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Progress in higher education reform across Europe

Governance and Funding Reform



Volume 2: Methodology, performance data, literature survey, national system analyses and case studies



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Governance and Funding Reform in the European Higher Education Area

National system analysis: Slovenia⁶¹

1 Introduction

This report summarizes the changes in governance and funding in the Slovenian higher education system since mid-90s, as well as their impact on the functioning and overall performance of the system.

It is based on existing literature on Slovenian higher education and on extensive documentary analysis, as well as on a set of 20 interviews to decision-makers in Slovenian higher education (names of the interviewed people can be found at the end of this document), who were asked to provide their view on the impact of the reforms on system performance.

The report is divided into 4 main sections. Section 2 presents a summary overview of reforms in Slovenian higher education governance and funding, while section 3 analyses the available indicators on system performance and qualifies them based on in-depth knowledge of the system. Section 4 examines the main impacts of the reforms and the extent to which these have contributed to changes in performance, while section 5 draws a final assessment.

2 Reforms in governance and funding over the last ten years

The Slovenian higher education system has been rapidly growing and continuously changing since the mid 90's. It is marked by transitional problems. Slovenia became an independent state in 1991 and started to build its higher education system on the basis of new strategic directions, legislation, changing relationships between the government and HEIs, changes in the funding system and changes within institutions.

The higher Education Act (HEA) of 1993, which still exists though in a modified way, set up a legal basis for the transformation of the higher education system to meet the needs of modern Slovenian society which has aimed to become a well developed and internationally oriented EU member⁶².

The HEA came into force when Slovenia had only two universities with very special features regarding their internal organisation and relationship with the government. Slovenia inherited universities with a very loose structure where faculties, art academies and schools were legal entities and not the university as a whole (Kump et

⁶¹ Aleksandra Kovač and Hans Vossensteyn, Center for Higher Education Policy Studies, University Twente.

⁶² Slovenia became the member of the EU in 2004.

all. 1998, Zgaga 1996). Universities did not have serious academic power, instruments of strategic planning, cooperation and communication between various faculties. Such disintegration of universities provoked differences in academic standards of higher education institutions, impeded transfers among study programs and reduced rationality of the entire higher education system (Zgaga 1996).

The basic building blocks of the reforms of the higher education system have aimed (Krek, 1995):

- To transform universities into autonomous, modern integrated (self-governed) institutions;
- Establishing next to public also private HEIs to assure competition and plurality in the HE system and to increase access to HE;
- Systematic integration of teaching and research;
- Implement quality control and quality assurance of HE activities;
- Restructuring study programs;
- To develop higher education strategies by a master plan for the sector and
- to change the funding system to assure more accountability for public funds.

There were several, rather incremental changes implemented in the HE legislation. Not all led to serious change of procedures and operation of the system. In the following chronological summary the main highlights of the recent reforms in the system are listed. These reforms will be presented in the next two subsections in more detail.

1. The Higher Education Act (HEA) from 1993 gave academic autonomy to higher education institutions. Universities became legal entities and not their members – faculties and HE colleges. Private, so called free-standing HEIs⁶³ were allowed. The HEA put forward regulations for the governance and funding structure of HEIs and set up the legal basis for QA. The Council for HE was set up as a mediary and consultative body between the Government and HEIs.
2. Amendments of Higher Education Act in 1999 gave full autonomy to universities giving them ownership over the buildings and full spending freedom. This was to prepare universities for lump sum financing. In addition, access to decision-making was widened to young teachers, assistants and students. Faculties of public universities and private higher education institutions had to set up an academic assembly composed by all faculty staff and a number of students. At least one fifth of the assembly's members should be students. In addition, students have their representatives also in University's and Faculty's senate (one seventh). In 2004 they were also conferred the right to vote in the election for a new Rector.
3. The 2004 amendments of the HEA introduced lump sum funding and Bologna degree structure. Also a quality evaluation system was introduced. At the

⁶³ These type of HEIs are not necessary completely privately funded. They can be also established by the local public institutions like municipalities, but not directly by the state like are for the time being three universities.

institutional level the rectors and deans got responsibility for implementation of the system. At the national level a Public Agency for HE was supposed to manage the national quality system and accreditation from 2005 onwards and to replace the National Education Quality Assessment Commission which proved not very powerful since its establishment in 1997. The QA was implemented only partially, at the institutional level in this period. These changes of the HEA required the Administrative Board of universities to include also representatives of the founder (e.g. government), representatives of academics, support staff and students.

4. The Public Agency was abolished by new amendments of the HEA in 2006. The National Commission for Quality Assurance in Higher Education continued to operate as an independent consultant body up to 2007. In January 2008 the Senate for Evaluation was established at the Council for Higher Education of the Republic in Slovenia to take over QA.
5. Since the beginning of 2008 the administrative and organisational tasks of the Council of the Republic of Slovenia of Higher Education are not part of the Ministry of Education, Science and Technology anymore. The Council now has an independent administrative Secretariat. The Council is now in charge of accreditation, habilitation and evaluation of all post secondary education.
6. Changes of the HEA in 2008 set up the legal basis for establishing international HEIs.
7. In October 2009 changes of the HEA gave again the legal basis for establishment of the National Agency for Quality Assurance in Higher Education which will be responsible for external evaluations and accreditation of study programmes and HEIs. The role of the Council will change and it is expected to become an advisory body in the area of HE development, legislation and strategy.

Reforms in higher education governance

The governance arrangements underwent a number of important reforms since the mid-1990s. A very important feature of the HEA from 1993 is that, since 1994, besides public or state higher education institutions also private and the so-called “free-standing higher education institutions” could be established. Such HEIs can be different types: universities, faculties, art academies and professional colleges. Like public higher education institutions also private institutions are allowed to perform public service. They can be granted a concession for public service by the government decree on the basis of a public tender and consequently they can receive public co-financing. Free-standing HEIs (faculties, art academies and colleges) can also become affiliated members of public universities.

In the period 1994-97 seven of such independent higher education institutions were established (Ministry for Education, Science and Sport, 2001). Another interesting development took place at the two universities in Ljubljana and Maribor, where some large faculties were reorganized into several smaller ones, mostly in the area of engineering and natural sciences. A dynamic development continued in the last

decade. For example, 4 free-standing higher education institutions were established, 2 research institutes and part of the Pedagogical Faculty of the University of Ljubljana merged into a new public university, the University of Primorska in 2003. In 2006, the first private university was established, also on the basis of a previous free-standing higher education institution – the Politehnika Nova Gorica. The University of Nova Gorica provides teaching and research at 5 faculties and 2 university colleges. Finally, the first international university in Slovenia was established in 2008 - The Euro-Mediterranean University (EMUNI University).

Whereas the University of Ljubljana has a relatively stable structure with 23 faculties and 3 Academies, the University of Maribor has been restructuring its own faculties and establishing new ones. For instance, the University of Maribor established a new Faculty of Medicine in 2003 and in 2006 the Faculty of Education was divided into three faculties: the Faculty of Arts, the Faculty of Natural Sciences and Mathematics and the Faculty of Education. In the same year a Faculty of Logistics was established and the Faculty of Criminal Justice and Security became a new member of the University of Maribor⁶⁴. In 2008 the Faculty of Energy was established. All together the University of Maribor now comprises 16 faculties.

Next to the four mentioned universities there are 26 free-standing higher education institutions (mostly faculties and colleges). Some of the dynamics of the growth in the higher education system since 1995 is summarized in Table 1.

⁶⁴ Before that it was a free-standing institution – College of Police and Security Studies and affiliated member of the University of Ljubljana.

Table 1: Overview of the number of higher education institutions in Slovenia

Year	Number of HEIs										
	Public						Private				total
	university				free-standing HEI	total	university	free-standing HEI		total	
	university	HEI as members of universities						faculties	Professional colleges		
faculties		professional colleges	total								
1995	2	30	4	34	-	2	0	0	4	4	6
2005	3	40	4	44	-	3	0	5	5	10	13
2007	3	45	3	48	-	3	1	9	14	24	27
2009	3	48	1	49	1	4	1	13	13	27	31

Source: Ministry for Higher Education, Science and Technology, 2009.

Curriculum reforms

An interesting characteristic of Slovenian higher education is that it is a binary system only in terms of provision of study programs and not the institutions. Slovenian HE has gone through two major curriculum reforms in the observed time period and both curriculum structures are still in place.

In 1996 the first curriculum reform was completed. This reform divided undergraduate programs into those leading to a professional higher education degree and those leading to a university degree. Professionally oriented programs last three to four years and those leading to academic (university) degrees have a study load of four to six years. On top of this, an additional year of studies (*absolventsko leto*) is added in which students are allowed to finalise their studies (to fulfil the remaining academic requirements and prepare their degree dissertation and defence), while keeping the student status with all social benefits. Students were allowed to go to the labour market earlier if they want, but the majority of them use this year completely.

At the graduate level three types of study programmes are offered. The professional degree (*specializacija*) can be obtained after one or two years of study. Academically or scientifically oriented graduate studies last two years and lead to a scientific master degree (*magisterij znanosti*). The PhD degree (*doktorat znanosti*) can be obtained in two ways. Students with a scientific master need to study two additional years to receive the PhD and students with a academically oriented undergraduate

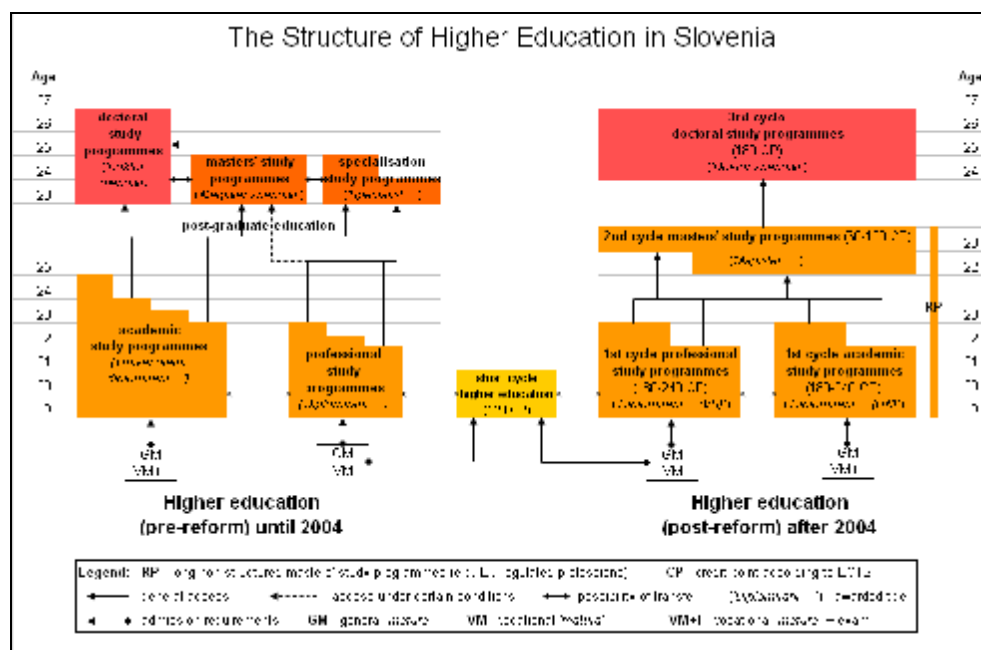
university degree four years. Only students with high marks at the undergraduate level can enrol in PhD programmes.

