

Higher education in Austria

Country report

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CHEPS – International higher education monitor

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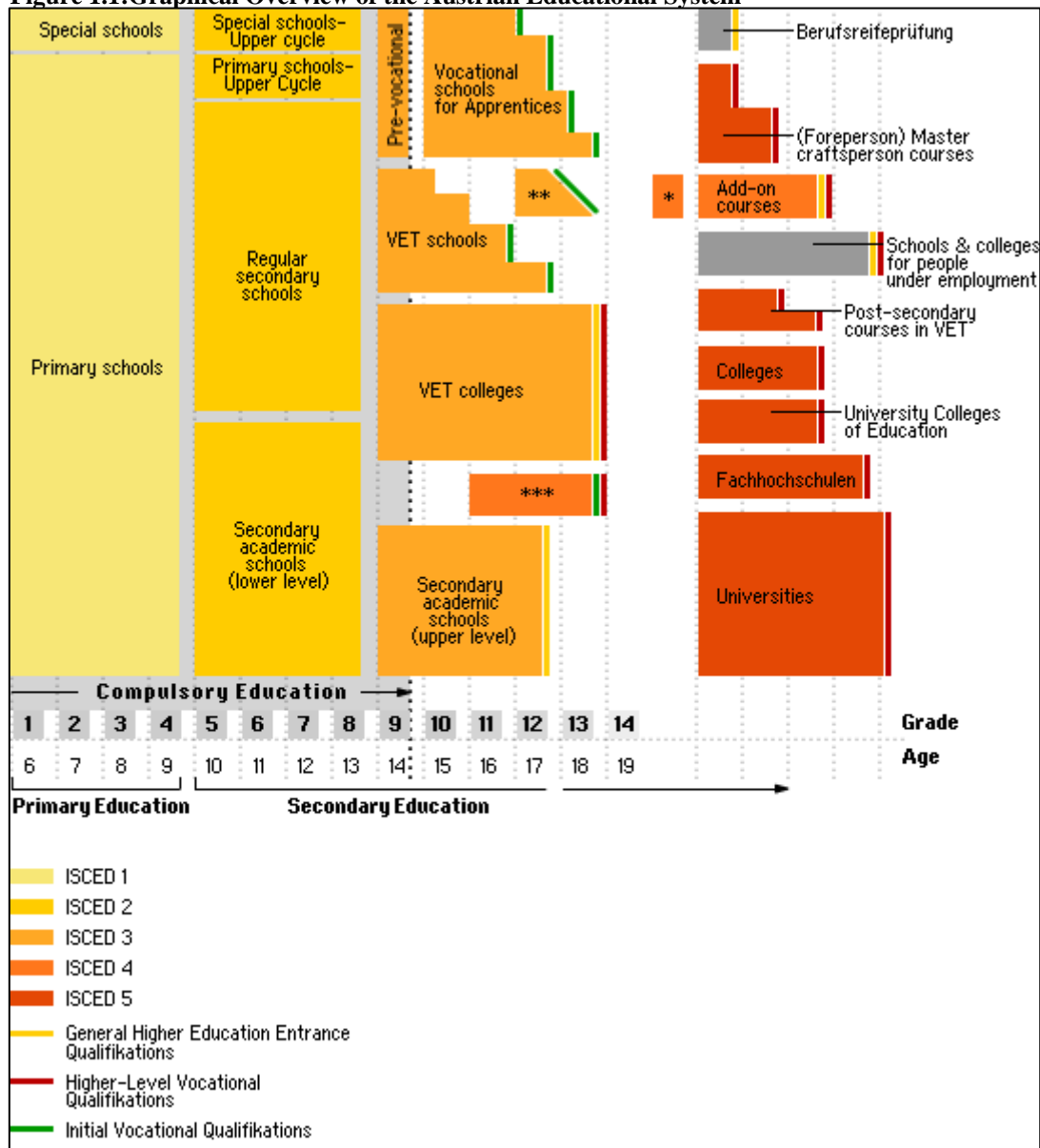
Abbreviations

FHStG	Bundesgesetz über Fachhochschul-Studiengänge
ÖAW	Austrian Academy of Sciences
ZAMG	Zentralanstalt für Meteorologie und Geodynamik
GBA	Geologische Bundesanstalt
LBG	Ludwig-Boltzmann Gesellschaft
FFG	Forschungsförderungsgesellschaft
AWS	Austria Wirtschaftsservice
FWF	Wissenschaftsfond
UG	Universitätsgesetz
AQA	Austrian Agency for Quality Assurance
UNIKO	Former Austrian rectors conference
BMBWK	the Federal Ministry for Education, Science and Culture
PU	Private universities
ÖH	Austrian National Union of Students
FHK	Austrian Conference of Universities of Applied Sciences
PH	organisation of Austrian universities of teacher education

1 EDUCATIONAL INFRASTRUCTURE

This chapter will focus on the educational infrastructure in Austria. An overview will be given of pre-school, primary and secondary education and then, the higher education infrastructure will be discussed in more detail. In Austria, primary education is provided for pupils until the age of ten, lower secondary for pupils aged ten to fourteen and upper secondary for pupils aged fourteen to (a maximum of) eighteen.

Figure 1.1: Graphical Overview of the Austrian Educational System



Source: <http://www.bildungssystem.at>, accessed on July 15th, 2008

1.1 Pre-school Education

Nursery school or Kindergarten is the traditional form of pre-school education for children aged three to six. Officially it is not a part of the education system. Participation in Kindergarten is optional and is dependent on the parent's initiative. About 75% of all Kindergartens are public, usually run by local communities. The remaining quarter is run by private providers. In the year 2000/2001 there were 4,534 Kindergartens in Austria. In 2003, 90% of all five-year-olds attended pre-compulsory education (Eurydice, 2001).

1.2 Primary Education

The legal bases of primary education are found in the *Schulorganisationsgesetz* (School Organisation Act) and in the *Schulunterrichtsgesetz* (School Education Act). The implementation of this legislation is divided between the federal state, the *Länder*, and local authorities. The *Länder* are responsible for administration and management of schools while the federal state is responsible for the foundation of schools, for class sizes, school hours, etc. General compulsory education extends to all children that have their permanent residence in Austria.

Children attend primary education for four years in the *Grundschule* or *Volksschule*. Primary education covers grade one to four from the *Grundschulen* or *Volksschulen*. The function of these first four years is to provide elementary education to all children. In grades three and four, one foreign language is taught, which is compulsory but not graded. As from 2003/2004, schools can teach a foreign language starting from grade 1. Teachers in grade 1-4 of the *Grundschule* spend four years with the same class. The curricula of the *Grundschulen* or *Volksschule* only provide a framework that can be shaped further by the teachers. This enables the schools to adapt it to individuals or to local conditions. During the fourth year parents are informed about the educational career options in secondary education for the pupils. Children with special educational needs are taught in *Sonderschulen* (special school) which are run parallel to the *Volksschule*. The difference between *Sonderschulen* and *Volksschulen* on the one hand and *Grundschulen* on the other is the fact that the former schools also provide education after the primary level. Grades five through eight from the *Volksschulen* is however run in only 15 locations today (Eurydice 2007).

1.3 Secondary Education

After completing these first four years, pupils proceed towards lower secondary education, to the *Hauptschule* (secondary general school) or to the *Allgemeinbildende Höhere Schule* (secondary academic school – lower level). These schools are attended at the age from 10 to 14 years.

The upper secondary level of education starts at grade 9 (age 14+) and is offered in three different forms. Pupils who that want to continue full-time education enter either the upper level of the *Allgemeinbildende Höhere Schule* or proceed with pre-vocational education. This pre-vocational training is offered either by *Berufsbildende Mittlere Schulen* or the *Berufsbildende Höhere Schulen*. Students completing secondary academic schools (*Allgemein bildende höhere Schule* or *Berufsbildende*

Höhere Schule) receive a 'Matura' qualification and are eligible to enter the higher/tertiary education sector.

Secondary Academic Schools (Allgemein Bildende Höhere Schulen)

This type of school comprises a four-year lower cycle (*Unterstufe*) and a four year upper cycle (*Oberstufe*). The final examination after eight years enables pupils to access Universities and *Fachhochschulen*. The prerequisite for admission to the *Allgemeinbildenden Höhere Schule* is the successful completion of the fourth grade of primary school plus an assessment of "very good" or "good" in the subjects German, reading and mathematics. Transition from the lower secondary cycle to the upper secondary cycle is based on continuous assessment of the student's work.

For the upper cycle, different subtypes of the *Allgemeinbildenden Höhere Schule* are offered:

- *Gymnasium*: Latin and another classic or modern language
- *Realgymnasium*: next to Latin or one modern language, the focus is on mathematics, physics, chemistry or environmental- and life sciences.
- *Wirtschaftkundliches Realgymnasium*: besides Latin or a modern language, the curriculum is focused on social sciences and humanities.
- *Oberstufenrealgymnasium*: this form of school is open for all pupils having successfully completed grade 8 (age 14) of a AHS, as well as for graduates of a *Hauptschule*. Students can choose between three different orientations.

Secondary General Schools (Hauptschulen)

After successfully completing grade four of primary education, pupils can go to the secondary general school (*Hauptschule*). After an observation period (3 weeks to 1 semester), pupils are subdivided into three groups according to their level. In the subsequent years there are several fixed points for streaming pupils either upward or downward. The educational objective of the *Hauptschule* is preparing pupils for a transition to medium and higher level secondary education on the one hand and to give them opportunities for acquiring practical skills on the other.

Pre-vocational Secondary Education

For the upper level of secondary, i.e. after grade 9 pupils can also choose to visit a pre-vocational school. Three types of schools are offered here: the *Polytechnische Schule*, the *Berufsbildende mittlere Schule* or the *Berufsbildende höhere Schule*.

Polytechnische Schule

This stream is attended by pupils after the 9th grade who want to start a vocational training directly after they completed their compulsory school time. The *Polytechnische Schule* lasts for one year and offers pre-vocational training for different subjects like for e.g. metalwork, electronics or tourism. The purpose of this pre-vocational year is to qualify pupils for transition to apprenticeship training or continuing education. 20% of all Austrian attend this type of school, mostly pupils leaving the *Hauptschulen* choose for it.

