried themselves with more and more companies. The speed up of job changing indicates the opportunity growth of BME graduates. The frequent change of jobs mostly characterised architects, and fresh graduates of the Faculty of Chemical and Bioengineering and the fresh transportation engineers and engineering IT specialist.

Which workplace	Year of graduation										
	1997.	1998.	1999.	2000.	2001.	2002.	2003.	2004.	2005.	2002S	2003S
1st	78	78	68	69	69	63	63	64	60.4	49	49.7
2nd	18	18	25	27	23	30	29	25	28.3	38	37.7
3rd or more	4	4	7	4	8	7	8	11	11.3	13	12.6

Table 15: Number of jobs, by year of graduation [%]

Examining the time period of four years it can be stated that only half of the 2003 graduates worked in their first job. Changing jobs during the past two years was most characteristic of the graduates of the Faculty of Architecture and the Faculty of Civil Engineering.

The 12.5% of 2005 graduates has a second job. The outstanding high value (28.6%) measured among architects can be reasoned by the supposed fact that architects usually work for more planning offices, which statement is also strengthened by the highest proportion of entrepreneurs at the same faculty.

Those having a second job	Year of graduation									
	1998.	1999.	2000.	2001.	2002.	2003.	2004.	2005.	2002S	2003S
	13	21	18	19	16	16	9	13	16	18

Table 16: Number of those with a second job, by year of graduation [%]

14. Professional Aspect of Job, Job Description

The improvement of labour market position of fresh engineers is indicated by the growing proportion of graduates finding placement in their own profession. Analysing data from the past nine years, it can be stated that so far we have measured the highest proportion of finding job in an own profession among the 2005 graduates. One and a half years after graduation the 82% of graduates worked in their own profession, and among the 2003 graduates the ratio of working in own profession has increased by 9% to 83.3%. Placement in the profession can be seen as a rational decision considering the faster return of the training costs, since those finding placement in their own profession in both examined years have an income advantage.

Women still seem more likely to undertake jobs differing from their profession since it is still twice in proportion among them who take employment out of their profession. In the past nine years on every occasion the highest proportion of finding placement within the profession was found among architects and civil engineers. Those working in their own profession regarded the skills acquired during their studies much more usable than those not, or only partly working in their profession. Most graduates remained employed in designer, researcher and developer positions, which were followed by the positions of implementer, manufacturer and operator.

Job description	FACULTIES								
	ÉMK	ÉPK	GPK	GTK	KSK	TTK	VBK	VIK	Total
Designer, researcher, developer	52.2	77.4	60.1	9.5	43.8	36.4	23.5	61.0	53.8
Implementer, manufacturer, operator	31.5	17.8	24.3	33.6	35.9	–	23.5	17.9	22.8
Economic, financial	–	–	–	13.7	–	45.4	–	1.0	1.9
Commercial, broker	–	–	4.5	5.3	12.5	–	4.3	–	2.7
Administrative	16.3	2.4	2.2	13.7	–	–	17.9	1.0	4.7
Consultant	–	–	2.2	10.5	–	–	8.6	16.3	7.6
Other	–	2.4	6.7	13.7	7.8	18.2	22.2	2.8	6.5

Table 17: Job description of 2005 graduates, by faculty [%]

15. Management Position, Opportunities for Promotion, Satisfaction

The social phenomenon, according to which women fulfil management positions in a lower proportion, is continuously true among our graduates. While the 13.2% of men were managers, only 11.5% women were. The disequality between sexes is felt stronger examining the data of 2003 graduates at two dates. The 1% difference measured two years ago (12.5% of men, 11.6% of women were managers then) became ten times higher (22.4% of men, 12.6% of women being managers).

The proportion of those working in managerial positions has increased since the last data collection in all faculties except the Faculty of Chemical Technology and Biotechnology. The number of subordinates is 13 on an average. Furthermore, while in 2005 the graduates of 2003 had 10 subordinates in general, in 2007 the number of subordinates has grown to 21 on an average. The respondents working in the country got promoted quicker. The 10.3% of respondents employed in the capital, in contrast with the 23.0% of those employed in the country had some sort of managerial positions.