The academic year 2008/2009 was the last year that it was possible to enrol in this programme structure. Students need to finish their studies in these programmes the latest in the academic year 2015/16. All students that start after 2009/2010 can only study in the new “Bologna programmes”.

After discussions for some years, an Amendment to the Higher Education Act in May 2004 set the legal basis for the three-cycle structure of study programmes according to the Bologna guidelines. The duration of study programmes is limited in credit points (CP) in which one CP stands for 25-30 hours of student work and 60 CP represent one academic year.

- The first-cycle has a binary system of academic and professional study programmes (180-240 CP; 3-4 years differing per discipline and study program) leading to the first-cycle degree. (*'diplomirani ... UN'*, *'diplomirani ... VS'*)
- The second-cycle offers masters study programmes (60-120 CP; 1-2 years), leading to *'Magister ...'*. The new *'Magister ...'* differs from the old *'Magister znanosti'* in content and the scientific title awarded after completion. The new *'Magister ...'* is not a first phase of doctoral studies any more but belongs to the pre-doctoral study structure.
- The third-cycle concerns doctoral studies (180 CP; 3 years) leading to *'Doktor znanosti'*.

The new Bologna study programmes have been introduced gradually since the academic year 2005/06. The following picture shows both study programme structures.



Source: Ministry for Higher Education, Science and Technology, 2009⁶⁵

The Bologna-related curriculum reforms were delayed. First, by the preparation of the new Professional and Academic Titles Act (adopted in June 2006) which was related to polemic discussions on awarded titles after finishing study at “old” university programmes and shorter Bologna first cycle programmes. Graduates of both types of programmes were granted the same academic title and this led to conflicting reaction of graduates with degrees of the longer, old university programmes. Second, major discussions arose on the comparison of the ‘pre-reform’ and ‘post-reform’ HE levels as well as on the funding of the second cycle studies. Both issues were finally settled in the 2006 amendment to the Higher Education Act.

Respondents stressed that after the Bologna-driven curriculum reform, the duration of study has been practically prolonged because most students continue after the first cycle and use their right for the additional year (*absolventsko leto*) to complete their education obligations in both cycles. Students also have the right to either repeat one year of study or change study program. This not only increases the duration but also the cost of study.

Reforms in the area of Quality Assurance

Though HEIs have full autonomy to develop their own curriculum in terms of content of courses, teaching and assessment methods, the Council for Higher Education of the Republic of Slovenia approves and accredits all new study programmes. In the

⁶⁵ The figure also shows the *short cycle higher education programmes*. These higher vocational programs are organised in parallel with higher education but are officially not an integral part of higher education. They fall under the jurisdiction of the Ministry for Labour, Family and Social Affairs. The first vocational colleges were established in 1996/97. The programmes are markedly practice-oriented and tightly connected to the world of work. In 2008/09 higher vocational education students represented 14% of all tertiary students. There are ideas to integrate higher vocational education into higher education. Accreditation procedures have been already taken over by the Senate for Accreditation at the Council for Higher Education.

period observed, the Council changed the criteria for accreditation to meet the demanded changes in the HEA and the guidelines of the Bologna process and the Lisbon strategy, stressing international comparability of study to ensure the employability of graduates.

Accreditation of higher education institutions and study programs has a long tradition, but other elements of quality assessment have been implemented rather slowly. QA has been included in the HEA in 1993 already. Though a number of elements were implemented, a well operating quality assurance system with a competent national agency that would meet the ENQA requirements has still not been established.

The awareness of the importance of QA has been expressed in policy documents like the Master plan from 2002 and the latest Resolution on the national programme for HE for the period 2007-2010. However, these developments are more normative than coherent ideas and (financial) plans for the QA system.

In mid-90s HEIs took more concrete initiatives and established the National Commission for Quality Assurance in 1996 as an independent consultative body composed of academics from different disciplines and experts from professional fields. The Commission operated up to 2007 without sufficient financial resources using infrastructure of the University of Ljubljana at the beginning and later at the University of Maribor. The Commission developed criteria for the quality of HE study programs, research and art, assisted HEIs in developing a methodology for self-evaluation, annually collected self-evaluation reports of HEIs, and published a national report. Legally the Commission did not have much power. HEIs were not obliged to follow its decisions. The Commission anyway applied for ENQA membership in 2007 but was refused because it did not meet the criteria in terms of its organization, autonomy, competences and experiences with external evaluation.

HEIs, particularly those of Ljubljana (UL) and Maribor (UM) found it important to take part in international external evaluations and accreditations. On their own initiative they took part in the CRE/EUA institutional evaluations and follow-ups. Some study programmes/institutions⁶⁶ gained accreditation from international professional associations in their respective fields (e.g. EQUIS accreditation of Faculty of Economics of the University of Ljubljana, EAEVE accreditation of Veterinary Faculty of University of Ljubljana, sixteen FEANI courses at the University of Maribor and twenty-nine at the University of Ljubljana) (Lesjak&Marjetič, 2009).

The government formally demanded quality assurance as a pre-condition for financing HEIs by the HEA Amendments in 1999. Systemic care for the quality of teaching and the formation of internal quality commissions that have to organise the self-evaluations became a concern of HEIs. According to the HEA (Amendments

⁶⁶ In Slovenian higher education term "institution" is oft used also for faculties, art academies and university colleges which are integrated part of a university.

from 2004) the rector is responsible for QA at the level of the university and the dean at the faculty's level. HEIs prepare and issue annual self-evaluation reports about the realization of institutional goals, management, curricula, teaching and research. Students' representatives are members of the commission. Self-evaluation reports are publicly available at institutional web-pages. It has also been decided that study programs should become reaccredited every seven years. For this purpose HEIs are obliged to send self-evaluations to the Council of HE.

The amendments of the HEA of 2004 envisaged the establishment of a National Agency for QA by the end of 2005, but the new Government did not implement these reforms. Instead, it proposed another change of the HEA in 2006 with the decision to reorganize the Council for Higher Education. Before this was realized the National Commission for QA continued to work for another year. In 2006, the Commission did 4 pilot external institutional evaluations and another round with 10 external evaluations took place in 2008. HEIs were however not obliged to implement the decisions of the Commission. Because of dissatisfaction with this practice, in 2008 the Senate for Evaluation was established at the Council for Higher Education of the Republic of Slovenia which replaced the National Commission for Quality Assurance in HE. This independent body is competent to run external evaluations, nominate commissions for evaluations of programmes and higher education institutions, collect and analyze self-evaluations reports, publish reports of external evaluations, amongst other tasks. The Senate for Evaluation already applied for membership of ENQA. In January 2009 the Senate for Evaluation announced to conduct 20 external institutional evaluations.

Recently a public discussion on establishing the independent agency for quality assurance has been revived again and led to a new amendment of the HEA which again made a legal basis for establishing new National Agency.

Institutional autonomy in terms of internal governance and management

Institutional autonomy has been increasing since 1995. In late 1990's there were vivid discussions on what the autonomy that is guaranteed by the Constitution of the Republic Slovenia from 1991 to "state universities and state colleges" practically means. In 1998 the Constitutional court provided some explanations and clarifications to the term (Official gazette 18/98, 1166-1176). The legal basis of the institutional autonomy is more precisely defined in the HEA. It appears that it is easier to apply institutional autonomy in the area of academic work (study programmes, research) than in other aspects of governance and (financial) management.

HEIs are legal entities, but their essential governance bodies are determined by the HEA. For universities, the governance bodies are defined at two levels: at the rectorate and at the faculty level (member of the university). Universities are however allowed to add additional governance bodies in their constituent act and statutes.

State universities are required to have the following governance bodies: Rector, Senate, Managerial Board and Student Council. The bodies of the faculties (or free-standing higher education institutions) are: Dean, Senate, Academic Assembly and Student Council. Since the 1999 amendments of the HEA, HEIs are allowed to separate academic and business management functions, to have next to the rector (or dean) also a director of the HEI, but none of the state universities has opted for this option up to now. A director has only been appointed at the private University of Nova Gorica.

Up to the amendments of the HEA in 1999, only full professors were members of the institutional governance body. The amendments widened access to decision-making processes to all teaching and research staff and to students. The same amendments also required the establishment of a new internal body, i.e. the academic assembly at faculties (members of universities and private HEIs). The academic assembly is composed of all faculty staff and at least one fifth of its members must be student representatives. The assembly elects the Senate of the faculty and prepares proposals for the Dean to its Senate. The amendments of the HEA from 2004 allow students to have their representatives also in the university's and the faculty's senate (one-seventh). These representatives have a right to vote in the election of the rector.

Currently, the rector at state universities is elected by all teaching and research staff and by the student representatives⁶⁷. The academic assembly of the faculty proposes candidates for the Dean to the Senate of the faculty. Then the Senate of the faculty elects one candidate and proposes him/her to the Rector of the university. Finally the Rector appoints the Dean of the faculty. Before 1999 the Rector was elected by the Senate of the university only, and the Dean was elected by the Senate of the faculty only.

The Higher Education Act of 1993 already defined that the Student Council is an organ at both the university level and the faculty level. Within this body, students had the right to vote on the statutes of the HEI, the candidates for becoming Rector and Dean and on students' rights and duties.

Universities are free to decide on how many and which type of (senior) academic staff they want to have. The freedom of determine salaries of academic staff is limited by the Salary system in Public Sector Act, the Collective agreement for non-commercial activities and the Collective agreement for education activities. Salaries are determined by the working place, and academic staff is recruited based on their academic status and habilitation. In addition, efficiency criteria and working conditions, personal competences and additional work undertaken determine the salary.

Academic staff needs a *habilitation* for being involved in teaching. This means that one can be elected on the basis of his or her teaching and research record in the

⁶⁷ This can be different at university which is not established by the government. At the University of Nova Gorica the rector is appointed by the Administrative Board for example.

following titles of higher education teachers: assistant lecturer, lecturer, higher lecturer, assistant professor, associate professor and full professor. The habilitation criteria are adopted by the University Senate after obtaining the opinion of the Council for Higher Education of the Republic of Slovenia. Teaching staff of private HEIs is habilitated by the Senate for Habilitation of the Council for Higher Education. Before 2008 this responsibility was carried out by the Commission for Habilitation of the Council for HE when the restructuring of the Council took place.

