

## **Funding higher education in Slovenia: the introduction of a lump-sum instrument**

### Summary

*The paper presents an analysis of the existing higher education funding system in Slovenia. The findings of this analysis, which focused on full-time undergraduate studies, show significant differences in the operating costs of study activities among different institutions within individual study groups, as well as different study fields. At the same time, considerable discrepancies were noted in connection with funding received for particular study activities and the average operating cost of study activities among individual study groups. In compliance with the mentioned findings, the study carried out an analysis of the effects of changing the ratio between basic and standard annual funds within the total annual funds. By increasing the percentage of standard funds within the total annual budget, average funds per student gradually approximate the average expenditure within individual study groups, based on which it can be claimed that the process of decreasing the percentage of basic funds has been too slow.*

**Key words:** Funding of education institutions, higher education institutions, Decree on the Public Financing of Higher Education and Other University Member Institutions 2004-2008, basic funds, standard funds.

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### 1. Introduction

The question of higher education funding is very high on the agenda in most EU countries (EC, 2004; Jacobs, van der Ploeg, 2006). On 23-24 March 2006 the European Council called on the member states "to facilitate, in line with national practices, universities' access to complementary sources of funding, including private ones, and to remove barriers to public-private partnerships with businesses", and concluded that reforms must be "stepped up to ensure high-quality education systems which are both efficient and equitable". Slovenia is no exception, as there has been a lot of debate about the level of funding and the right public-private mix of higher education funding in the last few years.

At the EU level, the new investment paradigm in education and training was first set out in January 2003 in the Communication *Investing efficiently in education and training: an imperative for Europe*. The need for a substantial increase in investment in human resources was highlighted in view of achieving the

Lisbon goals. Public funds should be granted to higher education institutions in such a way that effectiveness, efficiency and quality are promoted. Funding mechanisms should provide incentives for change and innovation. However, due to limited public budgets there is also clear pressure to ensure the more efficient use of existing funds and a stronger appeal to increase private contributions.

The share of total public expenditure for tertiary education in GDP in Slovenia is around 1.34%. However, the Slovenian government has made it an objective to raise this to 1.4% in the Master Plan for Higher Education. Tertiary education in Slovenia is mainly publicly funded. However, one third of all students in tertiary education (part-time students) pay tuition fees, which are not negligible.

In this paper we do not focus on what the optimal public-private mix should be, but instead concentrate on the allocation mechanism of public funds that are regulated by the Decree on the Public Financing of Higher Education and Other

\* Faculty of Management Koper, University of Primorska, Koper, Slovenia

\*\* Faculty of Management Koper, University of Primorska, Koper, Slovenia

\*\*\* Faculty of Management Koper, University of Primorska, Koper, Slovenia

University Member Institutions 2004–2008 (hereinafter: decree), which replaced the Standards for Financing Higher Education adopted by the government in 1992. The decree was adopted in December 2003 for a fixed period of time. The most important change in the funding system was the introduction of a lump-sum instrument that defines the allocation of public funds among higher education institutions (hereinafter: HEIs) in relation to their outcome.

Even though the lump-sum instrument was chosen to replace direct payments for individual HE activities and costs, a “link” remained with the former funding system. The new allocation mechanism defines basic funds and standard funds, which form the total annual funding for each HEI. The share of basic funds in 2004 amounted to 80% of the funds received in 2003 and was set to decrease by 2.5 percentage points each year. However, the funds received in 2003 represented direct payments according to the former standards. So, even though the allocation was supposed to be related to the outcome of HEIs, the majority of funds was still allocated according to the former standards.

Not all HEIs faced the same situation with the introduction of the lump-sum instrument. HEIs with large staff numbers (and possibly facing decreasing enrolments in the last few years) that had received quite substantial funding according to the former standards were in a more favourable position than the newly emerging HEIs, usually with small staff numbers but facing an expansion of their activities. That is why the introduction of the proposed allocation mechanism brought about a lot of discussion about the right basic-standard mix of annual funding.

In this paper we analyse the effects of changing the ratio between basic and standard annual funds within the total annual funds.

The paper is organised as follows: Section 2 briefly describes the funding system of tertiary education, with a focus on the lump-sum funding of study activities at HEIs. Section 3 describes the methodology and data used in the analysis. Section 4 presents the results of the analysis and, finally, Section 5 concludes the paper.

