BME STUDENT CENTER

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employment opportunities of fresh graduates

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Survey among 2004 graduates of the BME
and follow-up of 2002 graduates

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Extended management summary

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Our survey was prepared on full-time students with Hungarian citizenship receiving a degree at the Budapest University of Technology and Economics (BME) in 2004. Our follow-up examination forms part of the university's quality assurance system, according to which we perform regular surveys among freshmen, graduated students and companies employing graduated students.

The answers reflect the labour market experiences till December 2005 of young architects, mathematicians, engineering physicists and technical managers graduated in 2004. We have performed our follow-up examination for the eighth time, thus we have expanding timelines available, which provide an opportunity for comparison with earlier researches of a similar topic and for highlighting observed trends.

Our survey has been expanded for the first time by approaching students graduated in 2002 who had already been surveyed. True, our examination is not tied to individuals, but our statements concerning the given year may still be of interest.

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 and Bioengineering	cert. bioengineer, cert. environment engineer, cert. chemical engineer
VIK	Faculty of Electrical Engineering and IT	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 equipped the given cell with a dark background. When we received no answer in the given category, the cell got a "–" and if the ratio of the received answers assumed the value of zero following rounding, we indicated it with "0".

The amounts spent on accommodation and when calculating revenues and income we used the exchange rate of HUF 265/€.

In certain tables we referred to data acquired from a second, 2006 survey of the year of 2002 as 2002S.

1. Figures, Representativity

We reached 1292 out of the 1450 students graduated in 2004 and the number of responders was 349, which constitutes an answer ratio of 27%. We reached 1143 out of the 1350 students graduated in 2002 this year with our questionnaire, the number of responders was 265, which constitutes an answer ratio of 23.2%. 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 responders and the faculty of graduation as variables.

	FACULTIES								
	ÉMK	ÉPK	GPK	GTK	KSK	TTK	VBK	VIK	Total
Number of graduates [persons]	124	160	301	93	124	41	143	464	1450
Interfaculty proportion of graduates [%]	8.6	11.0	20.8	6.4	8.6	2.8	9.9	31.9	100
Number of delivered questionnaires [persons]	111	139	270	78	112	35	128	419	1292
Number of responders [persons]	38	32	76	18	36	7	34	108	349
Interfaculty proportion of responders [%]	10.9	9.2	21.8	5.2	10.3	2.0	9.7	30.9	100
Proportion of responders compared to delivered questionnaires [%]	34.2	23.0	28.1	23.1	32.1	20.0	26.6	25.8	27.0

Table 2: Headcount data of full-time students of Hungarian citizenship graduated from basic training at the BME in 2004, by faculty [%]

	FACULTIES								
	ÉMK	ÉPK	GPK	GTK	KSK	TTK	VBK	VIK	Total
Number of graduates [persons]	165	172	190	69	123	35	177	424	1355
Interfaculty proportion of graduates [%]	12.2	12.7	14.0	5.1	9.1	2.6	13.1	31.2	100
Number of delivered questionnaires in 2004 [persons]	159	163	185	67	121	35	169	417	1316
Number of responders in 2004 [persons]	41	33	45	13	36	5	29	84	286
Proportion of responders compared to delivered questionnaires in 2004 [%]	25.8	20.2	24.3	19.4	29.8	14.3	17.2	20.1	21.7
Number of delivered questionnaires in 2006 [persons]	121	134	167	61	113	28	161	359	1143
Number of responders in 2006 [persons]	37	18	42	9	41	7	29	82	265
Proportion of responders compared to delivered questionnaires in 2006 [%]	30.6	13.4	25.1	14.8	36.3	25.0	18.0	22.8	23.2

Table 3: Headcount data of full-time students of Hungarian citizenship graduated in basic training at the BME in 2002, by faculty [%]

2. Domicile

Separately analysing the division of the graduates of 2004 and their parents according to domicile, it can be stated that migration to and from the capital remains significant. While in the case of parents, the proportion of Budapesters is 34.6%, in the case of graduates the same proportion is 64.5%. While 7.7% of students with roots in the capital left the city, 49.9% of non-Budapesters left their parents domicile.

Domicile of graduates	FACULTIES								
	ÉMK	ÉPK	GPK	GTK	KSK	TTK	VBK	VIK	Total
Budapest	51.8	69.0	58.2	78.2	42.8	57.1	77.2	70.1	64.4
City of county rank	23.2	9.4	14.7	–	25.0	14.3	3.3	8.4	11.7
Other city	16.7	10.1	18.1	21.8	16.1	–	11.4	8.4	12.9
Village	8.3	11.5	9.0	–	13.4	14.3	8.1	11.2	9.8
Abroad	–	–	–	–	2.7	14.3	–	1.9	1.2

Table 4: Division of 2004 graduates according to own domicile, by faculty and total [%]

The proportion of those living in Budapest among the graduates of 2002 has increased by a further 3% to 69.8% in the past two years. The proportion of those living abroad is 2.2% and especially high among responders of the Faculty of Electrical Engineering and IT (IT specialists: 3.3%, electrical engineers: 5.5%). Over 4/5 of graduates of the Faculty of Chemical and Bioengineering still live in the capital. There are nearly 18% more students living in Budapest among responders of the Faculty of Architecture than two years ago, reaching 88.0%.