Reforms with relation to the Council for Higher Education

The Government of the Republic of Slovenia established a consultative body - the Council for Higher Education of the Republic of Slovenia in 1994. Its primary task was to advise Government in the preparation and adoption of higher education legislation and planning of the development of higher education. It has always had an important role in the accreditation of higher education institutions and study programs. Up to 2004 the Council assessed whether new HEIs and study programmes fulfilled the Criteria for accreditation of HEIs and study programs set by the Council. Without a positive opinion of the Council a HEI or programme could not be established. The accreditation procedures for free-standing HEIs differ as the Council had to agree with the establishment of a programme instead of only having assessing it. A negative assessment implied that the program was not eligible for public funding, and awarded diplomas would not be state approved, but a university could theoretically offer the program. Since the 2004 amendments of the HEA, all study programs need to be accredited by the Council for HE. Within this body a special commission was appointed to carry out these procedures. This special commission was cancelled in 2008 when the Senate for Accreditation was established.

The Council consisted of representatives of universities, free-standing higher institutions and other experts. The work was divided between commissions and working groups for particular fields of study.

After several earlier attempts to extend the Council into a Public Agency for Higher Education its change in status only took place in 2007 (on the basis of the Amendments of the HEA from 2006). The Council is now in charge of accreditation, habilitation and evaluation of the whole tertiary education sector including post-secondary vocational education. The role of the Quality Assessment Commission has been taken over by the Council as well. Its tasks were divided between specialized bodies – Senates for accreditation, habilitation and (external) evaluation. The Senates are autonomous and the Council serves as a superior appeal body. The professional, technical and administrative support for the Council is provided by the Secretariat of the Council. All operations of the Council and its Senates are secured from the state budget. Up to 2008, the Council was a governmental body, it is currently independent.

Some changes were implemented with relation to the Council's composition, the number of members and the working bodies, i.e. the senates of the Council. Members

of the Council are appointed by government from professionals in the field of HE, science and technology, students' representatives and representatives of employers and employees.

Reforms in the funding of higher education institutions

With relation to the funding of higher education, a first landmark was the Amendment of the Higher Education Act in 1999 which gave full autonomy to universities in terms of ownership over the buildings and full spending freedom. These reforms were intended to prepare universities for lump sum financing. The criteria and formula on the basis of which the public budget for Higher Education Institutions are calculated, are determined by Higher Education Act and additional public financing regulations for Higher Education. How the funds are distributed among a university's constituent parts can be determined by the Managerial Board of each University.

In 2004, further amendments in the HEA introduced lump sum funding based on a formula. This meant that the traditional way of funding by normatives and standards (about numbers of teachers, workloads and hours per week) was replaced by funding formula based on numbers of students and graduates. Regular funding is now only intended for fulltime undergraduate studies (first and second cycle). Postgraduate and part-time studies are financed by full-fee charged to students. Public financing does not differ between academic and professional study programmes. Weaknesses of the old funding model were considered:

- Strong state regulation and little institutional managerial freedom
- Non-efficient spending of money
- No performance orientation, flexibility and responsiveness to developments

Lump sum funding was envisaged to provide more flexibility, spending freedom and managerial capacity. In addition, lump sum funding should bring more focus on quality, excellence, transparency, predictability and efficiency in the acquisition and use of resources. To secure a gradual transfer into the new system, the funding mechanism consists of a fixed part and a flexible part. In 2004 the fixed part accounted for 80% of the total budget, which was gradually reduced to 60% in 2009. The flexible part is based on student and graduate numbers according to six different tariff groups ranging from 1.0 to 4.5, implying that the most costly programme would receive 4.5 times as much money in the flexible funding part as the cheapest study programme. The teaching allocations include expenses for:

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

Though the reasons underlying the funding differences through tariffs are found in cost differences between study programs in different disciplines, the funds allocated

through the formula are mostly meant for teaching staff. Infrastructural investments and research are funded in a separate way. These differences in the flexible funding part could lead to over- and underfunding of study programs in high versus low tariff groups respectively.

Another interesting development can be seen with regard to the freedom to use resources within universities and their constituent parts. Universities and member faculties may only use profits to invest in new buildings or equipment. Member faculties or other constituent parts of universities may have their own bank accounts to deal with their own income other than from public funds (that is to be on the university's bank account). This means that HEIs have enormous flexibility in the use of third party funding. Units are stimulated to be entrepreneurial in finding additional resources. Parts of these additional revenues do not necessarily support further investments in teaching and research as the revenues can be used to appoint research- and teaching assistants, to go to conferences, purchase equipment, but also to increase individual salaries. As the system is rather intransparent and not subject to strict accountability checks, it is unclear what such funds are used for. Respondents indicate however that this mechanism heavily stimulates contract activities. The opportunities for contract activities nevertheless differ substantially between disciplines and faculties.

Postgraduate studies (old scientific master and doctoral studies)

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

- *Public tender for co-financing of postgraduate studies* that, since 1998, finances around 60% of tuition fee for students whose faculties fulfilled the conditions of the tender (among others tuition fees must not exceed the one set by the state, around €2000 per annum). In academic year 2008/09 around 42% of enrolled postgraduate students received co-financing.
- An additional 16% (2008/09) of postgraduate students receive co-financing through a 'young researchers' financing scheme, which covers full tuition fees, part of the material costs for the research in which the student is involved, and a salary for the young researcher.

Tuition fees and student support

Slovenia has a so-called dual-track tuition system: free higher education for students admitted according to regular criteria (only a small registration fee is charged), and a fee-paying track for students who do not qualify for the state-financed places. In practice, this implies that part-time students are charged a tuition fee.

Most of the costs for students (living costs and tuition fees for part-time studies) are to be paid by the parents and/or the students, who pay for their educational costs through student work. Student work in Slovenia is widely established and regulated by the ministry responsible for labour.

No special reforms took place in the field of student finance. Full-time students who study at public HEIs and private higher education institutions with concession can apply for grants (state social scholarships, merit-based scholarships, and company scholarships) and are entitled to public subsidies for food, housing and public transportation. Less students are entitled to state social grants because of the means-tested measures. Furthermore, business sector scholarships are rather marginal (compared to the socialist times).

Any study abroad that is recognised as part of regular study (ERASMUS) is regarded as study at a national HEI. All rights, linked with the student status in Slovenia remain unchanged. National scholarships are portable.

Students may also apply for scholarships for the whole period of study abroad if a chosen study program is not provided at a Slovenian HEI or when studying abroad is geographically more suitable. In all other cases the candidate has to prove that studying abroad will enhance his/her employability and/or professional expertise.

Funding of research and investment

Higher education institutions obtain funds for research in accordance with the provisions of the Research and Development Activities Act. In December 2003, government established the Slovenian Research Agency. The Agency is an indirect user of the state budget in accordance with the legal provisions in the fields of public finances and public agencies. The Agency carries out the tasks entrusted to it by law, which are in the public interest, with the objective to provide for a permanent, professional and independent decision-making on the selection of research programmes and projects that are financed from the state budget and other financial sources. The Agency also performs professional, development, and executive tasks regarding the implementation of the National Research and Development Programme and of its specific components as well as other tasks for the enhancement of research and development activities.

Financing of research programmes and projects is divided by public tenders. Funds for research and infrastructure projects and research programmes are calculated according to standards set by government.

Funds for investment (building, renovation or purchase of real estate and equipment) and investment maintenance are determined pursuant to:

- The Act on Basic Development Programmes in the Area of Education and Science or the multi-annual investment programme of the HEI to which the minister responsible for higher education and science has consented,
- The annual investment programme of the HEI and additional State budgets.

Research and investment funding did not change much over the past decade.

On-going processes and new reforms envisaged

Respondents are sure that the process of change will continue. The most important change areas are QA, the financing of HE, a new HEA and a new National Program of HE.

QA is an area in which formal changes are again visible in the near future. In fall 2009 the National Assembly will decide on new Amendments of the HEA to finally establish independent National Agency for QA. It has been estimated that this area needs to be further professionalised, with full-time and independent experts. Up to now the Senate for Evaluation of the Council for HE is composed of members from academia who do not perform the tasks professionally. The Senate for Evaluation gets administrative support from the Secretariat of the Council for the time being but this is regarded insufficient for the demands of an increased number of HEIs. The establishment of the National Agency for QA will probably reduce the QA tasks of the Council to a consultative role only in the future.

Also the financing of HEIs is under revision. The introduction of changes is foreseen by 2011. But before that a temporary solution for 2010 will be adopted (Government of the Republic of Slovenia 2008). Opinions have been expressed that the current formula does not ensure an effective use of public funding because a big part of the funding is still fixed and based on historical trends and past costs of study activities rather than on the actual needs and size of the HEIs. No quality criteria are in place yet, which, according to the respondents, could be included in decisions on funding in the future. Some respondents wish for serious changes in the funding system, e.g. to allow longer term planning, but HEI representatives are afraid that bigger changes will bring even less money to the institution than the current funding arrangements.

The Rectors' Conference prepared a law proposal to separate universities from the rest of the HE sector and claim a different status than other public institutions. They wish more autonomy in governance structures, want to step out of the public salary system, be autonomous in the accreditation of study programs, and have universities take part in a well established system of external evaluations by both European organizations (i.e. EUA) and the National Agency for QA which should operate on the basis of ENQA recommendations. The discussion of the law stopped at the point where they should clarify the relationship between the rectorate and member faculties, between rectors and deans, their mutual way of cooperation and competences. From the point of view of some respondents many of these ideas will be further discussed in the preparation of the new HEA.

The Ministry plans to drastically revise the HEA and because the many amendments in recent years made the current HEA intransparent. A special working group is going to work on the new act in the coming year. This group needs to address some important status and legal questions related to the governance and management of universities. As mentioned before, government is very much aware of the necessity to define what the university is, what the faculty is, and possible management

structures (i.e. integrated, centralized). The respondents expect this to be the most difficult negotiating part with a lot of positional and power related interests.

According to the opinion of the respondent from the Ministry, the new HEA will most probably again include issues related to the workload of teaching staff of the HEIs. Nevertheless, HEIs should already be able to manage these issues on their own within the limits of their funding capacities. Some correction needs to be done in definitions of student status and their rights of transition between different study programs and the final year (*absolventsko leto*).

Some changes will be addressed as a response to the experiences with the new Bologna Degree Structure. The results of the implementation of the new degree structure do not completely fit to the idea of employability after the 1st cycle. Some faculties marginalized this goal and planned their study programs in such a way that students after finishing the 1st cycle cannot directly continue with their studies in the 2nd cycle which leads to prolonged study periods.

HEIs addressed demands to the Ministry to completely fund not only the 1st cycle but also the 2nd and even the 3rd cycle. A conceptual decision needs to be taken about what kind of professional and academic knowledge Slovenia needs in each cycle, particularly the 2nd. Some faculties still think that this level should lead to the scientific degree. Also the 3rd cycle needs to be redesigned to guarantee the expected academic achievements. Some faculties find that the time for a PhD is too short which is problematic because it has negative effects on the quality of PhDs.