## 2. Tertiary education funding in Slovenia

The share of total public expenditure on tertiary education in GDP amounted to 1.34% in 2003 (see Table 1). In the Master Plan for Higher Education, the Slovenian government made it an objective to raise this to 1.4%.

When comparing annual expenditure on education institutions per student in Slovenia and in EU countries, we can see that Slovenia is lagging behind. However, the difference shrinks when we make a relative comparison based on annual expenditure on education institutions per student compared to GDP per capita.

A quarter of total public expenditure on education at the tertiary level is spent on financial aid to students, which is outstanding in comparison with EU countries.

Slovenian tertiary education is offered by higher (post-secondary) vocational colleges and higher education institutions, which consist of professional colleges, faculties and art academies. Higher

**Table 1: Key indicators of tertiary education funding, Slovenia and the EU, 2003**

Indicator	SI	EU-25	EU-15*	Country with the lowest value	Country with the highest value
Total public expenditure on education as % of GDP, at tertiary education level (ISCED 5-6)	1.34	1.15	1.16	0.74 (Latvia)	2.48 (Denmark)
Annual expenditure on public and private education institutions per student in EUR PPS, at tertiary education level (ISCED 5-6)	5,743	8,060	8,868	3,245 (Lithuania)	13,717 (Sweden)
Annual expenditure on public and private education institutions per student compared to GDP per capita, at tertiary education level (ISCED 5-6)	34.8	36.7	37.4	27.4 (Ireland)	54.5 (Sweden)
Financial aid to students as a % of total public expenditure on education, at tertiary education level (ISCED 5-6)	25.2	16.1	16.9	0.4 (Poland)	56 (Cyprus)

Source: Eurostat, 2007.

Note: \* The EU-15 group comprises Luxembourg, Denmark, Belgium, Austria, Germany, France, Netherlands, Italy, Sweden, United Kingdom, Finland, Ireland, Spain, Portugal and Greece.

vocational education is organised parallel to higher education and not as an integrated part of it. The first vocational colleges were established in 1996–97. Programmes are markedly practice-oriented and closely connected with the world of work.

According to the Higher Education Act, an HEI may be established by the state or by private (national and foreign) natural persons and legal entities. Public HEIs are established in order to provide public services. In certain conditions, a private HEI may be granted a concession for a public service (and consequently for public co-financing) by a government decree on the basis of a public tender. In such cases, private HEIs are co-financed on the same conditions as the state ones. In the 2005–06 academic year, three out of five free-standing HEIs delivered undergraduate programmes with such a concession.

The financing of vocational colleges is regulated by the Standards for Financing Vocational Colleges adopted by the government in 1996. Study activities are publicly financed for all full-time students, whereas part-time students pay tuition fees. Since two-thirds of higher vocational students (part-time students) pay tuition fees, we can say that government funding plays a minor role. However, the funding of vocational colleges is not the focus of this paper.

### **2.1. Funding higher education institutions**

The funding of HEIs is more complex and comprises funding for study activities, funding for research and funding for investment. Only the funding of study activities, especially the related allocation mechanism, is of interest in this paper.

#### **Funding of study activities**

Study activities of HEIs comprise:

- educational and related research, artistic and professional activities of higher education teachers and staff and scientific staff;
- library, information and other professional activities; and
- organisational, administrative and infrastructural activities.

The financing of higher education differentiates between undergraduate and postgraduate studies. Undergraduate study activities are publicly financed for all full-time students, while part-time students pay tuition fees. The state allocates funds to HEIs based on the methodology set by the Decree on the Public Financing of Higher Education and Other University Member Institutions 2004–2008

(hereinafter: decree), which replaced the Standards for Financing Higher Education adopted by the government in 1992.

The decree regulates the public financing of study and extracurricular activities, investment, and investment maintenance and development tasks at universities and free-standing higher education institutions established by the Republic of Slovenia, and the financing of certain tasks of national importance. The provisions on the financing of study and extracurricular activities and development tasks also apply to private higher education institutions with a concession, while the provisions on the financing of development tasks also apply to private higher education institutions providing certified study programmes if they receive public funding. The public financing of study activities for a university or free-standing higher education institution is defined as total funds (a lump sum). There is no division between academic and professional study programmes.

