

*The basic objective of the development of higher education in the Republic of Slovenia is to make high quality undergraduate and graduate education accessible to as many of its citizens as possible. Such education is a key instrument of economic, social and cultural development and an important guardian of national identity. It can be achieved only on the basis of the scientific, creative and professional activities of universities and independent higher education institutions open to the region and the world.*

## **DEVELOPMENT OF HIGHER EDUCATION IN SLOVENIA**

**Edited by Pavel Zgaga**

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## **Development of Higher Education in Slovenia**

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# I.

## **DEVELOPMENT OF HIGHER EDUCATION 1993 - 1997**

*Dr. Pavel Zgaga*

### **1. INTRODUCTION**

In June 1995, this series featured the volume *Higher Education in Slovenia*, which presented the changes in the Slovene higher education system after the adoption of the Higher Education Act to the international audience. The summer of 1995 was the time when the first stage of the legislative reform of Slovene higher education institutions was accomplished. The new act, adopted by Parliament in December 1993 and becoming effective on 1 January 1994, set forth the adoption of subordinate legislation and of the new charters of both Slovene universities within a year. Within six months after that, the universities were required to pass new constitutions.

The period after the summer of 1995 brought further changes. Universities experienced some institutional changes and primarily changes in study programs. In the academic year 1995-96, the first new professional higher education programs (3-year studies) were offered. In 1996-97, all existing programs were either aligned with new legislation or new programs were adopted. A further important new feature was the establishment of free-standing higher education institutions not founded by the state.

Institutional changes and changed programs at universities accompanied by the emergence of free-standing higher education institutions defined the context in which, in fall 1996, the Council for Higher Education of the Republic of Slovenia began to prepare a basic strategic document for higher education, the Starting Points for the Higher Education Master Plan. The Master Plan will be adopted by Parliament of the Republic of Slovenia. The Higher Education Act, however, authorized the Government of the Republic of Slovenia to draft the bill based on the Starting Points to be previously discussed and adopted by the above-mentioned Council. The Starting Points were prepared in June 1997. In November, the Government submitted the harmonized Bill of the Master Plan for Higher Education to Parliament for discussion and adoption.

This volume is a collection of some documents which were published already in the above mentioned book but have been updated and completed for this one. In addition to that, the English translation of the Starting Points for the Higher Education Master Plan adopted by the Council for Higher Education of the Republic of Slovenia on 13 June 1997 is published for the first time. It also contains the analytical data reflecting the development of higher education in the period between 1981 and 1998. Other new elements are the Professional and Academic Titles Act passed in June 1998 and the list of all Slovene higher education institutions with their study programs. The final chapter contains the selected bibliography listing some publications and documents in the English language discussing Slovene higher education in that period, while the lines below seek to explain the background of contemporary changes in Slovene higher education.

## 2. SHORT HISTORY OF SLOVENE HIGHER EDUCATION

### 2.1. The roots

Despite certain significant educational traditions (existing since the establishment of the Jesuit college in 1595), the first true university in Slovenia was founded only after the disintegration of the Austro-Hungarian Empire. In 1919, the University of Ljubljana was established with five faculties: Arts, Law, Medicine, Theology and a Technical Faculty. The first academic staff were Slovene professors who had lectured abroad, mainly in Central European countries. The specific situation in royal Yugoslavia between the world wars threatened the university with dissolution in the first decade of its existence; it survived by virtue of the political pragmatism of the university administration of the time.

The University of Ljubljana began to develop rapidly in the entirely new circumstances after the Second World War. Its distinction of having had a Technical Faculty from the very beginning was preserved, while other new faculties were born out of cooperation and links between the natural and technical sciences. There was a similar trend in the social sciences. After the Second World War, in a period characterized by rapid industrial development, the university introduced shorter, two-year courses alongside the traditional four-year ones. The faculties were therefore joined within the university by two-year and four-year colleges, which provided education in the fields of the economy, the health sector, education, public administration etc. With the exception of the Faculty of Theology, which was at the time not part of the university, there were practically no other institutions of higher education in Slovenia. This particular national *monocentrism* in the field of higher education was accompanied by another characteristic: all three art academies developed within the university.

Until the 1960s, which were an important turning point in the modern history of higher education, the Slovene higher education system had only one university developing the full complex of activities which, in other systems, are developed by several universities or other institutions of higher education. The lack of academic competition could be interpreted as a sign of monopoly, and as such a danger to quality. However, from the perspective of a small national system of higher education, such a situation can also be interpreted as a consequence of efforts towards quality and the maintenance of international standards. Both arguments should be taken into account in seeking to understand recent trends in Slovene higher education. This is all the more important for the fact that, since the end of the 1960s, Slovenia, like other countries, has witnessed extensive development of higher education and new developmental challenges.

For seventy years, the University of Ljubljana developed as one of the Yugoslav universities; the cooperation with other Yugoslav universities, although fruitful in many aspects, did not substantially influence higher education in Slovenia because of the specific situation in the decentralized system of the former Yugoslavia and traditional differences in language and culture. The University of Ljubljana was one of the best in the former state; students from other federal republics came to study here and cooperation was established with universities elsewhere in Yugoslavia, but it would be difficult to say that there was any division of work or competition with these universities. University of Ljubljana was *the* national university for many decades. Probably more than by the relation with these universities, the traditional structure of Slovene higher education was changed by the establishment of a second university in Slovenia, the University of Maribor. Its establishment (in 1975) followed a decade of preparations, in particular the development of individual schools, and was closely related to the intensive industrial development of north-eastern Slovenia, as well as political debate over polycentric development in Slovenia.

## **2.2. 1981: Disintegration of higher education**

The second Slovene university was created at a time when there existed no university in the classical sense because of contemporary changes in the legal regulation of higher education. The specific decentralized model, with which the socialist self-management system regulated the legal status of economic enterprises, also impinged on the status of institutions of higher education. Faculties, art academies and two-year and four-year colleges became independent entities, which were obliged to associate to form a university. However, in the mid-1970s, the university became a "self-managing community" of higher education institutions, and not specifically an academic institution. This change reflected the spirit of the time, a period of defeat for reformist movements, as well as democratic and liberal ones, from the late 1960s and early 1970s, i.e. movements which recruited from the university in particular.

Of course, the powers of the university as a "self-managing community" were limited. Almost all crucial decisions concerning curricula, the development of scientific and arts disciplines and other academic tasks were formally taken within faculties, art academies and colleges. In such circumstances, the thesis of the traditional monocentric character of the Slovene higher education system might seem paradoxical. But the reality behind this seeming paradox becomes evident if one takes into account the fact that, at that time, all important decisions were influenced by the prevailing, and sometimes conflicting, political interests.

Some serious problems in the system of higher education itself were caused in the 1980s by the relation between a weak and disintegrated university on the one hand and powerful and independent faculties on the other, as well as by the lack of autonomy in academic affairs. The various disciplines began to develop on qualitatively different levels and there were major signs of disintegration in higher education. These problems became even more severe with new legislation on post-primary education (*Career-Oriented Education Act, 1981*), which regulated higher education together with the entire secondary education sector and which was premised on the idea that all education should be oriented directly towards work and a vocation. Undoubtedly the crucial, although not the only, mistake of this law was that it restricted the role of institutions of higher education to teaching alone, while establishing a system that neglected their scientific, artistic and expert work. Critics argued that this reinforced trends linking higher education to secondary school methods.

In the first few years after the adoption of this law governing higher education, it became obvious that study programs were expanding. Weekly lectures for students exceeded 30 hours, and the teaching load of faculty and assistants increased correspondingly. A trend towards longer study programs also emerged. In some instances, they were prolonged by one or two semesters, which was justified by the argument that the new system of secondary education, oriented towards work and a vocation, failed to provide an adequate basis for commencing study at higher education institutions. In terms of quality, these are of course worrying signs in any system of higher education. In our case, they were all the more dangerous for the fact that the system lacked a mechanism which at least on a formal level could measure or check the quality of studies or in some other way determine common criteria for accrediting higher education courses.

The concept of oriented education was designed as a strategic project and in many respects demonstrated the former regime's aspirations for strengthening development, which it was unable to consolidate after the outcome of the political conflicts of the mid-1970s. Slovenia was the last federal republic in the former state to launch this project, and the Slovene leadership immediately had to contend with strong opposition from civil society. Some analysts consider

that the movement against the project of career-oriented education was a component of the democratization process of the late 1980s. In these circumstances, in April 1988 both universities drew up a special document demanding the adoption of a law on universities and submitted it to Parliament. The Assembly agreed to the demand some weeks later and asked both universities to prepare expert guidelines for the drafting of the law.

The *de facto* disintegration of higher education institutions on the one hand, and historical events around the turn of the 1990s on the other, were the major reason for the fact that five years were needed for the preparation of the bill. However, even these five years brought some important developments. After lengthy debate the *Career-Oriented Education Act* was fairly fundamentally altered in 1989. It is interesting that this change preceded the political transition. The changes gave both universities autonomy in the academic sphere, while in secondary education, the major step of reintroducing the grammar school (*gimnazija*) was taken and it was also agreed that an externally assessed exam at the end of secondary schooling (*matura*) should be taken before university. But a complete body of laws governing higher education was not drafted during that period.

### **3. HIGHER EDUCATION ACT OF 1993**

#### **3.1. 1993: New legal regulation of higher education in Slovenia**

At the beginning of the nineties several versions of a new bill on higher education were prepared. Expert work and coordination regarding new legislation was stepped up in 1992, and, in December 1993, the Slovene Parliament passed the new *Higher Education Act (HEA)* under which both universities regained the traditional status, and the former disintegration of higher education was at least formally reversed. It was obvious already at that time that more time would be needed for a comprehensive reintegration to take place. The act envisaged a two-year transitional period in which higher education institutions and their study programs would be brought into line with the new regulations.

The *HEA* has introduced many changes in relation to the situation in the past. It grants higher education institutions autonomy in all academic matters, stipulates certain framing conditions for their operation, especially their financing, and regulates certain matters concerning status and curricula which are directly or indirectly related to the quality of higher education and international comparability. For the first time in the national history, the new legislation offered an opportunity to set up--on the basis of a special accreditation procedure--independent (free-standing) higher education institutions besides state universities. Study programs of the former two-year colleges were abolished and new three-year professional higher education programs were introduced in addition to the four- to six-year university ones. A possibility was given to start doctoral studies immediately after graduation provided that certain conditions were met, that is without first obtaining *magisterij*.

Taking into account the mentioned notion of »monocentrism«, the *HEA* provides for a pluralization of higher education institutions and introduces at least indirect competition among them. There have been hypothetical discussions of restructuring the present two universities into three or more, but attention has also been drawn to the negative side of such a project and, at most, a gradual approach to its implementation has been advised. It seems that the pluralization of the system will to some extent be influenced more by the establishment of non-state institutions of higher education. The act stipulates that faculties and art academies established by the state must operate within one or other (state) university, whose bodies and procedures guarantee their academic level and quality. Only the university is a legal person; faculties have lost

that status. Professional colleges (*Visoke strokovne šole*; professional higher education institutions) operate either as independent higher education institutions or within one of the universities. Schools (of the faculty or art academy type) which are not set up by the state are also allowed to operate independently (free-standing). They can become associate members of state universities, thus adhering to the latter's academic norms. In the new system of higher education professional colleges and private institutions are intended primarily to encourage the economic sector in cooperation with local communities, in addition to the state, to facilitate conditions for the creation of study, research and development programs. All these should fundamentally increase access to higher education for an increasingly large number of candidates, and should contribute to more job opportunities.

Indeed, pluralization of the higher education system began in 1975, when a second university was established in Slovenia. Since there is considerably larger scope and need for broadening the higher education system today, a competent body has been established such as has not previously existed and which is to take charge of coordinating higher education planning at the national level. The HEA entrusts these responsibilities to the Higher Education Council of the Republic of Slovenia, which was founded by the Government in February 1994. In the amending of higher education legislation and the funding of higher education, the Council plays an advisory role to state bodies, which decide about finances. In addition to this, one of its most important tasks is to define criteria for the designation of curricula and criteria for monitoring and assessing the quality of work at higher education institutions. The Council is also responsible for the accreditation procedure (See Chapter VII): it gives opinions about the fulfillment of conditions for the establishment of new institutions of higher education and opinions about the criteria of universities for the habilitation of teachers. It issues certain consents to independent institutions of higher education, which are given to faculties within universities by the university senate, the highest academic body. In the new system, the university senate and the Higher Education Council are the two bodies bearing the greatest responsibility for matters of quality and academic standards in higher education. The Quality Assessment Commission to be created by higher education institutions themselves is also defined by the law.

Study programs are adopted by the senates of faculties, art academies and professional colleges after a prior consent obtained from the university senate. The programs of free-standing higher education institutions are adopted by their senates after a prior consent of the Council for Higher Education of the Republic of Slovenia. The new legislation basically differentiates between *two types of undergraduate study programs*: university and professional higher education programs. As a rule, the former take four years to complete; exceptionally some last four and a half or five (e.g. engineering, pharmacy, veterinary medicine) or even six (human medicine, dental medicine) years. In this respect, there are no major differences in comparison with the former system. A new feature are professional programs lasting three years (with the exception of two four-year programs). They include practical training conducted in cooperation with companies and state and local administration. Students may transfer between programs under certain conditions. Higher education institutions classified as faculties or art academies may offer both types of programs, while professional colleges may deliver only professional higher education programs.

University programs are taught only by faculty members with the title of a full, associate, or assistant professor. The award of titles is the autonomous right of higher education institutions. Titles are granted for a five-year period with the exception of the titles of full professors, which are granted for life by the university senate. A mandatory requirement for the title of a full, associate or assistant professor is the researched-based advanced degree of *doktorat znanosti* and research achievements. Art academies may also award such titles to candidates without *doktorat znanosti* provided they can prove outstanding achievements in art. Professional programs may be taught by senior lecturers and lecturers besides professors. Senior lecturers and lecturers are not

required to possess *doktorat znanosti*; practical experience is important for both titles, while senior lecturers also need the degrees of *specializacija* or *magisterij*.

Graduate studies lead to the following degrees: *specializacija* (one to two years of study), *magisterij* (two years of study) and *doktorat znanosti* (four years of study). A general admission requirement is a successful completion of undergraduate studies in a specific field. Applicants with professional undergraduate degrees may enroll in specialist programs; those with university degrees may be admitted to any of the three types of graduate programs. Studies leading to *magisterij* were traditionally a compulsory stage on the path to *doktorat znanosti*. (The only possibility to compensate for *magisterij* was a special examination called *rigorozi*.) The stipulations of the new act allowing, under certain conditions, a direct enrollment into doctoral studies after the completion of an undergraduate university program is thus an important new feature. During the drafting of the new act and also afterwards, many discussions on the function of and the reasons for a traditional *magisterij* as a stage preceding *doktorat znanosti* were held. It was decided to keep it as a part of the system in spite of the above mentioned change.

### **3.2. Higher education and the legislative reform of pre-tertiary education**

Differentiation between university and professional programs became effective for applicants enrolling in their first year of studies in the academic year 1995-96. Pursuant to the *HEA*, a general admission requirement for higher education, that is for university and professional study programs, is the *matura* examination. As a rule, it is taken after a completed four-year secondary school. The only exception are art academies, which may also enroll exceptionally gifted students without *matura* or even without a completed secondary school. Applicants having completed secondary school with a final examination (*zaključni izpit*) may enroll in professional but not in university programs. Higher education institutions may determine the type of the secondary school program and school-leaving examination (e.g. technical fields, economics, health care, etc.) granting admission to individual professional programs. The act also stipulates the conditions for transfers from professional to university programs and vice versa.

The introduction of *matura* examinations marks a *de facto* end of the period of the so-called career-oriented education. The provisions of the *Career-Oriented Education Act* (1981) applying to secondary education were *de iure* repealed with the adoption of six acts concerning pre-tertiary education (February 1996). As already mentioned, the re-introduction of *matura* (an examination with a long tradition, which was abolished with the educational legislation reform of 1981) was demanded by universities; the laws reinstating it were passed already in 1989. It took several years to prepare it. A trial *matura* was pilot implemented on a sample of schools in 1994. *Matura* is an externally assessed examination in three compulsory subjects (mother tongue and literature, the first foreign language, mathematics) and two electives (from a set of approximately 30 subjects, mostly academic but also some professional). Tests are designed by subject committees consisting of secondary school teachers and university professors; the results are assessed by specially trained external examiners, most of whom come from the ranks of secondary school teachers. *Matura* has been primarily conceived as the completion of general secondary school, although a number of students from technical secondary schools also opt for it. The latter can also sit the final examination. Under certain conditions, (adult) candidates without a completed secondary education may take the *matura* examination.