The HEA will also address many other issues, e.g. lifelong learning, transnational education, postsecondary vocational education to meet the needs of the Slovene higher education system in the European Higher Education Area.

Finally, national strategic goals for HE have always been defined in the Master Plan. After the first Master Plans were adopted by the National Assembly in 2002 and 2007, in 2010 discussions on the new Master Plan for 2011-2015 is foreseen.

3 Performance improvements in Slovenian higher education

The performance of national systems has been measured along the following dimensions and using the uniform international indicators (see technical file for the precise definitions):

- Access: enrolment rate and net entry rate.
- Lifelong learning: mature enrolments and share of new entries above the age of 25.
- Graduation: educational attainment of the population (25-34) and graduation rate.
- Employability: relative earnings and relative employment rate.
- Mobility of students: students from abroad and students studying in other countries.

- Research output: scientific articles and patents.
- Capacity to attract funds: HERD from private funds and from abroad and contributions from private households.
- Cost effectiveness: expenditures per students (in Euros and PPPS).

Relevant indicators include the absolute value of the indicators, either compared to the average of the countries in the sample or the change in the indicator value between the years 1998, 2002 and 2006. Of course, these indicators provide only a partial view of system performance and, hence, we will comment on them below.

According to these indicators, the Slovenian system improved performance when it comes to:

- a) Research performance (more research outputs in terms of numbers of articles published);
- b) External income generated (more third party funding);
- c) Access to higher education (more students);
- d) More international student mobility.

In the following section is presented the analysis of the improved performances in these dimensions.

4 Effects of the reforms and other explanations of improved performance

Although Slovene higher education went through a period of substantial growth and change, the general conception of the stakeholders is that these developments have partially been initiated by public policies in the area of governance and funding. Using our international performance indicators, in this section effects in the area of student enrolments, international student mobility, research output and capacity to attract external funds are analyzed. Most stakeholders explain the good performances of Slovene higher education in these areas not only as effects of governance and funding reforms, but partly also by other, particularly international factors.

Enrolment and Graduation

Enrolment in higher education has been growing in Slovenia. According to the comparative data used for this project the growth in the period between 2002 and 2006 was of 16%. National statistics show a rapid growth since 1991 up to 2007 after which a slight drop can be noticed due to the decreasing size of new generations entering higher education. Despite this demographic decline the participation rate in tertiary education has increased and reached around 60% of the population. The policy goal is to keep this high rate of participation in tertiary education, in a variety of programmes of higher education and of vocational post-secondary programmes. It is the government's goal to improve the educational level and structure of the labour force to strengthen the international competitiveness of the economy.

Our respondents and policy documents show reasons for the increasing enrolment in higher education up to 2006 in increasing number of higher education institutions and demand for higher education of the young generation. The Slovenian labour market demands a highly educated labour force. In addition, many young people want to continue studying in higher education as a strategy to avoid unemployment. Important is also the shift in cultural and career perceptions of younger generations who have higher educational and career aspirations than previous ones (Zgaga, 1997). Consequently young people massively applied to higher education and created a strong demand for HE, putting pressure on its infrastructure.

The government responded by investing in the higher education infrastructure to satisfy this increased demands for HE. Financial investments in HE have increased. In the last decade, 3 universities (one public and two private) were established in addition to more than 20 small private HEIs. Private HEIs with concession are also entitled to receive public funds to run their study programs. All institutions are allowed to accept full-fee paying part-time students. Though many new private HEIs have been established, more than 90% of the students are still enrolled in public universities with the University of Ljubljana enrolling 61.4% of all Slovenian students. Private, free-standing higher education institutions enrol only 7.4% of all HE students (Statistical Office of the Republic in Slovenia). Most of them are small in size offering a limited number of study programs.

With the increased number of HEIs and student numbers one can also expect an increase in the number of graduates. Data indeed show such an increase: 23% in the period 2002-2006. Respondents indicate that this increase not only stems from the increased student numbers, but also from the selection taking place in popular fields of study like the social sciences and medicine. In such cases, HEIs can select the best students with good learning capacities and motivation who are likely to be the most successful students. In addition, HEIs are more and more aware of the importance of the quality of teaching, particularly those which enrol students with relatively low academic scores in secondary education. They offer additional teaching support to students. Finally, the number of graduates has also become an important element in the funding system and stimulates HEIs to produce more graduates. Some respondents expressed criticism that some HEIs (particularly the youngest ones) therefore reduce their quality standards and award their degrees easier.

International Student Mobility

Mobility is predominantly stimulated by the general trends of internationalization and the development of the European HEA. Together with the Bologna process, mobility is one of the key policy objectives in the Master Plan for HE and other Slovene policy documents. Data show that the number of incoming and outgoing students increased in the 2002-2006 period with 33% and 24% respectively.

The EU mobility programmes are key drivers for student mobility and Slovenia participates in these programmes since 1999. For outgoing mobility (student and teacher) the main EU programmes are ERASMUS (now under the Lifelong Learning

Programme), the Central European Exchange Programme for University Studies (CEEPUS) and bilateral agreements. In Slovenia the National agency for the European Community Programme (CMEPIUS) was established in 2006 to support international programs and mobility. Respondents reported that mobility and internationalization gained in importance and widened in different types of activities after Slovenia joined the EU.

Participation in the ERASMUS programme stimulated the general implementation of the Diploma Supplement in 2000 and gradual implementation of ECTS in all accredited study programmes. Our respondents reported that students in general do not have problems with recognition of their credit points. Next to this, Slovenia was among the first countries who ratified the Lisbon Convention. Since 1999 it focused on the recognition of qualifications and diplomas to reduce obstacles for international mobility.

To support international students mobility, the Slovene Human Resource Development and Scholarship Fund (previously called Ad Futura), have been established to provide scholarships and grants for internationally mobile students and researchers. The fund also manages company scholarships and merit-based scholarships for talented Slovene students which can also be used for studies abroad.

Respondents agreed that HEIs are taking initiatives to increase international mobility and to attract foreign students to assure sufficient student numbers to compensate for the shrinking Slovenian student population in the near future. Institutional bilateral agreements are gaining importance in this respect.

The respondents find it problematic that legislation (HEA) allows only parts of study programmes to be taught in a foreign language (but not the whole). HEIs particularly try to attract particularly students from former Yugoslav republics as cultural and geographic closeness makes mobility easier. The Ministry of Higher Education, Science and Sport indicates that more than 1000 students come from these countries annually with around 700 from Croatia. The Ministry is willing to intensify financial support for these students in the coming years. Nevertheless respondents from HEIs pointed at administrative problems (visas) for attracting non-EU students.

Many stakeholders indicated that Slovene higher education could benefit much more from student mobility if curricula are changed according to the demands of mobility. To solve the problem the UL established a university scholarship fund for up to 60 exchange students based on donations from business in 2007/08. Thirteen schools of the UL offer at least one semester of classes taught in foreign language. They also offer 4 accredited programmes leading to a joint degree with a foreign university and more are in the accreditation process.

Finally, in 2008 the first international university was established in Slovenia: the European Mediterranean University (EMUNI). Amendments in the Higher Education Act, adopted in June 2008, allowed such an international alliance of universities on the basis of a written contract or agreement between at least one

Slovene and one foreign university. The diploma must state that a certain study programme was implemented in the framework of such an alliance.

Research output: scientific articles and patents

Slovenia has remarkably improved its publication of scientific articles. In the 1995-2005 period there was a growth of 138%. The high research output of Slovene higher education has its origins in multiple developments.

First of all, Slovenia has a strong research system consisting of public research institutes next to substantial research performed in the university system. Universities and public research institutes are treated on an equal basis. The research budget is divided about half-half between the two sectors. Research policy fosters publishing and transfer of knowledge. There is a long tradition of stimulating research quality, international comparative data, competition and knowledge transfer. Younger generations of researchers learned how to successfully publish in refereed journals and universities developed efficient internal systems to collect data on publications.

The second reason can be found in the decentralized system of research funding which allocates rather small amounts of money for small projects but on a highly competitive basis. Despite its disadvantages in terms of limited research concentration and focus, this approach highly stimulates research productivity.

Thirdly, in 2004 the Agency for Research of the Republic of Slovenia (ARRS) was established to implement the National Research and Development Programme. Research proposals are reviewed on the basis of international recognised standards including bibliometric analysis, peer review and panel assessment. There is also another independent public agency, the Public Agency for Technology of the Republic of Slovenia (TIA) which promotes technological development and innovation in Slovenia by providing grants and fostering cooperation between R&D institutes, universities and industry (PPPs). They also promote international cooperation projects to develop new technology policies and services to the Slovenian industry.

Fourthly, continuously increasing performance criteria are imposed on academics for PhD obtaining the degree, attaining research projects, and habilitation. One requires a habilitation to get the right to teach at HEIs and to get promoted in the salary system. Strict selection criteria are applied in these procedures, including continuously increasing demands on the number of research outputs. All of this resulted in a highly competitive system with many short term projects and short term employment contracts for researchers.

A fifth major factor is the very open and transparent bibliographic databases (COBISS, SICRIS). Since some 20 years ago these databases make the academic records of all individual academics publicly available.

Sixthly, in 1985 the “Young Researcher Scheme” was introduced. It allows young researchers to enter the (old research) Masters and PhD tracks with regular employment contracts and salary. Around 200-300 new PhD candidates annually start in this scheme that aims at supporting a highly educated labour force to satisfy societal needs. In 2001 also the “Young Researchers for Economy Programme” was introduced to stimulate research cooperation with industry.

Seventhly, Slovene universities (i.e. University of Ljubljana) are ambitious in getting (higher) up in the Shanghai Ranking. Finally, the contributions of business to R&D are increasing. Together with the enormous freedom of professors and university units to decide what these private resources are spent on, academics are very active in attracting research projects from private entities.

Regardless of the remarkably improved research outputs and transparency in the Slovene system, some stakeholders expressed their concerns that researchers strategically focus on publications but do not aim to contribute to the economic development of the country.

Capacity to attract funds

Slovenia’s performance on the dimension that measures the capacity to attract external resources may have partially to do with the creation of new higher education institutions, but predominantly is the result of a relatively successful performance in attracting EU-projects (EURECA, Framework etc.) and the opportunities to attract full-fee paying students into part-time study programmes. But the number of part-time students has been decreasing in the last few years due to an increased number of regular study places in new HEIs as well as a gradual decline in the numbers of applicants. The national policy aims to reduce part-time studies for young students and have them enrol in full time programmes. Part-time studies should be reserved for LLL purposes in the future.

HEI respondents point at the need to attract external funds to compensate for insufficient public funds, particularly to invest in research equipment. Science and engineering faculties are particularly involved in projects for business and other external partners, whereas other faculties, e.g. Faculties of Education offer additional courses (i.e. for teachers). The Ministry of Higher Education, Science and Technology indicates that there is a relatively stable funding mix for HEIs with 50%-60% of their budget for full-time study, some 15% to 20% for part-time students and the rest is earned through research funds and business cooperation. The Ministry perceives the HEI’s revenues from business to be relatively low in Slovenian HE.