3. Family Background

As previously, it can also be said this year that the proportion of those living with a spouse or a partner (on average 44.6%, which is the highest value so far) is higher among females. 5.3% of the graduates of 2004 already have children.

4. Property, Accommodation

41.5% of 2004 graduates already have their own apartment; however, most of those with children (79.1%) do not own a flat.

	FACULTIES								
	ÉMK	ÉPK	GPK	GTK	KSK	TTK	VBK	VIK	Total
Has own flat	54.1	41.7	40.0	38.5	35.7	14.3	39.8	43.3	41.5
	Year of graduation								
	1997	1998	1999	2000	2001	2002	2003	2004	2002S
	34	31	42	38	35	35	36	42	65

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

Where do those with no flat live?					
With parents	Rented flat	Dormitory	My partners flat	With relatives	Other title
47.1	38.2	4.4	4.3	2.1	3.9

Table 6: Accommodation conditions among those with no flat of their own [%]

2004 graduates spent an average of € 149 on accommodation in an average month (in February 2006 in the questionnaire). Overhead costs add up to almost two thirds of accommodation costs (€ 92 on average), while the rent made up € 57 on average. Accommodation costs make up nearly 15% of gross incomes on average.

	Lives in own flat	Does not live in own flat				Total
		Lives with parents	Lives in rented flat	Lives under other title	Total	
Max. 75 €	19.9	19.3	3.6	38.0	15.7	17.4
75-113 €	25.9	7.2	15.0	18.5	12.4	18.0
113-151 €	19.1	4.0	22.9	7.4	11.5	14.6
151-189 €	7.3	1.7	18.6	2.8	8.0	7.8
189 € +	18.2	1.2	34.6	14.8	15.6	16.7
Indicated no cost	9.6	66.6	5.3	18.5	36.8	25.5
Average value* (€)	148	95	187	117	151	149
Deviation* (€)	89	56	76	100	87	88

* Average value was calculated among those who indicated some sort of accommodation related cost

Table 7: Size of monthly accommodation cost according to means of accommodation [%,€]

Questioning 2002 graduates in 2004, we found that 34.7% had their own flat, while two years later 66.4% reported having their own property. This means a significant advance and indicates that the property issue considered important from the aspect of family and starting a career seems to have been solved four years after graduation. Owning a flat, however, besides many positive aspects, can also become an obstacle for young people's mobility in the labour market, which is indicated by the fact that on average, fewer flat owners stated that they would be willing to move, should their work or company require it; only 43.3% responded positively as opposed to the average of 47.4%.

5. Financing Studies

Among the sources of financing living during tertiary level studies, family support clearly leads as the most widespread form, since 97.7% of graduates had been supported by their families. The role of state support is also significant, 79.4% of former students had received such subsidy during their studies, while 44.7% mentioned income from work.

The proportion of those utilising the Student Loan during their studies significantly increased as compared to last year (5.7%); one fourth of 2004 graduates indicated that among financing sources. Student Loan can be required as of September 2001, thus it could be perhaps due to the running up of credit utilisation that the subproportion of income from work, true, only slightly, but has been decreasing for three years. Since the years examined so far could not utilise the financing form during the whole training period, we forecast an even stronger effect of superseding income from work.

Family support also takes a leading role in sources for financing studies, although it is featured somewhat less than in previous years. The proportion of state support and income from work is essentially unchanged. The strengthening of the Student Loan is the most striking, since as compared to previous years' 1, and 3.4%, this year it can claim a 5.5% proportion, which means that not only the proportion of those using credit, but also the role of the loan in financing studies has also grown.

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

Table 8: Division of coverage of costs emerging during studies, total [%]

6. Usability of University Studies

Evaluation one and a half to two years after graduation is obviously not too distant for complete contemplation: graduates, similarly to previous years feel what they learnt at university fundamentally useful in their work. One fifth of answers showed that university studies were essential and a further one third believed their studies to be well usable.

Usability of studies	Average of previous years			FACULTIES								
	2001	2002	2003	ÉMK	ÉPK	GPK	GTK	KSK	TTK	VBK	VIK	Total
Essential	19	17	16	18.8	46.4	12.8	–	16.4	42.8	13.3	19.5	19.5
Well usable	34	37	34	49.9	21.7	33.6	30.1	27.3	14.3	29.7	34.7	32.5
Partly usable	42	35	40	25.9	28.3	41.2	23.3	46.3	–	39.8	39.0	36.1
Hardly usable	5	5	5	2.7	–	1.1	23.3	4.6	14.3	9.4	3.9	4.7
Not usable	–	1	0	–	–	1.1	5.5	–	–	–	–	0.6
Does not know, has not yet worked in the field	–	5	5	2.7	3.6	10.2	17.8	5.4	28.6	7.8	2.9	6.6

Table 9: Usability of university studies in graduates' work, by faculty and total [%]

Architects gave the best evaluation, where weak *("hardly usable"* or "*not usable"*) evaluations never occurred. Subsequent evaluation of GTK graduates remains unfavourable, which indicates that the graduates, upon entering the labour market, face somewhat different expectations.