Berufsbildende Mittlere Schulen

These intermediate secondary technical and vocational colleges provide not only a thorough general education but also practical vocational training for specific occupations. They are full-time schools. Pupils are generally accepted after successful completion of the 8th year of general education (i.e. at the age of 14). Depending on the sector they cover, these schools offer courses lasting from three to four years. Courses focus on practical training in school workshops, laboratories and practical rooms. Pupils must take part in compulsory practical training in companies or enterprises during their summer holidays (the number and duration of these training periods is laid down in the curriculum; in the commercial and trade schools summer work placements are voluntary).

Berufsbildende Höhere Schulen

To be admitted to a *Berufsbildende höhere Schule* (higher secondary technical and vocational college) pupils must have successfully completed the 8th grade of the *Allgemeinbildende höhere Schule* or the *Hauptschule* (students from the *Hauptschule* with lower achievements have to pass an entrance test). *Berufsbildende höhere Schulen* provide general and vocational education and lead to a double qualification: a vocational qualification and the eligibility to enter higher education. Education is full-time and lasts 5 years (grades 9-13).

The curriculum is divided into three equal parts: general education, vocational theory and vocational practice (in school workshops, laboratories, kitchens and other practical rooms). Pupils in *Berufsbildende höhere Schulen* must take part in compulsory practical training in business and industry during the summer holidays. Pupils successfully completing the *Berufsbildende höhere Schule* are entitled to practice their own trade after three years of professional experience.

The number of schools and number of students of the various primary and secondary schools in Austria are given in table 1.

Table 1.1: Number of schools and students in primary and secondary education (2006/2007)

	Number of schools	Number of students
Volksschulen/Grundschulen (age 6-10)	3,248	347,254
Hauptschulen (age 10-14)	1,165	257,642
Sonderschulen (age 6-15)	330	13,158
Polytechnische Schulen (14-15)	268	21,379
Allgemeinbildende höhere Schulen (age 10-18)	330	203,728
Berufsbildende mittlere Schulen (age 14-15/16/17/18)	433	52,468
Berufsbildende höhere Schulen (age 14-19)	304	134,609

Source: BMBWK 2006 (BM:BWK 2006)

1.4 Further/Adult Education

The adult education programs offered in Austria are accessible to everyone. For some courses or training programs, a specialist background is required; some are reserved to

specific target groups (migrants, unemployed persons, unskilled young persons, women, etc.) To be admitted to a school for working adults, applicants must have completed the eighth grade of school successfully, be over 17 years of age, and have completed their initial vocational training/education or have already taken up working life. Most institutions are run as evening classes, to allow participants to combine work and school.

Adult education in Austria consists of a wide variety of educational facilities with different objectives and educational programs. This sector consists of numerous commercial providers as well as associations and facilities for public adult education. A selection of major types of providers is given below:

- Different types of *Allgemeinbildende höhere Schule* providing general education leading to the *Reifeprüfung* (Matura).
- Technical and vocational schools and colleges providing courses for adults
- Post-secondary and post-graduate courses provided by higher education institutions
- Programs offered by the *Arbeitsmarktservice* (Labour-market-service)
- Programs offered by private(/commercial) providers, preparing students for the *Reifeprüfung* exam, offering language courses, management training courses, etc.
- Other post-secondary education: *Kollegs* and *Akademien*

Akademien are most common type of post-secondary education institutions in Austria. These post-secondary colleges offer vocational training for the following fields of study: social work, teacher training and the training of para-medical staff. Admission to these colleges requires the successful completion of the *Reifeprüfung*, *Reife- und Diplomprüfung* at a secondary school or college, or *Studienberechtigungsprüfung* or *Berufsreifeprüfung*. Also forms of education are similar to those at universities but officially these colleges are not regarded as part of the tertiary sector. Vocational training at post-secondary colleges usually last about six semester and lead to a professional diploma.

2 HIGHER EDUCATION

We will now turn to the higher education sector in Austria. While in former years three types of institutions have been prevailing: Universities, Colleges of Art and Music on the one hand and the *Fachhochschulen* on the other, since the introduction of the University Law in 2002, only Universities and *Fachhochschulen* make up the higher education sector. The former Colleges of Art and Music have been classified as universities. In the following both types of institutions and the major changes in the higher education sector in the recent years will be discussed.

2.1 *The Fachhochschulen sector (Universities of applied sciences)*

The non-university tertiary education sector comprises the *Fachhochschulen*. This type of institutions is relatively new in the Austrian higher education system. The first programmes started in 1994.

2.1.1 *Development of the Fachhochschulen sector*

Universities traditionally have dominated post-secondary education during the demographic and educational "boom years" in the 1960s and 1970s, but rather responded to the challenges of providing more education for more students by opening up and reforming its system. A new phase in post-secondary education began in 1994/1995 with the introduction of *Fachhochschule* programmes. The introduction of this new type of tertiary education provided students with an alternative to studying at universities and was designed to expand the number of study programmes. The establishment of a *Fachhochschule* sector was based on federal legislation, the *Bundesgesetz über Fachhochschul-Studiengänge – FHStG* – which was approved by the Austrian Parliament in the fall of 1993.

The introduction of the *Fachhochschulen* represents the abandonment of the "monopoly" the Austrian federal government used to have on higher education and is an unprecedented decentralisation measure. The *Fachhochschule* legislation itself consists of just twenty paragraphs and created a procedural framework for the establishment of these new institutions.

The *Fachhochschule* policy was a more radical departure from Austrian traditions (Pratt & Hackl 1999). In particular, it aimed at:

- Placing considerable power into the hands of a body (the *Fachhochschulrat*) and institutions (the providers of courses) that were not part of the central administration;
- Breaking with the Austrian tradition of explicit legal regulation for all government initiatives; for universities (on the Humboldtian model), courses and curricula in universities are controlled by Parliament, with modifications usually requiring legislation. The *Fachhochschule* policy devolved powers to accredit courses to an academic, not a governmental, political or politically dominated body;

- Increasing transparency in decision making, with clear contracts between the providing institutions, the controlling body and (for funding) the Ministry; in the university sector much communication is based on obscure bargaining between institutions and the Ministry; and
- Offering the providers of *Fachhochschule* courses considerably more autonomy than the universities. Any legal entity (public or private) may seek to offer a *Fachhochschul* course. It is responsible for its own affairs and finance; universities, even after recent reforms, do not have such powers.

Throughout the past 10 years this model has shown to be very successful. But also some structural weaknesses appeared (Leitner 2004, S. 110ff):

- The design of some study programs is too narrow therefore only related to very special occupation.
- Some *Fachhochschulen* only offer one or two programs which are also widespread on two or more locations.
- The fast growth of the *Fachhochschulen* in the recent 10 years also lead to a lack of qualified and experienced teachers.

Fachhochschulen are founded by an external holder called 'Erhalter' who can be either a federal institution, public entity or a private organization. Since 1994 a considerable number of private organizations like foundations or private limited companies have applied to establish a *Fachhochschule* (vgl. Leitner 2004). The operations of the *Fachhochschule* will be overseen, accredited, and periodically reviewed by an independent agency of sixteen experts known as the *Fachhochschulrat*, appointed for three year terms by the Austrian Minister for Science and Research. The Austrian federal government has not assumed legal responsibility for establishing or funding *Fachhochschulen*, but it sees itself as a catalyst and a financial partner in this process. The state mainly co-finances the *Fachhochschulen* up to 95% of their actual costs. This funding is based on the number of study places at a *Fachhochschule* (vgl. Leitner 2004, p. 101). The federal government does not spend money on the infrastructure of the *Fachhochschulen*. Further, the federal government set up a funding scheme (*Bundesförderung*) that targets to maintain and consolidate already existing *Fachhochschulen*. To apply for funds the *Fachhochschule* has to meet different requirements. They should for example show that they invest in raising the number of female students, to focus on natural science or to adjust the study programs to the local needs of the labor market.

The federal government is not directly involved in the administration or the articulation of *Fachhochschule* programmes. But within the funding scheme of financing the number of study place at one institution it can actually influence the establishment, widening or downsizing of study programs.

The *Fachhochschule* study programs differ from university study programs in several respects. The *Fachhochschulstudiengesetz* specifies these study programs as vocational training on the level of higher education. Compared to university study programs they are more oriented to the needs of the labor market. They also included more practical training than university study programs.

In the beginning *Fachhochschulen* awarded two types of degrees: the Diplom for graduates from the technical/natural sciences, the Magister for graduates from other study programs. In line with the Bologna reforms most study programs (76,9%) were changed to Bachelor and Master programs within the recent years (vgl. www.bildungssystem.at). Also, graduates from *Diplom* or Master Programs are allowed to proceed to a doctoral study.

University degrees awarded on the basis of completed *Fachhochschule* degree programs are the following:

- Bachelor of Arts (FH)
- Master of Science (FH)
- Master of Arts (FH)
- Bakk. (FH) – BA (FH)
- Dipl.-Ing. (FH) – MSc (FH)
- Mag. (FH) – MA (FH)

An attribute characterizing the occupational field may be added by the *Fachhochschule*. *Fachhochschule* providers can also establish master' degrees on the basis of completed courses of study for further education, in line with international customs, for example: Master of Arts (MA) or Master of Science (MSc).

2.1.2 Access

The requirements of admission to a *Fachhochschule* study program are.

- the general university entrance qualification or a professional qualification in the respective field (in this case by additionally taking the examinations in the general educational subjects required by the degree program);
- knowledge of the German language;
- successful completion of the admission procedure required for the degree program.

The secondary school-leaving examination (*Reifeprüfung/Matura*) is always satisfactory proof of the general university entrance qualification for *Fachhochschule* bachelor's degree programs and *Fachhochschule* diploma degree programs.