Academics are stimulated to attract external funds, particularly from private sources as they can decide how the revenues should be spent (hiring research assistants, paying conference attendance, and upgrading their own salaries). Also, the Agency for Research of the Republic of Slovenia (ARRS) stimulates projects that attract third party funds by matching funds.

Finally, next to the fees from part-time students, HEIs receive substantial fee-income from the regular master students who have to pay substantial tuition fees. As long as these fees do not exceed a certain level defined by government, public resources (co-financing) will still be available to the HEI.

Other factors of influence

The developments in Slovenian higher education have been influenced by several factors. The most important factor with a strong impact on the national and institutional policies is international development related to the Bologna Process, ERASMUS Programme, EU research projects and other corresponding processes to develop the European Higher Education Area and the European Research Area.

Most changes were introduced either by the government through legislation and funding mechanisms or by the HEIs themselves by responding to international developments. For example, the amendments of the HEA form 2004 completely follow the Bologna agenda with clear definitions on degree structure, including joint degrees, providing a legal basis for developing a system of quality assurance and external evaluation within the National Agency.

The Ministry stressed that the HE legislation does not hamper HEIs to follow international developments. There are no limitations in designing curricula, to participate in joint programs, develop LLL, to take part in international mobility schemes, research cooperation, international accreditations and external evaluations.

Higher education institutions take their own initiative to become internationally recognised and competitive institutions. Particularly universities and research institutions are eager to improve research activities. The University of Ljubljana for example built a clear strategy to get a visible position in international rankings (Shanghai Chart, the Times THE-QS 2007 Rankings). Some HEIs took their own initiative to become externally evaluated and accredited by international organizations (i.e. EUA, EQUIS, FEANI).

On the national level the most important factors of influence are the growth towards mass higher education, needs of the labour market, career aspirations of students, and last but not least the tensions and interests of different powerful actors in the system.

5 Institutional case studies

University of Ljubljana

The analysis of the University of Ljubljana is presented in 5 sections. Section 2 gives some general information about the institution, its size, disciplinary orientation, and its vision and strategy. In sections 3 and 4 the changes in governance and funding are presented. Section 5 explains the improved performances in enrolment and graduation, international student mobility, research productivity and capacity to

attract external funds. The final section outlines the highlights of the reforms in the period observed.

Basic information about the University of Ljubljana

The University of Ljubljana (UL) is the biggest and oldest university in Slovenia established in 1919 on the basis of centuries of educational tradition. The institution has survived three political regimes of three different states. It is a public (state) institution which offers teaching and research in almost all scientific disciplines. Currently the university has 23 faculties and 3 Academies. It enrolls more than 60.000 students and has about 4000 higher education teachers. UL is ranked among the 500 best universities in the world according to the Shanghai Chart and the Times THE-QS 2007 Ranking.

It is interesting to see what changes happened in the area of funding and governance at an institution that enrolls more than 60% of all Slovenian students and produces around 50% of all national research output.

The UL strives for excellence and quality in all fields of science and arts such as humanities, social sciences, linguistics, arts, medicine, natural sciences and technology throughout basic, applied and developmental research. Research is supposed to be a basis for teaching. The university promotes interdisciplinary and multi-disciplinary study like Biomedicine.

The UL also wants to be open to the national and international environment in terms of sharing achievements in science and arts with other institutions, carrying out scientific research, and cooperate with various economic institutions, national and local authorities as well as other civil institutions. The strategy of UL is focused on 8 main goals⁶⁸:

1. *High quality research and development work* which should be achieved through improvements in staffing policy, research infrastructure, setting up an institute for innovation and development which would serve as a university incubator to facilitate a more direct and efficient transfer of knowledge to those who may use research outcomes. In this respect the UL aims to set up also a University service for technology transfer, i.e. a “patents office”.
2. Introducing *study programmes in line with the Bologna process principles* in order to meet the requirements of developing professions and scientific disciplines, the needs of individuals for intellectual development and a career, as well as the needs of the labour market. Special attention is paid also to formulating joint inter-university programmes.
3. More effort than in the past is put into strengthening and enhancing *international cooperation* through cooperation with excellent comprehensive

⁶⁸ The mission and strategy of the University of Ljubljana are available on the website: http://www.uni-lj.si/en/about_university_of_ljubljana.aspx

universities in Europe in teaching and research. Student, teachers, and researchers exchanges are regarded important as well as offering courses in foreign languages, offshore education and funding foreign students.

4. Growth of *the application of knowledge into practice* is another goal of the UL which should be achieved with more applied knowledge (e.g. including students in working and research environments, educators and researcher in applied research, experts in teaching and research processes, creating an advisory body for business leaders and monitoring the employability of students).
5. Establishing a comprehensive *system to monitor and assure quality* which is integrated in the annual workplan of the university (i.e. self-evaluation, promotion of international accreditation of faculties and their study programmes, student surveys, habilitation procedures, a system of student tutorship and career guidance as well as an office in charge of quality).
6. *Development of supplementary activities* for students to enhance and enrich their studies and student life like sports, cultural and artistic activities, social events, informal education and training on a systematic way with appropriate spatial and financial support.
7. The UL strives to *strengthen mutual cooperation among its members* (faculties, art academies) and other organisational entities for the purpose of achieving excellence and greater international recognition for the entire University. Such cooperation needs to take into account the autonomy, initiative and special features of the members (Faculties).

Changes in the area of governance of the UL

There have been some ideas to divide UL into 3 or 4 smaller units to make it easier to manage, but this has not been realised. Though the institution is very complex due to its size and variety of disciplines (23 faculties and 3 art academies as the members of the university), it managed to become more integrated in the last few years. The university and not individual faculties became the legal entity and the negotiator for the government about public financing. But university members are allowed to have their own accounts to directly receive private and market funds.

The governance structure is defined in the Higher Education Act. The change in the last decade was to extend access to institutional decision-making to younger academics and students who now make up at least one-fifth of each decision-making body of the university and its members. The university has limited possibilities to form its own governance structure which basically is defined by the Higher Education Act.

The rector represents the university and is responsible for academic and business leadership of the UL, though the Statutes of the UL allow the rector to appoint a manager with the power of procuration. In such a case the leadership of the academic work and business management of the University would be separated. The UL has

four vice-rectors responsible for specific areas. They can also replace rector in his absence.

The Senate represents all faculties, academies and students and decides on academic issues. The Senate has several working bodies. These are commissions and working groups which work on specific issues like habilitation, undergraduate studies, PhD studies, master studies, research and development, internationalization. Decision-making is sometime difficult because all issues that have any financial consequences need to be approved also by the Administrative Board, which task is to decide on financial matters. The Board is composed of representatives of the university (teaching, research and administrative staff), the founder (the government), representatives from business and students.

The Student Council represents students of the UL; it discusses and gives the competent bodies of the University its opinion on the University Statutes and on all matters relating to the rights and obligations of students. It also forms its opinion on the candidates for the Rector and elects the members of the bodies of the University, and proposes the candidates for their working bodies from among students.

A similar governance structure is applied at faculties and art academies. The Dean has autonomy in leading and representing the faculty or academy. He or she is responsible for teaching, research and development issues as well as for QA, employment relations, student applications in study and other duties. The faculty or academy has one or more vice-deans responsible for special areas. The administrative part of the institution, both at the level of the rectorate and member institution, is ruled by the secretaries, whose educational background is usually in law.

The Senate of the members of the University (faculties) is composed of full-time employed HE teachers and student representatives. It decides on academic issues. It has bodies like a commission for study matters and a commission for research.

The Academic Assembly of the Member consists of all teachers, researchers and associates. One fifth of all members are student representatives. The Assembly reviews the reports of the Dean on the work of the Member and prepares proposals and initiatives for the Senate. The Academic Assembly elects the members of the Member's Senate and proposes to the Senate the candidates for the position of Dean.

The UL is an autonomous HEI regarding educational work, scientific and research work. The institution decides independently on its own developmental strategy, rules of institutional organization and operation, devising the study and research programmes. The UL is free to decide on the habilitation and habilitation criteria of the university teachers, researchers and associates. The institution is also free to decide on employment of its own staff.

In recent years the need for change in many activities has been recognized at the UL. First initiatives to integrate the universities started in the late 1990s when the experts of the Council of Europe and external evaluators of CRE (now EUA) pointed

at the problem of disintegrated and highly decentralized structure of the university with its almost independent faculties and academies. The university managed in 1996 to prepare its first institutional mission and 10 years later its first strategy. The previous rector managed to agree with the faculties and academies on distribution of tasks, responsibilities, and funds, though this issue remains the biggest managerial challenge of the institution. The UL anyway managed to implement a big part of its strategy.

Implementation of the QA

The UL started to implement internal QA through actions like the external EUA evaluation and the implementation of student questionnaires to assess HE teachers in late 90's. Since 2000 the university and its members prepare self-evaluation reports annually. At the rectorate the Office for QA was established to support all QA activities in the whole university. Also the member faculties and academies have their own QA committees appointed by the deans. The UL and its members adopted the QA indicators in 2006. On the basis of QA reports they build action plans to improve their internal organisation, teaching, research and other related activities.

The UL took its own initiative for external evaluation and invited CRE/EUA experts in 1996 and 2007. Next to that, some faculties and their study programmes became internationally accredited (e.g. EQUIS accreditation of Faculty of Economics of the University of Ljubljana⁶⁹, EAEVE accreditation of Veterinary Faculty of University of Ljubljana, EAPAA accreditation of Faculty of Administration, and twenty-nine FEANI courses at the University of Ljubljana) (Lesjak&Marjetič, 2009; University of Ljubljana, 2009c). The UL became aware of the importance of the quality and excellence of teaching, research and other activities in order to stay attractive and become more attractive for students, as well as national and international partners in research and development. The international external evaluations and international cooperation in general contributed very much to this awareness.

Curriculum change

In recent years the UL managed to design study programmes according to the requirement of the Bologna Process. The University offers studies at undergraduate and graduate levels. The three cycle degree structure has been implemented in parallel⁷⁰ with the old structure of programmes composed of higher professional programmes, university (Bachelor) and Doctoral programmes. The UL included students in the process of restructuring study programmes, and in few cases they cooperated with employers from business and public services. Those who prepared the programmes warned for insufficient financial resources, teaching capacities, buildings, equipment and capacities for study placement in business and public companies.

⁶⁹ The Faculty of Economics is also in the process for AACSB accreditation (Assoc. to Advance Collegiate School of Business)

⁷⁰ In academic year 2009/10 is the last year when students can enroll into the "old" programs. After that year only enrolment in the "Bologna programmes" will be possible. This decision has been taken at the national level.

The university managed to design new PhD programmes on a more coherent, systematic way than the 1st and 2nd cycle programmes. Special committees of the Senate were to guide members towards achieving a balanced development of the programmes. They are sure that this approach contributed to the quality of programmes. The UL designed 25 new PhD study programmes, among which are 3 interdisciplinary oriented. These interdisciplinary programmes with a focus on knowledge transfer were designed in cooperation with member institutions and some other research institutions in Slovenia.