Postgraduate students pay tuition fees. However, the state provides public funding for the co-financing of these tuition fees through:

- a public tender for the co-financing of postgraduate studies that finances 60–80% of tuition fees for students whose faculties fulfilled the conditions of the tender (among others, the tuition fee must not exceed the one set by the state). The tender was issued for the first time in 1998, when 27% of students received co-financing. In the 2004–05 academic year this percentage was 53%;
- an additional 9% of postgraduate students receive co-financing through the “Young Researchers” financing scheme, which covers the full tuition fee, some of the material costs for the research in which the student is involved, and the salary for the young researcher.

### **2.2. Lump-sum funding**

The introduction of lump-sum funding, which is used to fund the study activities of undergraduate programmes at HEIs, was driven by the following drawbacks of the former standards:

- the distribution of funds for study activities among HEIs was mainly in the domain of the ministry. The lack of autonomy at the university level did not promote efficiency in the use of the funds;
- financial monitoring mainly focused on the cash flow rather than on the realisation of the set long-term goals and performance and quality indicators of HEIs; and

- the slow responsiveness of HEIs to changes in society and the economy.

The instrument of lump-sum funding was chosen to replace direct payments for individual HEI activities and costs so the HEIs would gain greater financial autonomy. Increased institutional autonomy, which is also advocated by the communications of the European Commission and endorsed by the European Council (EC, 2007), should allow greater flexibility in resource management and promote the more efficient use of public funds. The long-term objectives of the reform were:

- to increase the flexibility of HEIs, which should result in a higher rate of responsiveness to labour market and society needs;
- to maintain a diverse higher education system and to guarantee equality of opportunity (wide access to higher education, particularly for people from disadvantaged backgrounds); and
- to promote the more efficient use of funds and a higher degree of transparency.

The new system was introduced for a limited period of time (from 2004 to 2008). Since the lump-sum funding instrument relates funds to outcomes, the HEIs needed to completely change their financial management and administration. The increased financial autonomy of HEIs must be accompanied by a higher level of responsibility for the efficient use of public money, and the way money is spent should be made transparent.

However, the formula currently proposed by the ministry, which includes only the number of students and graduates as outcome indicators, does not give strong incentives to improve educational quality. There is a need to establish a quality evaluation system based on performance indicators and clearly set targets; otherwise there is a risk of grade inflation.

The methodology for the allocation of funds is divided into two parts:

- planning the budget; and
- allocating funds to higher education institutions.

### Planning the budget at the state level

The budget is planned so that the annual budget funds for study activities from the previous fiscal year are increased each year in real terms by at least the growth of gross domestic product, but by not less than 2.5% with regard to the realisation for the previous year for study activities. From all the funds planned for higher education at the relevant ministry, at most 4% is reserved by the

minister for specific policy and development goals. These funds are delivered through public tenders for specific developmental activities.

### Allocating funds to higher education institutions

The annual funds for the study activities of a higher education institution (LS) comprise basic annual funds (OLS) and standard annual funds (NLS).

Basic annual funds for a higher education institution (OLS) are defined in the decree. For 2004 they were set at 80% of the annual funds for the study activities of an HEI in 2003. The share of basic annual funds was set to decrease each year by 2.5 percentage points, reaching 70% of the annual funds for the previous year's study activities of the HEI in 2008.

The standard annual funds for an HEI (NLS) are determined by taking account of the annual initial value (LIV), the total number of students ( $\check{S}$ ), and the number of graduates (D) multiplied by the weighting (Ud) and a factor for the study group f(s) to which the higher education institution belongs ( $NLS = LIV * \Sigma [(\check{S} + D * Ud) * f(s)]$ ).

The annual initial value (LIV) means the standard annual funds per student in the first study group. Students ( $\check{S}$ ) are full-time students in undergraduate study programmes excluding graduands at the HEI in the current academic year. Graduates (D) are the graduates of full-time undergraduate study programmes at the HEI in the previous calendar year. The graduate weighting (Ud) is currently set at a value of 4.

Study groups (s) combine higher education institutions by their dominant study fields or subfields according to the ISCED classification of study fields (UNESCO, November 1997).

The factor of the study group f(s) expresses the ratio between the funds allocated for the provision of education in the study group compared to the first study group. There are six study groups, whose values vary from 1.00 to 4.50.

The funds are allocated annually by contract.

## 3. Data and Methodology

The analysis was based on data provided in annual reports for 2004 and 2005 by the HEIs and on data provided by the ministry. In this context, it should be emphasised that the methodology used for the cost calculation of study activities is not clearly defined, and therefore probably not completely uniform, among individual HEIs.