The *final examination* was reintroduced in 1992, following a decade without any final knowledge assessment after the end of secondary school. It is *internally* assessed (nevertheless featuring some elements of external assessment). Candidates must successfully pass the examinations in two compulsory subjects (mother tongue and literature and either a foreign language or mathematics)

and two electives normally chosen from among vocational subjects depending on the type of school (e.g. technical fields, economics, health care, music etc.). The final examination leads to employment or the continuation of studies in professional higher education programs. In the first three years after the *matura* reinstatement, final examinations could also be taken by students finishing *gimnazija*.

When the *HEA* was pending adoption, thorough preparations for the legislative reform of the complete pre-tertiary education were carried out. After several years of preparations, the Government submitted a package of six bills to Parliament in fall 1994. They were passed in February 1996. According to the new legislation, basic education has been prolonged from the present 8 to 9 years by earlier entrance into education, namely at the age of 6. The "career-oriented education on a secondary level", introduced in the beginning of the eighties and based on the premise of education leading at the same time to a vocational qualification and to a preparation for academic studies, has undergone a systemic change. General secondary education and different forms of vocational education and training have been separated. Four-year general education takes place in *gimnazija*. There are two types of *gimnazija*: general (*splošna gimnazija*) and technical (*strokovna gimnazija*; e.g. technical, economic, art). It is a preparation for further studies and is concluded with *matura*. Vocational education (programs lasting from two to four years) makes it possible for students to learn a trade and to continue their studies in some cases, though not directly in higher education programs. After completion of vocational education, students will have a possibility to enroll in a one-year *matura* course, then take a *matura* examination and afterwards continue their studies in higher education. On the other hand, it is also possible to attend a one-year *vocational* course instead of taking a *matura* examination after the last year at *gimnazija* and thus obtain a vocational qualification.

The new legislation of 1996 (more precisely, the *Organization and Financing of Education Act* and the *Vocational Education and Training Act*) introduced another important new element in the sphere of post-secondary education, i.e. vocational colleges (*višje strokovne šole*) to be established in cooperation with industry and employers. Studies last two years. A good third of the program consists of practical work in companies. Applicants having passed a *matura* or final examination after a completed four-year secondary school may enroll. Under certain conditions, admission is also granted to applicants with a completed three-year vocational school. Teachers at these colleges are appointed following a special procedure. At least an undergraduate university degree and proven practical achievements in their profession are required for appointment. Vocational colleges do not form part of higher education. They nevertheless offer an important additional educational opportunity after secondary school. Conceived as the highest level in the vocational education system and as education offered in collaboration with industry, they aroused much interest among the potential applicants (especially adults) and employers in the first two years of their operation. Six vocational colleges were established by the school year 1998-99. The EU Phare support (within the framework of the Reform of Vocational Education and Training program) was instrumental in establishing them.

### **3.3. Professional and Academic Titles Act, 1998**

The *HEA* does not contain provisions on the award of professional and academic titles at the end of studies. This issue has been traditionally regulated by a separate piece of legislation. The drafting of the new Titles Bill paralleled the adoption of the *HEA*. The newly established Council for Higher Education discussed the Titles Bill in 1994, but the procedure in Parliament stalled, therefore the act was not adopted until June 1998 (See Chapter V). The *Professional and Academic Titles Act* is an important complement to the *HEA*.

According to this act, professional and academic titles shall denote the level and type of education obtained in undergraduate or graduate study programs of higher education institutions established in accordance with the HEA. *Professional titles* are awarded to the graduates of study programs leading to a professional higher education degree, undergraduate university degree or the graduate degree of *specializacija*. *Academic titles* are awarded to the graduates of study programs leading to *magisterij* and *doktorat znanosti*.

Professional titles awarded after completed study programs leading to professional higher education degrees are formed by adding the name based on the study program to the words *diplomirani* (male) and *diplomirana* (female), respectively (e.g. *diplomirani socialni delavec*); after completed study programs leading to undergraduate university degrees by adding the name based on the study program to the words *univerzitetni diplomirani* and *univerzitetna diplomirana*, respectively (e.g. *univerzitetni diplomirani pravnik*). Professional titles in the fields of engineering, biotechnology and technology shall be formed by inserting the words *inženir/inženirka* after the words *diplomirani/diplomirana* (e.g. *diplomirani inženir strojništva*, *univerzitetna diplomirana inženirka živilske tehnologije*). The act also defines some exceptions based on tradition. In the field of arts, the words *akademski/akademski* may replace the words *diplomirani/diplomirana* (e.g. *akademski slikar*). After the completion of undergraduate study programs in human medicine, dentistry and veterinary medicine, professional titles are formed by adding the words *doktor/doktorica* to the name of the study field (e.g. *doktor/doktorica medicine*); after the completion of undergraduate pharmaceutical studies, the title of *magister/magistra farmacije* is awarded. In all study programs leading to university degrees in any field and discipline also giving pedagogical qualifications, the professional titles of *profesor/profesorica* may be awarded (e.g. *profesorica geografije in zgodovine*).

Academic titles are *magister/magistrica znanosti* (or *umetnosti*, respectively) and *doktor/doktorica znanosti*. Professional titles are placed after, academic titles in front of the name and surname.

Corresponding professional and academic titles have to be determined by the study programs of higher education institutions. It is stipulated in the transitional provisions of the act that universities and higher education institutions have to decide on professional and academic titles and correspondingly complete study programs within one year after this act has taken effect at the latest. The Ministry of Education and Sport will publish the list of all titles in the Official Gazette of the Republic of Slovenia. Higher education institutions also have to prepare a list of equivalencies between the new and formerly awarded titles. This means that the stipulations of the new act will actually begin to be fully implemented in the first half of 1999.

The recognition of degrees and titles, respectively, obtained abroad will be regulated by a special act. Because of many changes at home and abroad, a new bill is being drafted.

#### **4. IMPLANTATION OF NEW LEGISLATION: SOME ANSWERS - AND NEW QUESTIONS**

##### **4.1. Matters of status**

During the first year after having passed the HEA, efforts were directed primarily towards the reorganization of the two existing universities. Regulations on reorganization of the universities passed by Parliament in December 1994 completed the changes in their status and the former concept of a university as a "self-managing community" of higher education institutions ceased. This also led to some changes in their organization. Some of the largest faculties of both universities split into several new ones. Former junior colleges (*višje šole*) with two-year study programs were abolished, or reestablished as new professional colleges (*visoke strokovne šole*)

offering three-year programs. Most of these institutions made use of the legal stipulation that they may continue to operate as part of the university; only the College of Police and Security Studies remained a free-standing professional college after January 1, 1995 but soon became an associated member of the University of Ljubljana. At the beginning of 1995, the universities intensified the drafting of their new constitutions to be passed before the beginning of the next academic year. After a dynamic discussion they were adopted by both university senates in summer 1995.

Since December 1994, the College of Hotel and Travel Administration in Portorož has also been operating as a free-standing professional higher education institution. It is the first private higher education institution founded on the basis of new legislation in Slovenia. Its founders are 11 hotel corporations and an insurance company. The first 100 full-time and 60 part-time students began their studies in October 1995 (and should graduate in 1998). The development of this program was part of a TEMPUS project. From that time on, some new institutions have been established after successfully passing the accreditation procedure. In the academic year 1998-99, state recognized study programs will be offered by five free-standing professional colleges and two graduate schools (See Chapter IX).

As mentioned above, study opportunities in the tertiary education system have been increased by new vocational colleges, first established in 1996, which are not regulated by the *HEA*. At the post-secondary level, there are now seven free-standing professional higher education institutions and six vocational colleges in addition to the University of Ljubljana (20 faculties, 3 art academies and 3 professional colleges) and University of Maribor (9 faculties and 1 professional college).

#### **4.2. Study programs, students and graduates, investments in development**

The *HEA* stipulated not only the deadlines for changes in the status of institutions but also the deadlines for changes in study programs. The then existing undergraduate university programs were formally harmonized with the stipulations of new legislation (e.g. admission requirements, duration of studies, requirements for transfers between programs, etc.) already in fall 1995. In most cases, higher education institutions used the opportunity to renew the contents of their programs as well. The development of new professional study programs was more demanding, especially because it was presumed that industry would participate in the process. The first five programs were ready as early as the end of 1994 and as such offered to the cohort enrolling in the first year of studies in the academic year 1995-96. In compliance with new legislation, the last two-year programs leading to *višješolska diploma* were offered in that same academic year. (Those programs were provided either by junior colleges or by faculties as the so-called »first-degree« programs, that is the programs consisting of the first two years of otherwise four-year programs.) In the next year, over 30 professional programs were prepared. Some of them admit the holders of the aforementioned »first degree«, who studied under the old legislation, in the third year of studies in compliance with the stipulations regulating transfers. After the deep changes concerning study programs, which were experienced by the cohorts enrolling in 1995-96 and 1996-97, the number of new developments declined in the last two academic years. In spite of that, new university and professional study programs, regarded as practicable, surface every year.

The reform of study programs in mid-nineties was profoundly marked by the exponential growth of student numbers. The Starting Points for the Higher Education Master Plan and the analysis of trends in higher education (See Chapter II and Chapter III) give a broad view and discussion of those trends. At the beginning of the nineties, Slovenia faced developmental challenges which could not be interpreted in a single dimension. Such steep increases in student numbers cannot be related only to the unemployment problem; they are to a large degree also a consequence of

changed educational aspirations of the population. The unemployment rate among the graduates of post-secondary education institutions is comparatively low, therefore, from a personal point of view, the decision to enroll in higher education is a rational solution in the time of social transition. Moreover: the fact that education belongs to the most efficient factors of social mobility is especially evident in times of social transition. Political, economic and social changes from the beginning of the nineties placed individuals in a »world of thousand possibilities« enabling them to move to new positions in social networks. The awareness that education is an important instrument of such mobility influenced noticeable changes in population's educational aspirations. After 8 years of compulsory education, almost everybody enrolls in secondary education (98% of the cohort finishing primary school in June 1998). Each year, an increasingly higher percentage of students takes part in longer and more demanding forms of secondary education. (At present, more than two thirds of secondary school students attend four-year *gimnazije* and technical schools, the rest vocational schools). Almost all individuals meeting admission requirements for tertiary education want to enroll. A growing number of adults aspiring to continue their education should be added to that.

The reform of post-secondary education encountered severe problems related to the above mentioned developments. Above all, it was necessary to provide additional budgetary funding. The total number of students increased almost by 70% between 1990 and 1997. Numerous new study places at higher education institutions were needed, new high quality study programs had to be designed (because of high numbers of new applicants and because of new national development challenges) and new professors and assistants appointed. It was necessary to diversify the types and levels of post-secondary education. Neither should we overlook the demands and importance of the development of basic and secondary education. At the beginning of the nineties, material resources were decidedly insufficient as far as the aspirations of young people and the national development were concerned.

In such circumstances, one of the most important steps in the development of the education system was taken in 1994 when a special *Educational Development Projects Act* (popularly called the »School Tolar Act« - the tolar being the Slovene currency) was passed by Parliament in February. It allocated a considerable amount of additional resources for development projects in education. Approximately US \$ 250,000,000 will be provided for investments in school premises and equipment and some other purposes (computer literacy, textbooks, school meals, learning foreign languages) in the six-year period from 1994 to 1999. Although these resources will be distributed among all levels of education from primary school to university, they are especially important for higher education. Many new buildings have been built or adapted in last years, mainly for the higher education institutions with the fastest growing number of students. As the program is running out (although the needs have not been fully met yet) the Republic of Slovenia applied for a loan from the Council of Europe Social Development Fund in order to round off the investments in school premises and equipment. The act approving the loan request was passed by Parliament in July 1998. The total value of investments (loan and budgetary resources) in the period from 1998 to 2002 would amount to approximately US \$ 250,000,000. As a result, most of the problems concerning premises and equipment for secondary and post-secondary education should be solved by 2002. They will be solved not only thanks to substantial investments but also as a result of the fact that a progressive decline in the number of births, started at the end of the previous decade (in the last years, cohorts have been reduced by a good third), will effect secondary and higher education in the coming decade. From the national perspective, it is all the more important to provide ample possibilities for top quality education of future generations.

A special chapter in the renewal process of higher education programs are graduate studies. In the past, the number of students in individual graduate programs was very low, the studies were predominantly carried out on an individual basis, in many cases very successfully and in

cooperation with renowned foreign universities. Unluckily, no genuine attempts to bring together Slovene faculties were made. A quicker development of graduate studies was also curbed by the elitist perception of their goals. Besides, the systemic budgetary funding was not sufficient for their expansion. Growth in other sectors of the higher education system strengthened the traditional fragmentation and segmentation. The discussions in the middle of this decade were highly critical towards this issue and underlined the promotion of integration and quality as the main task (See Chapter II, point 2.2.5.). Old graduate study programs were formally harmonized with new legislation in summer 1996. Some new programs were designed including those of two new private graduate schools. The discussions on the renewal of graduate studies ended in spring 1998 with the Government's resolution on a new interim funding system presupposing the linking of study and research institutions, international cooperation, quality assessment and guaranteeing a higher share of budgetary resources than so far. The employment of graduates in industry and the public administration sector has been particularly stressed; traditionally, their career paths led predominantly to higher education and research institutions.

In addition to research and graduate studies, the introduction of new three-year professional programs helped tackle the question of the relationship between higher education institutions and industry in a new way. These programs presume various forms of cooperation of higher education institutions with the employers of their future graduates, for example in providing practical training for students. The discussion could not ignore thorough political changes at the end of the eighties and the beginning of the nineties, which brought great challenges also for higher education institutions. For some of them, especially for the engineering faculties of both universities, those challenges were even greater than for the others because they had to face fundamentally changed conditions for their operation resulting from radical economic changes and the privatization process in companies. In new circumstances, many companies were not ready to use the research facilities of higher education institutions in the same extent and manner as before because of the crisis following the loss of markets at the beginning of this decade and a different management philosophy. Besides, the reproaches of partners from industry that not all higher education institutions were able to face the changed economic reality, their new needs and requirements and that they were too often satisfied with the logic of the academic self-sufficiency were at least partially true.

This complex situation resulted in a number of dilemmas concerning the relationships between higher education institutions, the state and the civil society, behind which an interlacement of two contradictory demands could often be perceived: (1) the functioning of higher education institutions should be guaranteed by the state and fully funded from the state budget; (2) within legal limitations, higher education institutions should be granted as much freedom as possible in their business connections with all potential partners carried out in addition to the activities funded from the state budget. These dilemmas are to a high degree also reflected in the never-ending discussion on the autonomy of the university. For example: How is the autonomy of (state) universities influenced by the efforts to earn additional money from private sources? Is public financing a potential contradiction of the autonomy of (state) universities? And so on.

#### **4.3. Review of the constitutionality of the Higher Education Act and university statutes**

Discussions concerning changes in status caused by new legislation were especially dynamical when the relationship between university member institutions (faculties, art academies, professional colleges) and the university was being defined. It should be remembered that university members were legal entities under the former law. Some (actually, quite a number of them) knew how to make use of such status as far as doing business was concerned. Therefore, salaries at various higher education institutions (of the same university) could differ quite

considerably. After long discussions, the *HEA* transferred the legal personality to universities. As a compromise, university members were granted the right to independently perform certain additional activities (»on behalf of themselves«; *HEA*, Article 10) not falling within the scope of activities defined by the Master Plan for Higher Education.

The problem of complex relationships between member institutions was not limited to this issue. It became extremely acute during the adoption of the constitution of the University of Ljubljana, more precisely in defining the composition of the university senate membership. In the opinion of many, the principle that the senate should be elected »in such a manner that all scientific, art and professional disciplines be equally represented« was not adhered to. Similarly, the relationship between the powers of the rector and those of deans and of the central administration versus the administration of member institutions was debated at both universities before and after the adoption of their constitutions. In this context, special attention was paid to the discussion concerning university autonomy and its relationship with the government.

Soon after the adoption of the act, the constitutionality of some of these issues was to be assessed by the Constitutional Court of the Republic of Slovenia. The first review was sought by the State Council of the Republic of Slovenia (i.e. the second chamber of Parliament) immediately after the adoption of the act. It concerned the truly controversial stipulation on the retirement of university professors, which was a consequence of higher-degree amendments offered by representatives during the last reading of the bill in Parliament. This stipulation (See Chapter IV, *HEA*, Article 60) was repealed by the Constitutional Court in February 1994.