Development of the transfer of knowledge of the UL

In the last few years the UL put effort in increasing knowledge applicability and knowledge flow between the university and other organizations in the economic and public sector. For this purpose the university established the Economic Board, The Ljubljana University Incubator, The Innovation Development Institute, the Career Development Centre for students, and the University Service for R&D Intellectual Property (University of Ljubljana, 2009a). Some of these new projects are still developing and challenge university management in terms of work distribution, and the division of competences between the University rectorate and faculties.

A more coherent approach was developed in the area of internationalization, where faculties and academies participate in international student exchange and research cooperation

Recent development in financing of the UL

Lump sum funding was introduced in 2004 which brought more transparency in the system. But the reform has not been fully implemented yet which brings uncertainty to the university planning. The First Decree provided the public funding from 2004 till 2008 and now the university needs to negotiate with the government annually for funding. The funding for 2009 changed so that programmes and not institutions were financed. The programmes are classified according to 6 different tariffs groups across disciplines. Some representatives of the institutions which offer programmes in low paid tariffs are unhappy with the system because differences between tariffs are substantial. The system also did not bring the envisaged flexibility to allow the financing of special tasks of institutions. The funding system stimulates institutions to attract more students and to award more degrees. Some respondents have some hesitation to such initiative because the national QA system does not operate properly yet. They do consider international accreditation of faculties and programmes very beneficiary. They report that employers gradually start to distinguish between the quality of graduates of different schools (faculties) in the HE system.

The University of Ljubljana uses a financial plan by which resources for the University Administration and central tasks are allocated annually. Faculties and academies finance joint tasks. The amount they need to contribute is based on the entire earnings of the faculty/academy and is decided by the Administrative Board.

The financial contribution of the member faculties and academies to the UL for common activities is currently very low. The UL has a symbolic "Reserve fund" to which members contribute 0.22% of the total revenues of the faculty/academy. Next to this the faculty/academy needs to pay 2.5% of the revenues from public teaching funds for the common tasks of the university. For the management and distribution of all other funds the member institutions of the UL enjoy full autonomy. The dean is responsible for the management of both public and all commercial activities of the faculty/academy.

Next to public funds, faculties and academies are allowed to generate income from other funds like research projects, tuition fees and other market and private sources. All respondents agree that public funding is not sufficient to offer good quality and competitive education to students. Faculties and academies cover the cost related to education (i.e. premises, equipment, teaching staff), research equipment and other investments partly from non-public money. For this purpose they try to earn third party money by offering fee-paid programmes, market oriented research, consultancy and similar for profit activities. A strong incentive to earn third party money is also privately oriented.

A senior researcher (leader of a research group) can generate high personal funds (author honorariums) out of market-oriented activities. The Dean decides how much money needs to be paid to the faculty out of these activities. The proportion of third party funds that need to be paid to the faculty/academy varies between faculties from 10% up to 50%. For the rest the project leader can decide on his/her own how the money will be spent (salary increase of the researchers and him/herself, equipment, research assistants or other investments).

In the case of external money earned from publicly funded research, a project leader who is involved in teaching for maximum hours according to the national criteria can increase his/her own salary at maximum for 20%.

The general funding structure of the University of Ljubljana did not change much in recent years. In 2008 73% of the total financial resources came from public funds, 12% from the market, 2% from EU funds and 13% from private funds (University of Ljubljana, 2009a).

Effects of the reforms and other explanations of improved performance

In the following we present the development on some indicators on which Slovenian HE has shown substantial improvement. These indicators are enrolment and graduation, research output, international student mobility and generation of third party funds.

Development in enrolment and graduation

The UL is the biggest institutions in terms of student enrolment. 64% of all university students study at the UL. Since the beginning of 90's the number of students more than doubled. Since 2004 the number of students decreases gradually

due to both the enhance of new HE institutions and demographic developments. According to national statistics, the total number of enrolments at the University of Ljubljana dropped from 63.118 in 2004 to 60.284 in 2008 (Statistical Office of the Republic of Slovenia). Comparing to other HEIs in the system however, UL continues to have highest number of student enrolments in Slovenia.

Particularly at the undergraduate level, the number of graduates grows slower than wished for. But the number of post-graduates grows; particularly the number of PhDs has increased rapidly. About 60% of all PhD defenses in 2008 took place at UL. But UL still needs to improve the transition rates between study years and also to shorten the time to degree in undergraduate programmes. The university introduced a tutor system to offer additional help to academically weaker students in 1st and 2nd cycle programmes. Many initiatives are taken such as more interactive and problem-based teaching and learning methods. Other issues that contribute to long study periods and high drop-out rates are that programmes that are built on the Bologna logic (1st and 2nd cycle) still include old elements like the right of students to repeat one year of study and to use an additional year (*absolventsko leto*) at the end of each programme to finalize all study requirements.

Many students stay in HE only to keep social benefits which are entitled to the status of being student and to postpone entrance into the labour market (to avoid unemployment). Most students in the last years of study have already part-time jobs (University of Ljubljana, 2009b).

Growth of international student mobility

UL and its member institutions are very active in international activities, particularly in student exchange. The most important in these respects are student exchanges with 750 European universities within the ERASMUS program. The UL joined the program in 1999 and the number of students in it has been growing continuously, both in terms of outgoing and incoming students. 83 students went to study abroad and only 2 foreign students came to the UL in the academic year 1999/2000, whereas in the academic year 2007/08 there were already 865 outgoing and 402 incoming students. The process of student mobility was very much accelerated in the academic year 2004/05 when Slovenia became member of the EU⁷¹.

UL cooperates also with 25 HEIs in Southern and Eastern Europe and over 100 universities through other bilateral agreements. On the basis of business donations UL established a university scholarship fund in 2007/08 to provide student exchange programmes for up to 60 students staying at the UL for longer period. UL is particularly interested in attracting students from former Yugoslavia because of its geographical proximity and linguistic closeness and similarities. 13 schools of the UL offer this year at least one semester of classes taught in a foreign language. They also

⁷¹ Statistics on students mobility are available at the webpage:
http://www.uni-lj.si/files/ULJ/userfiles/ulj/o_univerzi_v_lj/univerza_v_stevilkah/incoming&outgoing.xls

offer 4 accredited programmes leading to the joint degree with a foreign university and new ones are in the accreditation process (University of Ljubljana, 2009a).

Student mobility within EU countries became easier with the entrance of Slovenia into the EU in 2004 and also by the implementation of mechanism for recognition of foreign degrees, ECTS, and Diploma Supplements. Some members of the UL established their own international offices and/or have coordinators (i.e. Erasmus coordinators) (University of Ljubljana, 2009c).

Improvements in research productivity

UL is also the largest research institution in the country and significantly contributes to the whole national research agenda. Over the last 10 years the number of scientific publications increased and ranks as 590th in the world according to the number of quotations or in the top one percent of all the institutions in the world listed by the ISI Web of Science (University of Ljubljana, 2009a). According to the absolute number of quotations the most successful researchers are in the fields of physics, clinical medicine, chemical engineering, material sciences and the sciences of plants and animals. Next to these international publishing achievements, the UL produces over 250 own monographic publications annually which makes the UL the larger publisher in Slovenia (Ibid.).

The UL is involved in international programs (6th and 7th Framework, Structural funds and other international projects, mostly European projects such as EUREKA, COST, Safer Internet Plus, Intelligent Energy for Europe, LIF+, DAPHNE, CULTURE, TEMPUS and many others).

The UL also established the Research Infrastructural Centres Network to provide support for the research and infrastructural groups of the UL, its pedagogical activities and for outside users. The institution improved in knowledge applicability and transferability between the UL members and other organisations in the economic and public sector.

For all these achievements, the UL ranked for the third consecutive year among 500 best universities in the world in the Academic World Ranking of Universities 2008 (the Shanghai Chart). The UL is also listed in the 400-500 group of the worlds best universities by the 2007 Times THE-QS rankings (Ibid.).

All these achievements are the result of the demanding criteria for selecting research programmes and projects at the national Agency for Research of the Republic of Slovenia (ARRS), and of increasingly more selective habilitation criteria at the UL. Suggestions for further research improvement are to focus support on a few top research areas and to define research priority areas. Respondents think that research projects are too fragmented with insufficient interdisciplinary cooperation between different faculties. In addition, researchers and HE teachers are said to suffer from work overload (University of Ljubljana, 2009c). There are still no mechanisms in place to stimulate strategically oriented research at the level of

individual faculties and at the level of the whole UL because research interests vary very much among different research groups and disciplines.

Capacity to attract funds

The changes in financing of the UL have been described in section 4. One of the interesting findings was that academics at member faculties and academies are highly motivated to earn third party money. They are completely autonomous in managing and obtaining their own financial resources through national and international for profit research projects, offering fee-paying programmes, consultancy and other market and commercially oriented activities. They can decide on their own how to spend money generated through these funds. They can substantially increase their own salaries, invest in teaching, research and other infrastructure. They only need to contribute to the university's "reserve fund" with 0.22% of the total revenues of the faculty/academy, and for common tasks of the university with the 2.5% of the public teaching funds they receive.

Final discussion and appraisal

The changes and reforms implemented at the UL were very much related to the Bologna Process and other international developments like the requirements of different international accreditation organizations and rankings.

The UL strives to become a strong international, competitive, and comprehensive university based on high productivity and high quality research output. The institution focuses its attention on international rankings and wants to improve its score among the best 500 universities worldwide in the Shanghai Chart and the Times THE-QS Rankings.

The university not only puts a lot of policy efforts in enhancing international cooperation in the area of research, but also in the area of student exchange. Next to international programmes like ERASMUS, the university, with support of external stakeholders, initiated special funds to attract students from former Yugoslav republics and invested its own resources to offer courses and programmes in foreign languages. However the number of English taught programmes is still very limited.

There are also other indicators that show institutional improvement since the 90's like student enrolment and graduation rates. The UL is the biggest institution with 60% of all students enrolled in Slovenian HE. For the purpose of improving education achievements the institution introduced study programmes in line with the Bologna declaration. Attention has also been paid to QA. Because the national external QA systems does not yet fully function the UL stimulates international accreditation of individual schools and programmes where possible.

Actions were taken to promote knowledge transfer, and to develop cooperation with several external stakeholders. The UL has developed strong capacities to attracting external funding through international and applied research, fee-paying study programs, consultancy and other market-oriented activities.

Though there were several changes in governance and also some in funding that support mentioned improvements at the UL in line with the institutional vision and strategy, the impact of the traditional internal governance structure remains very strong. Member faculties and academies enjoy high autonomy not only in teaching and research, but also financially, particularly concerning third party money.