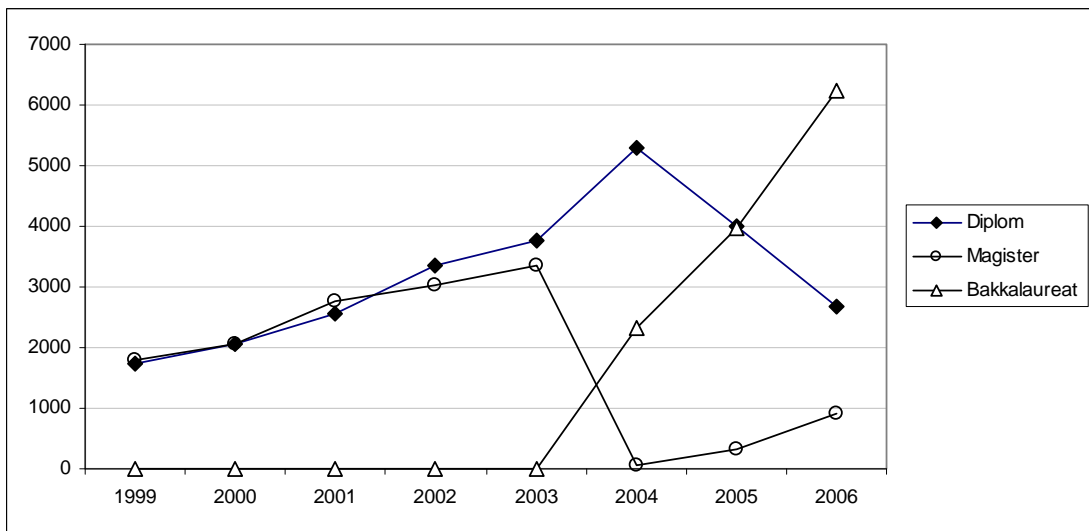
In the *Fachhochschule* sector a university entrance qualification examination (*Studienberechtigungsprüfung*), a vocational school-leaving examination (*Berufsreifeprüfung*) or completion of a study course at a post-secondary educational institution also provides the admission title in the sense of a general university entrance qualification,. As a general principle, an entrance examination must be taken or an additional admission procedure must be followed whenever the number of applicants exceeds the number of study places. Whenever the scientific and didactic design of a *Fachhochschule* degree program is based on occupational experience, admission to that *Fachhochschule* degree program may be limited to the relevant target group.

Depending on the objectives of a course of study, entrants with special professional training may have to pass a number of additional examinations, either prior to

admission or by a deadline, in any case before the beginning of the second year of studies.

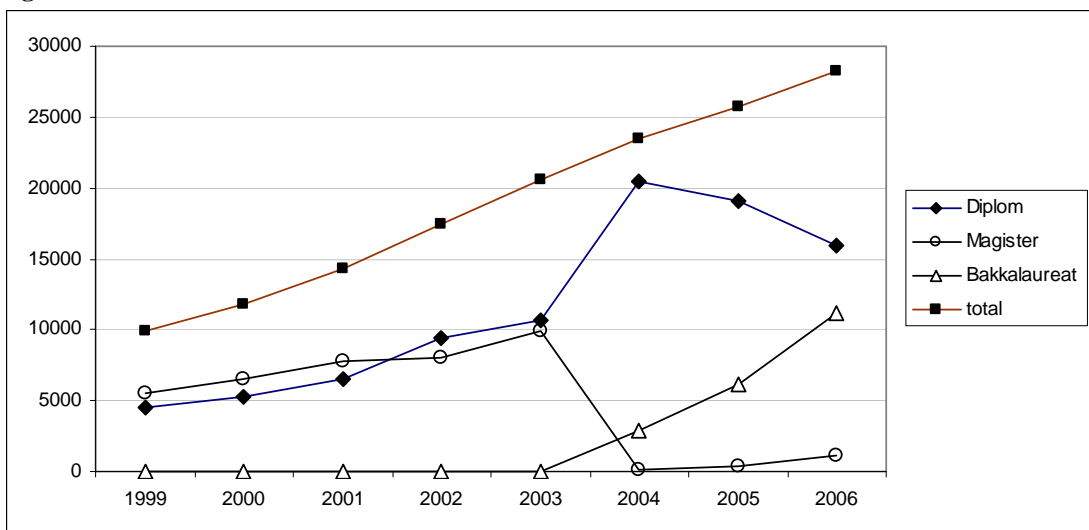
Due to the limited number of study places in each *Fachhochschule*, individual institutions are pursuing selective admissions policies. For the programs inaugurated in the fall of 1994-1995, the number of applicants was 1.55 as high as the number of students admitted. Over 600 students enrolled in the various programmes. In the starting phase of the *Fachhochschule* sector, policy-makers established a target of 10,000 enrolments in *Fachhochschule* programs for the academic year 1999/2000. With a substantial increase in the amount of programs offered, this target was almost reached. Since 2000, the amount of programs offered and the amount of students have increased substantially (Table 2). Due to incentives like the 600+ the number of new study places doubled in 2002/03, and the target to establish about 21.000 study places by 2004/05 was already reached in 2003/04.

Figure 2.1: New entrants in Fachhochschulen



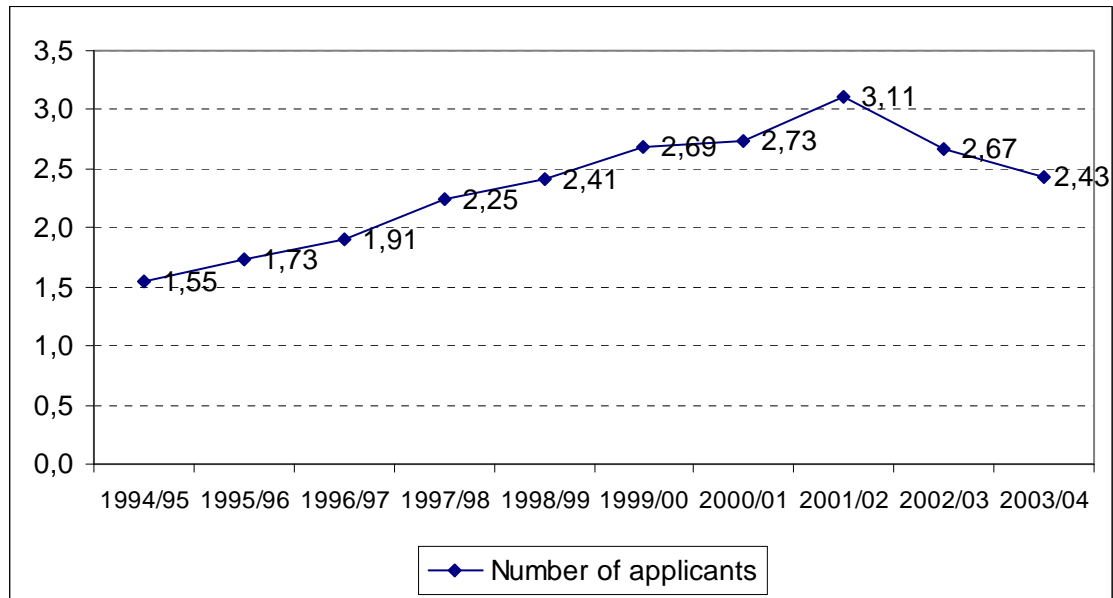
source: IHEM database

Figure 2.2: Enrolment in Fachhochschulen



Throughout the years there was an increasing demand for study places which exceeded the actual number of study places. In the academic year 2000/01 about 3.11 students applied per study place.

Figure 2.3: Applicants per study place, academic year 1994/95 - 2003/04

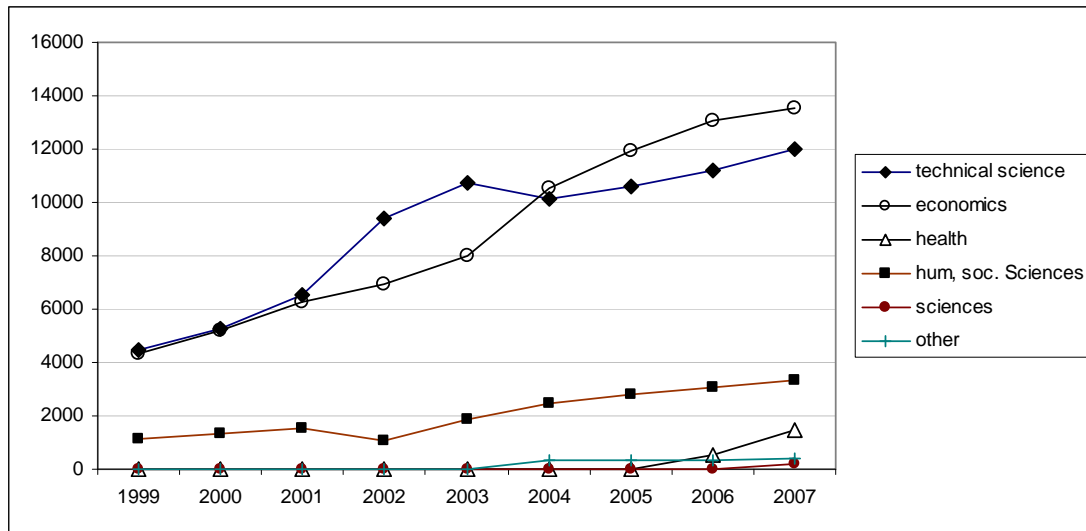


Source: Fachhochschul Entwicklungs- und Finanzierungsplan III, 2005/06 - 2009/10, p. 15

2.1.3 Participation

As noticed before, the targets for the *Fachhochschulen* for the year 2004/05 were already met in 2003/04. The participation in this sector has shown a rapid increase since its start in 1994. In the year 2003/04 about 9.1% of all students were enrolled in a study program at the *Fachhochschule*, and 18,2% of all study beginners started at a *Fachhochschule*. Since the start of this sector the participation of female students in *Fachhochschulen* has been an important topic. Due to the overrepresentation of engineering studies in this sector, male students still make up the majority of the *Fachhochschulen*. Although the underrepresentation of women was reduced from a quarter to a 38% of all students in the year 2003/04, this can partly be ascribed to the types of new *Fachhochschulen* programs. Different programs of the federal government like FEMtech-*Fachhochschulen* and FFORTE try to increase the number of female students in these more technical study programs.