7. Strengths, Shortcomings and Weaknesses of Training

We also see among 2004 graduates that most observe the strengths of the training in professional elements and within that, predominantly in the development of a professional attitude.

Strengths	2003	FACULTIES								
		ÉMK	ÉPK	GPK	GTK	KSK	TTK	VBK	VIK	Total
Provided professional attitude and way of thinking *	70.5	57.3	44.2	63.6	72.7	56.2	42.9	69.3	66.3	61.8
Provided strong theoretical base	17.2	31.8	33.6	20.8	11.7	30.4	57.1	28.3	27.0	27.0
Provided knowledge beyond professional skills	2.9	–	–	5.6	5.2	2.7	–	–	1.9	2.4
Provided skills well usable in practice	1.7	2.7	12.9	1.1	–	2.7	–	–	1.0	2.4
The training has no special strength	4.9	8.2	2.9	5.2	5.2	–	–	2.4	1.9	3.3
Other	2.8	–	6.4	3.7	5.2	8.0	–	–	1.9	3.1

* In 2003: provided engineering attitude and way of thinking

Table 10: Strengths of university training, by faculty [%]

The deviation according to faculties is rather significant here too, the proportion of responders emphasising their satisfaction with practical elements is especially high among students of the Faculty of Architecture, although that was not what most of them marked as the main benefit of the training.

7.6% of responders claimed the training had had no significant weakness. The answers of the others, in concurrence with the responses on strengths, highlighted the lack of opportunities for professional practice. Half of real responders (44.6% of the total) marked that as the most important disadvantage. The category *"Many skills were taught that cannot be used in practice"* became the second most often selected answer again. A tenth of the graduates believed that they had received obsolete or inadequate professional skills, and a further 7.7%, if they could only highlight one option, marked the lack of skills pointing beyond professional material as most important.

Shortcomings, weaknesses	2003	FACULTIES								
		ÉMK	ÉPK	GPK	GTK	KSK	TTK	VBK	VIK	Total
Few professional practical exercises	37.8	46.5	30.1	40.9	55.8	53.9	14.3	33.0	51.6	44.5
Many skills not usable in practice	17.7	24.5	9.6	25.1	11.7	13.3	14.3	32.3	16.5	19.2
Obsolete / inadequate professional skills	14.4	12.7	22.1	11.6	–	12.4	–	7.9	8.4	10.5
Few / poor skills pointing beyond professional material	9.3	10.9	20.6	1.1	5.2	4.4	14.3	–	8.4	7.1
Inadequate language learning opportunities	6.8	2.7	2.9	14.2	22.1	13.3	28.5	9.4	2.9	8.5
Other	5.9	2.7	2.9	2.6	5.2	–	14.3	2.4	1.9	2.6
Training has no special weakness	8.1	–	11.8	4.5	–	2.7	14.3	15.0	10.3	7.6

Table 11: Shortcomings and weaknesses of university training, by faculty and total [%]

The category *"Few opportunities for professional practical exercises"* marked as the greatest shortcoming in total once again received the lowest value among architects, although it is also a leader among those graduates.

Answers indicating the large number of skills not usable in practice were more often provided by graduates of the Faculties of Civil Engineering, Mechanical Engineering and Chemical and Bioengineering.

The lack of adequate language learning opportunities was considered the greatest problem among graduates of the Faculty of Economic and Social Sciences.

8. Moral and Financial Recognition of the Profession

In total, graduates regard their profession morally recognised rather than financially appreciated. Two thirds of responders answered that their profession is the most recognised concerning its moral prestige, or belongs among well recognised professions. Graduates of the Faculty of Electrical Engineering and IT and those graduating from the Faculty of Architecture gave an above average evaluation of the moral recognition of their profession, while the opinion of the graduates of the Faculty of Economic and Social Sciences is less positive – they reported on an average recognition of their profession in most cases.

Level of recognition	Previous years' average		FACULTIES								
	2002	2003	ÉMK	ÉPK	GPK	GTK	KSK	TTK	VBK	VIK	Total
Recognised to the greatest extent	7	9.4	5.4	12.9	2.6	–	5.4	28.6	6.3	14.7	9.0
Well recognised	59	57.5	55.9	62.7	63.3	35.1	40.2	42.8	37.8	65.6	56.7
Moderately recognised	29	29.4	33.3	19.4	27.0	64.9	49.0	28.6	47.2	17.8	29.9
Badly recognised	4	3.4	5.4	5.0	5.2	–	5.4	–	6.3	1.9	3.8
Recognised to the least extent	1	0.3	–	–	1.9	–	–	–	2.4	–	0.6

Table 12: 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 39.1%, which indicates a much smaller value than the proportion of those evaluating moral recognition as positive. We saw a positive deviation in two faculties: the Faculty of Electrical Engineering and IT, and the Faculty of Economic and Social Sciences; but while graduates of the former often felt that financial and moral recognition went together, the opinion of graduates of the latter indicated that financial recognition was not accompanied by moral recognition. Architects and graduates of the Faculty of Civil Engineering also gave account on the different values of the two prestige factors, but in an opposite way: although they sensed the moral prestige of their profession as good, most of them only gave an average evaluation concerning financial recognition.