This means that the inherited governance structure with very powerful faculties and academies remains a big managerial challenge for the institution. So far, no solution has been found to smoothly introduce and manage initiatives at the university level. Mechanisms of mutual cooperation, labour distribution, efficient administration procedures would give UL capacities to use their resources more efficiently and to strengthen its position as an internationally competitive comprehensive university.

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People interviewed

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University of Maribor

Introduction

The analysis of the University of Maribor is presented in 5 sections. Section 2 gives some general information about the institution: its size, disciplinary orientation and its vision. Sections 3 and 4 present changes in institutional governance and funding. Section 5 explains the improved performances in enrolment, international student mobility, research productivity and capacity to attract external funds. The final section outlines highlights of the reforms in the period observed.

Basic information about the University of Maribor

The University of Maribor is second biggest university in Slovenia and is one among three public and two private universities in the country. It is a public institution, established by the Republic of Slovenia in 1975. The roots of higher education in this region goes back to the second half of 19th century but the immediate forerunner of the present university was the Association of Higher Education Institutions, which was composed of the first colleges⁷² established in the period between 1959 and 1961. The Association was supposed to meet the industrial needs of the city Maribor.

The predominant goal of the university since the mid 90's has been to grow into a comprehensive institution. It offers study and research opportunities in a variety of disciplines. For the time being, UM has 16 faculties.

In 2008, 23.363 students were enrolled at UM, which is 23.8% of the total student population in Slovenia. The UM offers around 200 undergraduate and graduate study programmes and employs around 1800 staff members.

The vision⁷³ of the UM is to provide the highest quality of undergraduate, postgraduate and professional education. It will remain one of the leading academic institutions in Slovenia, contributing to world-quality research in the arts and sciences. The mission of the UM is to strive for excellence in education, research and artistic expression. It also aims for international cooperation through student and staff mobility, participation in international associations, networks, and projects. At the same time the institution wants to promote and protect the Slovenian language and national identity.

Another intention is to build partnerships with various stakeholders in business and governmental and non-governmental institutions in society. It also strengthens democratic and ethical values, and addresses important issues like ecological, environmental goals and also wishes to contribute to public goods.

⁷² The first colleges were: School of economics and Commerce, Technical College with departments of mechanical engineering, electrical engineering, textile technology, civil engineering and chemistry, College of Agriculture, College of Law and School of Dentistry. A bit latter joint the association also the College of Organizational Studies.

⁷³ The vision and mission of the UM are available on the web page: <http://www.uni-mb.si/povezava.aspx?pid=6183>

The University of Maribor was chosen as a case study because it is the second largest and oldest university in Slovenia and had to go through all governance and funding reforms since the mid-90s.

Changes in the area of governance of the UM

The UM has been exposed to changes and reforms from the national level and international context.

Governance structure

The most important governance bodies are defined by the Higher Education Act (HEA) and have not changed much in the last two decades. Main decision making bodies at the central university level include the rector, the university senate, the administrative board and the student council.

The rector represents the university and leads the institution both in academic and business matters. Though the HEA allows to have a director to manage business issues, the UM has not decided for this option in the last few years. The rector cooperates closely with the vice-rectors who are responsible for different fields, e.g. research and educational development, internationalisation and legal issues. The Secretary General is nominated by the rector after positive opinion about the candidate was reached by University Senate. He or she is the leader of the university administration.

The University Senate is composed of academic staff who represent all academic disciplines of the university, and of student representatives. The Senate decides on academic issues like teaching and research policy, quality assurance, international development, habilitation of academic staff, but its decision making power is limited when decisions have financial consequences. Then the formal decision-making process takes place at the Administrative Board. Both bodies - the Senate and Administrative Board - have special working bodies called commissions which discuss and prepare expert opinions on possible decisions for them. The Administrative Board is composed of representatives of the founder (the government), academic and non-academic staff, students and employers representatives. Members of Administrative Board cannot be rector, vice-rectors, deans and vice-deans.

The Student Council discusses issues related to student rights and obligations, forms opinions on candidates for rector and elects their representatives for decision making bodies at the UM.

A similar governance structure is found at the level of faculties (members of the UM). The Dean is representing and leading the faculty. Together with vice-deans he or she is responsible for teaching, research, QA and other governance and business issues. Also at the faculties, the HEA allows to separate the academic and business management functions but none of the faculties decided to do so. The head of the administrative staff at the faculty is the faculty secretary.

The Senate of the faculty is composed of academic staff and student representatives. Its competency is to discuss and decide on academic issues like education, research, QA, international development, and habilitation. Also at this level the Senate has some commissions which discuss particular issues more in-depth and prepare possible decisions for the Senate.

The Administrative Board decides on financial matters, business cooperation and market-oriented activities. Members of the Board are elected by the Academic assembly, ex-officio members are the dean and the secretary of the faculty.

All faculties are obliged to have an Academic Assembly which elects the members of the Senate, Administrative Board, propose candidates for the Dean and reviews reports of the Dean about the work of the faculty, and discuss developmental programme of the faculty.

The Student Council is to discuss matters related to student issues and to elect their candidates who will represent students in other decision-making bodies of the faculty.

The main changes in terms of governance are related to wider access to decision-making to all teaching and research staff besides full-time professors. In all of these bodies students compose one fifth of the members which has increased their impact on the institutional decision-making. A new decision-making body at the faculties is the Academic Assembly. The composition of the administrative board has changed slightly due to the inclusion of representatives of government.

Like at other public universities in Slovenia, the complicated governance structure leads to long-lasting and costly administrative procedures in which different interests can lead to many tensions particularly between the rector's office and faculties, but also among faculties.

Since the late 90's university management tried to make the internal governance more efficient and to overcome the traditional fragmentation in decision-making and administrative operations. A first attempt was made with the common Development Plan for the period 1998-2003 and with the decision to establish a common fund to which all faculties would contribute for common developmental projects and tasks.

Up to now, the UM has centralised several activities. The unified human resource system and accounting system, as well as one purchase department for the whole university are examples of this. Next to these, the university is owner of its buildings and estates rather than the faculties. The Rector also signs research tenders and many other documents of the faculty. All these changes created additional tensions between central university management (rectorate) and some individual faculties and deans, who perceive current management as highly centralized and inefficient when fast reaction of the faculty is required.

Next to the mentioned mission, vision and the 1998-2003 Development plan the university did not provide much information on mid term-strategic planning at the central or faculty level. They usually prepare plans and reports on an annual basis which are required for the ministry to negotiate and obtain public funds.

Growth of number of institutions, study and research fields

One of the important goals of the UM stated in the Developmental Plan 1998-2003 was to build a strong, comprehensive university, developing a variety of academic disciplines and study opportunities, and to become a strong institution in the national system which would build capacities for strong international cooperation in teaching and research area. In this sense the institution managed to accredit several new faculties and study programmes. The vision is to build a university that acts like Harvard with a tight network of business-like activities around the academic core.

Different from current developments in many western universities where mergers are taking place to improve governance efficiency and quality in teaching and research, the UM decided to use a different approach. The pattern of splitting up faculties in smaller units started in 1995 when the departments of Technical Faculty were divided into new faculties.

The establishment of new institutions brought to the UM new study programmes, disciplines and students but also managerial challenges. The decision-making bodies expanded. The University Senate for example requires representatives of all scientific disciplines. New institutions require also new resources (staff, buildings, equipment etc.). Particularly challenging was the break up in the Faculty of Education which lead to financial problems of the two new faculties, Faculty of Arts and Faculty of Natural Sciences and Mathematics.

Next to these new institutions and their study programmes the university made a big step in restructuring all study programmes according to the requirements of the Bologna Declaration. Faculties find it very important to adjust to international developments and are eager to cooperate with foreign universities.

The international impact is not only visible in curricula but also in research orientation and in student and staff exchange through numerous international programmes. These areas are presented in section 5.

The UM made some first steps in the area of quality assurance in the late 90's. A special commission for QA was established in 1997 at the rectorate of the university. The university also decided to take part in external CRE (EUA) evaluations. The first one took place in 1998 and the second one in 2004. Many faculties went into the process of international accreditation. Faculties and the university do prepare self evaluation reports on an annual basis, and have their own commissions for QA, but the culture of quality of higher education is developing rather slowly.

An important area in which the UM invests a lot is the transfer of knowledge and cooperation with business in the region and in the wider national and international

environment. The UM sees potential in this area to earn important additional financial resources in the future.

Recent development in financing of the UM

Changes at the national level in 1999 and 2004 increased the financial autonomy of universities. They became owners of their estates and other teaching and research infrastructure and got more freedom in managing their own resources. The implementation of a lump-sum finding system changed the financial allocation model.

The UM has been trying to adapt to the lump-sum system though the formula does not allow much flexibility in distributing the public funds between faculties because the most important criteria are the number of students and graduates in different disciplines (tariff groups). The formula determines the amounts of public money faculties are entitled to and makes it difficult to negotiate for a different distribution.

Out of the total lump-sum fund, university management agreed that 4.7% is kept at the university rectorate for funding central activities and facilities an additional 1% of the lump-sum is called „University Fund“. Its allocation is decided by the rector and deans. There is also a small „Rector’s Fund“ of 300.000€ on which the rector can decide on his own.

The general financial structure of the UM in 2008 was as follows (UM 2008):

- 63 % public money for teaching (lump-sum)
- 11% public money for reseach (Ministry for HE, Science and Technology, Agency for Research of the Republic of Slovenia)
- 1% other public money from national and local (municipality) budgets
- 2% EU budget (programmes)
- 17% Public services (e.g. fees of part-time students)
- 6% Market funds
- 100% Total

As can be seen from this funding structure, most of the university budget comes from public sources. Most of the resources are transferred to the faculties but the UM uses some resources to run some joint activities at the central level (joint purchasing system, human resources policy and single accounting system).

Respondents agreed that the public funds for teaching are not sufficient for the daily teaching operation. Faculties are therefore required to offer also public services (e.g. fee paid part-time studies). The lump-sum funding does not support or stimulate institutions to develop additional study programmes and specialisations. The central university level is aware that it is not realistic to increase the small proportion of money they can levy from the faculties for central purposes. For this reason, as well as to become less dependent on government, the university decided to put great effort in earning additional funds through market activities and research projects.

The UM develops activities to stimulate knowledge transfer and attract external funds. They take some well established US universities (e.g. Harvard) as examples. The TechnoCenter was established in 2005 as a Technology Transfer Office to offer services to researchers of the UM to transfer research results into products attractive to the business sector, to establish contacts with industry, to do marketing, acquiring research funds and offer services in the establishment of 'spin-off' companies. The office also supports students and companies that need assistance in their research, and in establishing networks with UM researchers and (regional) business.

Another idea of supporting entrepreneurship is the Business Incubator of the UM which has an advising role and offers supportive services to new entrepreneurs. There are also plans to establish the University Maribor Scientific Park. The University Service operates with the purpose of providing a variety of supporting services to the UM like education, promotion, catering and leisure activities. The UM expects visible results of spin-off companies in 10 years time.