Figure 2.4: Number of students in *Fachhochschulen* by subject of study

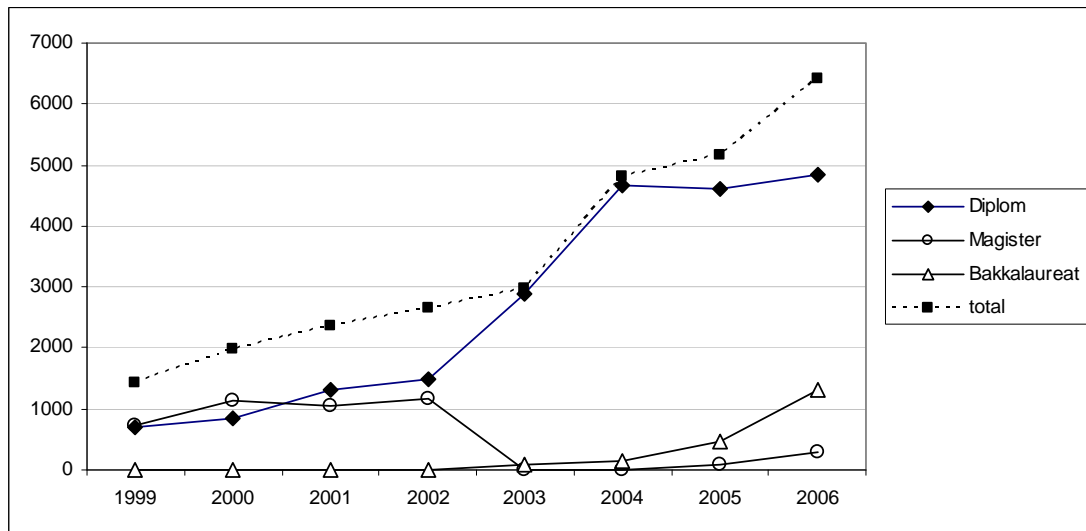


source: IHEM database

Outflow of students

The first *Fachhochschule* students graduated in 1996. Until 2006, a total of 22,473 individuals graduated within this sector.

Figure 2.5: Graduates of Fachhochschulen



Source: IHEM database

2.1.4 Education and Labour Market

Whether the *Fachhochschule* programs match the demand, is not only of overriding importance at the time of accreditation, but also plays a major role in the long-term commitments of the sector. Therefore the accreditation of *Fachhochschule* programs is restricted to a maximum of five years. This mechanism ensures flexible response to short and medium term changes in the educational demand from the labor market..

The analysis of acceptance by the labor market and the demand for training is analyzed by each *Fachhochschule* individually. Nonetheless, data on the entrance of *Fachhochschule* students into the labour market are not available.

2.1.5 Personnel

The *Fachhochschul* Studies Act stipulates as one of the requirements for approving a *Fachhochschule* degree program that the teaching be provided by a teaching and research staff with scientific, practical occupational and pedagogic-didactic qualifications and that the requisite application-related research and development work be carried out to achieve the desired objectives and safeguard the principles. There are no specific statutory regulations for the staff in the *Fachhochschule* sector. As a matter of principle, private-law contracts with the providers of the *Fachhochschule* programmes or the *Fachhochschule* are the only basis of employment.

The *Fachhochschule* Council has established that the occupational title – irrespective of the holder's position under labor law – is as follows: *Fachhochschule* Lecturer (up to the third year of an employment relation) or *Fachhochschule* Professor (as of the fourth year).

The teaching faculty consists of the full-time management of the study programme and full-time or part-time teachers. In 2001/02 only about 17% of the staff were full-time personnel teaching 16 to 18 hours a week. The remaining 83% of the teaching staff were hired as part-time staff. Teaching staff has, in addition to teaching, a responsibility for applied research and development work.

Table 2.1: Teaching staff in the academic year 2001/02

	Personnel in total	FTE 2000/01 estimation 67 study-programs 18 providers	FTE 2001/02 estimation 94 study programs, 19 providers
All	3,500	1,000 - 1,100	1,400 - 1,600
<i>Fachhochschulen</i>			
per provider	200	55 - 61	74 - 84
full-time staff	33	19 - 22	25 - 30
part-time staff	167	37 - 41	49 - 54
per study program	50	15 - 17	15 - 17
full-time staff	10	5 - 6	5 - 6
part-time staff	40	10 - 11	10 - 11

Source: Lassnig et. al., 2003, p. 45

2.2 The University sector

2.2.1 Development of the university sector

Up to 2004 within the Austrian university sector two main types of university could be distinguished: the traditional universities and the colleges of arts and music. The Universities Act 2002 which gained full power from January 1st, 2004 changed this. Now both are regarded as public universities, also two new types of universities have been established: autonomous medical universities and the Donau-Krems-University.

Also, since the introduction of the *Universitäts-Akkreditierungsgesetz* in 1999 private universities can be established. To date about 11 private universities enrolling about 3,600 students have been established.

In the following we will mainly focus on those public universities which are regulated by the university act of 2002. One of the major changes caused by it was the change of the legal status of universities. Universities now possess full legal power, they gained the status of a full legal body under the public law..

The university act describes the main task of public universities. As regards teaching they are obliged (Wadsack/Kasparovsky, 2007, p. 11):

- to provide basic training for scientific and/or artistic occupations and the qualifications for professional activities which require the application of scientific and/or artistic findings;
- to train a next generation of scientists and/or artists;
- to offer further training, especially to graduates.

The university act also provides the legal base for the introduction of the three cycle study structure according to the Bologna Declaration. University degrees offered mostly follow the BA/MA degree structure. End of 2006 about 42% of all university programs followed this degree structure (Bacher 2006). New university study programs have to follow this two cycle structure. Medical studies and teacher training did not have to follow the two/three cycle structure since medical studies will remain long studies. Teacher training will be regulated by a new law by October 2007. The new “Teacher Education Act” will convert former post secondary programs of teacher training to bachelor programs of higher Education (Bacher 2006).

The University Act of 2002 also replaced former regulations on the curriculum: the *Universitätsstudiengesetz* of 1997 and the General University Studies Act (*Allgemeines Hochschulstudiengesetz*), which came into effect in 1966. The new University Act mainly takes up and amends the former regulations of the *Universitätsstudiengesetz* of 1997 (Faulhammer and Hoffmann 2004). It now regulates:

- degrees and length of study
- exams
- recognition of foreign academic degrees (nostrification)

The Universities Act of 2002 also changed the regulations for the establishment of curricula. Before the implementation of the University Act the design and planning of the curricula was strongly determined by the Ministry. Now curricula are defined within the newly introduced “performance agreement” (*Leistungsvereinbarung*) between the Ministry and the universities. Within the performance agreement universities and the Ministry as equal partners identify the services universities should provide within a three-year period (see section 4.2 for more details on the performance agreement).

Within university the senate decides on the development of study courses and the concrete offer of degree programs and further-education programs (university training courses) Universities may set up and/or continue bachelor's programs, master's

programs and doctoral programs, but also – if required – diploma programs according to the old system. However, the range of studies is subject of performance agreements between the respective university and the federal authorities (see section 4.2).

Private universities

In 1999, foreign universities as well as private Austrian institutions were entitled by law to act as universities and to offer study programs in Austria. The University Accreditation Act regulated the criteria for educational institutions and the procedure to be accredited as a private university by the Austrian Accreditation Council (see section 5.2 - for the Austrian Accreditation Council). This is one of the prerequisites to be allowed to award degrees. Moreover, students at private universities have been incorporated into the system of study grants and transfer payments and into the Austrian National Union of Students. Public financial contributions are only available within the framework of particular governmental teaching and research funding schemes.

In 2006/07 about 11 private universities had a five-year accreditation, and in total 3.872 students were enrolled.

The Danube University Krems

The Danube University Krems is a university for postgraduate education which was founded in 1994 and has a special position in the Austrian higher education landscape. It is a legal entity under public law and not part of the federal budget law. The Danube University is funded by the federal government and the provincial government of Lower Austria. It offers exclusively postgraduate further and continuing education. The university courses have to be carried out in accordance with the study law of state universities, but costs have to be financed by fees. The Danube University is under supervision of the Federal Minister in legal and financial matters. In 2007 about 3.700 students were enrolled at the Danube-University, in total 75% of the cost were covered by own earnings.

2.2.2 Access and Participation

Admission to a degree program at a public university requires the following:

- general university entrance qualification;
- specific university entrance qualification for the chosen study course;
- knowledge of the German language;
- proof of artistic aptitude in case of arts studies;
- proof of aptitude for physical/motor skills when wishing to follow a teacher training program for the subject physical education (*Leibeserziehung*) and for the study course of sports science (*Sportwissenschaften*).

As a matter of principle, compliance with the general university entrance qualification for bachelor's and diploma degree courses is provided by the secondary school-leaving examination (*Reifeprüfung/Matura*). Persons who did not take the secondary school-leaving examination have the possibility of taking the university entrance qualification examination (*Studienberechtigungsprüfung*) for a specific study course and/or a group of studies. In addition, graduates of a skilled-workers' training can take

the so-called “*Berufsreifeprüfung*”. It replaces the secondary school-leaving examination in the traditional sense and provides the title for admission to all studies. Finally, the general university entrance qualification is also obtained by completing studies at a post-secondary educational institution, for which the required work output amounts to a minimum of 180 ECTS credits (corresponds to a minimum three-year duration of studies).

In 2004/05, 25% of the age group 18 to 21 years accessed higher education. The percentage of graduates with a general university entrance qualification accessing higher education was about 49% in 2004/2005. The chances of entering the post-secondary and tertiary sector vary: over 70% of graduates of academic secondary schools, but only about 23% of graduates of higher vocational schools enter the university system.

Most new entrants to university in 2004/05 finished a *Allgemeinbildenden höhere Schule* (42%), every fourth new entrant finished a *Berufsbildende höhere Schule*. Also, about 25% of all new entrants to the university sector had a foreign post-secondary school degree. Another 3% of all new entrants in 2004/2005 qualified via the *Berufsreifeprüfung* bzw. the *Studienberechtigungsprüfung* (Universitätsbericht 2005, Bd. 1, S. 88).