Level of recognition	Previous years' average		FACULTIES								
	2002	2003	ÉMK	ÉPK	GPK	GTK	KSK	TTK	VBK	VIK	Total
Recognised to the greatest extent	3	4.3	–	–	–	–	2.8	–	–	15.8	5.4
Well recognised	38	39.6	19.4	14.2	32.4	47.3	13.8	28.6	15.6	53.0	33.7
Moderately recognised	43	43.8	63.9	47.7	53.5	47.3	66.8	42.8	65.5	27.3	46.9
Badly recognised	14	11.5	16.7	35.1	13.0	5.4	13.8	28.6	18.9	3.9	13.2
Recognised to the least extent	2	0.8	–	3.0	1.1	–	2.8	–	–	–	0.8

Table 13: Graduates' opinion on the financial recognition of their profession, by faculty and total [%]

9. Extension Training

There is a tremendous demand for further studies among fresh graduates (97.9% of graduates require it), and that can practically be said of everyone, regardless of faculties.

2003 graduates mentioned training targeting a new degree in the greatest proportion among the most popular forms of extension training, but self-instruction and corporate training were also featured to nearly the same extent. This year, in the plans of 2004 graduates, the weight of self-instruction was somewhat smaller, while demands for receiving a new degree were higher. 12.2% of graduates had marked extension training in the form of PhD or DLA last year, and this year we essentially saw the same. There is a natural connection between the contents and forms of extension training courses, there are typical pertainings. Most of those aspiring for PhD training imagined their training in the adequate profession, however, within professional extension training courses it was not PhD, but corporate training that comprised the largest proportion (28.2%). Graduates tied most of the non-professional technical and economy or management related courses to receiving a new degree, but often mentioned some sort of corporate training in the case of that latter.

61.3% of responders indicated that they participated in some sort of extension training on the date of 31 December 2005. This rather high proportion is remarkable; it indicates that most of the graduates did not only demand a supplementation or extension of their existing knowledge in the distant future, but practically in the period of starting their job too, or their employer regarded that a necessity. This is especially true, if we consider that, since we inquired about a specific date, responders did not include those who had already started and completed their training at an earlier date.

Data collection among 2002 graduates prepared two years ago showed that a vast majority of graduates (95.6%) demanded some kind of extension training. It is no surprise, therefore, that by this period (4 years after graduation) 67.4% of graduates indicated that they had received some sort of certificate of new qualifications, or participated in some sort of course or extension training. Despite the large number of already completed extension training courses 81.8% of those filling in the questionnaire still regarded the extension of their skills necessary in the form of some kind of extension training. Interestingly, those who had already participated in such a course after receiving their degree gave that answer more often than the average (88% against the 69.2% characteristic of those who had not participated in extension training), which shows that the demand for extension training does not decrease with years passing by after graduation, nor due to the fresh graduate having completed one or two courses. That is most probably also due to the fact that skills soon become obsolete in some professions, and also to the fact that expert branches of a given profession are highly specialised.

10. Labour Market Status, Placement

The proportion of those employed (employed in labour relation or by subcontract or entrepreneurs) on 31 December 2005 among the responders of the 2004 graduates was 90.3%, the proportion of students (PhD and full-time students) 8.5%, the proportion of those unemployed 0.9%, and the proportion of those otherwise inactive 0.3%. The unemployment rate stayed below that of the results of the previous two data collections. Only mechanical engineers (3.9%) and IT specialist (2.9%) marked themselves as unemployed.

For informative purposes, we must state that the national unemployment rate of university graduates in the 4th quarter of 2005 (2.4%) and the 1st quarter of 2006 was 2.1%. [1] Unfortunately, national tendencies are

not too positive, true, the growth dynamics of graduate unemployment decreased every month concerning months January-June compared to the same period in the previous year, but the employment rate among graduates continues to grow, e.g. in May 2006 by 1.7% as compared to the same period of the previous year. It is hopeful that for the first time in the past three years in July of this year the proportion of graduate unemployed has decreased (by 1.9%) as compared to the same period of the previous year, and that decrease has continued ever since. [2]

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 2002 graduates. The proportion of those employed in a labour relation has increased by 10% among 2002 graduates in the past two years (the proportion of all employed individuals increased by 4%), and the proportion of students (full-time, PhD) has decreased. 15.2% of women were on maternity leave at the time of the questionnaire, and the total proportion of that category was 3.7%.