Effects of the reforms and other explanations of improved performance

Development of student enrollment at the UM

University of Maribor remained the second biggest university in the country in terms of student enrolment. It enrolls 23.8% of all Slovenian students. The number has been rapidly growing and more than doubled between beginning of the 90's and 2005. Then student numbers started to decrease slightly because of demographic reasons. Another reason was a rapidly decreasing number of part-time students. Most of the part-time students used to belong to the same age cohorts as full-time students who could not enter the full-time study places because of lower academic records. But with decreasing applicant numbers these students now could either get full-time study places or they were attracted by the new HE institutions which have been established in Slovenia in recent years. Many of these new institutions offer studies in the area of management and business administration and have an important impact on enrolment in some programmes and faculties of the UM.

The UM managed to keep the number of full-time students high by establishing some new faculties in the last decade and offering new study programmes in additional academic disciplines (medicine, logistics, criminal and security studies and energy technology).

The growth of graduate students is increasing faster than in undergraduate studies. In the academic year 1997/98 only 417 students were enrolled in master's and PhD programmes, whereas in 2008/2009 there were already 1303 students enrolled (Univerza v Mariboru, 2008). Though the number of graduate students has been growing gradually, it has jumped rapidly in the last few years due to the implementation of the Bologna structure in which the new master's programmes are considered graduate programmes. For the time being students can enrol in both programmes in the old structure and in the new Bologna master's and PhD programmes.

Growth of international student mobility

International activities, particularly student mobility has grown rapidly in the last 10 years. This was also included in the National Plan which is adapted to the Bologna Process and other international developments. Though UM has been participating in the Central Eastern Exchange Programme for University Studies (CEEPUS) since 1995, the UM's membership to the ERASMUS programme (since 1999) has boosted student mobility.

In the ERASMUS programme the number of outgoing students grew from 86 in 1999/2001 to 290 in academic year 2008/09. The most attractive countries have been Germany, Austria, Spain, Portugal and the Netherlands (University of Maribor, 2009a). The large increase of outgoing students is related to improved institutional policy of informing students about student mobility and its benefits. Also the number of incoming students has been growing continuously from 35 students in 2000/2001 to 232 in 2008/2009 (University of Maribor 2009b). The interest to study at the UM has been growing particularly since 2004/05 and 2005/2006 when Slovenia became an EU member state. The UM is particularly a desired institution for students coming from Spain, France, Portugal and Turkey.

Students from the UM which have been involved in the ERASMUS programme help students new groups of (potential) mobile students, both incoming and outgoing. They give advice and information and act as buddies. The student club Erasmus Socrates Network takes care for the incoming students through a system of buddies and the organisation of social activities which build an image of friendly and entertaining social atmosphere at the institution. The UM does not provide study programmes in foreign languages, but instead gives more attention to students through their supervisors.

The UM is actively involved in the Leonardo da Vinci programme, within which it has successfully submitted 6 mobility projects for students and graduates since 2005. Also in this programme the number of participating students increases every year.

Faculties are interested to attract full-time students from former Yugoslavia because of language similarities and geographical closeness. But there are still some financial problems and legal barriers in getting visas for these students. These problems have been solved for students from EU countries.

Already for several years, the UM has an International Relations Office and a special Senate Commission which decides on institutional internationalisation policies. The Commission is chaired by the vice-rector for international cooperation. The responsibility for international cooperation at the faculty level is given to the Erasmus coordinator and an internationalisation commission which is chaired by the vice-dean of international cooperation.

Growth in the research output

The growing number of research publications is a result of national research policies. Particularly the tough criteria for evaluation of researchers and projects by the Slovenian Research Agency stimulated a high competition between researchers. Publication records are also the most important criteria for an individual's promotion and habilitation. These criteria are set by the university and confirmed by the National Council for Higher Education.

The university has special commissions of senates at central and faculty levels to discuss and set up research policies on a yearly basis. The institution and individual researchers learned smart publication strategies (e.g. ISI Web of Knowledge). Gradually, the UM is improving also in terms of the number of patents. Since 2005 the growth in the number of patents is around 37% annually (University of Maribor, 2008).

Another strong incentive to do research is related to financial benefits. Whereas the EU projects have strong regulations on how the money has to be spent, the business and national research projects give more spending freedom. Researchers are motivated to do such projects because they can improve their own salaries from these funds. Particularly researchers in engineering attract a lot of national and international projects.

Capacity to raise external funds

External money is partly coming from part-time students' fees. But in recent years this income stream decreases. Other resources are coming from research projects particularly applied research and market oriented activities like consultancy, business projects with industry, etc. Most of these funds can be kept at faculty level. Only 1% of these external revenues go to the university's central administration (rectorate). People are motivated to do such work because they can improve their salaries. Faculties decide on their own what part of this money is going to be spent for the development of teaching and research (equipment) or for team enhancement and salary increase.

In the future the UM expect a lot of the spin-off and commercial activities offered by the TechnoCenter, Business Incubator and Uni Servis Ltd.

Final discussion and appraisal

Since the mid-90's, the UM has been growing considerably in all respects such as in the number of faculties, study programmes, students, research output, etc. Most changes follow national patterns (change of legislation) or follow international developments. The Bologna process has boosted internationalisation strategies and the wish to become competitively involved in international research projects and study exchanges. It is remarkable that mobility strategies are focused on students from ex-Yugoslavia instead of investing in English taught programmes for a wider audience.

From an organisational perspective, the UM has been trying to build more integrated units in order to enhance the university's efficiency. This seems to be a good and efficient development. Faculties are nevertheless still strong and financially independent. The lump-sum budget did not bring much of a change in terms of developing a strong institutional financial strategy.

This is visible in the tensions within the university. Faculties and central leadership often find themselves in conflicts over appropriate leadership styles, and budgetary decisions. The perception is that the UM is already too centralised. On the other hand, the rector and secretary general are not allowed to be members of the administrative board which is in charge of financial issues. Nevertheless the rector and secretary general are powerful in the development of the institution through a strong central steering towards revenue generating activities. This is probably related to the fact that according to the constitution of the UM, the rector has to be elected out of the academics employed at UM.

The major challenge is to find a better balance in the cooperation and coordination between faculties for implementing common activities. The UM has no coherent strategic plan. It uses only annual plans which are submitted to the ministry for funding purposes.

Finally the UM is a relatively closed system with hardly any foreign academics. In the area of internationalisation the institution is strong but could further develop if some programmes would be taught in foreign languages.

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People interviewed

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Prof. Dr. Samo Fošnarič, Dean, Faculty of Education, University of Maribor

**Prof. Dr. Željko Knez, Dean, Faculty of Chemistry and Chemical Engineering,
University of Maribor**

**Prof. Dr. Igor Tičar, Dean, Faculty of Electrical Engineering and Computer Sciences,
University of Maribor**

6 Final discussion and appraisal

The Slovenian higher education system has displayed substantial growth and significant changes in the observed period, but we cannot talk about deeply grounded reforms. The changes have been rather slow and incremental.

It looks like power and positional interests and a lack of expertise and managerial skills prevented the country to move faster away from old structures and to choose new directions that could lead to a more efficient system. Some changes led into long and polemic discussions (university autonomy, the titles awarded to graduates, the rapid growth of free-standing higher education institutions, the salary system and the implementation of an effective QA system).

HEIs, particularly the traditional comprehensive universities, are struggling with the internal governance structures that are mostly determined by law, though it allows some institutional freedom. Universities could for instance separate between functions of academic and business management, but the state universities do not take decisions into that direction. Decision-making processes remain highly complex and politicised. The tensions between rectorates and faculties are still remarkable, often leading to serious conflicts of interests. A lot of decision-making and administrative work is taking place at both levels. It appears to be a major challenge to make these processes more efficient.

On the positive side, there are developments in the direction of more integrated and coordinated activities of universities. The impact of external evaluations guided universities to develop institutional missions, visions, and strategic directions. They do develop some institution-wide policies like in the area of internationalization, business cooperation and setting up career centres. But such policies show problems in a distribution of competences, labour, and funding between rectorates and faculties.

The new projects and initiatives require more professional administrative, managerial and policy expertise and such skills are often lacking in the strongly politicised system. It appears it would be very helpful for HEIs if newly appointed deans, vice-deans, rectors, vice-rectors as well as other policy makers and administrators receive some training on HE legislation, internationalisation processes, and in managerial skills.

For example, the new lump-sum funding did not bring much change in the behaviour of universities because the inflexible part of the formula is rather large and based on the 2003 situation. Universities have not yet started to allocate funds in different ways and according to internal allocation models that better fit their own profiles. This however, is a practice that can be seen in more countries. It takes some time before institutions start to develop their own internal financial policies and rewarding systems.

And in Slovenia there seem to be problems to understand the funding formula and institutions are limited by national salary systems and options for new study programs.

Universities internally struggle with staffing policies. For example, the promotion of academics through habilitation into higher salary scales is not foreseen in the funding formula. The same goes for other types of rising costs. Some faculties also did not understand the formula and developed several new study programmes with many optional courses which also do not lead to additional public funding. Instead, institutions should keep teaching hours at minimum. Though they are getting aware that students and graduates matter financially, the relative efficiency of programs is important. This situation raises new managerial challenges, particularly now the student cohorts are shrinking, resulting in lower numbers of fee paying part-time students. It now also becomes clear that senior teaching staff is expensive with long term effects due to permanent employment contracts. Gradually institutions will have to adjust to such circumstances. But situations differ substantially between faculties as the discussion on the substantial differences in funding tariffs has shown.

The current system comprises a combination of old and new elements. This is strongly visible in the curriculum structure where both the old and the new Bologna programmes exist in parallel. Regardless of the curricula reforms and modernisations there is no unified 3-cycle structure. One side-effect of the curriculum reforms is that students prolong their studies because in many areas the employability bachelors is marginal which guarantees sufficient numbers of students in the 2nd cycle. Next to that, the Student Union was successful in maintaining the additional old year (*absolventsko leto*) on top of bachelor and master programs.

Slovenia appears to have weak governance capacities in the area of QA. Several incremental changes in legislation and attempts to establish the National QA Agency took place, but were only partially successful. The Agency lacks authority and sufficient numbers of trained experts to carry out the (external) evaluations.

The Council for HE shows similar weaknesses in other areas of operation like in the accreditation of study programmes and HEIs. There are few experts available and administrators are overloaded and often have to do their tasks next to their regular jobs. Though the Council is legally an independent body it somehow struggles with political interests from government and the fact that rectors, who are *ex-officio* members of the Council, can block decisions.

The power of the three State Universities is further emphasised by the fact that they collectively started designing a new university act on their own.

To conclude, the growth and development of the Slovene higher education system raised the need for professionalization of intermediary bodies of the HE system. Though Slovenian HE is relatively young, it already has achieved some remarkable performance improvements in the period of observation like access, graduation,

international student mobility, research output, and generation of external money. Continuous growth, diversification and international demands still require further changes and improvements in the area of governance and funding.

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