Figure 2.6: New entrants in universities and Kunsthochschulen

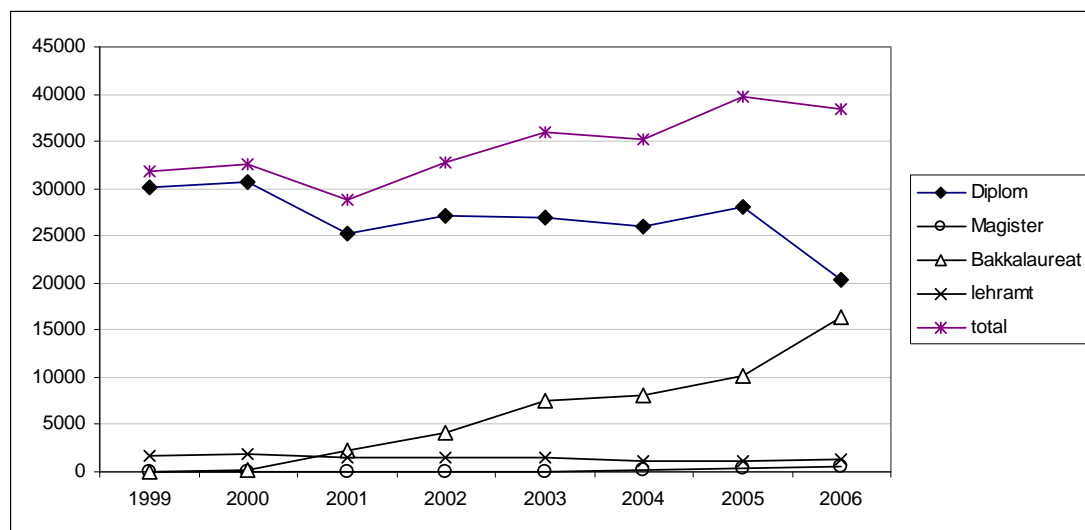
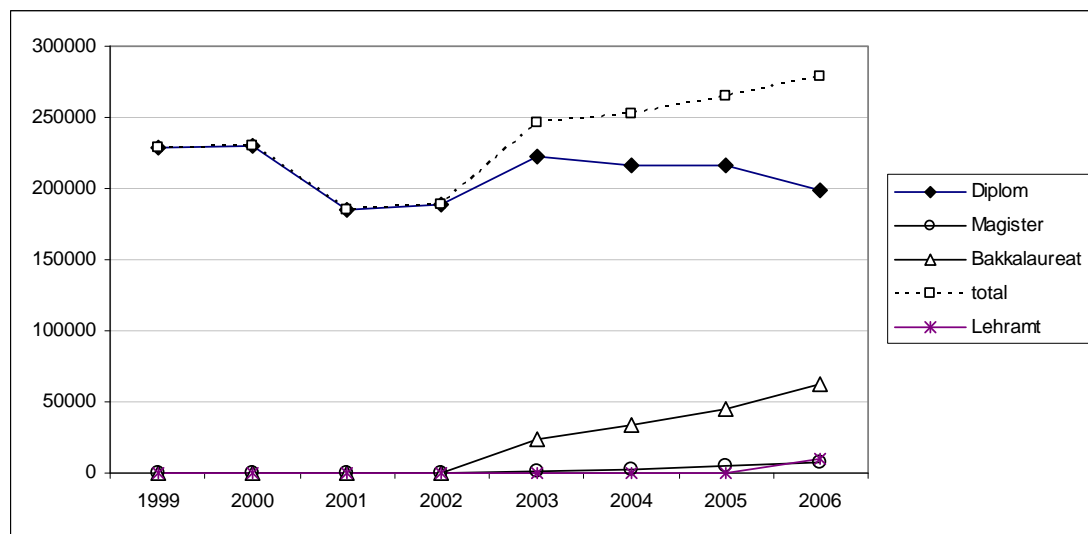
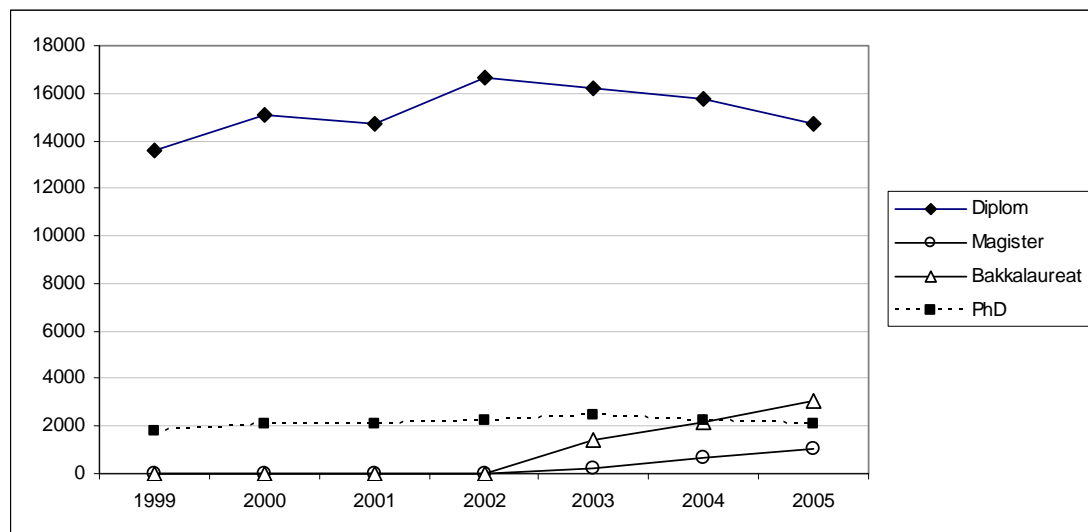


Figure 2.7: Students in the university sector (1999 - 2006)

The sharp decrease of new entrants and enrolments coincides with the introduction of tuition fees for undergraduate studies in the academic year 2001/02.

2.2.3 Outflow

Universities in Austria are not only confronted with the problem of long duration of study but also with high drop-out rates. The system is widely regarded as inefficient, despite a high student/staff ratio.

Figure 2.8: Graduates in the university sector (1999 - 2005)

source: IHEM database

2.2.4 Education and Labour Market

Despite the expansion of the higher education sector in the last decade the proportion of persons with higher education degrees is lower than in other OECD countries

(OECD average 32% of an age group, Austria: 19% of an age group, cf. OECD 2005: Indicator A3). The educational expansion does become noticeable in the younger age group: 10.4 % of the 30 to 34 year old persons have a university degree. One reason for the relatively low proportion of persons with higher education qualifications in Austria can be explained by the focus on higher vocational training in the upper secondary level of education. 71% have at least completed the upper secondary level II, against only 60% on average in OECD countries (BMBWK 2002c).

In 2006, in total 714,000 persons with an education level of ISCED97 5-6 were employed. These were about 18% of the Austrian labor force (Statistisches Jahrbuch 2008). Surveys on the labor market entrance of graduates from the 1990s showed that transition to first employment after graduation takes slightly more time than in other European countries (Cheers-study 2006). But unemployment rates among graduates are still much lower than the average unemployment rate in Austria. Data on the labor market entrance and early careers of graduates from younger cohort are not available. Recently, a study on the perspectives of enterprises, universities and *Fachhochschulen* on the employability of bachelor studies was done (Campbell/Brechelmacher 2007). In general enterprises appreciate the new appearance of the bachelor degree as a first study. Especially the stronger interweavement of theoretical and practical elements were mentioned. On the other hand, enterprises also asked with regard to lifelong learning for a higher extent of modularization and of multidisciplinary of bachelor studies (cf. Campbell/Brechelmacher 2007).

2.2.5 Personnel

The two main groups of personnel at Austrian universities are the academic and art staff (professors, lecturers and other research, art and teaching staff), and the general university staff (like administrative, technical staff or librarians). Other members of the university are for example the research fellows, assistant lecturers or retired professors. While the academic/art staff and the general university staff are employed by the university the other groups are not. This general change of the employment relationship was introduced by the *Dienstrechtssnovelle* in 2001. This new law allowed universities to act as an autonomous employer of academic staff. Before all employees at an university were civil servants. The novel also effected other changes, mainly the introduction of a new classification of hierarchical positions and new career models for academics. The former academic career model offered the option to move over to permanent positions as civil servants after finishing a dissertation or a habilitation. This policy led to blockage of positions for a younger generation of scientists (Zechlin 2003: 12). The novel introduced four new hierarchical levels of academic staff at universities: 1. PhD – Positions, 2. *Universitätsassentaturen* (e.g. Post docs), 3. temporary positions for professors (including tenure track options), 4. permanent positions for professors. Permanent contracts are now only allowed for this last category, none of the positions provides the status of a civil servant anymore. PhD-Positions and *Universitätsassentaturen* are mainly dedicated to the further qualification/training of graduates while professors are responsible for research and

teaching. Professors have to prove that they have the adequate qualification, a habilitation is not an essential prerequisite anymore.

Since 1990 the number of academic staff has risen dramatically. The strongest increase can be found for academic/art staff.

Table 2.2: Personnel at Public Universities 1990, 1995, 2000 und 2005 till 2007

	1990	1995	2000	2005	2006	2007
Total	13,609	16,144	17,015	21,410	22,363	22,820
Academic/Art Staff total	7,893	9,401	9,413	10,643	11,284	11,343
Professors	1,732	1,854	627	2,005	1,999	1,967
Assistants and other academic/art staff	6,161	7,547	7,786	8,637	9,285	9,376
thereof: Dozentinnen			2,322	3,123	3,094	3,079
General (administrative and other non-academic) staff total	5,716	6,743	7,601	10,766	11,079	11,476

Source: Statistisches Taschenbuch 2006

2.3 Postgraduate Education

Master's degree programs

Master's degree programs should be associated with a workload of at least 120 ECTS. The general prerequisite to enter a master degree program is to have a bachelor's degree.

Doctoral Programmes

The regulation of doctoral programs has undergone strong reforms in 2006 with a first amendment of the university act 2002. According to the Bologna declaration doctoral studies are regarded as a third cycle of higher education. Now doctoral programs have to last for at least three years. The workload is not defined by ECTS points anymore. Old programs still based on the achievement of at least 120 ECTS points have to be finished in 2017; commencing in 2009 only doctoral programs with a minimum length of three years are allowed. A necessary prerequisite to enter doctoral programs is the successful graduation from a master, magister or diploma program.

Individual Studies

Students are allowed to choose their own individual study program which they can finish with a bachelor, magister or diploma degree. The subjects/elements chosen must be part of an other degree program, and students have to apply for their individual study at their university. Applications have to include information on the ECTS points gained, on the curriculum and on the competencies that should be gained throughout the study.