11. Channels Supporting Placement

More than a third of the responders (only those had to answer questions relating to placement and a job concerning whom the question was interpretable) found a job with the help of friends, so that remained the most successful jobseeking channel. The proportion of the utilisation of contacts as such was most characteristic of technical managers; the proportion of that category among them increased nearly two-fold at a continuous pace in four years.

The role of online job sites in jobseeking has been increasing dynamically for four years. The proportion of those finding a job via educational contracts or with the help of job centres has remained the lowest. What we had stated a year ago was still valid: alongside the near equal proportion of the other categories women significantly more often use online job agencies and men newspaper adverts than representatives of the opposite sex.

How did they find placement?	FACULTIES								
	ÉMK	ÉPK	GPK	GTK	KSK	TTK	VBK	VIK	Total
With the help of friends	54.4	46.8	44.1	59.5	36.5	40.0	24.4	19.6	35.8
Based on university contacts	14.6	17.0	18.3	12.5	19.6	40.0	11.7	14.6	16.2
With the help of online job sites and adverts	–	20.1	12.8	5.6	19.6	20.0	25.4	16.5	15.0
With the help of job fairs	2.9	3.7	4.8		2.8	–	19.2	26.5	12.2
Via newspaper adverts	5.8	–	6.8	5.6	8.4	–	7.5	14.3	8.4
With the help of personnel consulting agencies	2.9	–	1.2	5.6	–	–	–	2.1	1.6
Based on educational contracts	–	–	2.8	–	2.8	–	–	–	0.9
With the help of job centres job offices	–	2.9	–	–	–	–	4.3	–	0.7
Other	19.4	9.5	9.2	11.2	10.3	–	7.5	6.4	9.2

Table 14: Methods of placement, by faculty [%]

[1] Dóra Pozsonyi, Erika Csaba, Judit Főző: Munkaerő-piaci jellemzők 2006. II. negyedévében; Központi Statisztikai Hivatal, 2006., (Labour Market Characteristics in the 2nd quarter of 2006; Central Statistics Office)
Source: http://portal.ksh.hu/pls/ksh/docs/hun/xftp/idoszaki/munkero/munkero062.pdf

[2] Az Állami Foglakoztatási Szolgálat munkanélküli nyilvántartásának legfontosabb adatai; Állami Foglakoztatási Szolgálat, 2006. (Most Important Data of the Unemployment Registry of the Public Employment Service; Public Employment Service), Source: www.afsz.hu/engine.aspx?page=full_afsz_legfrissebb_adatai

12. Time of Placement

The average time of finding the first jobs in the past three years has dropped from 2.4 months to 1.6 months. In the same period the proportion of those who found placement within a month increased from 45.6% to 66.2%, and the proportion of those unable to find placement within 6 months has dropped from 10% to 5%. An average time of placement significantly longer than the general average was only characteristic of former students of the Faculty of Chemical Engineering (chemical engineer 2.9 months, bioengineer 4.0 months, environment engineer 5.6 months).

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
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

Table 15: Average time of finding the first job, by faculty [months]

13. Sources of Help Expected for Placement

65.4% of graduates received no help from the university concerning placement, which is the lowest figure in the past three years. Those receiving help most often mentioned commendation by the thesis consultant to enterprises (52.7% of answers), and the activities of the BME Student Centre Career Office (37.5%). 63.4% of graduates (would have) regarded receiving some sort of help concerning placement necessary (8.9% of responders did not answer the question).

Form of help	Year of graduation		
	2002	2003	2004
Corporate presentations, factory visits	18.5	19.9	21.2
Job placement	25.2	22.0	17.9
Preparation for interviews	10.1	12.6	12.8
Individual career planning	11.9	7.7	9.9
Personality development training	8.7	9.9	9.9
Mock interviews, simulated ACs	7.8	9.8	9.8
Publications helping jobseeking	10.9	9.4	8.8
Writing motivational letters	4.8	6.6	7.6
Other	2.1	2.1	2.1

Table 16: Help expected from the institution, according to year of graduation [%]

14. Changing Jobs, Second Jobs

Nearly two thirds of those with a job worked at their first workplace at the time of the survey, which is essentially equal to the values of previous years, and we could also see that the proportion of those working at their third or more workplaces had increased. The frequent change of jobs mostly characterised architects and fresh graduates of the Faculties of Electrical Engineering and IT and Civil Engineering.

Which workplace	Year of graduation								
	1997	1998	1999	2000	2001	2002	2003	2004	2002S
1st	78	78	68	69	69	63	63	64	49
2nd	18	18	25	27	23	30	29	25	38
3rd +	4	4	7	4	8	7	8	11	13

Table 17: Number of jobs, by year of graduation [%]

Examining the time period of four years, it can be stated that only half of the 2002 graduates worked in their first job. There was a significant difference between the sexes; while 9% of women had already seen two previous jobs, the same proportion among men was 14.4%. Changing jobs during the past two years was most characteristic of the graduates of the Faculties of Chemical Engineering and Civil Engineering.