Almost at the same time, the Faculty of Law of the University of Ljubljana brought an action for the initiation of a procedure to assess the constitutionality of some stipulations of the *HEA*. The initiative concerned four stipulations including the repealed one regulating the retirement of university professors. The other three were: the stipulation regulating the award of the title of full professor in case the university adopted restricted criteria for the award of titles (*HEA*, Article 56); the stipulation regulating students' right to repeat an examination at least three times in the same academic year (*HEA*, Article 66); and the stipulation granting the right to adopt admission criteria for student residence halls funded or co-funded by public money to the minister having jurisdiction over higher education (*HEA*; Article 69). Articles 56 and 66 are also a consequence of the amending process in Parliament. They were not contained in the first version of the bill. The party proposing the review claimed that the stipulation of Article 56 violated the constitutional principle of the autonomy of universities. It was also claimed that such regulation caused uncertainty in a specific class of citizens (i.e. full professors who were granted the title for life under former regulations) and therefore violated the principle of the rule of law. It was further alleged that the provision of Article 66 violated the constitutional principle of the autonomy of universities (academic issues should be regulated exclusively by the constitution of the university). The provision of Article 69, supposedly interfering with the relationship between the university and its students, was claimed to violate the same principle.

In January 1995, the initiative for the review of the constitutionality of the whole act was submitted by one of the university professors alleging that the *HEA* violates the university autonomy guaranteed by Article 58 of the Constitution of the Republic of Slovenia: »State universities and other institutions of higher education shall be autonomous. The founding of these institutions shall be regulated by statute.« The plaintiff claimed that this gave the universities, being research and educational institutions, the right to regulate themselves the manner and form of their operation without being accountable to any other body (e.g. state administration, government, ministries). This would render the majority of the stipulations of the *HEA* unconstitutional (I. General provisions, articles 1, 2, 4, 6; II. Definition of the status of higher education institutions; III. Teaching, research and artistic activities; IV. Council for higher

education; V. Teaching and research faculty and faculty assistants; IX. Control). In spite of the radical character of the initiative giving it a potentially humorous tone, the request triggered a number of serious controversies and discussions; there was enough time for them because the decision of the Constitutional Court was delivered three years later.

In 1995, the list of requests for the review of the constitutionality grew even longer. The dean of the Faculty of Arts of the University of Ljubljana lodged the request to review the constitution of the University of Ljubljana, more precisely its articles determining the composition of the university senate. He claimed that those articles violated the legislative principle that the senate should be elected »in such a manner that all scientific, art and professional disciplines are equally represented« (*HEA*, Article 21). The faculty of Arts was granted only one seat in the university senate in spite of the fact that it covered a whole range of disciplines.

University College of Public Administration proposed that the provision stipulating that only full professors may be members of the university senate (*HEA*, Article 21; this provision was also a result of higher-degree amendments offered by representatives during the last reading of the bill in Parliament) be reviewed in addition to the provision on university senate membership. As the College was not employing any full professors at the time, it believed that it was prevented from taking decisions in the highest university governing body.

The third initiative was submitted by three candidates for the rector of the University of Ljubljana in 1995, when the elections were held under the new university constitution for the first time. They also claimed that the provision on the composition of the university senate violated the legislative stipulation on equal representation of all scientific, art and professional disciplines. The number of disciplines is not identical with the number of university member institutions, which is especially true in the field of social sciences. It was alleged that the former stipulation was also violated by the provisions according to which the rector and vice-rectors were *ex officio* members of the senate.

The Constitutional Court decided on all initiatives in spring 1998. In March it delivered the decision which upheld the claim of the Faculty of Law of the University of Ljubljana filed in February 1994 and repealed the above mentioned parts of Articles 56, 66 and 69 of *HEA*. It dismissed the action brought by the university professor in January 1995. As far as the issue of autonomy is concerned, it stated: »A fully autonomous social subsystem is an intrinsically contradictory notion: if it is fully autonomous, then it is no longer social nor a subsystem.« The decision further stated that the *HEA* was unconstitutional only as far it stipulated that also university member institutions were autonomous. In May it delivered another decision, which repealed Article 21 of the *HEA*, stipulating that only full professors could be members of the university senate, and the respective provisions of the university's constitution regulating this same issue which violated the provision on equal representation of scientific disciplines.

#### **4.4. Next steps in the development of higher education**

Issues raised by the initiatives for the review of constitutionality were discussed in other milieus as well. Especially the discussions of younger higher education faculty members and their trade unions focused on the stipulations concerning the composition of the senates of the university and its member institutions besides the problem of salaries. It has been already mentioned that, in the amending process during the adoption of the Higher Education Bill in Parliament, the provision stipulating that only full professors could be members of the university senate and that they had to have the majority in the senates of faculties, art academies and professional colleges was adopted. If full professors did »not represent all the scientific, art and professional disciplines

of the institution« (*HEA*, Article 21), associate and assistant professors could be elected to the senate. Pursuant to this provision, faculty assistants, non-academic staff and students could not be members of the senate. Students, however, could in part influence the decisions through the student council, a mandatory body of the university and its member institutions.

The discussion on possible changes in the composition of senates was controversial and the standpoints of university bodies were not favorable. In June 1997, a petition for the amendment of the *HEA* signed by approximately 200 faculty members was submitted to Parliament of the Republic of Slovenia. A group of representatives proposed the amendment for legislative procedure, which has not started yet because of further open questions and debate.

The discussion on the composition of senates was closely linked with the problems of the management of the university and higher education institutions in general. It was not only the young teachers and assistants who drew attention to the stagnation in this field. In September 1997, a group of members of the senate of the University of Ljubljana submitted a document to their peers for discussion. The document, entitled *Memorandum for the University of Ljubljana*, had quite an impact on the recent period in Slovene higher education. It was based on the aspiration that »the member institutions of the University of Ljubljana should themselves find the answers to the most important questions concerning the operation of the University of Ljubljana«.

The document supports internal networking and communication and further development in an environment of pronounced autonomy. The unpredictable elements originating in the environment should be reduced by increasing the number of partners which the university cooperates with: the state, companies, non-profit organizations at home and abroad. The university should keep a critical distance in its relations with the environment, which means that its officers should not hold visible positions in the state, industry or church. As far as the internal organization is concerned, the document advocates equal representation of all disciplines in the governing bodies involving all higher education teaching and research staff, non-academic staff and students. Decentralized decision making on matters specific for individual fields or faculties should be maintained; on the other hand, common tasks needed for the integration of the university should be defined. The document ends with the list of short-term tasks including the preparation of the development and organization strategy and the elections of the new university management. The present team was elected with a great majority in December 1997. Their term of office began in the beginning of 1998. (This is the first team with a four-year term of office. The provision stipulating a two-year term of office for the rector and vice-rectors has been changed.)

The events in the academic year 1997-98 were also shaped by university trade unions. An apparent reason were previous changes in salaries in the judicial and health sector. University trade unions announced a strike in March 1998. The points to be negotiated, in addition to the requirement that the salaries of higher education employees should not be dealt with separately from the salaries of employees in the judicial and health sector, concerned various aspects of the status of higher education employees and amendments to the *HEA*. As a part of those questions did not fall within the competence of the state, the management of both universities participated in the negotiations, which were long and ended at the beginning of June 1998 with an agreement signed by the government, universities and university trade unions.

The agreement is quite a well-rounded summary of the issues to be tackled by the Slovene higher education as well as the trends of its future development and proposed solutions. It is composed of two parts: the first discusses development questions and the related demands of trade unions, the other concerns the salaries. The problem of salaries was solved by guaranteeing an approximately 25% gradual increase (slightly higher for lower paid jobs) between October 1998

and July 2000. The signatory parties undertook an obligation to do their best to reach a higher level of efficiency in higher education. The reorganization of the higher education funding system was underlined. It should be based on the principle of lump-sum funding. The number of students and graduates and specific situations in individual study fields will be taken into account. Graduate studies will be funded from the budget. The universities will ensure links among teaching and research institutions and the modernization and high quality of programs. They will modernize the general organization of studies by introducing the credit transfer system. The document also addresses the issues such as the modernization of management, separation of academic and business functions, appointments of teaching faculty and faculty assistants, their status and promotion, improvement of work with students, introduction of regular quality assessment, requirements for the introduction of new study programs and increasing the number of students, etc. Some elements of the agreement require legislative changes, therefore the *HEA* will be amended in the coming months. The change will include an alteration of the provision on the composition of senates already pending the decision.

The academic year 1997-98 was probably one of the most dynamic in this decade. And last but not least: a draft Master Plan for Higher Education was submitted to Parliament. This document is based on the evaluation of the achieved level of development and the analysis of trends in higher education; it is expected to profoundly impact the next period. Its adoption is expected in 1999 together with the amendments of the *HEA*.

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## II.

### HIGHER EDUCATION IN FIGURES: DEVELOPMENTS AND TRENDS

*Note: This chapter presents statistical analyses (based on the situation in June 1997) made during the preparation of the Starting Points for the Higher Education Master Plan (1996-1997). For this edition, the supplement has been revised, partly abridged and shortened, and completed with more recent data (situation in July 1998).*

#### 1. STUDY PLACES ANNOUNCED AND ENROLLMENT

Table 1.1 shows full-time study places, spring applications and actual fall full- and part-time undergraduate enrollment in the first and all other years of study. Enrollment is occasionally influenced by specific external factors. In the first half of the eighties, it was influenced by changes in military service. The general economic situation caused a significantly lower interest in part-time studies in the second part of the eighties and the transition to the nineties. Due to the extraordinary circumstances in summer 1991, examinations were disturbed, so the requirements were reduced, which slightly increased the 1991-92 enrollment.

In tertiary education, the differentiation between university studies (lasting four to six years) and university-equivalent studies (lasting at least three years) on one hand, and non-university studies (lasting two years) with a specifically vocational orientation on the other is becoming increasingly apparent.

In the Slovene educational system, the former include study programs leading to *university degrees* and *professional higher education degrees*, which may be offered only by higher education institutions established in compliance with the Higher Education Act (1993). Two-year study programs offered by junior colleges (i.e. short-type higher education institutions) were abolished by this Act. The last generation of students enrolled in this type of studies in the academic year 1995-96.

The new programs of post-secondary vocational colleges founded in compliance with the Vocational Education and Training Act (1996) and supported by an EU Phare program belong to the second group. In 1996-97, the first generation of 432 students enrolled in the five new post-secondary vocational colleges. The second generation counting 864 students enrolled in 1997-98. Further increases are expected in the coming years.

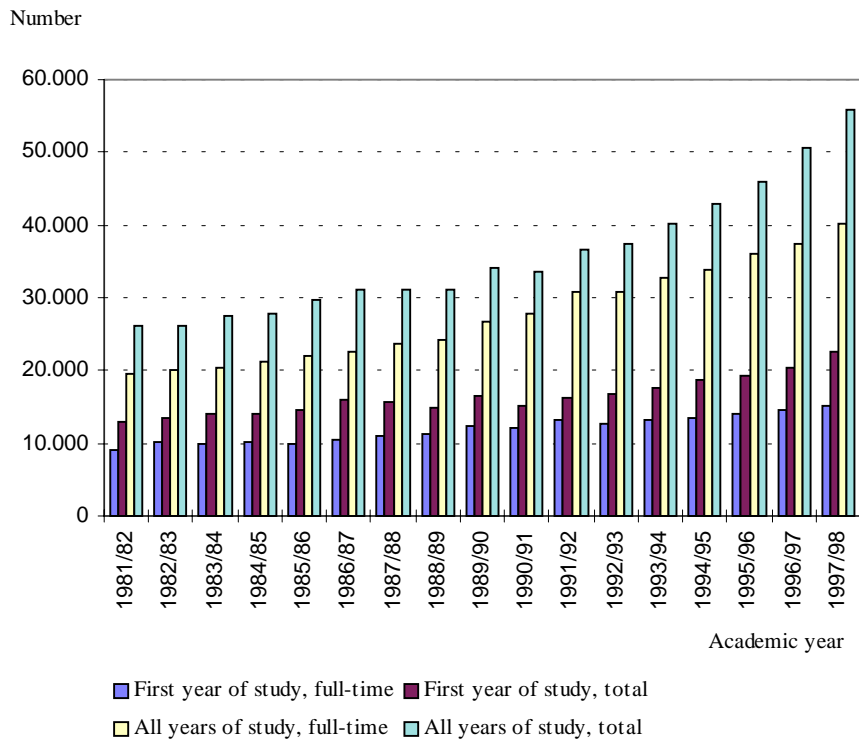
Taking into account the students enrolled in higher education institutions and the students of new vocational colleges, we can see that there was a total of *56,709 students enrolled in tertiary education in the academic year 1997-98*. The figure does not include graduate students.

Unless specifically marked, the students of new vocational colleges are not included in the subsequent analyses.

**Table 1.1: Study places announced and higher education enrollment  
(between 1981-82 and 1997-98)**

Acad. year	Announced		Applicants		First-year enrollment			Total enrollment		
	Full-time	%	Full-time	%	Full-time	Part-time	Total	Full-time	%	Total
1981-82	8,715	100	9,704	100	9,186	3,728	12,914	19,567	100	26,207
1982-83	8,666	99	9,802	101	10,074	3,480	13,554	20,086	103	26,197
1983-84	8,873	102	10,349	107	9,970	3,954	13,924	20,501	105	27,403
1984-85	8,763	101	12,235	126	10,271	3,885	14,156	21,319	109	27,691
1985-86	8,882	102	12,237	126	10,036	4,648	14,684	22,030	113	29,601
1986-87	9,390	108	11,512	119	10,513	5,317	15,830	22,626	116	30,985
1987-88	9,805	113	11,639	120	11,014	4,647	15,661	23,732	121	30,981
1988-89	9,835	113	12,224	126	11,266	3,714	14,980	24,349	124	31,055
1989-90	9,480	109	12,237	126	12,305	4,124	16,429	26,697	136	34,228
1990-91	9,695	111	13,471	139	12,122	3,132	15,254	27,774	142	33,565
1991-92	9,523	109	14,741	152	13,298	3,021	16,319	30,744	157	36,504
1992-93	9,885	113	14,997	155	12,749	3,910	16,659	30,788	157	37,362
1993-94	10,752	123	17,404	179	13,190	4,395	17,585	32,728	167	40,239
1994-95	11,278	129	17,598	181	13,605	5,211	18,816	33,794	173	42,961
1995-96	12,321	141	17,065	176	14,095	5,151	19,246	35,998	184	45,951
1996-97	13,160	151	17,541	181	14,527	5,893	20,420	37,314	191	50,667
1997-98	13,526	155	18,258	188	15,220	7,289	22,509	40,304	205	55,845
1998-99	13,993	160	19,237	198	'''	'''	'''	'''	'''	'''

**Figure 1 A: Enrollment - first year and all students  
(between 1981-82 and 1997-98)**



Tables 1.2 and 1.3 show the study places announced and the enrollment in the first year of study and the enrollment of all students at both universities. The figures for the last academic year also include data for free-standing higher education institutions with accredited undergraduate study programs (College of Hotel and Travel Administration in Portorož, College of Management in Koper, College of Global Entrepreneurship in Portorož). Full-time and part-time studies are presented separately. The data include students repeating the same year of study.