Continuing Education

Universities are allowed to offer continuing education courses, and they are also allowed to cooperate with other legal entities. The title "master" can be awarded if the

program fulfills the same standards as a master program. The prefix “*Akademischer...*” can be added if the continuing Education program qualifies for 60 ECTS points.

In Austria, the Danube University Krems mainly offers programs in continuing education. In 2007 about 260 programs from a variety of disciplines were offered.

Access and participation

To start a *Doktoratsstudium*, a *Magister* or *Diplom* degree is required. Graduates from *Fachhochschulen* can also continue to the *Doktoratsstudium*.

2.4 Distance Education

Austria does not have an own higher education institution which only provides distance education, but strongly cooperates with the German *Fernuniversität Hagen*. Austrians are allowed to enroll at the *Fernuniversität Hagen* in full study program and in continuing education courses. Centers for Distance Education located in Linz, Bregenz, Steyr and Vienna support students enrolled at the *Fernuniversität*. Another opportunity to enroll in distance education is provided by the Open University (UK). The Open University is also supported by the centers for distance education.

3 RESEARCH INFRASTRUCTURE

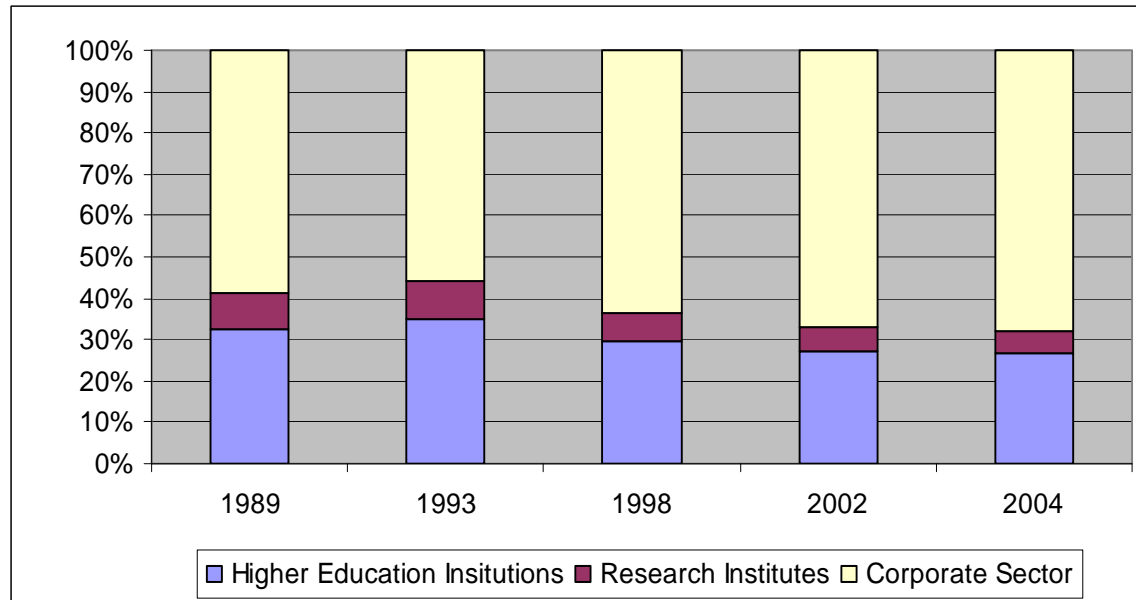
3.1 Performers

The main actors carrying out research in Austria are the higher education institutions (universities, universities of applied sciences, and private research universities), non-university public research centres, and also small and medium enterprises engaging in R&D.

The 21 federal universities form the back bone of Austrian research. They receive the majority of public funding and are mainly occupied with basic research. Also, non-university public research institutes, like the Ludwig-Boltzman-Gesellschaft and the Austrian Academy of science play an important role in Austrian research. In 2006 the Institute of Science and Technology Austria (IST Austria) was founded which forms one milestone in Austria's strive for excellence in research.

Another important pillar of Austrian research are R&D activities in the corporate sector. About two-thirds of all expenditures on research in 2004 were spent here. The corporate sector also employs the majority researchers: about 70% of the employees in R&D can be found here, another quarter is employed at universities while 5% work at non-university public research institutions.

Figure 3.1: R&D Activities (in terms of expenditure) by performer



Source: Statistisches Jahrbuch 2008, p. 160

3.1.1 Research in the Corporate Sector

In Austria the corporate sector is most active in research. About two-thirds of expenditures on research were spent in the corporate sector. In 2004 in the cooperative sector about 2,123 units which employed about 16,500 FTE researchers.

3.1.2 *Research in Higher education Institutions*

In 2007, about 21 Universities were active in research; also nine private universities are involved. Within Austrian research policy Universities are assigned a double role. On the one hand they are the main actors in basic research. In the recent years also public-private partnerships in research have gained importance, and - as universities have become autonomous legal bodies - contract research has become increasingly important. On the other hand universities are seen as the main actors responsible for the education and training of a 'new generation of young scientists'. (Austria - Land of research: 38). The introduction of doctoral schools and new career schemes for postdoctoral researchers is major steps in this human capital offensive (see Forschungs-Technologiebericht 2007 englisch).

In 2004, universities gained about 75% of the public expenditures on basic research. Also, about 1,038 higher education research units employed about 8,208 FTE of academic staff.

3.1.3 *Non university public research institutes*

There are about five non university but public research institutes: the Institute of Science and Technology Austria, the *Österreichische Akademie der Wissenschaften*, the *Zentralanstalt für Meteorologie und Geodynamik*, the *Geologische Bundesanstalt*, and finally the Ludwig-Boltzmann-Gesellschaft.

- Institute of Science and Technology Austria (IST Austria)

This IST Austria is one of the efforts Austria made within its strive for academic excellence. It was founded in 2006, and resumed working in January 2008. Its main task is to perform excellent basic research in science. Therefore it was designed as an international institute: working language is English, all PhD programs and research projects are internationally oriented. Besides research, doctoral training will be the second main task of the IST Austria. This doctoral training will be performed in graduate school which will be deeply integrated into the research of its different research areas.

- Austrian Academy of Sciences (ÖAW)

The Austrian Academy of Sciences (ÖAW) is a research institution with its own legal basis. It functions as a learned society as well as a promoter for science. Currently it promotes about 65 research institutes. The Austrian Academy of Sciences consists of two sections, the Section for Mathematics and the Natural Sciences and the Section for the Humanities and the Social Sciences. Nowadays the ÖAW is the biggest non-university research institution for basic research in Austria. In 2004 the Academy employed about 530 FTEs in 63 research institutes. In the recent years it also started to engage in to promote the most talented young scientist. Its eight fellowship programs and 19 scientific awards target to support career building processes among Austrian scientific offspring.

- *Zentralanstalt für Meteorologie und Geodynamik (ZAMG)*

The “*Zentralanstalt für Meteorologie und Geodynamik*” (ZAMG – Central Institute for Meteorology and Geodynamics), for short, has the mission to “provide a meteorological and geophysical service, as well as to provide meteorological and geophysical data and information for public crisis management and comparable international supervisory institutions with regard to controlling natural or environmental disasters“.

- *Geologische Bundesanstalt (GBA)*

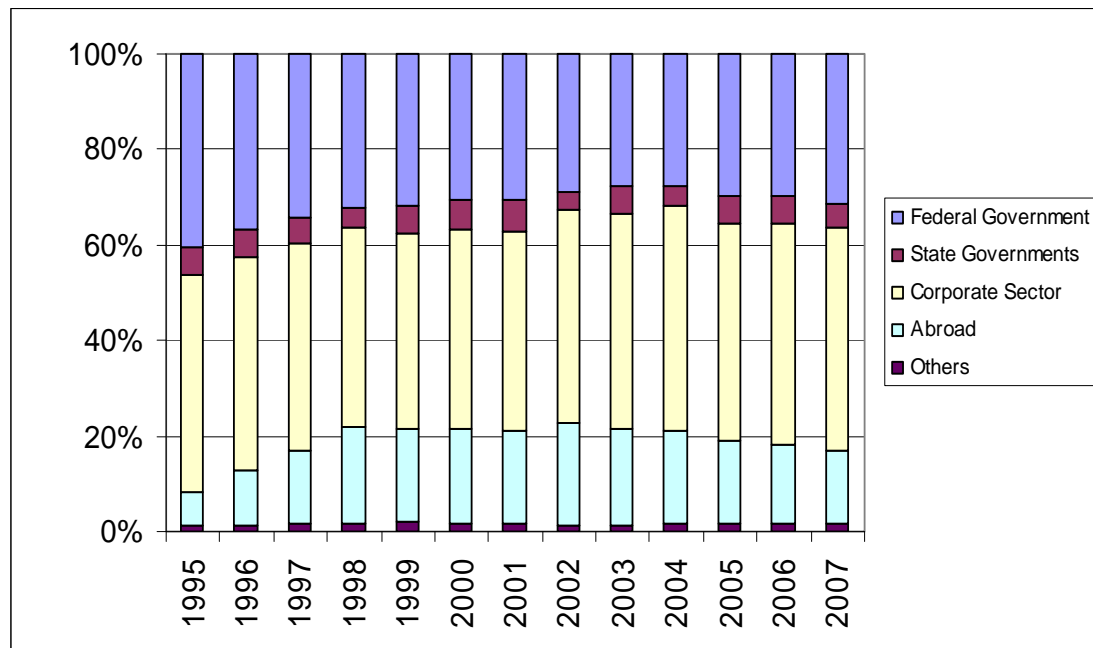
The Geologische Bundesanstalt (GBA - Geological Survey of Austria) is among the oldest institutions in its special field in Europe. Currently it has about 115 employees. It serves as a central information and advisory institution for the Federal state in the field of earth sciences and geo-technology.