**Table 2: Average expenditure on study activities per full-time undergraduate student by study group, EUR, 2004 and 2005\***

Study group	2004			2005		
	Min	Max	Average	Min	Max	Average
Group 1	480 (UM PF)	3,768 (VSŠP)	2,195	409 (UL FU)	3,768 (VSŠP)	2,387
Group 2	1,114 <sup>1</sup> (UM VZŠ)	4,348 <sup>1</sup> (UL FŠ)	3,146 <sup>1</sup>	1,340 (UM VZŠ)	4,486 (UL FŠ)	3,109
Group 3	2,387 (POLITEH)	4,949 (UL FS)	3,764	2,441 (POLITEH)	5,212 (UM FS)	3,910
Group 4	2,804 (UL FFA)	4,640 (UL BF)	4,198	3,288 (UL FFA)	4,974 (UL FFA)	4,565
Group 5	5,008 (UM FKKT)	5,955 (UL FMF)	5,633	4,528 (UM FKKT)	7,349 (UL FMF)	6,113
Group 6	6,677 <sup>2</sup> (UL ALUO)	28,251 <sup>2</sup> (UL AGRFT)	10,040 <sup>2</sup>	6,084 (UM MF)	26,552 (UL AGRFT)	10,286

Source: MHEST (2004), MHEST(2005), own calculations Trunk Širca et al.

Notes: \* See the list of HEIs in the Appendix. <sup>1</sup>UP VŠZI is not included. <sup>2</sup>UM MF is not included.

However, the annual reports were the only source of expenditures on study activities available at the time of the analysis.

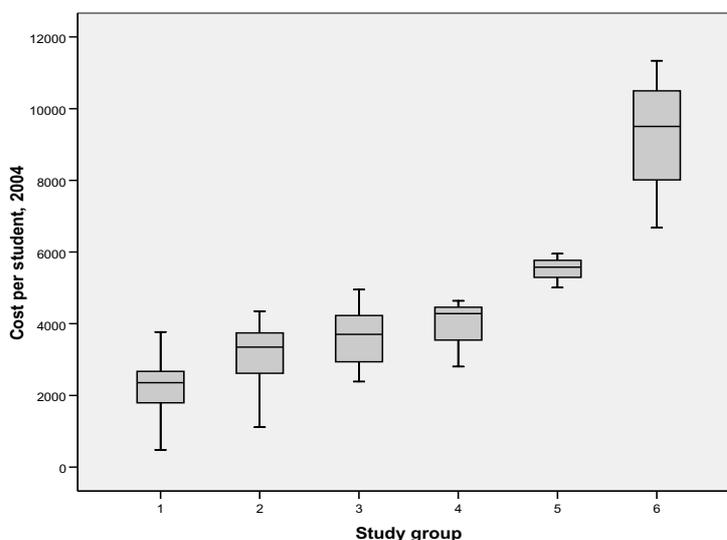
We calculated the average expenditure per student within study groups and took the group averages as benchmarks when analysing the effects of changing the ratio between basic and standard funds within the total annual funds.

We started the analysis with a comparison of the average funds received per student and average expenditure of study activities per student within study groups to find out the relative position of an

HEI in different educational groups. Then we continued with the same comparison; however, it was undertaken at different ratios between basic and standard funds to see how the position of an HEI in each of the study groups would change.

### 3.1. Expenditure on study activities

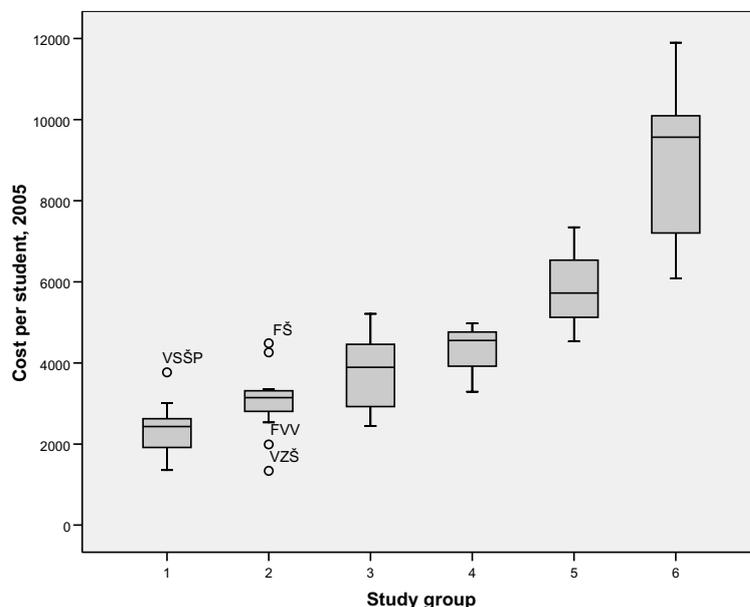
Table 2 contains the lowest, highest and average expenditure per student in each of the six study groups in 2004 and 2005. Some HEIs were not included in the analysis for 2004 since they did not exist yet or their data were unavailable. However, we do not consider the bias to be