**Table 1.2: Study places announced and first-year enrollment by university or free-standing higher education institution (1990-91 and 1997-98)**

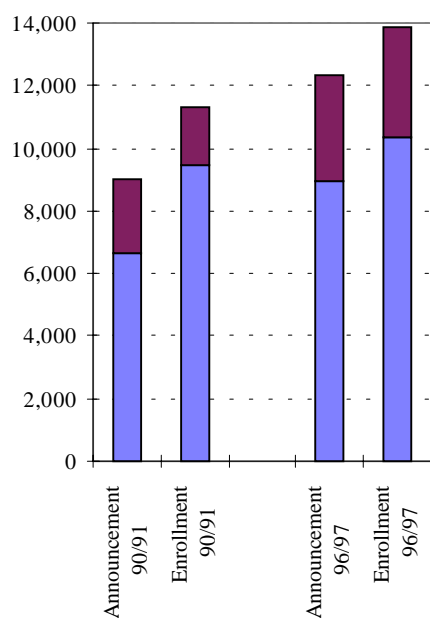
Higher education institutions	Full-time students				Part-time students			
	Announcement		Enrollment		Announcement		Enrollment	
	90/91	97/98	90/91	97/98	90/91	97/98	90/91	96/97
University of Ljubljana	6,678	9,529	9,475	10,844	2,342	3,988	1,871	4,583
University of Maribor	2,845	4,164	3,823	4,100	2,145	2,653	1,150	2,460
Free-standing HE institutions	-	220	-	276	-	120	-	246
Republic of Slovenia	9,523	13,913	13,298	15,220	4,487	6,761	3,021	7,289

**Figure 1 B: First-year enrollment by university (1990-91 and 1997-98)**

University of Ljubljana

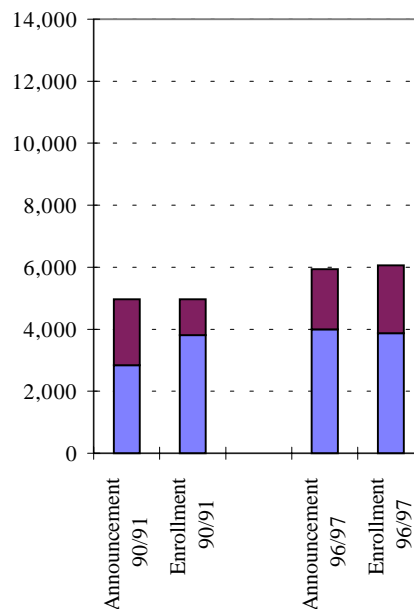
University of Maribor

Number



■ full-time ■ part-time

Number



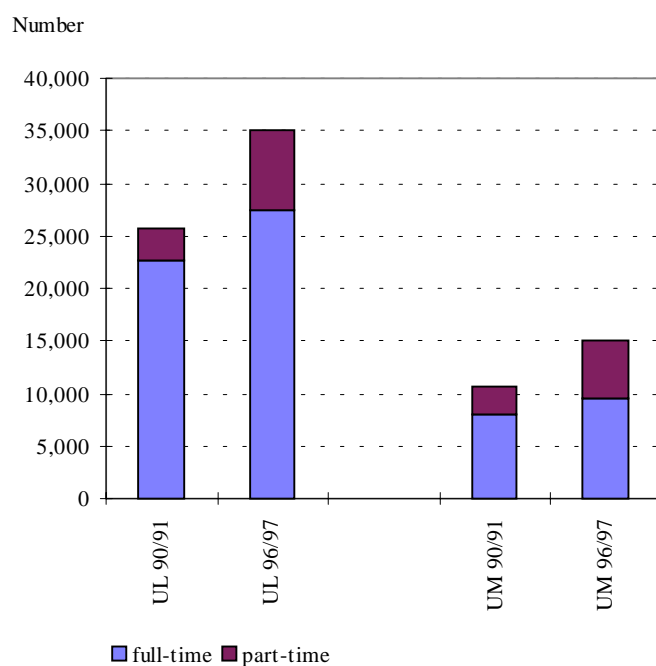
■ full-time ■ part-time

**Table 1.3: Total enrollment by university or free-standing higher education institution (1990-91 and 1997-98)**

Higher education institutions	Full-time students		Part-time students		All students	
	1990-91	1997-98	1990-91	1997-98	1990-91	1997-98
University of Ljubljana	22,757	29,785	3,032	8,819	25,789	38,604
University of Maribor	7,987	9,884	2,728	6,187	10,715	16,071
Free-standing HE institutions	-	635	-	535	-	1,170
Republic of Slovenia	30,744	40,304	5,760	15,541	36,504	55,845

**Note:** Students of the College of Police and Security Studies, an associated member of the University of Ljubljana, are included in the figures referring to that university.

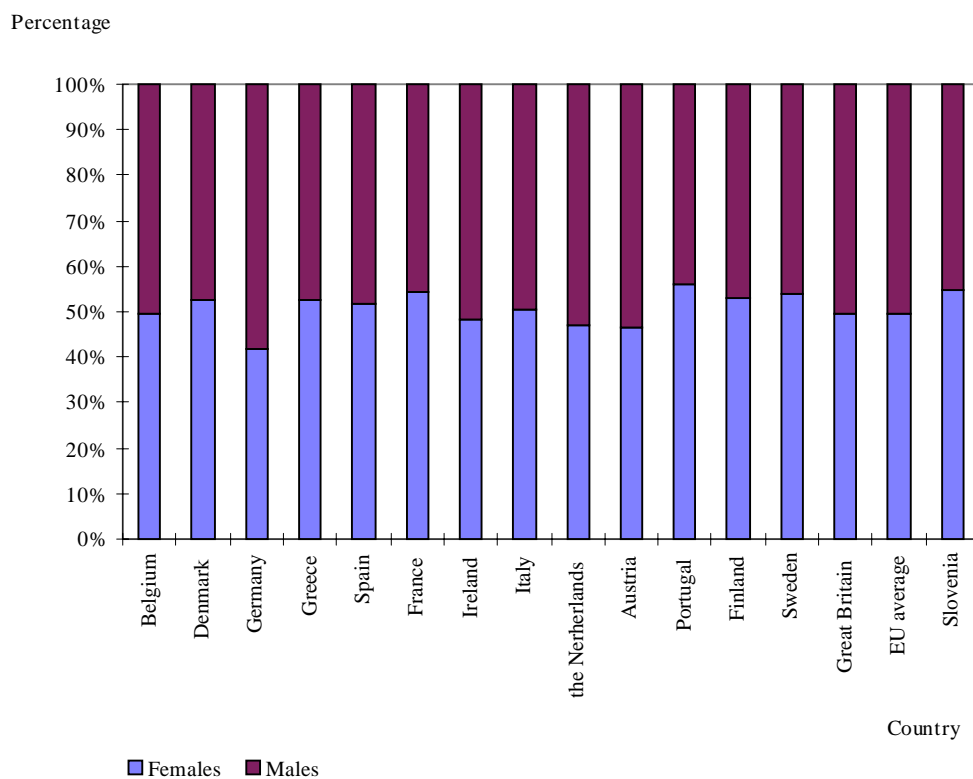
**Figure 1 C: Total enrollment by university (1990-91 and 1997-98)**



## 2. UNDERGRADUATE STUDENTS BY GENDER

The number of female students in the higher education systems of European countries varies considerably. On average, the ratio of female to male students in EU countries was 94 to 100 in the academic year 1991-92; a year later it changed to 98 to 100. In 1992-93, the number of female students per 100 male students ranged from 72 in Germany to 128 in Portugal [*Key data on education in the European Union, 1994, 1995*]. In the same academic year, there were 121 female undergraduate students per 100 males in Slovenia.

**Figure 2 A: Students by gender in Slovenia and EU (1992-93)**



Tables 2.1 and 2.2 show students by gender in such a way that the data on full-time and part-time enrollment and the first-year enrollment and the enrollment in all years of study can be found. The percentage of female students is given. The ratio did not change significantly in the period shown. Occasional changes resulted primarily from changes in military service. However, the percentage of female part-time students in the total number of students grew notably in this decade compared with the first part of the eighties.

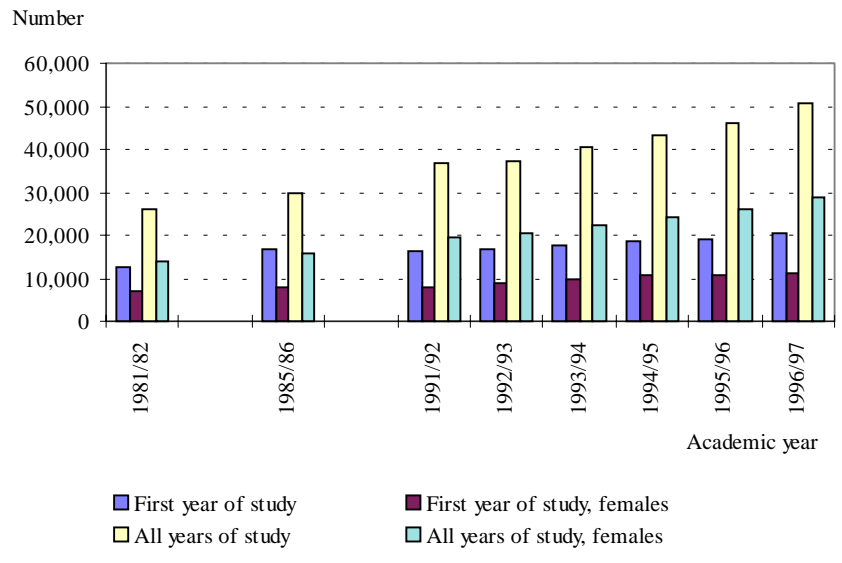
**Table 2.1: Undergraduate students by gender – the first year of study  
(1981-82, 1985-86, 1991-92 to 1997-98)**

Academ. year	Full-time students			Part-time students		
	Total	Females	%	Total	Females	%
1981-82	9,186	5,210	57	3,278	1,652	50
1985-86	10,036	5,706	57	4,648	2,174	47
1991-92	13,298	6,284	47	3,021	1,692	56
1992-93	12,749	6,869	54	3,910	2,100	54
1993-94	13,190	7,190	55	4,395	2,349	53
1994-95	13,605	7,418	55	5,211	3,217	62
1995-96	14,095	7,870	56	5,151	2,776	54
1996-97	14,527	7,965	55	5,893	3,318	56
1997-98	15,220	8,301	56	7,289	4,016	55

**Table 2.2: Undergraduate students by gender - all years of study  
(1981-82, 1985-86, 1991-92 to 1997-98)**

Academic year	Full-time students			Part-time students		
	Total	Females	%	Total	Female s	%
1981-82	19,567	11,280	58	6,640	2,891	44
1985-86	22,030	12,315	56	7,571	3,328	44
1991-92	30,744	16,244	53	5,860	3,245	55
1992-93	30,788	16,788	55	6,574	3,671	56
1993-94	32,728	18,023	55	7,511	4,295	57
1994-95	33,794	18,846	56	9,410	5,500	58
1995-96	35,998	20,441	57	9,953	5,685	57
1996-97	37,314	21,199	57	13,353	7,461	56
1997-98	40,304	22,883	57	15,541	8,243	53

**Figure 2 B: Undergraduate students by gender - full- and part-time  
(1981-82, 1985-86, 1991-92 to 1997-98)**



### 3. FOREIGN STUDENTS

Table 3 shows the changes in the number and percentage of all foreign students enrolled in Slovene higher education institutions (in comparison with Slovene nationals enrolled full-time). Foreign students studying at our higher education institutions in the framework of mobility programs (Tempus, Ceepus, etc.) are not included. During the 1991-92 enrollment it was not possible to collect suitable data for objective reasons. After the independence of Slovenia, the number of foreign students increased greatly at first, but began to fall gradually afterwards: in 1992-93, 749 foreign students were statistically recorded, and 522 in 1997-98. The main reason for that is the changed status of students from former Yugoslav republics, who were enrolled in individual Slovene higher education institutions when Slovenia became independent and continued their studies. At the beginning of this decade, the number of first-year foreign students dropped considerably (mainly because of the temporarily uncertain political situation), but their enrollment then began to grow. In comparison with the previous decade, primarily the number of students from other European countries and those of Slovene ancestry has been growing.

According to the data of the Ministry of Education and Sport, there were 32 students of Slovene ancestry enrolled in 1992-93, 51 the following year (the total number of Slovene minority members coming mainly from Italy and Austria and descendants of emigrants from Europe, North and South America), 73 (of whom 32 Slovene minority members and 41 descendants of emigrants) in 1994-95, 75 (of whom 37 Slovene minority members and 38 descendants of emigrants) in 1995-96, and 98 (of whom 56 Slovene minority members and 42 descendants of emigrants) in 1996-97.

**Table 3: Foreign students  
(1981-82, 1985-86, 1991-92 to 1997-98)**

<b>Academic year</b>	<b>Full-time Slovene stud.</b>	<b>Foreign students</b>	<b>Percentage of foreign stud.</b>
1981-82	19,567	297	1.5
1985-86	22,030	240	1.1
1992-93	30,788	749	2.4
1993-94	32,728	657	2.0
1994-95	33,794	548	1.6
1995-96	35,998	484	1.3
1996-97	37,314	424	1.1
1997-98	40,304	522	1.3

## 4. GRADUATE STUDENTS

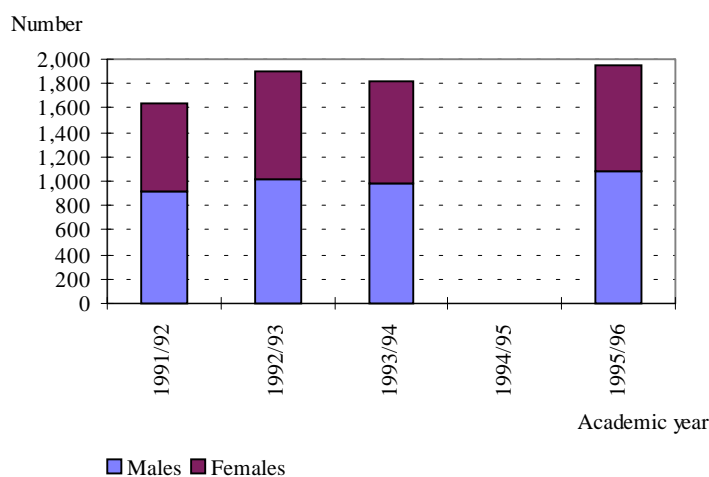
Tables 4.1 and 4.2 show the enrollment in the first and second year of study, the total number of graduate students and their distribution by gender and age group. Only those enrolled in study programs leading to *specializacija* and *magisterij* are included. Students who applied for doctoral studies (individual programs leading to *doktorat znanosti*) are not included. (See Chapter VIII, Lexicon of higher education in Slovenia, Section IX: Degrees and diplomas).

1994-95 data were not collected by the National Statistics Office; the data for the next year were collected according to a slightly modified method. So the students' age groups are different. Before 1991, the data on graduate students were not collected systematically.

**Table 4.1: Graduate students (1<sup>st</sup> and 2<sup>nd</sup> year) by gender (1991-92 to 1996-97)**

Academic year	1 <sup>st</sup> year	2 <sup>nd</sup> year	Total	Females	%
1991-92	1,013	634	1,647	726	44.1
1992-93	1,313	589	1,902	879	46.2
1993-94	1,183	632	1,815	827	45.6
1994-95	...	...	...	...	...
1995-96	1,288	669	1,957	879	44.9
1996-97	1,648	826	2,474	1,251	50.6

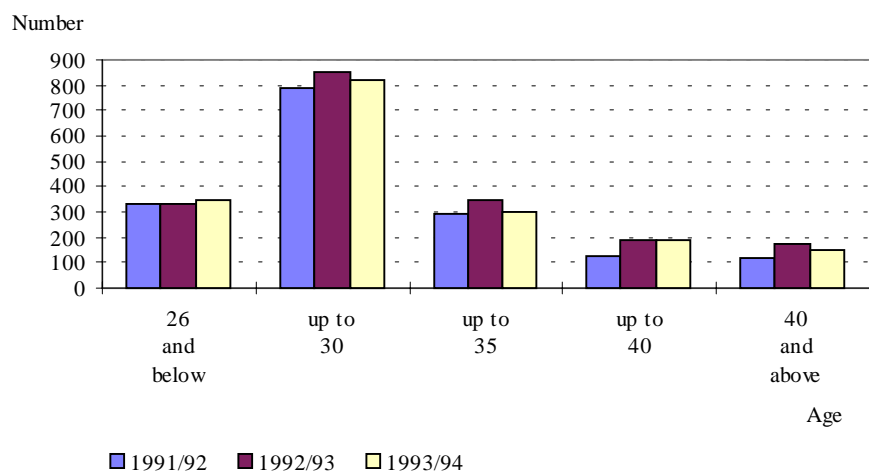
**Figure 4 A: Graduate students by gender (1991-92 to 1996-97)**



**Table 4.2: Graduate students by age  
(1991-92 to 1996-97)**

Acad. year	Up to 26 years	Up to 30 years	Up to 35 years	Up to 40years	Above 40
1991-92	331	786	289	123	118
1992-93	335	856	351	186	174
1993-94	349	822	299	193	152
1994-95	...	...	...	...	...
	<b>20 to 25 years</b>	<b>26 to 29 years</b>	<b>30 to 34 years</b>	<b>35 and above</b>	-
1995-96	206	1,055	332	364	-
	<b>Up to 26 years</b>	<b>Up to 30 years</b>	<b>Up to 35 years</b>	<b>Up to 40years</b>	<b>Above 40</b>
1996-97	604	1,044	343	224	259

**Figure 4 B: Graduate students by age  
(1991-92 to 1993-94)**



## 5. TRANSITION FROM SECONDARY TO TERTIARY EDUCATION

Table 5 shows the transition of the net cohort to tertiary education. The column “secondary-school graduates” includes all graduates of four-year (exceptionally five-year) secondary schools meeting general admission requirements for higher education in a given school year, while the column “number of students of the net cohort” includes only those continuing their studies in the next academic year. The data comprise full-time and part-time students. The number of all freshmen (compare with Table 1) is higher because of repeaters and students enrolling in their first year of study not immediately but a year or more after completion of secondary school. The last column gives the percentage of the net cohort continuing their studies.