- *Ludwig Boltzmann Gesellschaft (LBG)*

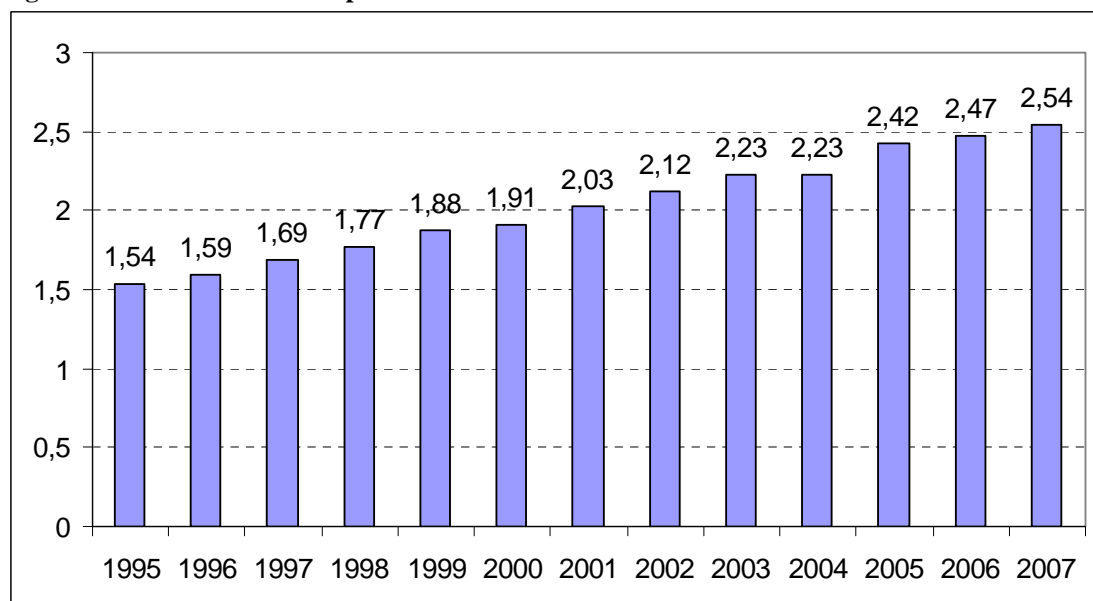
The Ludwig-Boltzmann Gesellschaft is a private *trägerorganisation* which currently supports 21 Ludwig-Boltzmann-Institute and eight research clusters, doing research mainly in medicine, but also in arts and humanities. Currently about 250 people are employed at the LBG. From 2002 to 2005 the LBG was undergoing a structural reform which mainly changed the legal status of the LBG and the way research funds are distributed. The establishment of (new) Ludwig-Boltzmann-Institutes is tendered and applicants will be reviewed by international experts.

3.2 Providers

In 2007, the corporate sector financed about 46.7% of the expenditures on research. About 36.3% was financed by the public sector. According to estimates by Statistik Austria, Austria will spend altogether €6,833.56 million on R&D in 2007. With this, the country’s R&D rate is rising from 2.47 percent in 2006 to 2.54 percent of GDP in 2007 (a plus of 8.1 percent). The public sector (federal, state and other public financing) is expected to invest €2.56 billion in R&D in 2007, 10.5 percent more than in the previous year. Federal expenditure alone will be about €2.13 billion, a substantial increase over the previous year’s level of €1.89 billion. Since 2000, the public sector has been increasing its R&D investment by 66.9 percent (an average of 7.6 percent p.a.), which should cover 37.4 percent of overall R&D expenditure in 2007 (see Forschungs- und Technologiebericht 2007).

Figure 3.2: Expenditure on R&D in Austria, by source of funds

Source: Austrian Research & Technology Report 2007, p. 141

Figure 3.3: Gross domestic expenditure on R&D in % of GDP

Source: Austrian Research & Technology Report 2007, p. 141

Besides the different ministries on the federal and the state level which fund a certain amount of research, the funding of research is mainly organized by three organizations: the *Forschungsförderungsgesellschaft* (FFG), the Austria *Wirtschaftsservice* (AWS) and, mostly important, by the *Wissenschaftsfond* (FWF). This triad is completed by the LBG and by the ÖAW, and some smaller organizations.

- *Forschungsförderungsgesellschaft (FFG)*

Founded in 2004 the FFG is the national funding agency for industrial research and development in Austria. Its main task is to support applied research. Therefore it provides services for the corporate sector as well as for research institutes and higher education institutions. These services are for example managing and financing research projects, consultancy for European cooperative projects.

- *Austria Wirtschaftsservice (AWS)*

The AWS mainly works in business respective economic development. It was established in 2002 and is responsible for providing financial support of the federal entities. Therefore it functions like a loan corporation. The AWS also serves as an consultant for innovation policies.

- *Wissenschaftsfond (FWF)*

The FWF is the central organisation providing support for Austrian basic research. Within various program research as well as the qualification of academic is funded. The FWF mainly funds single research projects running for three years, but also national research networks in certain fields. The establishment of doctoral/graduate schools and fellowship improving the academic cross-border mobility are a central cornerstone of the funding of the FWF. In 2006, the FWF spent €151 billion, which mostly funded university research (87%).

3.3 Research Policy

Since Austrian higher education has undergone constant changes in the recent years also research policy transformed. These changes in research policy can mainly be characterized as attempts to promote effective, well-targeted and organized research. By embedding its research into more specific contexts step wisely and also relating it to international and competitive research fields Austria tried to catch up with countries leading in excellent research. This development started in the 1990s when especially university research was more strongly embedded in a larger, i.e. societal context (Lanzendorf 2006:111) as the 1993 Act (UOA) stipulated that research has to meet and nourish societal as well as environmental needs. After 2000 this context became even more specified: Research had to fit itself into ‘medium-term strategies’ and also be related to international developments. Finally, in 2003 and 2004, the government proposed structural and thematic areas for future Austrian Research. Different policies and instrument support these general goals. Besides providing a considerable amount of funds new regulations allowing a more flexible human resource policy were introduced. Also the University Act 2002 supported this policy as performance agreements between universities and ministry allow to set goals and prescribe areas for research.

Currently the goal to reach an excellent, international competitive and most of all effective research is the most important goal of Austrian research policy. Therefore different initiatives to coordinate and restructure the heterogeneous Austrian research landscape have been implemented. One step here was to reorganize the organizational structure of public funding but also to improve public-private partnerships. Here

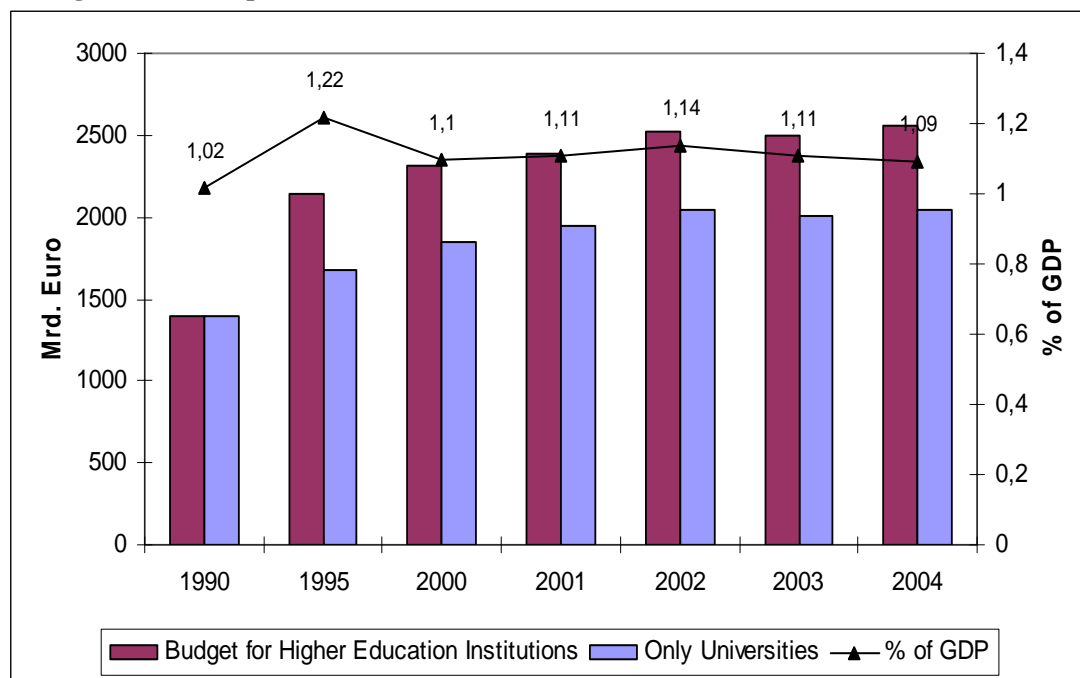
programs aim at intensifying the co-operation between the country's two large research systems (the universities and the private sector). A closer linkage between industries, universities and non-university research organisations should help building "critical masses" to improve Austria's international competitiveness. Further objectives are providing the international co-operation in the area of research - particularly on the European level (Framework Programmes for Research and Technological Development) but also in international organisations and the production of highly qualified human resources in science and technology.

4 FINANCIAL ASPECTS

4.1 Public expenditure

Since 2000 Austrian public expenditure on higher education institutions has been rather stable. Since 1995 also the *Fachhochschulen* also are funded by public money. The budget of universities has not been affected by this. They still receive the bulk of the funds.

Figure 4.1: Budget for higher education institutions 1990 - 2004, in Mrd. € and as a percentage of the gross domestic product



Source: Universitätsbericht 2005, Vol. 2, p. 39, Author's calculations

4.2 Institutional financing

The Universities Act 2002 changed the financing of higher education institutions fundamentally. The legal autonomy assigned to universities and to other higher education institution gave more financial autonomy to them but also challenged in their financial competencies as the new law forces them to plan their expenditures more targeted. Because of their new autonomous status universities are now able to tap other funding resources. They are free to gain capital but also to do contract research and also to spend this money autonomously. Since 2004 universities and other higher education institutions receive a lump sum budget. Since beginning of 2007 this institutional funding - the global budget - is distributed on the base of performance agreements (*Leistungsvereinbarungen*) which are contracts between the Federal Government and the several universities. Within these performance agreements universities have to describe their strategic goals and aims for a period of three years. Another important instrument here is the intellectual capital report

(*Wissensbilanz*) which universities have to hand in to the ministry every year. This intellectual capital report informs about the university's activities and goals, the intellectual capital gained and about (temporary) outcomes of the processes agreed upon in the performance agreement.