**Figure 1: Distribution of average expenditure on study activities per full-time undergraduate student by study group, EUR, 2004\***

Source: MHEST (2004), MHEST (2005).

Note: \* See the list of HEIs in the Appendix. UL AGRFT is not included in Group 6.

**Figure 2: Distribution of average expenditure on study activities per full-time undergraduate student by study group, EUR, 2005\***



Source: MHEST (2004), MHEST (2005).

Note: \* See the list of HEIs in the Appendix. UL AGRFT is not included in Group 6.

significant, since the number of students in these HEIs in 2005 was small and so were the weights when calculating the group averages (weighted).

First, we can see large differences in expenditure per student among HEIs in the first and second study groups (see Table 2 and figures 1 and 2).

Second, it is almost impossible to draw a line between HEIs from study groups 1 to 4, since the distributions in these groups overlap (figures 1 and 2).

These findings hardly justify the distribution of HEIs by the six study groups defined by the decree; however, this is beyond the scope of this paper.

### **3.2. Efficiency of the allocation of funds**

Table 3 contains the average funds received per student and the average expenditure on study activities per student in each of the six study groups in 2004 and 2005. Again, some HEIs were not included in the analysis since they did not exist yet or their data were unavailable.

We can see that HEIs from the first study group were underfunded by 23% in 2004 and by 24% in 2005. HEIs from the sixth study group were also underfunded in 2004 and 2005 (by 7% and 5%).

As was evident from the documentation, the deficit was financed from other sources.

On the other hand, HEIs in the second group were overfunded in 2004 and 2005, while HEIs in the fourth and fifth group were only overfunded in 2004.

With some exceptions, the situation was very similar among all HEIs within each study group.

As we can see, the funds were not efficiently allocated in 2004 and 2005. We see the reason for this in the excessive share of basic funds within the total annual funds of each HEI. For 2004, the basic funds of each HEI were set at 80% of the annual funds for the study activities of an HEI in the previous year (2003). For 2005 the share of basic funds dropped to 77.5% of the total annual funds for the study activities of the HEI in the previous year (2004).

Since the funds of each HEI in 2003 represented direct payments according to the former standards, we can conclude that the majority of funds in 2004 and 2005 were still allocated according to the former standards, even though the lump-sum instrument had been introduced. HEIs with large staff numbers (and possibly facing decreasing enrolments in the last few years) that received quite substantial funds according to the former standards

**Table 3: Funds received per student and expenditure on study activities per student by study group, EUR, 2004 and 2005\***

Study group	2004			2005		
	Funds per student	Expenditure per student	Funds/ expenditure ratio	Funds per student	Expenditure per student	Funds/ expenditure ratio
Group 1	1,690	2,195	0.77	1,803 <sup>1</sup>	2,387 <sup>1</sup>	0.76
Group 2	3176 <sup>2</sup>	3,146 <sup>2</sup>	1.01	3,196	3,109	1.03
Group 3	3,668	3,764	0.98	3,872	3,910	0.99
Group 4	4,306	4,198	1.03	4,553	4,565	1.00
Group 5	5,859	5,633	1.04	5,984	6,113	0.98
Group 6	9,381 <sup>3</sup>	10,040 <sup>3</sup>	0.93	9,769	10,286	0.95

Source: MHEST (2004), MHEST(2005), own calculations Trunk Širca et al.

Notes: \* See the list of HEIs in the Appendix. <sup>1</sup> UL FU is not included. <sup>2</sup> UP VŠZI is not included. <sup>3</sup> UP MF not is included.

were in a more favourable position than the newly emerging HEIs that usually have small staff numbers but face an expansion of their activities.