Between 1984 and 1990, there were no final or *matura* examinations at the end of secondary school. Applicants were admitted to higher education programs on the basis of a certificate (diploma) of completed secondary school. In 1991, final examinations were reintroduced, so graduates who passed it in the spring or autumn terms are monitored separately. The data on graduates who passed a trial *matura* examination (formally counted as a form of the final examination) are also given for 1994. The data on graduates having finished a four or (exceptionally) a five-year secondary school with a *matura* or a *final examination* are shown separately after 1995 when this distinction was introduced into the educational system.

In 1994, 13,013 students finished secondary school (12,347 of them passed the final examination and 466 the trial *matura*). In 1995, there were 12,394 secondary-school graduates (of whom 7,196 passed the *matura* and 5,152 the final examination). In 1996, their number reached 13,043 (of whom 7,388 passed the *matura* and 5,655 the final examination) and in 1997 14,886 (of whom 7,665 passed the *matura* and 7,221 the final examination).

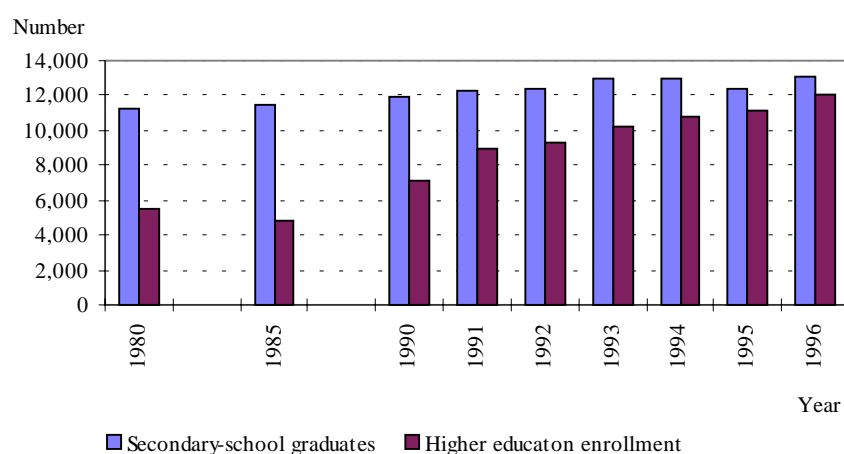
In 1998 spring term, 13,308 students finished secondary school (of whom 7,265 passed the *matura* and 6,043 the final examination). This number will increase after the fall examinations.

The column “higher education enrollment” for the years before 1995-96 includes all students enrolled in higher education institutions; the data for the academic year 1996-97 and 1997-98, however, include also students enrolled in post-secondary vocational colleges founded in compliance with the new legislation. 342 of the first-generation applicants enrolled in new post-secondary vocational programs; 152 of them had completed secondary school in that same year. Including these students, the percentage of transition was 92.5% in the academic year 1996-97 and 91.2% in 1997-98.

**Table 5: Transition from secondary to tertiary education  
(1979-80, 1984-85, 1989-90 to 1996-97)**

Secondary school graduates				Higher education		%
Academic year	Total	Final examin.	<i>Matura</i>	Enrollment in acad. year	Students of the net cohort	
1979-80	11,221	11,221	-	1980-81	5,460	48.7
1984-85	11,438	-	-	1985-86	4,828	42.2
1989-90	11,939	-	-	1990-91	7,114	59.6
1990-91	12,227	12,227	-	1991-92	8,947	73.2
1991-92	12,432	12,432	-	1992-93	9,344	75.2
1992-93	12,966	12,966	-	1993-94	10,169	78.4
1993-94	13,013	12,347	466	1994-95	10,788	82.9
1994-95	12,394	5,152	7,196	1995-96	11,184	90.2
1995-96	13,043	5,655	7,388	1996-97	12,064	92.5
1996-97	14,886	7,221	7,665	1997-98	13,573	91.2

**Figure 5: Transition from secondary to tertiary education  
(1980, 1985, 1990 to 1997)**



## 6. STUDENTS BY AGE GROUP

Table 6.1 shows students aged 19. As a rule, this is the age group meeting the requirements for admission to tertiary education in Slovenia.

The number of young people of this age having the status of students in tertiary education varies considerably in individual countries. This is partly influenced by different modes of completion of secondary school, and to an even larger degree by special features based on tradition (e.g. in northern Europe, the majority of freshmen enroll slightly later than in our country). For example, in 1992, 36.7% of nineteen-year olds were enrolled in tertiary education in the USA, 36.0% in Belgium, 35.9% in Canada, 34.2% in Greece, 30.8% in France, 27.6% in Ireland, 27.4% in Australia, 24.9% in New Zealand, 24.0% in Spain, 19.9% in the Netherlands, 19.6% in the Great Britain, 14.4% in the Czech Republic, 14.0% in Norway, 13.6% in Poland, 6.1% in Germany, 5.0% in Denmark, and 3.9% in Switzerland [*Education at a Glance, OECD Indicators, 1995*].

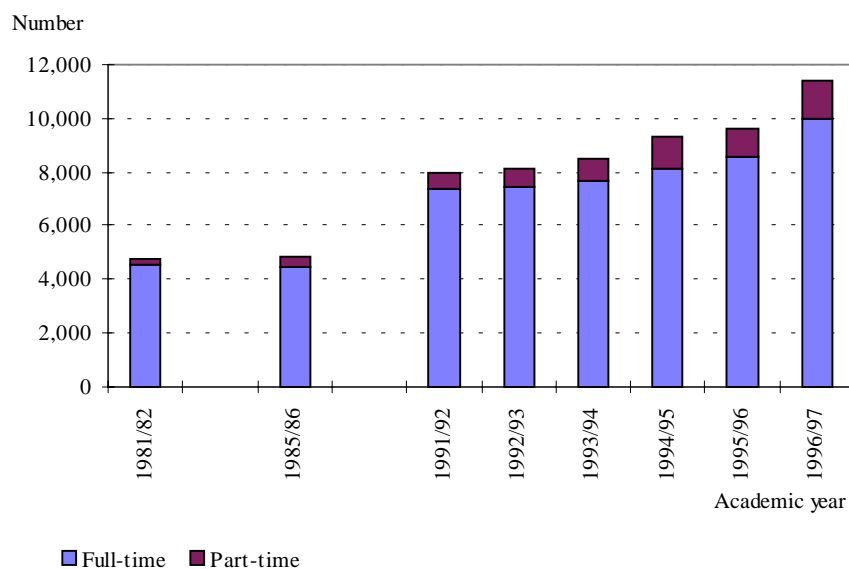
The data for Slovenia for 1997-98 should be increased by 0.5% because of students enrolled as the first generation in the new post-secondary vocational colleges (non-university tertiary education); the figure is thus actually 39.6%. These students are not included in Tables 6.1, 6.2, 6.3, 6.4 and Figures 6A, 6B, 6C and 6D.

Tables 6.2, 6.3 and 6.4. show students in Slovenia by age group. Table 6.2 includes students aged 18 to 21; as a rule, those are students enrolled in their first and second year of study. It also shows their share in the age group as a whole in such a manner that the share of full- and part-time students is evident. Tables 6.3 and 6.4 show full- and part-time students of the next two typical age groups and the percentage of students by age group compared to the total enrollment.

**Table 6.1: 19-year old students  
(1981-82, 1985-86, 1991-92 to 1997-98)**

Academic year	Population aged 19	Students aged 19			Percentage of students per cohort %		
		Total	Full-time	Part-time	Total	Full-time	Part-time
1981-82	29,035	4,790	4,544	246	16.5	15.7	0.8
1985-86	30,941	4,874	4,506	368	15.8	14.6	1.2
1991-92	28,713	7,965	7,343	622	27.8	25.6	2.2
1992-93	29,548	8,087	7,429	658	27.3	25.1	2.2
1993-94	28,652	8,524	7,704	820	29.8	26.9	2.9
1994-95	29,786	9,305	8,101	1,204	31.2	27.2	4.0
1995-96	30,339	9,595	8,559	1,036	31.6	28.2	3.4
1996-97	29,904	9,735	8,486	1,249	32.5	28.3	4.2
1997-98	30,354	11,877	10,243	1,634	39.1	33.7	5.4

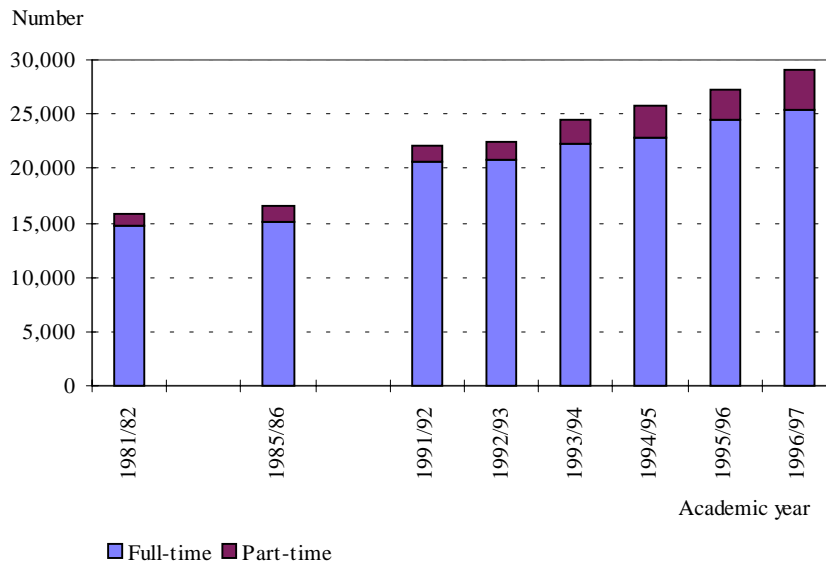
**Figure 6 A: 19-year old students  
(1981-82, 1985-86, 1991-92 to 1997-98)**



**Table 6.2: Students aged 18 to 21  
(1981-82, 1985-86, 1991-92 to 1997-98)**

Academic year	Population aged 18 to 21	Students aged 18 to 21			Students as percentage of age group %		
		Total	Full-time	Part-time	Total	Full-time	Part-time
1981-82	114,989	15,745	14,693	1,052	13.7	12.8	0.9
1985-86	120,536	16,593	15,169	1,424	13.8	12.6	1.2
1991-92	113,971	22,163	20,598	1,565	19.4	18.1	1.4
1992-93	115,164	22,385	20,735	1,650	19.4	18.0	1.4
1993-94	116,672	24,457	22,306	2,151	21.0	19.1	1.8
1994-95	118,298	25,703	22,888	2,815	21.7	19.3	2.4
1995-96	118,654	27,290	24,564	2,726	23.0	20.7	2.3
1996-97	120,383	29,023	25,469	3,554	24.1	21.2	3.0
1997-98	121,201	31,646	27,365	4,099	26.0	22.6	3.4

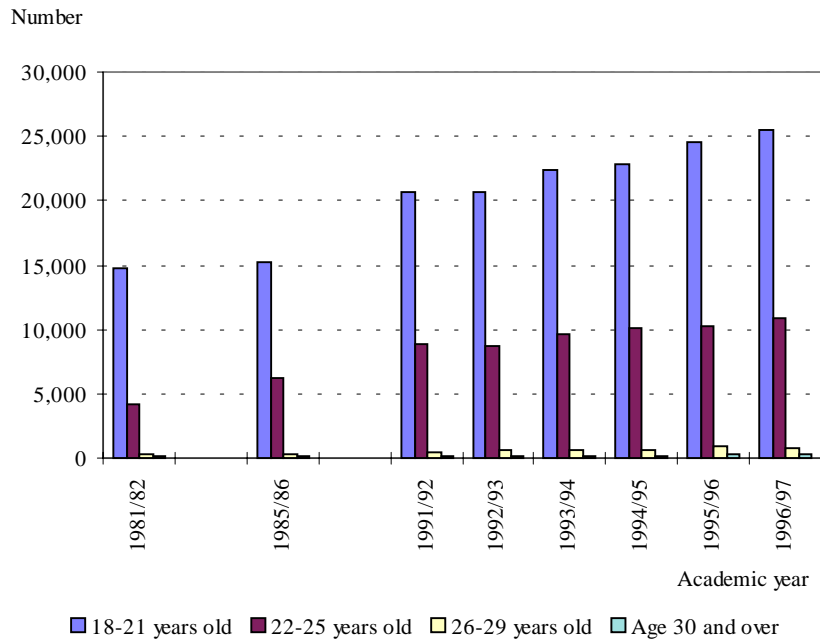
**Figure 6 B: Students aged 18 to 21  
(1981-82, 1985-86, 1991-92 to 1997-98)**



**Table 6.3: Full-time students by age group  
(1981-82, 1985-86, 1991-92 to 1997-98)**

Academic year	18-21 years old	%	22-25 years old	%	26-29 years old	%	Age 30 and over	%
1981-82	14,693	76.01	4,209	21.77	289	1.50	140	0.72
1985-86	15,169	69.54	6,191	28.38	314	1.44	139	0.64
1991-92	20,598	68.78	8,800	29.39	464	1.55	85	0.28
1992-93	20,735	68.70	8,772	29.06	554	1.84	120	0.40
1993-94	22,306	68.16	9,631	29.43	631	1.93	160	0.49
1994-95	22,888	67.65	10,043	29.68	696	2.06	208	0.61
1995-96	24,566	68.24	10,316	28.66	869	2.41	247	0.69
1996-97	25,469	68.26	10,814	28.98	794	2.13	237	0.64
1997-98	27,365	67.89	11,792	29.25	859	2.13	238	0.59

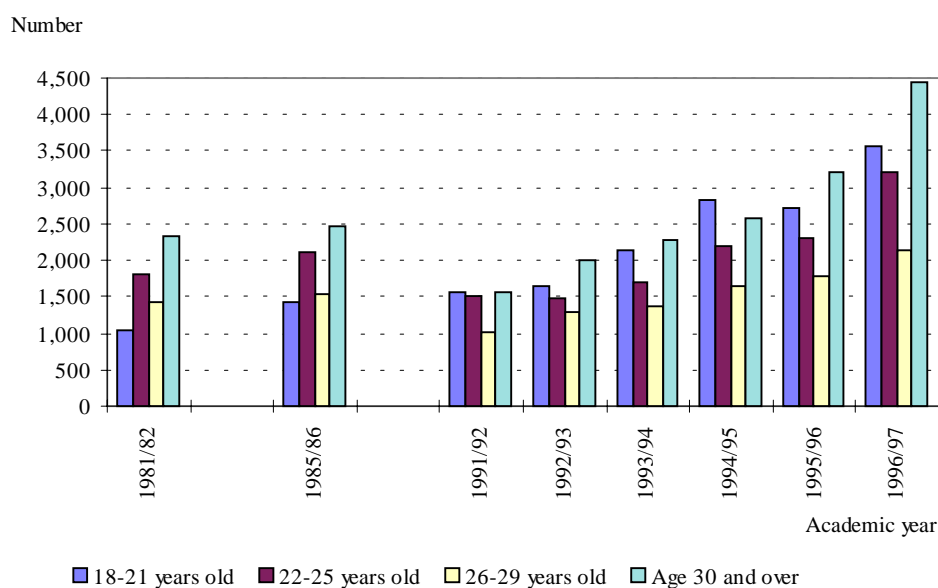
**Figure 6 C: Full-time students by age group  
(1981-82, 1985-86, 1991-92 to 1997-98)**



**Table 6.4: Part-time students by age group  
(1981-82, 1985-86, 1991-92 to 1997-98)**

Academic year	18-21 years old	%	22-25 years old	%	26-29 years old	%	Age 30 and over	%
1981-82	1,052	15.9	1,799	27.2	1,419	21.5	2,344	35.4
1985-86	1,424	18.9	2,120	28.1	1,523	20.2	2,481	32.9
1991-92	1,565	27.7	1,506	26.6	1,022	18.1	1,566	27.7
1992-93	1,650	25.7	1,490	23.2	1,283	19.9	2,009	31.2
1993-94	2,151	28.6	1,704	22.7	1,366	18.2	2,290	30.5
1994-95	2,815	30.5	2,198	23.8	1,644	17.8	2,575	27.9
1995-96	2,364	27.2	2,292	22.9	2,090	17.8	3,207	32.0
1996-97	3,554	26.6	3,219	24.1	2,131	16.0	4,449	33.3
1997-98	4,099	26.3	3,695	23.7	2,518	16.2	5,529	35.6

**Figure 6D: Part-time students by age group  
(1981-82, 1985-86, 1991-92 to 1997-98)**



## 7. TRANSITION OF STUDENTS FROM THE FIRST TO THE SECOND YEAR OF STUDY

Table 7 shows the ratio between the enrollment in the first year of study by academic year and the enrollment in the second year of study a year later. The data refer to Slovenia as a whole.