Works in managerial position	Year of graduation										
	1997.	1998.	1999.	2000.	2001.	2002.	2003.	2004.	2005.	2002S	2003S
	17	11	16	11	12	13	12	14	12.8	19	20.5

Table 18: Graduates with a managerial position, by year of graduation [%]

The 53.0% of 2005 graduates – according to their own report – will have some sort of professional or managerial promotion opportunities. The question was first asked four years ago, since then the proportion of hopeful graduates in respect of their promotion reached the highest ratio. Among the graduates of 2003 the proportion of those hoping professional or managerial promotion has increased by 9.0% in the last two years.

Opportunities for promotion	Year of graduation					
	2002.	2003.	2004.	2005.	2002S	2003S
	44.7	47.3	51.6	53.0	47.3	56.2

Table 19: Graduates' opportunities for promotion, by year of graduation [%]

In the cases of both examined years the 21.4% of all respondents were seeking new jobs, which has a significant deviation between faculties. The proportion of new job seekers in the Faculty of Civil Engineering (the Faculty of Architecture in the case of 2003 graduates) was the lowest, while in both groups the Faculty of Mechanical Engineering was the highest.

Seeking new job	FACULTIES								
	ÉMK	ÉPK	GPK	GTK	KSK	TTK	VBK	VIK	Total
2005.	13.7	23.9	28.4	28.3	26.9	25.0	17.8	16.1	21.4
2003S.	19.8	14.2	31.5	–	20.2	19.2	21.1	21.7	21.4

Table 20: Proportion of those graduates seeking new jobs in the four weeks before data collection, by faculty [%]

16. Size, Company Type, Ownership Structure

This year we have refined the classification of employees according to headcount, but kept its comparability with earlier years. The one fourth of the graduates work for enterprises employing over 500 employees (this being the lowest proportion in the last 9 years), however, the number of those finding placement at micro- and small sized enterprises is still considerable. Graduates of technical management, transportation engineering and informatics found placement at companies with the largest headcount. Architects continued to find employment at smaller companies. At the same time, owing to the new classification, it is known that it is not the micro but the small-sized enterprises which employ architects overwhelmingly. While we can meet women rather at smaller companies (companies with 0-20 employees employ the 40% of women), men are more often found in corporates with more than 500 employees (the 30.1% of men).

The vast majority of graduates (88.3%) is employed in the market sector, and only the 8.8% of respondents had their workplace at some sort of public or civil institution. In the civil sector it is the graduates of the Faculty of Chemical Technology and Biotechnology and the Faculty of Transportation Engineering who found their placement.

Operational Sector	ÉMK	ÉPK	GPK	GTK	KSK	TTK	VBK	VIK	Total
Market sector	89.8	84.0	86.2	90.5	87.6	69.2	77.8	94.5	88.3
Public sector	5.1	6.5	11.5	9.5	12.4	30.8	13.6	5.5	8.8
Civil sector	5.1	9.5	2.3	–	–	–	8.6	–	2.9

Table 21: The operational sector of companies employing graduates, by faculty [%]

It can be stated about the ownership structure of the companies employing graduates, that most often among employees we can find enterprises with foreign private majority. State (or local government) owned enterprises offer employment rather for men, while the private (family) owned enterprises prefer women and architects.

Ownership structure	In proportion of respondents
Hungarian private majority	30.2
Foreign private majority	46.7
State (local government)	10.7
Own / family property	11.9
Other	0.5

Table 22: Ownership structure of companies employing graduates [%]

Examining the headquarters of the companies employing graduates, we stated that the proportions developed during the past years had not changed at university level, those working in the capital remain a near 70% of the respondents.

Company headquarters	FACULTIES								
	ÉMK	ÉPK	GPK	GTK	KSK	TTK	VBK	VIK	Total
Budapest	79.6	66.5	53.9	75.3	56.2	84.6	42.9	84.3	69.0
City of county rank	5.1	7.9	16.0	4.5	12.3	15.4	9.6	4.6	8.5
City	10.2	6.4	27.7	14.6	20.0	–	35.6	3.6	13.9
Village*	–	6.4	2.4	–	7.7	–	11.9	1.1	3.5
Abroad	5.1	12.8	–	5.6	3.8	–	–	6.4	5.1

* The number of respondents is below 10!

Table 23: Headquarters of companies employing 2004 graduates, by faculty [%]

Just like the past years' data, graduates of the Faculty of Transportation Engineering and the Faculty of Electrical Engineering and Informatics found employment with Budapest based companies in the highest numbers (84.3%). This year it is the graduates of the Faculty of Chemical Technology and Biotechnology who can be the least characterized as capital-centered.