### 3.3. The simulation

Since we found the proposed ratio between basic and standard funds within the total annual funds of each HEI caused the inefficient allocation of funds, we did some simulations of the effects of changing the ratio between basic and standard funds. The simulations were based on the following assumptions:

- we simulated the allocation of public funds among the HEIs for the 2004–2010 period;
- the total budget in 2004–2006 equals the realisation in these years; for the 2007–2010 period the total budget was estimated according to the decree;
- the number of students in 2003–2007 equals the number of full-time students in undergraduate study programmes excluding graduands at the HEIs in the current academic year; in the 2007–2010 period the number of students equals the number of full-time students in the 2006–07 academic year;
- the number of graduates in the 2003–2005 period equals the number of graduates from full-time undergraduate study programmes at the HEIs in the previous calendar year; in the 2006–2010 period the number of graduates equals the number of graduates in 2005;
- from all the funds planned for higher education in the 2007–2010 period, 4% is reserved by the minister for specific policy and development goals. These funds are being delivered through public tenders for specific developmental activities;

since the variation in expenditures on study activities within study groups was found to be very high, we took group averages as benchmarks. We assumed the averages should be less biased than individual data on expenditure and this should, at least partly, eliminate the already mentioned problem of a lack of uniformity in the cost calculation methodology among HEIs.

When analysing several scenarios, three aspects must be considered:

- a comparison of funds received and average expenditure on study activities within individual study groups in 2004 and 2005 to find out which basic-standard mix of funds helps to approximate the funds received to the average expenditure within individual study groups;
- a comparison of the funds/expenditure ratio in 2004 and 2005 between study groups to find out which redistribution effects appear when changing the share of basic funds; and
- a comparison of funds received per student in each year of the 2004–2010 period by average funds per student in the whole period to analyse the stability of the funding system from the point of view of each HEI.

The relative deviation was the criterion chosen to evaluate the discrepancies between the funds received and average expenditure or average funds in the case of the analysis of time stability. The relative deviation was estimated in the following way:

- First, we compared funds for study activities received per student with average expenditure in the study group:

$$I_{\%}^i = \frac{\text{funds\_per\_student}_i}{\text{expenditure\_per\_student}_i} * 100$$

- We calculated the absolute deviation (expressed in index points):

$$D_{it} = \left| 100 - I_{j,t} \right|$$

- Finally, we calculated the weighted average deviation from the average expenditure for each study group:

$$AD_t = \frac{\sum_i (D_{it} * students_{it})}{\sum_i students_{it}}$$

The relative deviation defined as described above is expressed in index points.

2007-2010 was estimated according to the assumptions mentioned in the previous section.

- The allocation of funds according to the decree, without exceptions. The total budget in 2004-2006, including additional funds according to Article 18 of the decree, was allocated according to the formula. The allocation in 2007-2010 was estimated according to the assumptions noted in the previous section.
- The allocation of funds according to the formula defined in the decree, but at different ratios between basic and standard funds within the total annual funding of each HEI - 70%:30%, 60%:40%, 50%:50%, 40%:60% and 100% standard funds.

#### 4. Results

The following scenarios were evaluated:

- The allocation of funds according to the decree. The actual realisation in 2004-2006 was taken as a benchmark, whereas the allocation in

Several remarks may be made concerning the results:

- When the allocation is performed according to the decree, we see the HEIs from the first and sixth groups were underfunded in 2004

**Table 4: Comparison of average funds received per student according to different ways of allocation, with average expenditure per student, by study group, 2004 and 2005 (index)**

Year	Study group	Decree <sup>1</sup>	Decree, without exceptions <sup>2</sup>	70 S:30 N <sup>3</sup>	60 S:40N <sup>4</sup>	50 S:50 N <sup>5</sup>	40 S:60 N <sup>6</sup>	100S <sup>7</sup>
2004	Group 1	80	80	80	81	82	82	85
	Group 2	104	103	103	103	102	102	101
	Group 3	101	102	101	101	101	101	100
	Group 4	105	105	107	109	110	112	119
	Group 5	104	104	103	103	102	101	98
	Group 6	94	93	93	92	92	91	89
	Group 6 without academies	88	88	89	89	90	90	93
2005	Group 1	76	76	77	77	78	78	79
	Group 2	106	103	102	101	101	100	100
	Group 3	103	103	103	103	102	102	103
	Group 4	105	105	107	109	111	113	117
	Group 5	95	96	95	94	94	94	95
	Group 6	96	92	92	92	92	92	94
	Group 6 without academies	92	87	88	90	91	92	96

Source: MHEST (2004), MHEST (2005), own calculations Trunk Širca et al.