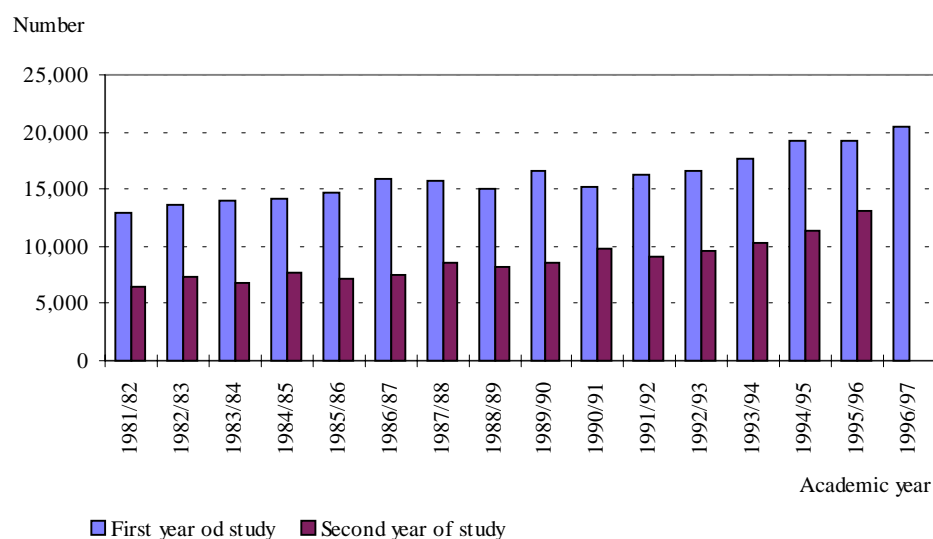
Due to the extraordinary circumstances in summer 1991, examinations were disturbed, so the requirements were reduced, which slightly increased the transition rate. The data for this year (total 64%, full-time 68%) are thus not fully comparable with other years.

Cohorts enrolling in the academic years between 1981-82 and 1986-87 were not required to pass a school-leaving examination. In 1991 (until February 1992), school-leaving examinations in two subjects were reintroduced; after that, the examination was taken in four subjects. In 1994, a part of the generation (466 students) passed a trial *matura* examination. After 1995, seniors have to take either a school-assessed final examination in four subjects or a *matura* examination in five subjects with external examiners.

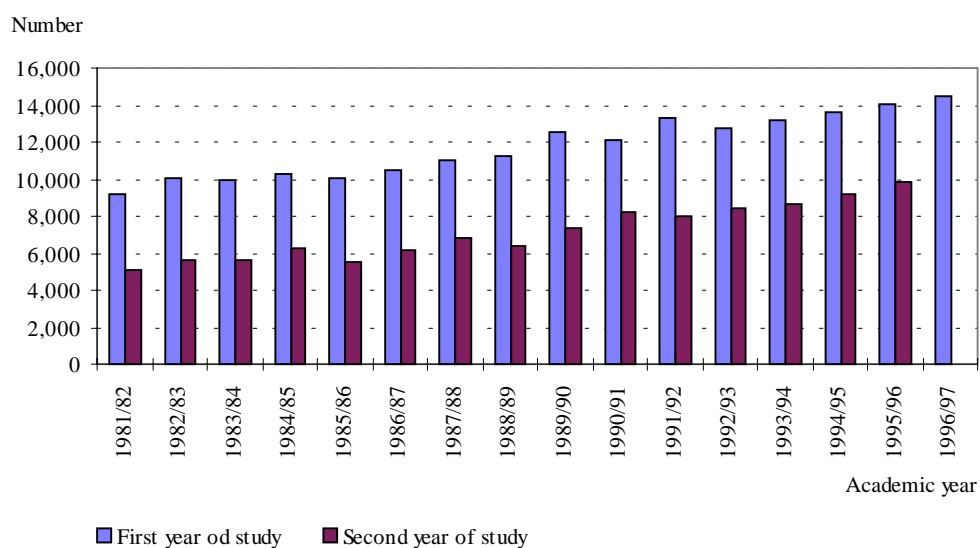
**Table 7: Transition of students from the first to the second year of study (1981-82 to 1997-98)**

Cohort by academic year	First year of study		Second year of study		Second year : first year %	
	Total	Full-time	Total	Full-time	Total	Full-time
1981-82	12,914	9,186	6,471	5,124	50	56
1982-83	13,554	10,074	7,359	5,640	54	56
1983-84	13,924	9,970	6,822	5,594	49	56
1984-85	14,165	10,271	7,696	6,226	54	61
1985-86	14,684	10,036	7,142	5,533	49	55
1986-87	15,830	10,513	7,568	6,118	48	58
1987-88	15,661	11,014	8,486	6,781	54	62
1988-89	14,980	11,266	8,228	6,402	55	57
1989-90	16,627	12,503	8,641	7,369	52	59
1990-91	15,254	12,122	9,741	8,201	64	68
1991-92	16,319	13,298	9,134	7,981	56	60
1992-93	16,659	12,749	9,573	8,429	57	66
1993-94	17,585	13,190	10,262	8,697	58	66
1994-95	19,305	13,635	11,279	9,165	58	67
1995-96	19,246	14,095	13,068	9,884	68	70
1996-97	20,420	14,527	13,364	10,226	65	70
1997-98	22,509	15,220	...	...	...	...

**Figure 7 A: Transition of students from the first to the second year of study, all students (1981-82 to 1997-98)**



**Figure 7 B: Transition of students from the first to the second year of study, full-time students (1981-82 to 1997-98)**



## **8. GRADUATES OF SHORT-TYPE AND OTHER UNDERGRADUATE STUDY PROGRAMS**

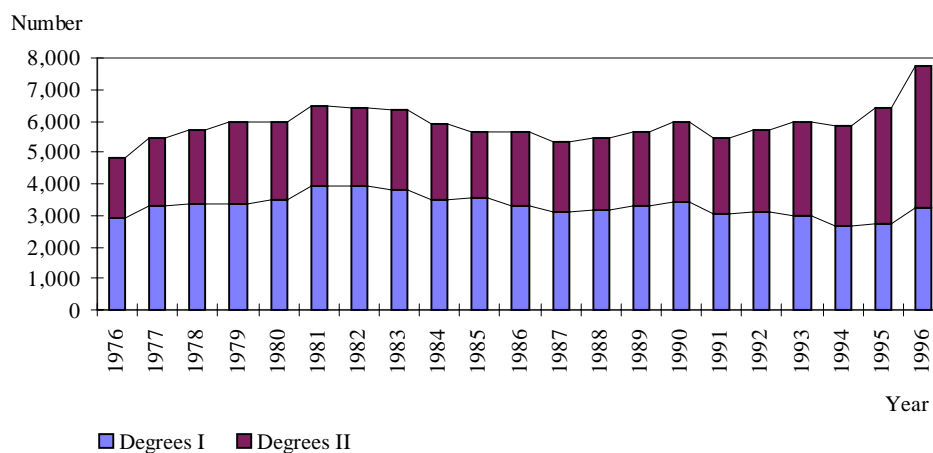
Table 8 shows the data on the graduates having completed short-type studies (*višješolska izobrazba*, marked as “degree I”; as a rule, these degrees were conferred after two or two and a half years of studies) and other undergraduate study programs (marked as “degree II”; degrees conferred, as a rule, after four to six years of studies at a higher education institution) between 1976 and 1996. The former legislation was taken into account in their classification. The possibility of finishing studies according to former short-type study programs (last enrollment possible in the academic year 1995-96) has been granted till the end of the decade. On the other hand, the first graduates of new professional higher education programs were already registered in 1996; higher numbers can be expected at the end of the decade.

The data is collected statistically by calendar and not academic year. The year of 1981 is taken as the basis for comparison, because the total number of that year graduates was not exceeded until 1996.

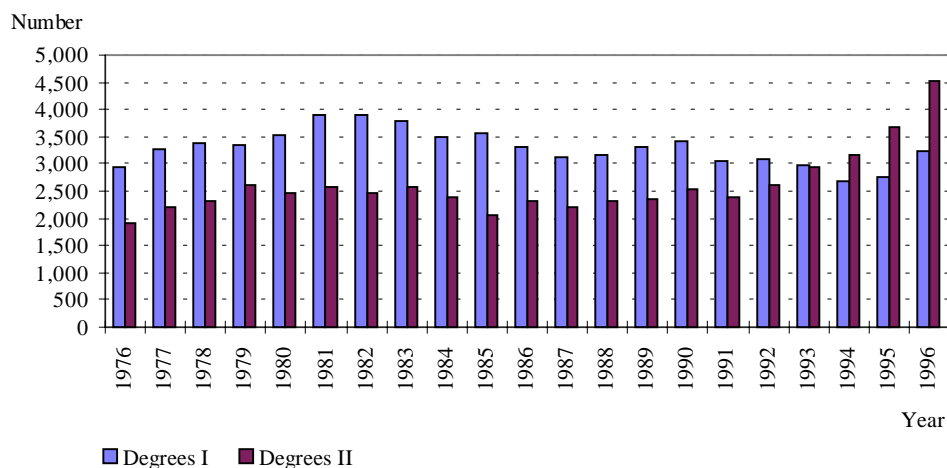
**Table 8: Graduates of short-type and other undergraduate study programs (1976 to 1997)**

Year	Number of degrees I	Comparison with 1981 %	Number of degrees II	Comparison with 1981 %	Number of degrees I+II	Comparison with 1981 %
1976	2,934	75	1,911	74	4,845	75
1977	3,283	84	2,195	85	5,478	84
1978	3,386	87	2,315	90	5,701	88
1979	3,338	85	2,620	101	5,958	92
1980	3,512	90	2,455	95	5,967	92
1981	3,911	100	2,583	100	6,494	100
1982	3,910	100	2,473	96	6,383	98
1983	3,797	97	2,583	100	6,380	98
1984	3,498	89	2,398	93	5,896	91
1985	3,568	91	2,053	79	5,621	87
1986	3,318	85	2,316	90	5,634	87
1987	3,113	80	2,196	85	5,309	82
1988	3,158	81	2,309	89	5,467	84
1989	3,311	85	2,368	92	5,679	87
1990	3,421	87	2,530	98	5,951	92
1991	3,046	78	2,393	93	5,439	84
1992	3,104	79	2,607	101	5,711	88
1993	2,991	76	2,952	114	5,943	92
1994	2,668	68	3,144	122	5,812	89
1995	2,746	70	3,673	142	6,419	99
1996	3,217	82	4,507	174	7,724	119
1997	3,099	79	4,912	190	8,011	123

**Figure 8 A: All degrees (1976 to 1997)**



**Figure 8 B: Short-type and other undergraduate degrees  
(1976 to 1997)**



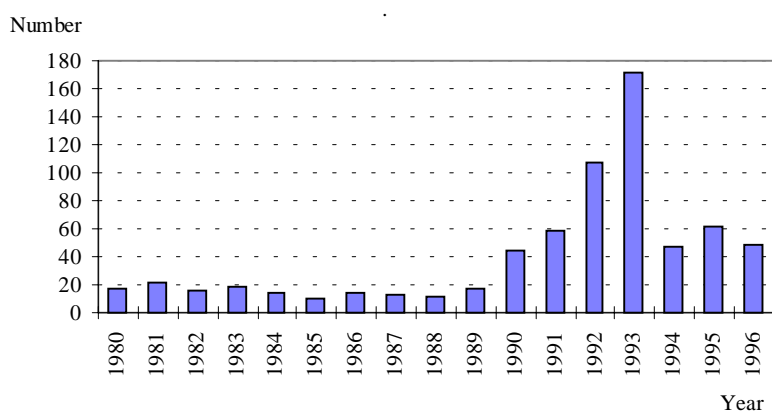
## 9. GRADUATE DEGREES

Table 9 gives the data on graduates who, from 1976 to 1997, received any of the following types of graduate degrees: *specializacija*, *magisterij* and *doktorat znanosti*. The statistical data was collected by calendar and not academic year. *Specializacije* conferred in 1979 and before are included in the figure for *magisterij*. The figures do not include medical doctors who have finished their medical specialist studies according to special regulations of the Ministry of Health. From a formal point of view, those degrees do not belong to the higher education system and the system of graduate studies at higher education institutions. The year 1981 was taken as the basis for comparison (100%) in this table, too. (See Chapter VIII, Lexicon of higher education in Slovenia, Section IX: Degrees and diplomas).

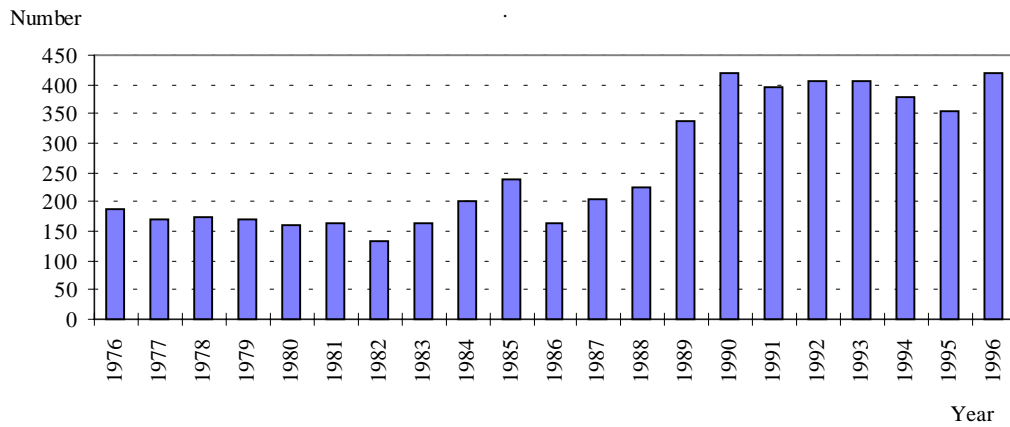
**Table 9: Graduate degrees  
(1976 to 1997)**

Year	Number of specializacija	Comparison with 1981 %	Number of magisterij	Comparison with 1981 %	Number of doktorat znanosti	Comparison with 1981 %
1976	-	-	187	115	67	86
1977	-	-	172	106	94	121
1978	-	-	174	107	80	103
1979	-	-	169	104	73	94
1980	17	77	159	98	65	83
1981	22	100	162	100	78	100
1982	16	73	133	82	82	105
1983	18	82	165	102	96	123
1984	15	68	201	124	100	128
1985	10	45	238	147	88	113
1986	15	68	163	101	89	114
1987	13	59	204	126	100	128
1988	11	50	225	139	118	151
1989	17	77	336	207	116	149
1990	45	205	421	260	121	155
1991	58	264	397	245	149	191
1992	107	486	406	251	170	218
1993	171	777	407	251	192	246
1994	47	214	377	233	160	205
1995	61	277	355	219	199	255
1996	48	218	418	258	238	305
1997	81	368	463	285	206	264

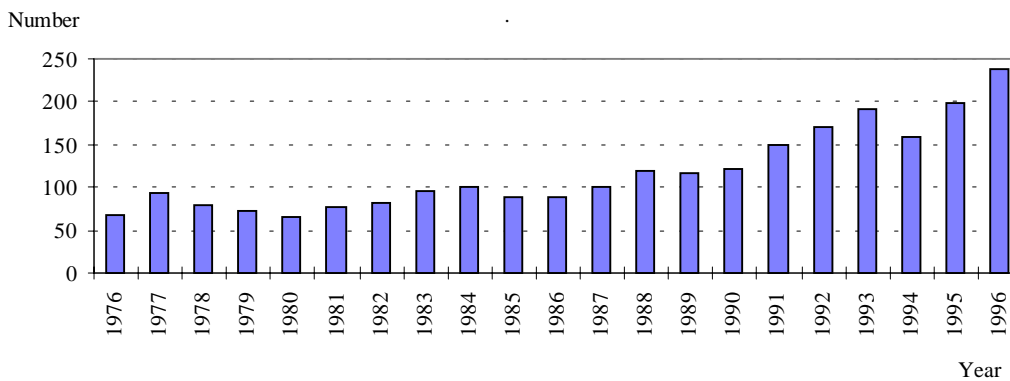
**Figure 9 A: Specializacije (1980 to 1997)**



**Figure 9 B: Magisteriji (1976 to 1997)**



**Figure 9 C: Doktorati znanosti (1976 to 1997)**



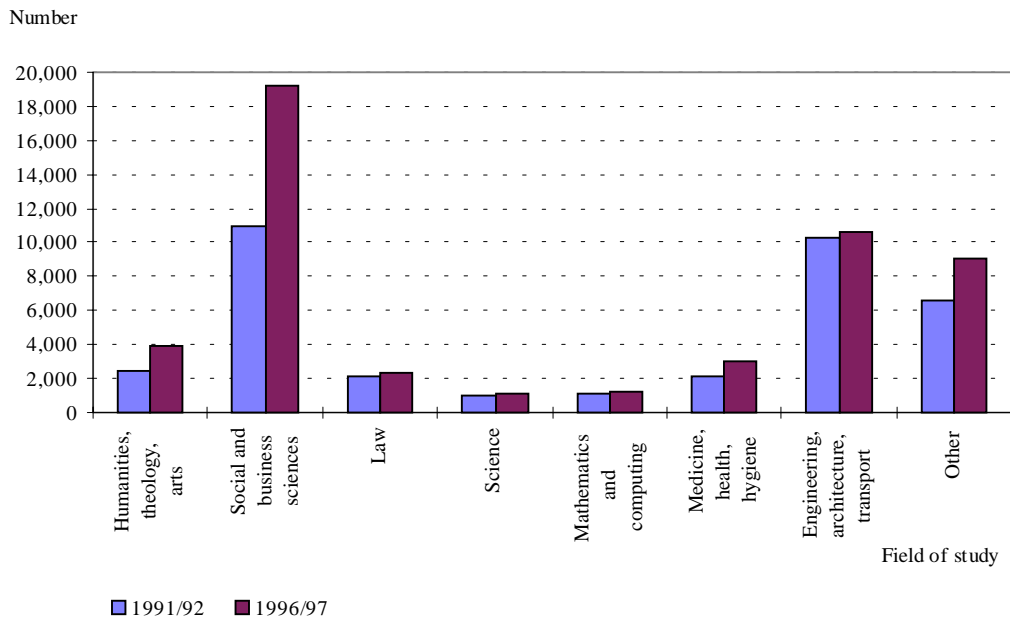
## 10. UNDERGRADUATE STUDENTS BY FIELD OF STUDY

Table 10 shows the number of students (total and full-time) and their share by field of study. For the sake of comparison with the EU countries, they are taken according to the Eurostat methodology, with the ISCED field divided into eight broad groups. In the last column, the figure in the first line refers to the country with the lowest, in the last line to the country with the highest percentage, and the number in the middle to the average for the EU. In other columns, the figure in the upper line refers to the academic year 1991-92, and in the lower to 1997-98.