17. Mobility

First we raised the question of commuting time between domicile and workplace to the graduates of 2001. During the past 5 years the time spent on commuting has increased by 20 minutes (to 69 minutes) on a daily basis. Employees of Budapest-based companies commuted the same 73 minutes as they did a year ago, while those employed at country-based companies considerably less, 57 minutes. The commuting time of the graduates of 2003 has not changed typically in the last two years, it has remained 65 minutes on average.

The willingness of mobility, upon examining the past 4 year graduates has not changed remarkably, though still increased a little. Whereas the 55% of 2002 graduates would move should their job require it, it has increased to 60.9% among 2005 graduates. Regarding mobility there is a sizeable difference between women (51.5%) and men (63.9%). The willingness of mobility is lower among those with a second job, working in the pubic or civil sectors, and among the graduates of the Faculty of Electrical Engineering and Informatics. Among those who would move should their company or job require it we have recorded higher average salary figures both concerning 2006 and February 2007.

18. Language Skills

The number of intermediate and advanced language examinations per person at the time of survey was 1.32. This has not brought any changes compared to the data collected in earlier years (1.30-1.36). The 34.8% of the respondents speak two and 2.7% speak three languages. The vast majority of graduates had certified language skills in English: while three years ago the 62.5% of the respondents spoke this language, now among the 2005 graduates this number has increased to 84.5%, the degree holders speaking English at an intermediate or advanced level, furthermore, the 38.4% had the same level of language skills in German. Considering the various levels of language examinations, the proportion of intermediate examinations was 80.5%, and that of advanced examinations was 19.5% (7-8% higher than the figures of past years). The language skills of graduates, concerning use, helps translation in 30.7%, conversation in 35.5% and negotiation in 34.4%.

Without language skills the participation in foreign exchange programmes is impossible. The 22.3% of former students indicated that they had gained some sort of experience abroad during their university years.

19. Income Conditions

During the examination of income data we only analysed information related to those employed in labour relation, via subcontract and those being entrepreneurs. Those without or with only partial income would have distorted our statements. In the questionnaire we inquired about the gross income of 2006, the gross average income of February 2007, and other financial or natural allowances. The average of other allowances featured in the tables is the averages of data where the respondents declared other allowances and the value was not zero. For publishing income and salary data, we used the methodological definition of the Central Statistics Office (CSO).[2]

		FACULTIES								
		ÉMK*	ÉPK	GPK	GTK	KSK	TTK*	VBK	VIK	Total
Income of February 2007	Average	1176	1154	985	1273	1155	1152	869	1403	1183
	Deviation	1196	756	375	483	486	450	241	573	628
1 month gross average salary in 2006	Average	1004	1278	919	1204	1059	1203	778	1352	1140
	Deviation	861	1536	278	511	395	493	240	581	781
1 month other allowances in 2006	Average	185	65	160	101	164	219	109	188	157
	Deviation	135	41	310	72	181	305	90	244	224
1 month average salary in 2006	Average	1329	n.d**	1111	1239	1182	1422	928	1540	1261
	Deviation	1068	n.d**	500	432	310	650	253	707	641

* The number of respondents in case of other allowances and average salary was 10 or below!

** In the case of average salary we have counted those 11 respondents' answers who also have other allowances. They are the respondents with lower salaries thus the resultant average income is not given due to significant distortions.

Table 24: Income conditions of 2005 graduates, by faculty [€]

		FACULTIES								
		ÉMK	ÉPK*	GPK	GTK*	KSK	TTK*	VBK	VIK	Total
Income of February 2007	Average	969	939	1245	1463	1217	1041	938	1699	1320
	Deviation	350	681	331	483	389	623	438	957	765
1 month gross average salary in 2006	Average	1163	930	1203	987	1239	1010	906	1713	1313
	Deviation	723	671	304	464	440	620	426	1014	809
1 month other allowances in 2006	Average	239	154	114	102	136	95	141	130	140
	Deviation	181	153	77	29	160	30	114	110	125
1 month average income in 2006	Average	1232	1144	1376	1311	1417	n.d.**	1061	n.d.**	1416
	Deviation	315	725	300	399	501	n.d.**	468	n.d.**	708
1 month average income in 2004	Average	914	765	877	909	914	1007	879	1233	1015
	Deviation	390	621	404	224	465	74	295	994	734

* The number of respondents in case of other allowances and average salary was 10 or below!