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

Table 18: Number of those with a second job, by year of graduation [%]

15. Professional Aspect of Job, Job Description

Analysing data from the past eight years, it can be seen that the proportion of those not working in their profession at the time of the survey had grown from the initial 4% to 10%, and those partly working in their profession decreased from 24% to 16%.

Women continued to undertake jobs differing from their profession in twice the proportion. Among architects the proportion of those not working in their profession was only 3.7%, and more than 90% of civil engineers also worked in their profession. 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. Two thirds of those working in their profession worked in their first job, while the same proportion of those not in their profession did not reach 50%.

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	48.5	88.3	37.1	–	41.3	40.0	20.2	61.2	48.4
Implementer, manufacturer, operator	48.5	7.8	45.6	23.0	23.1	20.0	55.3	26.6	32.2
Economic, financial	–	–	1.2	12.2	2.9	20.0	–	1.9	2.3
Commercial, broker	–	–	8.9	35.1	13.5	20.0	3.2	1.1	6.4
Administrative	3.0	–	6.0	17.6	8.7	–	21.3	1.1	5.6
Consultant	–	–	1.2	12.2	7.7	–	–	7.2	4.1
Other	–	3.9	–	–	2.9	–	–	1.1	1.0

Table 19: Job description of 2004 graduates, by faculty [%]

16. Management Position, Opportunities for Promotion, Satisfaction

The social phenomenon, according to which men fulfil management positions in a higher proportion, was true among our graduates too. While 15.7% of men were managers, only 7% of women were. The proportion of managers was the highest again among graduates of the Faculty of Chemical and Bioengineering (27.7%), while continuing to fulfil managerial positions significantly less than the average were architects (6.3%), and graduates of the Faculty of Electrical Engineering and IT (10.5%).

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

Table 20: Graduates with a managerial position, by year of graduation [%]

Opportunities for promotion	Year of graduation			
	2002	2003	2004	2002S
	44.7	47.3	51.6	47.3

Table 21: Graduates' opportunities for promotion, by year of graduation [%]

Satisfied with job	Year of graduation							
	1997	1998	1999	2000	2001	2002	2003	2004
	82	79	77	74	76	75	79	75

Table 22: Satisfaction of graduates with their job, by year of graduation [%]

It is joyful that the proportion of those in a managerial position among 2002 graduates has increased by 6% since the survey (by 8% each at the Faculties VBK and GPK) and the difference between the sexes has decreased. Architects and graduates of the Faculty of Electrical Engineering and IT continue to fulfil managerial positions significantly less than the average. The development cannot only be seen in the increase of the proportion of managers but also in the rise of the average employee headcount. While in the case of 2002 graduates the average employee headcount was 21 in 2004, in 2006 the average employee headcount grew to 30, true deviations reached 54.

17. Size, Company Type, Ownership Structure

The large proportion of the placement of architects at micro-enterprises stopped growing, but was still above 80%. Just like the past years' data, graduates of the Faculty of Chemical Engineering found placement in the largest proportion at companies employing over 500 employees. The proportion increased compared to the past year.

Size of company	FACULTIES								
	ÉMK	ÉPK	GPK	GTK	KSK	TTK	VBK	VIK	Total
0-20 persons	42.2	82.8	34.7	35.6	15.9	20.0	7.4	16.7	31.0
21-50 persons	7.8	3.0	9.8	5.5	5.6	–	3.2	15.9	9.4
51-100 persons	5.9	3.7	11.0	5.5	18.7	–	11.7	6.2	8.4
101-500 persons	17.6	7.5	21.6	35.6	16.8	40.0	12.8	34.4	23.8
500 + persons	26.5	3.0	22.9	17.8	43.0	40.0	64.9	26.9	27.5

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

The analysis of companies employing 2004 graduates according to type of company did not entail significant changes at a university level compared to last year. The proportion of companies with a legal entity (Kft., Rt., etc.) remained overwhelming; in fact it has grown somewhat compared to last year, especially at the cost of the public sector.

Ownership structure	In proportion of responders
Hungarian majority	33.7
Foreign majority	47.9
State	5.4
Own	12.5
Other	0.5

Table 24: 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 changes at a university level, those working in the capital remain a near 70% of responders.

Company headquarters	FACULTIES								
	ÉMK	ÉPK	GPK	GTK	KSK	TTK	VBK	VIK	Total
Budapest	63.1	71.3	54.6	76.7	52.4	80.0	76.6	81.4	69.5
City of county rank	22.3	16.3	19.9	–	35.9	20.0	11.7	11.2	16.4
City	11.7	5.4	19.9	23.3	8.7	–	11.7	4.3	10.6
Village	2.9	7.0	5.6	–	2.9	–	–	3.2	3.6

Table 25: Headquarters of companies employing 2004 graduates, by faculty [%]

While a year ago the proportion of those working for Budapest based companies had been the highest among graduates of the Faculty of Economic and Social Sciences, this year it was highest among graduates from the Faculty of Electrical Engineering and IT. Capital-centeredness continued to be least characteristic of graduates of the Faculties of Mechanical and Transportation Engineering.