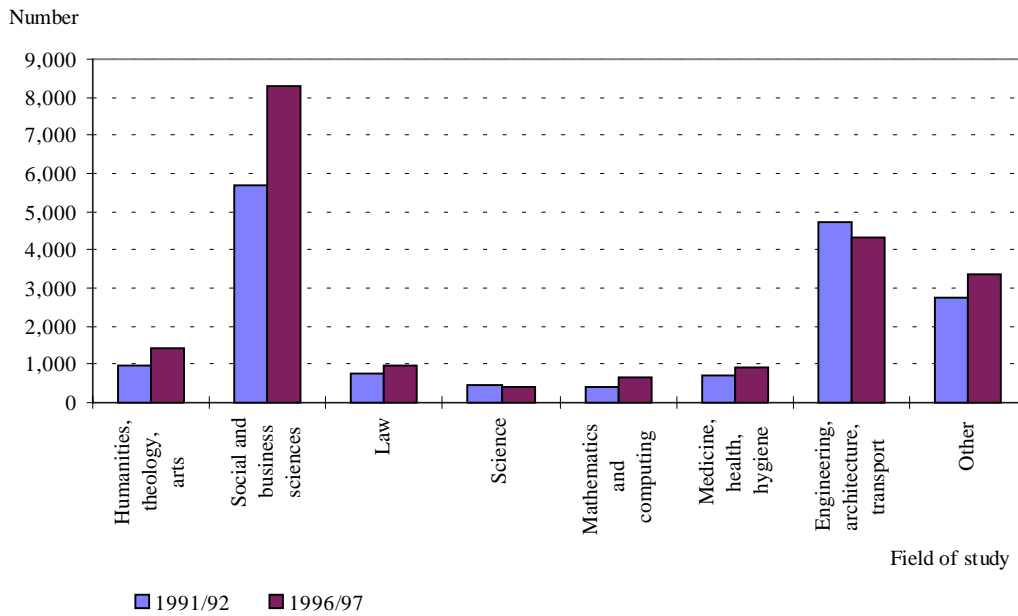
**Table 10: Undergraduate students by field of study  
(1991-92 and 1997-98)**

Fields of study	All students		Full-time students		First year of study, all students		First year of study, full-time students		EU 1992-93 Average min. – max.
	1991-92	1997-98	1991-92	1997-98	1991-92	1997-98	1991-92	1997-98	
Humanities, theology, fine arts	2,404	<b>7%</b>	2,364	<b>8%</b>	960	<b>6%</b>	938	<b>7%</b>	9% Portugal <b>13% European Union</b>
	4,118	7%	4,037	<b>10%</b>	1,566	7%	1,505	<b>10%</b>	20% Ireland
Social sciences, business studies	10,984	<b>30%</b>	7,607	<b>25%</b>	5,674	<b>35%</b>	3,493	<b>26%</b>	16% Finland <b>25% European Union</b>
	21,157	<b>38%</b>	11,111	37%	9,400	<b>42%</b>	4,101	<b>27%</b>	36% Netherlands
Law	2,117	<b>6%</b>	1,454	<b>5%</b>	762	<b>5%</b>	619	<b>5%</b>	1% Finland <b>9% European Union</b>
	2,729	5%	1,962	4%	1,077	5%	589	<b>4%</b>	19% Spain
Natural sciences	992	<b>3%</b>	991	<b>3%</b>	437	<b>3%</b>	437	<b>3%</b>	4% Denmark, Netherlands <b>6% European Union</b>
	1,094	<b>2%</b>	1,092	<b>3%</b>	435	<b>2%</b>	434	<b>3%</b>	14% Ireland
Mathematics and computer sciences	1,147	<b>3%</b>	1,119	<b>4%</b>	424	<b>3%</b>	401	<b>3%</b>	2% Netherlands <b>5% European Union</b>
	1,556	<b>3%</b>	1,532	<b>4%</b>	764	<b>3%</b>	749	<b>5%</b>	7% Finland
Medical sciences, health	2,156	<b>6%</b>	2,104	<b>7%</b>	688	<b>4%</b>	688	<b>5%</b>	4% Ireland <b>10% European Union</b>
	3,691	7%	3,325	<b>8%</b>	1,041	5%	897	<b>6%</b>	18% Finland
Engineering, architecture, transport	10,309	<b>28%</b>	9,667	<b>31%</b>	4,727	<b>29%</b>	4,436	<b>33%</b>	13% Netherlands <b>17% European Union</b>
	11,445	<b>20%</b>	9,243	<b>23%</b>	4,601	<b>20%</b>	4,033	<b>26%</b>	23% Finland
Other	6,632	<b>18%</b>	5,668	<b>18%</b>	2,751	<b>17%</b>	2,386	<b>18%</b>	4% Italy <b>15% European Union</b>
	10,055	<b>18%</b>	8,002	<b>20%</b>	3,625	<b>16%</b>	2,912	<b>19%</b>	25% United Kingdom
Total	36,741	<b>100%</b>	30,974	<b>100%</b>	16,423	<b>100%</b>	13,398	<b>100%</b>	-
	55,845	<b>100%</b>	40,304	<b>100%</b>	22,509	<b>100%</b>	15,220	<b>100%</b>	

**Figure 10 A: Undergraduate students in all years of study by field of study (1991-92 and 1996/97)**



**Figure 10 B: Undergraduate students in the first year of study by field of study (1991-92 and 1996/97)**



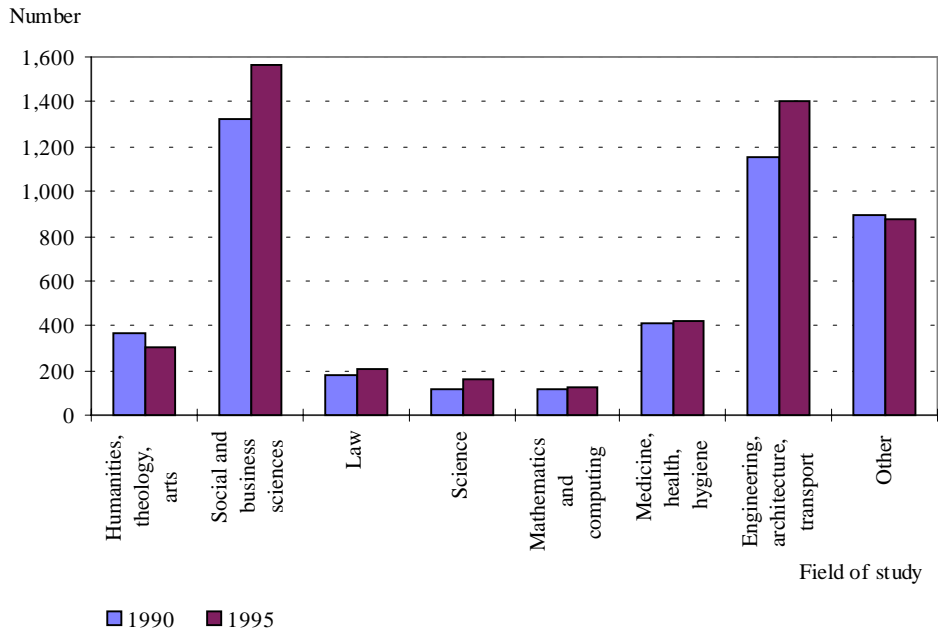
## 11. GRADUATES OF UNDERGRADUATE STUDIES BY FIELD OF STUDY

Table 11 is based on the same principles as the preceding one. At the time of editing, the available 1997 data on graduates did not show the graduates of full-time and part-time studies separately.

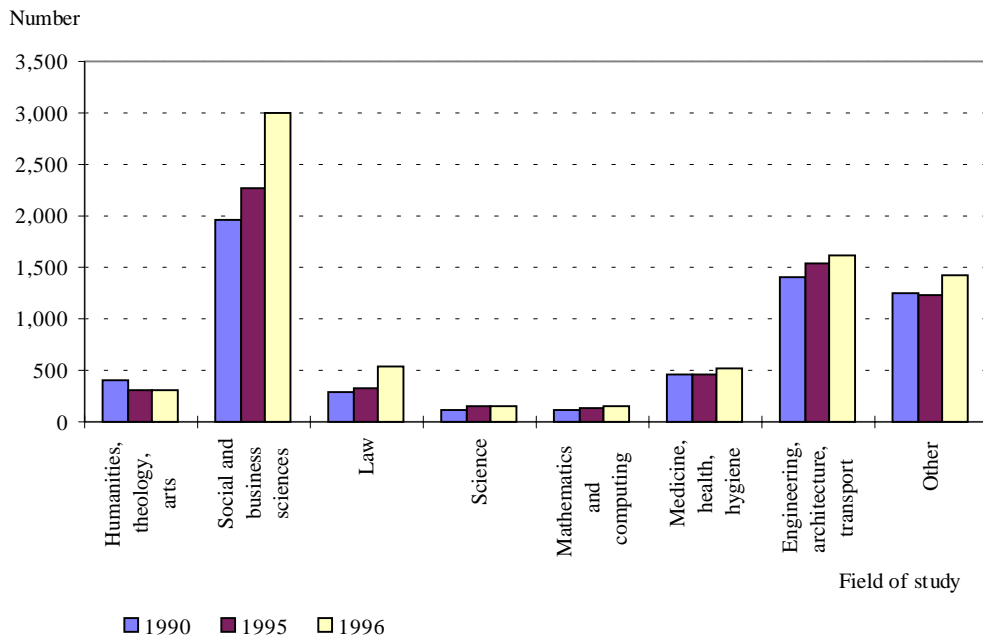
**Table 11: Graduates of undergraduate studies by field of study (1990, 1995 and 1997)**

Fields of study	1990 All students	1990 Full-time students	1995 All students	1995 Full-time students	1997 All students	1997 Full-time students	EU 1991-92 Everege Mini. - maxi.
Humanities, theology, fine arts	397 <i>7%</i>	369 <i>8%</i>	306 <i>5%</i>	302 <i>6%</i>	427 <i>5%</i>	<b>415</b> <i>7%</i>	3% Sweden <b>12% European Union</b> 19% Ireland
Social sciences, business studies	1,960 <b>33%</b>	1,321 <b>29%</b>	2,269 <b>35%</b>	1,560 <b>31%</b>	<b>3,317</b> <b>41%</b>	1,843 31%	37% France <b>25% European Union</b> 9% Finland
Law	286 <i>5%</i>	181 <i>4%</i>	322 <i>5%</i>	209 <i>4%</i>	<b>328</b> <i>4%</i>	270 <i>5%</i>	1% Denmark <b>4% European Union</b> 16% Spain
Natural sciences	114 <i>2%</i>	114 <i>3%</i>	157 <i>2%</i>	157 <i>3%</i>	<b>120</b> <i>2%</i>	<b>119</b> <i>2%</i>	1% Denmark <b>9% European Union</b> 17% France
Mathematics and computer sciences	115 <i>2%</i>	115 <i>3%</i>	128 <i>2%</i>	128 <i>3%</i>	134 <i>2%</i>	<b>133</b> <i>2%</i>	1% Netherlands <b>3% European Union</b> 18% Ireland
Medical sciences, health	458 <i>8%</i>	413 <i>9%</i>	454 <i>7%</i>	419 <i>8%</i>	<b>539</b> <i>7%</i>	<b>520</b> <i>9%</i>	3% France <b>13% European Union</b> 32% Finland
Engineering, architecture, transport	1,408 <i>24%</i>	1,151 <i>25%</i>	1,543 <i>24%</i>	1,404 <i>28%</i>	<b>1,309</b> <i>16%</i>	<b>1,214</b> <i>20%</i>	10% Spain <b>16% European Union</b> 25% Sweden
Other	1,247 <i>21%</i>	890 <i>20%</i>	1,240 <i>19%</i>	876 <i>17%</i>	1,837 <i>23%</i>	<b>1,346</b> <i>24%</i>	6% Italy <b>18% European Union</b> 31% Portugal
Total	5,985 <b>100%</b>	4,554 <b>100%</b>	6,419 <b>100%</b>	5,055 <b>100%</b>	<b>8,011</b> <b>100%</b>	<b>5,860</b> <b>100%</b>	-

**Figure 11 A: Graduates of full-time studies by field of study (1990, 1995 and 1997)**



**Figure 11 B: All graduates of full-time studies by field of study (1990, 1995 and 1997)**



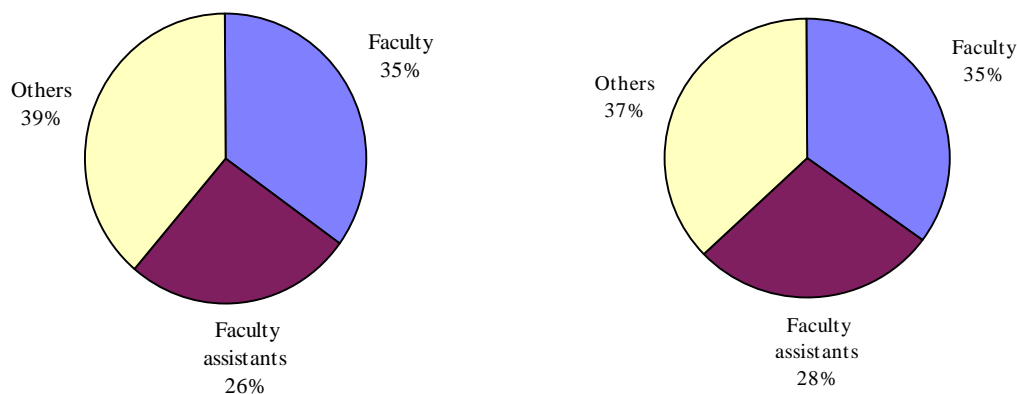
## 12. FACULTY AND NON-ACADEMIC STAFF

Table 12 shows the number of higher education employees. The number of part-time faculty and non-academic staff expressed in FTE is added to the number of full-time employees in order to obtain the total. Only the employees of higher education institutions whose salaries are financed by the Ministry of Education and Sport (full-time studies) are included. Faculty and faculty assistants are first shown separately, then together. Non-academic staff is shown separately. The data valid in May of each year were considered.