** In the case of average salary we have counted those 11 respondents' answers who also have other allowances. They are the respondents with lower salaries thus the resultant average income is not given due to significant distortions.

Table 25: Income conditions of 2003 graduates, by faculty [€]

2 Source: http://portal.ksh.hu/pls/ksh/docs/hun/modsz/modsztoc.html

As we can see from Table 25, the income of 2003 graduates has increased by 29.7% in two years.

Among 2003 graduates the former students of the Faculty of Mechanical Engineering and the Faculty of Transportation Engineering produced the most intensive income increase: within two years the average income (nominal) had increased by 57% and 55% accordingly.

	2005	2006	2004-2007
GDP increase [%][3]	4.2	3.9	8.3
Consumer price-index increase [%][4]	3.6	3.9	7.6
Real income increase [%]			29.7
Real income increase [€]			301
Nominal income increase [€]			401

Table 26: Changes in the income conditions of 2003 graduates

In our last year survey, having compared the 2003 and 2004 graduates, we reported on a deteriorating position of 2004 graduates since we spoke of a 39€ decrease regarding the average real income. Based upon this year data we can state about the 2005 year that – considering the 3.9% inflation rate[5] – we have recorded a 148€ average real income growth compared to the data as of 2004 graduates. The calculated monthly gross average income of those with an intellectual occupation employed full time – using CSO terminology – was 939€[6] in 2006. Compared to the average national situation, therefore, our average graduates were still in an advantageous situation, that is a BME degree entails an above average income, even at the beginning of a career. Unfortunately, however, we must say that upon analysing faculty data, our last statement is not true in connection with the Faculty of Mechanical Engineering and the Faculty of Chemical Technology and Biotechnology, that is in these cases the average faculty data does not reach the national average of those with intellectual occupation.

Comparing the average income of men and women graduated in 2005, it can be stated, that a woman earned the 68%, on an average, of her male colleague's monthly average income in 2006, and the ratio of February 2007 incomes was only a little favourable (71%). Last year and the year before that proportion was 76% and 72% accordingly. The deviation of the income concerning women was 55% of that of their male colleagues', which leads us to conclude that the glass-ceiling phenomenon can be observed, and that women graduated at BME have less chance to earn an outstandingly high income than their male colleagues at the university. Compared to the 2005 survey data the difference between the average yearly income of men and women graduated in 2003 has increased (72%), women earned only the 66.5% of the income of men. Certainly, average values are meant in this case, which are only of informative nature due to the differing proportions of the two sexes in professions and faculties.

The 40% of 2005 graduates were no longer in their first jobs at the time of survey. In the change of jobs the more favourable income can also take a role. The 2007 February income of those at their second jobs is higher with 86€ compared to those working at their first jobs, and those working at their third jobs is even higher with 306€ than the ones at their second jobs. Moreover, those working at least at their fourth jobs can reach on average a further 333€ growth in their incomes only by changing their job.

According to the expectations proven in earlier years, those working in managerial positions have higher incomes than the ones not in such positions. The difference between managers and subordinates

3 Source: http://portal.ksh.hu/pls/ksh/docs/hun/xftp/idoszaki/gdpev/gdpevelo06.pdf
4 Source: www.mnb.hu/engine.aspx?page=mnbhu_statisztikai_idosorok
5 Source: www.mnb.hu/engine.aspx?page=mnbhu_statisztikai_idosorok
6 Source: http://portal.ksh.hu/pls/ksh/docs/hun/xftp/idoszaki/fmf/fmf20612.pdf

regarding the 2006 average income of 2005 graduates is 140€, while among 2003 graduates it was the even greater sum of 337€.

We can also see phenomena observed in earlier years to be repeated. The motivation of those undertaking a second job was supposedly to reach a more favourable income. Comparing the average income (in 2006 of the 2005 graduates with second jobs (1101€) with the ones not taking a second job (1197€), we can state that graduates are encouraged to undertake second jobs due to the incomes probably (much) lower than the average. However, even by undertaking a second job they could not manage to reach the same income level than the level of graduates not taking second jobs succeeded to gain only by working in their first and main job. This latter statement is true for the graduates of 2003 as well.

Among those whose income conditions were examined, language skills are used by the 79.5% of the respondents. It can be stated that they were able to realize a 44% higher (380€ more) average income in February 2007 than those not using their language skills in their work.