Notes: <sup>1</sup>Actual realisation of Ministry of Higher Education, Science and Technology (exceptions were taken into account). <sup>2</sup> Allocation according to the decree, but without making exceptions - additional funds represent that part of the total budget allocated according to the formula. <sup>3</sup> Simulation when basic funds represent 70% and standard funds 30% of the annual funds of each HEI. <sup>4</sup> Simulation when basic funds represent 60% and standard funds 40% of the annual funds of each HEI. <sup>5</sup> Simulation when basic funds represent 50% and standard funds 50% of the annual funds of each HEI. <sup>6</sup> Simulation when basic funds represent 40% and standard funds 60% of the annual funds of each HEI. <sup>7</sup> Simulation when standard funds represent 100% of the annual funds of each HEI.

and 2005, whereas HEIs from the fifth group were only underfunded in 2005 (see Table 4). We ran two separate estimations for the sixth group, one with art academies included (as defined in the decree) and the other with art academies left out of the system, since we consider them exceptional cases that should be treated individually. When excluding the art academies, the deficit per student is even higher (12% in 2004 and 8% in 2005).

- Increasing the share of standard funds means relating funds more and more to outcome indicators. As we can see in Table 5, increasing the share of standard funds helps to reduce the deficit in the first group by nearly 5% when total annual funds are defined as standard funds.
- Results for the sixth group differ when art academies are left out. Again, increasing the share of standard funds within the total annual funds helps to reduce the deficit by nearly 5% (2004) or 4% (2005) when the total annual funds are defined as standard funds.
- On the other hand, increasing the share of standard funds helps to reduce the surplus in the second and third groups, which were overfunded.
- The only exception is group 4, where the surplus even grows when increasing the share of standard funds. We consider this to be a consequence of overestimating the factor of group 4 in the decree.

In accordance with the above findings, we can conclude that by increasing the share of standard funds within the total annual funds, average funds per student gradually approximate the average expenditure within the individual study groups. It can be seen (Table 5) that by increasing the share of standard funds within the total annual funds,

the average relative deviation of funds received from average expenditure decreases by nearly one third in 2004 and by about 15% in 2005.

## 5. Conclusion

The findings of this analysis reveal significant differences in the operating costs of study activities among different institutions within the individual study groups, as well as the different study fields. At the same time, considerable discrepancies were noted in connection with funding received for particular study activities and the average operating cost of study activities among individual study groups, especially the groups numbered 1 and 6. We have showed that by raising the percentage of standard funds within the total annual budget, average funds per student gradually approximate the average expenditure within individual study groups, based on which it can be asserted that the process of decreasing the percentage of basic funds and increasing the share of standard funds (within the total annual budget for study activities) has been too slow. Relating funds more to outcome indicators would help to increase efficiency in the allocation of funds among HEIs.

We also recommend that greater attention be paid in the future to the reporting system of higher education institutions, since the lack of uniformity in that system poses an important limitation to the comparability of the data.

## References

European Commission (2004). *The Financing of Higher Education in Europe*.

**Table 5: Average relative deviation of funds per student from group average expenditure according to several scenarios, 2004 and 2005 (index points)**

Year	HEI	Decree <sup>1</sup>	Decree, without exceptions <sup>2</sup>	70S:30N <sup>3</sup>	60S:40N <sup>4</sup>	50S:50N <sup>5</sup>	40S:60N <sup>6</sup>	100S <sup>7</sup>
2004	All	17.7	17.0	15.7	14.5	13.3	12.7	12.2
	Without academies	16.6	16.1	14.9	13.8	12.7	12.3	12.2
2005	All	14.6	14.6	13.8	13.1	12.7	12.4	12.3
	Without academies	14.3	14.5	13.7	13.0	12.6	12.4	12.4

Source: MHEST (2004), MHEST (2005), own calculations Trunk Širca et al.

Note: <sup>1</sup>Actual realisation of Ministry of Higher Education, Science and Technology (exceptions were taken into account). <sup>2</sup>Allocation according to the decree, but without making exceptions - additional funds represent that part of the total budget allocated according to the formula. <sup>3</sup>Simulation when basic funds represent 70% and standard funds 30% of the annual funds of each HEI. <sup>4</sup>Simulation when basic funds represent 60% and standard funds 40% of the annual funds of each HEI. <sup>5</sup>Simulation when basic funds represent 50% and standard funds 50% of the annual funds of each HEI. <sup>6</sup>Simulation when basic funds represent 40% and standard funds 60% of the annual funds of each HEI. <sup>7</sup>Simulation when standard funds represent 100% of the annual funds of each HEI.