**Table 12: Faculty and non-academic staff  
(1991-92 to 1997-98)**

Academic year	Faculty and faculty assistants			Non-ac. staff Total	Number of full-time students per			
	Faculty	Assistants	Total		Faculty	Assistants	Fac. & ass.	Non-ac. staff
1991-92	1,485	1,108	2,593	1,674	20.7	27.7	11.9	18.4
1992-93	1,504	1,302	2,806	1,677	20.5	23.6	11.0	18.4
1993-94	1,527	1,263	2,790	1,680	21.4	25.9	11.7	19.5
1994-95	1,605	1,333	2,938	1,756	21.1	25.4	11.5	19.3
1995-96	1,676	1,353	3,039	1,810	21.5	26.6	11.9	19.9
1996-97	1,704	1,355	3,059	1,821	22.0	27.6	12.2	20.5
1997-98	1,765	1,471	3,236	1,825	22.8	27.4	12.5	22.1

**Figure 12 A: Percentage of higher education employees 1991-92 and 1997-98**



### 13. STUDENT HOUSING AND SCHOLARSHIPS

Table 13.1 shows the number of beds in student residence halls accommodating the students of the University of Ljubljana and the University of Maribor (in Maribor and Kranj). The number of beds in the new residence hall in Portorož for the students of the University of Ljubljana (Faculty of Maritime Studies and Transport) and free-standing higher education institutions in this area as well as a residence hall with a concession in Ljubljana were included in the data for the last two academic years. The beds for students in dormitories otherwise accommodating secondary-school students in the two university centers and on the Coast are shown separately ("S - dormitories").

Tables 13.2 and 13.3 show all kinds of state scholarships and their number by year of study. Source: National Employment Office.

**Table 13.1: Places in student residence halls (1990-91 to 1997-98)**

Academic year	Ljubljana	Maribor Kranj	Coast	Total	Concession	S - dormitories	Total
1990-91	5,868	2,227	-	8,095	-	269	8,364
1991-92	5,868	2,221	-	8,474	-	502	8,976
1992-93	6,253	2,191	-	8,444	-	764	9,208
1993-94	6,253	2,260	-	8,513	-	646	9,159
1994-95	6,316	2,301	-	8,617	-	593	9,210
1995-96	6,309	2,328	-	8,637	-	987	9,624
1996-97	6,318	2,336	105	8,762	65	849	9,676
1997-98	6,526	2,442	112	9,097	717	760	10,556

**Table 13.2: Types of scholarships (1993-94 to 1997-98)**

Academic year	State scholarship	Additional scholarships	Scholarships for talented and gifted	Total
1993-94	9,021	100	3,300	12,421
1994-95	8,985	4	3,636	12,663
1995-96	9,979	9	4,041	14,029
1996-97	9,873	4	4,511	14,388
1997-98	10,412	1	4,948	15,361

**Table 13.3: Scholarships by year of study (1993-94 to 1997-98)**

Academic year	First year of study	Second year of study	Third year of study	Fourth year of study	Fifth year of study	Sixth year of study	Total
1993-94	4,156	2,966	2,013	1,612	126	1,548	12,421
1994-95	4,060	2,872	1,906	1,557	145	2,123	12,663
1995-96	4,210	3,202	2,315	1,768	176	2,358	14,029
1996-97	4,252	3,330	2,225	1,863	198	2,520	14,388
1997-98	4,604	3,378	2,684	1,884	324	2,487	15,361

## 14. EDUCATIONAL ATTAINMENT OF THE POPULATION AND EMPLOYMENT OF HIGHER EDUCATION GRADUATES

Table 14.1 gives a brief comparison of the level of education achieved by the Slovene population aged between 25 and 64 with the situation in some other countries (source: *Education at a Glance, OECD Indicators, 1995*). Such a comparison is rather difficult because of considerable differences in the educational systems of various countries. The levels of education are therefore arranged into groups for the purpose of analysis. Following the classification in *Education at a Glance*, the data in the table is shown in the following groups:

- A: Early childhood, primary and lower secondary education;
- B: Upper secondary education;
- C: Non-university tertiary education;
- D: University education.

Table 14.2 shows the inhabitants of the Republic of Slovenia with higher education degrees. The data of the last four censuses (Statistical Almanac of the Republic of Slovenia, 1996, pp. 79-80) were used; after the last census in 1991, the data collected by the Staff Capacity Survey (AKP) and Labor Force Survey (ADS) were used. The surveys were first conducted as a research and development project of the Faculty of Social Sciences of the University of Ljubljana, and after 1995, as a regular statistical survey of the Statistical Office of the Republic of Slovenia. It began in 1989 on a sample of 4000 people, which was later enlarged, so that the estimate is quite acceptable.

Table 14.3 shows the educational attainment of the population according to the 1993 Staff Capacity Survey. Source: Jasna Smonkar, Structure of Education and Participation in Education. - In: *Zaposlovanje: približevanje Evropi* (Employment: Approaching Europe). Eds. S. Pirhar, I. Svetlik. Ljubljana: FDV, 1994, p.108.

**Table 14.1: International comparison of the level of education achieved by the population aged between 25 and 64**

Country	A	B	C	D
Belgium	26	58	8	8
Germany	32	49	8	11
Italy	41	40	6	13
Netherlands	42	37	0	21
Portugal	43	33	13	11
Great Britain	48	36	6	10
Austria	55	25	11	9
Finland	58	25	9	8
Switzerland	77	10	3	10
OECD average	86	9	0	5
<i>Slovenia</i>	45	36	8	11

**Table 14.2: Percentage of Slovene population with higher education degrees (1961, 1971, 1981, 1991 to 1996)**

Year	Census*	AKP – ADS			
		Total population	Working population	Unemployed	Population aged 30 and above
1961	1.8	-	-	-	-
1971	3.3	-	-	-	-
1981	5.9	-	-	-	-
1991	8.8	10.6	15.1	4.7	13.6
1992	-	10.7	14.5	7.6	16.1
1993	-	10.7	15.7	6.7	16.8
1994	-	11.0	16.2	5.7	14.8
1995	-	10.6	15.4	5.4	13.0
1996	-	10.1	14.6	5.6	16.5
1997	-	9.5	15.9	5.6	18.1

**Table 14.3: Educational attainment of the Slovene population according to AKP/ADS of 1993**

Gender	Incompl. primary school	Primary school	Short vocational courses	2- to 3-year vocation. school	4- to 5-year second. school	Short-type higher educ. degree	Univers. and univers.-equival. degrees	Graduate degrees	Total
<b>AGED OVER 15</b>									
Male	8.9	26.7	4.9	26.9	21.4	4.9	5.6	(0.8)	100
Female	9.9	39.4	3.0	15.0	22.3	6.2	3.5	(0.6)	100
Total	9.4	33.4	3.9	20.7	21.8	5.6	4.5	0.7	100
<b>WORKING POPULATION</b>									
Male	5.3	18.8	4.7	31.3	24.8	6.3	7.6	(1.1)	100
Female	3.9	24.9	2.9	21.4	30.1	10.0	6.1	(0.9)	100
<b>EMPLOYMENT STATUS</b>									
Total	4.6	21.7	3.8	26.7	27.3	8.0	6.9	1.0	100
Craftsmen	*	(8.4)	((2.3))	36.6	3.8	(8.1)	(7.8)	*	100
Entrepr.									
Farmers	18.7	54.4	(5.6)	(13.6)	(6.3)	*	*	-	100
Free-lance professions	-	*	*	*	17.4	*	((64.6))	*	100
Social sector	3.6	19.0	3.8	26.4	29.2	9.1	7.8	(1.2)	100
Private sector	(3.4)	19.9	(4.4)	37.9	25.2	(5.7)	((3.2))	*	100
Family business	(17.3)	58.6	((4.7))	(12.7)	((5.6))	*	*9	-	100
Under contract	*	(19.5)	*	(19.8)	(36.7)	((9.2))	((9.1))	*	100
Occasion jobs	*	(31.7)	*	(21.6)	((30.1))	*	*	-	100
<b>UNEMPLOYED</b>									
Male	(7.8)	22.7	(7.6)	37.8	18.6	*	((3.3))	*	100
Female	(7.0)	26.4	((3.5))	22.6	32.2	((3.9))	((4.2))	*	100
Total	(7.5)	24.3	(5.9)	31.4	24.3	((2.6))	(3.7)	*	100

Note: When the values of frequency are questionable, this is marked as follows::

- \* - very imprecise estimate (less than 1,000 persons in the basic population)
- (( )) - imprecise estimate

( ) - less precise estimate

## 15. FUNDING OF HIGHER EDUCATION

Table 15.1 gives an overview of budgetary funding from 1991 to 1998, converted into constant prices in Slovenian tolar (SIT) by using an appropriate deflator. It includes funding through three ministries: the Ministry of Education and Sport (the basic part of higher education activities), the Ministry of Science and Technology (basic and applied research, research assistants) and the Ministry of Labor, Family and Social Affairs (most of the financial aid to students). The important elements essential for international comparison (the data on GNP, its share for higher education, etc.) are also considered. Other budgetary funding (in smaller amounts and unsystematically allocated) is not included.

Notes to Table 15.1:

<sup>1</sup> In 1994, eleven monthly advance payments for salaries of public institutions were earmarked in the budget, while in 1995 12 monthly salaries were again guaranteed (a shift in payment was carried out).

<sup>2</sup> 1997 and 1998 GNP and the data calculated on the basis of it are based on an estimate.

<sup>3</sup> In addition to the above mentioned ministries, some other ministries (the Ministry of Agriculture, Forestry and Nutrition, the Ministry of Health, the Ministry of Interior, etc.) provide budgetary funding for certain other tasks carried out by individual higher education institutions, but that funding is not included.

<sup>4</sup> Students of the College of Police and Security Studies funded by the Ministry of Interior are not included in the number of students shown.

<sup>5</sup> The average annual US\$ exchange rate for 1996 was used.

**Table 15.1: Budgetary funding of higher education in constant prices (in SIT 1,000,000)  
(1991 to 1998)**

	1991	1992	1993	1994 <sup>1</sup>	1995	1996	1997	1998
Deflator	3.314	1.718	1.398	1.182	1.088	1.000	0.914	0.914
<b>1. Source: Ministry of Education and Sport</b>								
Solaries	3,761	7,860	9,532	9,369	11,903	13,038	14,021	15,565
Cost of material	1,753	2,324	2,259	3,232	3,130	2,892	2,792	3,097
Other	2,820	393	2,323	2,273	2,231	2,139	678	806
Investments	212	409	607	727	733	1,201	2,641	1,740
<b>Total</b>	<b>8,546</b>	<b>10,986</b>	<b>14,721</b>	<b>15,601</b>	<b>17,997</b>	<b>19,270</b>	<b>20,132</b>	<b>21,208</b>
<b>2. Source: Ministry of Science and Technology</b>								
Research assistents	...	...	1,834	1,695	1,662	1,604	1,620	1,648
Basic and appliend research	...	...	2,083	2,163	2,191	2,171	2,033	2,562
Other	...	...	969	1,173	1,125	1,212	819	1,319
<b>Total</b>	<b>3,334</b>	<b>4,809</b>	<b>4,886</b>	<b>5,031</b>	<b>4,978</b>	<b>4,987</b>	<b>4,471</b>	<b>5,529</b>
<b>3. Source: Ministry of Labor, Family and Social Affairs, Ministry of Education and Sport</b>								
Sholarships (estimation)	...	2,740	2,528	2,982	2,793	2,751	4,927	5,189
Subsidies for student housing	176	335	372	342	312	331	328	385
Meal plan subsidies	0	497	1,100	1,131	1,088	1,016	926	1,000
Public transportation subsidies	133	399	310	350	361	336	406	466
Total financial aid	309	3,971	4,310	4,805	4,554	4,434	6,587	7,040
Total 1+2+3	12,189	19,766	23,917	25,437	27,531	28,691	31,190	33,777
GNP <sup>2</sup>	1,157,938	1,748,864	2,006,263	2,190,242	2,416,947	2,552,668	2,656,712	2,997,838
Public expenditure for higher education as % in BDP <sup>3</sup>	1.05	1.13	1.19	1.16	1.14	1.12	1.17	1.13
Number of full-time students <sup>4</sup>	27,945	30,974	30,788	32,715	33,822	35,975	37,500	40,508
USS/ SIT exchange rate <sup>5</sup>	135.4	135.4	135.4	135.4	135.4	135.4	135.4	135.4
SIT per student	436,174	638,135	776,828	777,486	813,989	797,526	831,740	833,832
USS per student	3,221	4,713	5,737	5,742	6,012	5,890	6,143	6,158

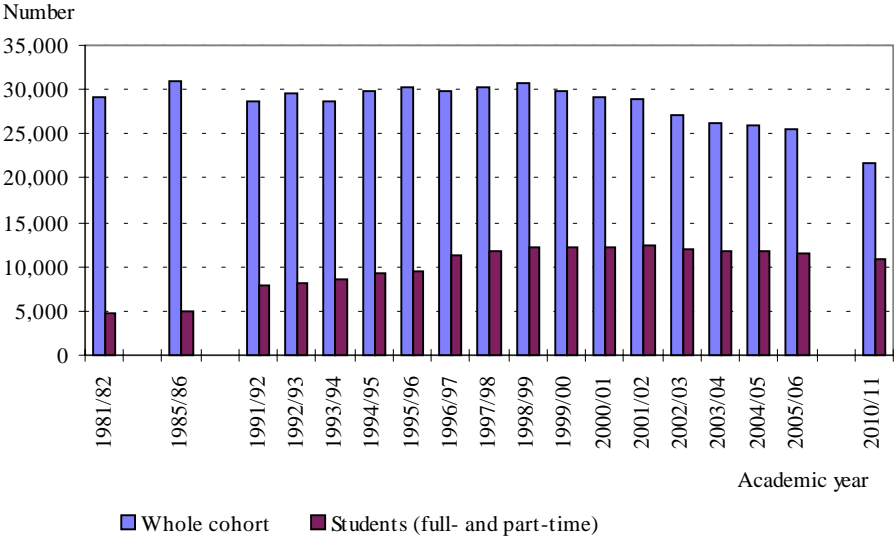
## 16. FORECAST

Table 16.1 summarizes the data on students since 1981 and provides an attempted forecast of their numbers till 2010. The forecast is based on the data on the size of cohorts enrolling or expected to enroll in educational institutions. The data on young people deciding to enroll in secondary schools leading to higher education institutions and the data on transition to higher education were taken into account. The columns "Aged 19" refer to students aged 19 and below. - Source: P. Zgaga, Situation, possibilities and prospects of higher education in societies in transition. In: *Sodobna pedagogika* (Modern Pedagogics), No 1-2 (1997), pp. 19-23.

**Table 16.1: Students enrolled in higher education institutions as a percentage of cohorts from 1981 to 1996 and forecasts for the period between 1997 and 2010.**

Acad. year	COHORT		STUDENTS									
	Aged 18 to 19	Aged 19 to 21	Aged 19 total	(%)	Aged 19 full-time	(%)	Aged 18 to 21 total	(%)	Aged 18 to 21 full-time	(%)	All in the RS	Per 1000 inhabitants
1981-82	29,035	114,989	5,765	20	5,460	19	15,745	14	14,693	13	26,207	14
1985-86	30,941	120,536	5,746	19	5,316	17	16,593	14	15,169	13	29,601	15
1991-92	28,713	113,971	9,456	33	8,712	30	22,163	19	20,598	18	36,504	18
1992-93	29,548	115,164	9,703	33	8,927	30	22,385	19	20,735	18	37,362	19
1993-94	28,652	116,672	10,646	37	9,609	34	24,457	21	22,306	19	40,239	20
1994-95	29,786	118,298	10,712	36	9,409	32	25,703	22	22,888	19	43,249	22
1995-96	30,339	118,654	11,451	38	10,220	34	27,290	23	24,564	21	45,951	23
1996-97	29,904	120,383	11,397	38	9,953	33	29,023	24	25,469	21	50,667	25
1997-98	30,354	121,201	11,877	39	10,243	33	31,464	26	27,365	22	55,845	26
1998-99	30,604	120,764	12,200	40	10,500	34	31,800	26	28,000	23	54,000	27
1999-00	29,902	120,080	12,200	41	10,600	35	32,400	27	28,800	24	56,000	28
2000-01	29,220	118,620	12,300	42	10,700	37	33,200	28	29,700	25	58,000	29
2001-02	28,894	115,216	12,400	43	10,800	37	33,400	29	30,200	26	60,000	30
2002-03	27,200	111,588	12,000	44	10,500	39	33,500	30	30,500	27	60,000	30
2003-04	26,274	108,301	11,800	45	10,400	40	32,500	30	30,500	28	60,000	<30
2004-05	25,933	104,977	11,700	45	10,300	40	31,500	30	29,500	28	60,000	<30
2005-06	25,570	103,369	11,500	45	10,200	40	31,000	30	29,000	28	60,000	<30
2010-11	21,583	87,380	10,800	50	9,500	44	30,500	35	28,500	33	58,000	<30

**Figure 16 A: Share of enrolled 19-year old students - situation and forecast**



**Figure 16 B: Share of enrolled students aged 18 to 21 - situation and forecast**