18. Mobility

Analysing the headquarters of the companies employing graduates, we can state that 2004 graduates commuted 64 minutes on average a day. This value was essentially equal to the one measured at the year graduated in 2003 (60 minutes). Employees of Budapest-based companies travelled the most timewise (72 minutes), they were followed in that aspect by employees of companies with a headquarter in villages and other cities (61 and 48 minutes), and those travelling least were employees of companies operating in cities of county rank (40 minutes) and they also displayed the least deviation concerning travel time.

The willingness of mobility, upon examining the graduates of the past 3 years has not changed. 58% of 2004 graduates would move should their job require it. The willingness of mobility decreases with the improvement of living and the strengtheneing of family bonds (long-term relations, children, etc.), which we had also observed at the 2002 graduates. The previous value of 55.5% was only 47% 2 years later.

19. Language Skills

The number of language examinations (intermediate, advanced) per person at the time of the survey was 1.3. The average language skills of 2004 graduates one and a half years after graduation equalled that measured earlier. 30% of responders spoke two, while 2.8% spoke three languages. The vast majority of graduates had certified language skills in English: 78.7% of them spoke that language at an intermediate or advanced level, and 44.7% of responders had the same level language skills in German. Concerning the various levels of language examinations, the proportion of intermediate examinations was 85.9%, the advanced 14.1%, which latter was higher than the value measured in previous years by 2-3%. The language skills of graduates, concerning use, helps translation in 37%, conversation in 34% and negotiation in 29% of cases.

20. Income Conditions

During the examination of income data we only analysed information related to those employed in labour relation or via subcontract. Those without or with only partial income would have distorted our statements. In the questionnaire we inquired about the gross income of 2005, the gross average income of February 2006, and other financial or natural allowances. The average of other allowances featured in the tables is the averages of data where the responder declared other allowances and the value was not zero. During publishing income and salary data, we used the methodological definitions of the Central Statistics Office. [3]

[3] Source: http://portal.ksh.hu/pls/ksh/docs/hun/modsz/modsztoc.html

		FACULTIES								
		ÉMK	ÉPK	GPK	GTK	KSK	TTK	VBK	VIK	Total
Income of February 2006	Average	793	667	852	1020	829	1011	797	1179	940
	Deviation	288	295	345	387	192	255	272	449	403
1 month's gross average salary in 2005	Average	732	599	755	981	765	1004	777	1120	876
	Deviation	284	238	302	286	200	240	242	421	377
1 month's other allowances in 2005	Average	79	98	103	95	65	251	101	116	104
	Deviation	108	127	105	108	60	302	92	134	123
1 month's average income in 2005	Average	788	709	866	1096	825	1364	801	1218	983
	Deviation	308	272	316	368	196	391	291	488	427

Table 26: Income conditions of 2004 graduates, by faculty [€]

		FACULTIES								
		ÉMK	ÉPK	GPK	GTK	KSK	TTK	VBK	VIK	Total
Income of February 2006	Average	909	749	1153	1361	1289	1227	1054	1446	1187
	Deviation	375	411	494	370	734	577	402	709	616
1 month's gross average salary in 2005	Average	916	649	1114	1183	1249	1296	1068	1399	1156
	Deviation	385	267	433	546	573	682	420	762	612
1 month's other allowances in 2005	Average	152	94	141	187	103	81	83	105	113
	Deviation	180	101	125	66	85	77	57	108	114
1 month's average income in 2005	Average	1132	761	1271	1773	1351	1494	1152	1451	1290
	Deviation	483	250	474	382	599	651	456	584	557
1 month's average income in 2003	Average	744	723	731	976	1037	–	776	1030	876
	Deviation	303	339	417	450	742	–	365	61	523

Table 27: Income conditions of 2002 graduates, by faculty [€]

	2004	2005	2003-2005
GDP increase [%] [4]	4.9	4.2	9.3
Consumer price-index increase [%] [5]	6.8	3.6	10.6
Real income increase [%]			33.13
Real income increase [€]			290
Nominal income increase [€]			414

Table 28: Changes in the income conditions of 2002 graduates

[4] Dr. Csák Ligeti, Dr. Pál Pozsonyi: Bruttó hazai termék 2005. (Előzetes adatok II.); Központi Statisztikai Hivatal, (Gross Domestic Product 2005 (Preliminary Data II); Central Statistics Office) 2006.,
Source: http://portal.ksh.hu/pls/ksh/docs/hun/xftp/idoszaki/gdpev/gdpevelo05.pdf

[5] Mrs László Demecs, Beáta Kollár, Mrs Lajos Kozma, Andrea Mészáros, Borbála Mináry, Erzsébet Sármány: Fogyasztóiár-indexek 2005.; Központi Statisztikai Hivatal, (Consumer Price Indexes 2005; Central Statistics Office) 2006.,
Source: http://portal.ksh.hu/pls/ksh/docs/hun/xftp/idoszaki/fogyar/fogyar05.pdf

As we can see from Table 29, the income of 2002 graduates has increased by 33% in 2 years. Observing the faculty division of 2005 income data, we can state that all faculties have surpassed the average income of (one) profession(s) comparable to the field according to the statistics of the PES, although in the case of architects the two values are very close.