URL: [http://ec.europa.eu/education/policies/2010/studies/financing1\\_en.pdf](http://ec.europa.eu/education/policies/2010/studies/financing1_en.pdf), 10.9.2007

European Commission (2007). PLA on "Steering on System Performance". The Hague, 7-9 March 2007.

Eurostat (2007). Population and Social Conditions. URL:[http://epp.eurostat.ec.europa.eu/portal/page?\\_pageid=0,1136184,0\\_45572592&\\_dad=portal&\\_schema=PORTAL](http://epp.eurostat.ec.europa.eu/portal/page?_pageid=0,1136184,0_45572592&_dad=portal&_schema=PORTAL), 5.9.2007

Jacobs, B., Frederick van der Ploeg (2006). How to Reform Higher Education in Europe. *Economic Policy*, July 2006 (535-592).

MHEST (2004). Annual report on HEIs - 2004. Ljubljana: Ministry of Higher Education, Science and Technology.

MHEST (2005). Annual report on HEIs - 2005. Ljubljana: Ministry of Higher Education, Science and Technology.

MHEST (2006). Decree on the Public Financing of Higher Education and Other University Member Institutions 2004-2008. Official gazette RS, No. 132/06, Ljubljana: Ministry of Higher Education, Science and Technology.

Trunk Širca, N., Kodrič B., Strašek R. & Marjetič D. (2007). Izdelava ekonomskega modela za simulacijo učinkov sprememb sistema financiranja terciarnega izobraževanja - zaključno poročilo. Koper : University of Primorska, Faculty of management Koper.

## Appendix

**Table A.1: The list of higher education institutions in Slovenia**

<b>Code</b>	<b>Title</b>
<b>UL - University of Ljubljana</b>	
UL AG	Music Academy
UL AGRFT	Academy of Theatre, Radio, Film and Television
UL ALUO	Academy of Fine Arts and Design
UL BF	Biotechnical Faculty
UL EF	Faculty of Economics
UL FA	Faculty of Architecture
UL FDV	Faculty of Social Sciences
UL FE	Faculty of Electrical Engineering
UL FFA	Faculty of Pharmacy
UL FGG	Faculty of Civil and Geodetic Engineering
UL FKKT	Faculty of Chemistry and Chemical Technology
UL FMF	Faculty of Mathematics and Physics
UL FPP	Faculty of Maritime Studies and Transport
UL FRI	Faculty of Computer and Information Science
UL FSD	Faculty of Social Work
UL FS	Faculty of Mechanical Engineering
UL FŠ	Faculty of Sports
UL FU	Faculty of Administration
UL FF	Faculty of Arts
UL MF	Medical Faculty
UL NTF	Faculty of Natural Sciences and Engineering
UL PEF	Faculty of Education
UL PF	Faculty of Law
UL TEOF	Faculty of Theology
UL VF	Veterinary Faculty
UL VŠZ	Professional College for Health Sciences
<b>UM - University of Maribor</b>	
UM EPF	Faculty of Economics and Business
UM FERi	Faculty of Electrical Engineering and Computer Science
UM FE	Faculty of Energy Engineering
UM FG	Faculty of Civil Engineering
UM FKKT	Faculty of Chemistry and Chemical Technology
UM FK	Faculty of Agriculture
UM FL	Faculty of Logistics
UM FNM	Faculty of Natural Sciences and Mathematics
UM FOV	Faculty of Organisational Sciences
UM FS	Faculty of Mechanical Engineering
UM FVV	Faculty of Criminal Justice and Security
UM VZŠ	Professional College for Health Sciences
UM FF	Faculty of Arts
UM MF	Faculty of Medicine
UM PEF	Faculty of Education
UM PF	Faculty of Law
<b>UP - University of Primorska</b>	
UP FHŠ	Faculty of Humanistic Studies Koper
UP FM	Faculty of Management Koper
UP PEF	Faculty of Education Koper
UP TURISTICA	Turistica - College of Tourism Portorož
UP VŠZI	College of Health Care Izola
<b>Independent higher education institutions</b>	
POLITEH	Nova Gorica Polytechnic
VSŠP	GEA College of Entrepreneurship, Piran
VŠUP	School of Business and Management, Novo mesto