Faculty	FEOR code of profession	Profession	Gross monthly income of 2002 graduates	PES data (for all age groups)
ÉMK	2124	civil engineer	1132	999
ÉPK	2123	architect	761	760
GPK	2117	mechanical engineer	1271	1165
GTK	2511	economist	1773	1262
KSK	2122	transportation engineer	1351	1093
TTK	2141	physician	1494	1061
VBK	2115	chemical engineer	1152	1143
VIK	2133	software designer, IT specialist	1451	1220

Table 29: Comparing 2002 graduates' income with PES data [€]

Former students of the Faculty of Economic and Social Sciences and Mechanical Engineering produced the most intensive income increase among 2002 graduates: within two years the average income (nominal) had increased by 81 and 73%.

In our survey last year, we reported a EUR 38 average real income increase among 2003 graduates at a university level. Based upon this year's data, we can say of the 2004 year that the situation has deteriorated somewhat. Considering the 3.6% inflation [6], we can mention a slight, some EUR 38 real income decrease compared to the year graduated in 2003. The calculated monthly gross average income of those with an intellectual occupation – using CSO terminology – was € 841 in 2005. [7] 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: the data of four faculties does not reach the national average of those with an intellectual occupation.

Upon examining the income data of the faculties, we can state that besides the deviation of the various income indices, the graduates of the 8 faculties reached an unfavourable income position – compared to the previous year – in total. We must state that the income conditions of the graduates of the Faculty of Architecture also deteriorated, yet more or less at the same rate as the other faculties, which could mean that the negative trends of previous years characteristic of only this faculty still stand. Disregarding the faculty of Economic and Social Sciences and the Faculty of Natural Sciences (in lack of adequate data), we can say that the winner of the year was the Faculty of Mechanical Engineering where all three – not derivated – income indices increased; while the Faculty of Transportation Engineering the Faculty of Chemical and Bioengineering were detractive faculties in all three indices.

6 Dr. András Balogh, Gergely Baksay, Mrs Demény, Zsuzsa Lehel, Mónika Freid, Péter Friss, Gyula Holka, Mrs Jávorszky Anikó Nagy, Mrs Kátai Angéla Marosi, Nóra Kelemen, László Kenyeres, Beatrix Molnár, Eszter Németh, Mrs László Simon, dr. Mária Pintér, dr. Zsuzsanna Szabó: A KSH jelenti Gazdaság és társadalom 2006/1.; Központi Statisztikai Hivatal, (CSO Reports. Economy and Society 1/2006; Central Statistics Office)2006., Source: http://portal.ksh.hu/pls/ksh/docs/hun/xftp/gyor/jel/jel20601.pdf

7 Mrs Demény Zsuzsa Lehel, Judit Főző, Mrs Kovács Ágnes Balásfalvi, Erika Molnárfi, Szilvia Vasas G.: Főbb munkaügyi folyamatok 2005. január-december; Központi Statisztikai Hivatal, (Main Labour Processes January-December 2005; Central Statistics Office) 2006., Source: http://portal.ksh.hu/pls/ksh/docs/hun/xftp/idoszaki/fmf/fmf0512.pdf, calculated data

Comparing the average income of men and women graduated in 2004, it can be stated that women only earn 76% of the income of their male colleagues on average. Last year that proportion was only 72%. The deviation of the income concerning women is 63% of that of their male colleagues', which leads us to conclude that women have less chance to earn really high incomes than their male colleagues. According to the national statistics of the PES [8] the difference between the incomes of men and women of intellectual occupation is 23% in favour of men.

Those who partly financed their university studies from work related income had higher incomes on average in 2005.

Examining the income data of the year of 2004 according to the headquarters of companies, we can state that in domestic comparison, there is an income gap between Budapest and other settlements, which was not at all characteristic of previous years and the survey of the year of 2002 did not show similar results either.

Average income	Budapest	City of county right	Other city	Village	Abroad
2002 graduates (in 2006)	1129	1605	1295	1105	2855
2004 graduates	907	818	773	825	1568
2003 graduates	893	767	1064	1052	
2002 graduates	823	689	907	951	

Table 30: Average income of the surveyed population 1-1.5 years (and 3 years) after graduation by headquarters of company [€]

36.9% of 2004 graduates were not in their first job at the time of the survey. The reason for the first changing of jobs was probably a better income, those that had changed jobs earned € 8 6 more than those who had not. The reasons behind further job changes may not (only) be a better income, because the income of those changing jobs a third, or even more times was worse than those who had only changed once.

[8] Public Employment Service: Average basic salaries and income by profession, according to age group, in the national economy, 2005., Source: www.afsz.hu/resource.aspx?ResourceID=stat_egyeni_berek_2005_isk_vegz