Performance agreement (Leistungsvereinbarung)

Performance agreements are contracts in public law, concluded between the several universities and the Federal Government (Section 13, UG 2002). The performance agreement shall give information on the services to be provided by the university within this three-year-period. Detailed information should be given for (Section 13, UG 2002):

- Strategic objectives, academic priorities, and university and human resources development,
- Research, and the advancement and appreciation of the arts,
- Study programmes and continuing education,
- Social goals,
- Internationalization and academic mobility, and
- Inter-university co-operation.

Also the performance agreement has to include information on the timing of activities as well as on the financial planning:

- Commitments made by the Federal Government: allocation of the basic budget. Here the criteria for the allocation of public money have to be considered. These are: needs, demand, performance, and social goals.
- The content, extent and scope of the objectives and the timing of goal attainment;
- The division of the basic budget into allocations for given budget years;

Finally, performance agreements have to include agreements on:

- Action in the event of non-fulfillment of performance goals, and
- Reporting and accounting.

An amendment of the University Act in 2008 stipulated that the performance agreement can include performance indicators. These will be used to measure if certain goals of the performance agreement have been fulfilled. These indicators will function as controlling and sanctioning instruments: in case of not fulfilling a goal the budget of the university will be reduced by an amount of money assigned to the relevant indicator.

20% of the funding will be based on performance indicators, 80% of the funding will be actually contracted between the university and the ministry. In line with these new forms of funding the principles of financial administration of universities also were changed fundamentally. Fiscal accounting was replaced by business accounting (geared to the specific needs of a university).

Intellectual capital report (Wissensbilanz)

Each university is obliged to report to the responsible Minister¹ on an annual basis by sending an intellectual capital report. This report has to include information on (UG 2002, Section 13, 6):

- The university's activities, social goals and self-imposed objectives and strategies;
- Its intellectual capital, broken down into human, structural and relationship capital;
- The processes set out in the performance agreement, including their outputs and impacts.

Within this intellectual capital report universities have to include a performance report which is directly related to the performance agreement. In the second year of the contracted period this performance report also has to include a prognosis about the outcomes expected in the third year.

The University Act also set that the actual design of the report and the different indicators will be specified by the minister in charge. Throughout the recent years this instrument has been widely discussed. Mainly the construction of (performance) indicators was criticized. Since beginning of 2007 this intellectual capital report has to be sent, and practical considerations lead to an amendment of the University Act in 2008.

4.3 Tuition Fees and Student support

4.3.1 Tuition fees

Students of both universities and *Fachhochschulen* have to pay university fees (*Studienbeitrag*). While Austrian citizens, citizens of the European Union (EU) or the European Economic Area (EEA) have to pay €63.36 per Semester, students from outside the EU or EEA have to €726.72 per Semester. This university fees have to be paid in advance and will be raised by 10% if it is not paid within the due dates. Students who are enrolled in different programmes at different universities have to pay fees only once. Students being simultaneously enrolled at a university and at a university of applied science have to pay fees twice (see Wadsack/Kasparovsky 2007, p. 21).

University fees will be retained by the several universities; in case of joint programmes it will be divided among the participating universities. Students can also choose how their fees should be spent by the university when paying their contributions.

Under certain conditions university fees will be reimbursed: Students studying abroad for at least one semester and students from countries which do not charge fees from Austrian students and students being convention refugees can ask for the reimbursement of their fees.

¹ Since 2005 the Austrian government has undergone constant changes. In line with that also the structure of ministries has constantly been reorganized. Currently, the Ministry of Science and Research (BMWF) is in charge.

4.3.2 Student support

In Austria student can receive financial assistance from public funds to follow a study. These public funds are provided as indirect and direct support to the students. Indirect support is provided as tax reduction or via special regulations for social insurances. Indirect support is not linked to specific conditions (like social need) which have to be met by the beneficiaries.

Direct support measures, which are granted pursuant to the Student Support Act (*Studienförderungsgesetz*), depend upon the social needs and the academic success of students. The income of the student and/or the person with maintenance obligations is decisive for the definition of social need. In this connection, there are also special support measures such as study grants (paying the entire or part of the tuition fee), commuter travelling grants, benefits for studying abroad, etc. In addition, the universities receive funds from the Federal Minister of Education, Science and Culture to grant performance-based or research scholarships in order to support students who achieve especially good results (vgl. Wadsack/Kasparovsky 2007, p. 34).

Study Grants (*Studienbeihilfe*) and the performance-based scholarships (*Leistungs- und Förderungsstipendien*) are the most important direct support measures in Austria.

Study Grants (Studienbeihilfe)

Study Grants are the most important student support measure in Austria. They aim at widening access to higher education as they are provided to young people capable of studying but not having sufficient financial fund to follow a study. In Austria parents are responsible to meet the financial needs of their children until these are capable of maintaining themselves. Only in case that the parent's income is not high enough to contribute to the cost of studying and if the student can prove that she/he will successfully complete his/her study that a study grant is given. Also, to be entitled for a study grant applicants have to be Austrian Citizens, must come from a EU or EEA country (including Switzerland) or be a convention refugee.

A special form of the study grant is the self-provider scholarship. Students who were at least capable of maintaining themselves for four years (given they had at least an annual income of €7,272 for that period) are eligible. These students still have to prove that they will successfully complete their study, but parental income is not taken into consideration here. Study grants range between €180 and €8,148 a year.

Table 4.1: Students Receiving a Study Grant 2001 - 2004

Semester	Total Number of Students	% of Domestic Students	Students at Universities
WS 2001	34,328	20.2	30,610
WS 2002	36,815	20.4	32,080
WS 2003	39,325	21.0	33,674
WS 2004	40,416	21.9	34,176

Source: Universitätsbericht 2005, Vol. 1, p. 107

Throughout the recent years the number of applications for a study grant have increased constantly, also the number of application granted have risen. Different policies to mobilize students to apply for a study grant have been considered to be very successful. As of autumn 2008 a further amendment of the student support act will come into effect. Besides an increase of the study grant of 12% some further regulations have been changed:

- Students are now allowed to have an annual income of €8,000.
- Students with children will receive an amendment of their study grant of €7 per child.
- Disabled students will be supported for a longer period.
- New regulations to support enrolments in master programs have been introduced.

Performance-based Scholarships

Performance-based scholarships aim at supporting outstanding academic performance. They are offered by the universities and/or university of applied science degree programs for every academic year. The amount granted is between €727 and €1,500 per academic year. Different regulations applying to the study grant also apply to the performance-based scholarships but social need is not a necessary prerequisite here. Universities and universities of applied science are responsible for granting performance-based scholarships.

Direct support measures also can take on different other forms: support scholarships, grants for studies abroad and tuition fee grants are most important here.

Support Scholarships

Support scholarships are intended to support scientific or artistic theses (e.g. diplomas, PhDs, master thesis) of students. Similar to performance based scholarships outstanding academic performance is a prerequisite to receive funding, social need is not important here. As support scholarships are granted by the universities or faculties they can decide about further regulations. The amount granted is here about €700 and €3,600 per academic year.

Grants for studies abroad

Study grants are paid continuously for the period of four semesters at maximum for studies abroad. Also students who are entitled to a study grant also can apply for additional support of a study abroad. To receive this additional support they have to

pass an exam at their host institution, also they have to stay for a period of three months at minimum.

Tuition fee grants

All students receiving a student grant are reimbursed their tuition fees/university fees. Also students who are not entitled to a study grant can apply for a reimbursement of their tuition fees.

5 GOVERNANCE

5.1 *Historical developments*

Throughout the last forty years Austrian higher education and research has undergone several reforms. Pechar (2005, p. 269) defines three different periods within Austrian higher education between 1960 and 2002. He locates a first reform cycle from 1963 till 1975. Here the major aims of the reform were in line with the maturation of the welfare state: widening access to higher education and the implementation of democracy within universities were the major goals of these reforms. After a decade of consolidation a new reform cycle started in 1992 and lasted till 2002 when the universities act was introduced. The goals of the second reform can be summarized as deregulation and increasing efficiency. In the following we will concentrate on this second reform cycle.

Pechar characterizes this period as “attempt to split areas of administrative decision making at the system and the institutional level”. The introduction of New Public Management was one of the instruments to split up these intermingled fields. The introduction of the universities of applied science in 1993 was one first step in implementing New Public Management. As universities of applied science were organized as quasi-private associations or corporations they had more legal autonomy than universities which were strongly dependent on the state.

The University Organisation Act of 1993, a first major reform step, provided the basis for assigning a higher degree institutional autonomy also to universities (see Zechlin 2003). Extensive decision-making powers were shifted from the Federal Ministry to the universities as this new law aimed at changing the managerial structures of universities. Assigning more decision making power to the new rectors led to further changes in the university sector. Following the model of the universities of applied science they called for more institutional autonomy of the universities and also for changes in institutional financing. Their main claims were that universities should become fully autonomous legal bodies receiving a lump sum budget. These initiatives of the new rectors were one driving force in drafting and implementing the Universities Act in 2002. Its main features can be characterized as follows (see Pechar 2005, p. 280-281):

- Universities are no longer state agencies – they got full legal entity but still function under the domain of the public law.
- Universities still receive public funding. They obtain a lump sum budget which they can spend under their own discretion. Fiscal restriction do not exist anymore, funding is distributed on the base of performance agreements.
- Universities can decide autonomously about their internal organization.
- Universities now have a governing board (Universitätsrat).
- The rector’s position was strengthened – it is now more independent from the collegial academic bodies of the university as the rector is now elected by the governing board.
- Universities now are the employers of their academic and non-academic staff who are no longer civil servants.

This new law was considered to be the most far-reaching reform in higher education throughout Europe. Some of the instruments implemented in line with this new law like the performance agreement or the intellectual have been discussed intensively.

5.2 *Present system of governance*

5.2.1 *Basic principles/structures of governance*

According to Article 14 of the Austrian Federal Constitutional Law federal bodies are responsible for adopting and implementing legislation in higher education. The Ministries Act of 2007 also defines that all issues concerning universities and universities of applied science are the matter of the Minister of Science and Research. Except for the colleges of education (*Pädagogische Hochschulen*) – here the Federal Ministry for Education, the Arts and Culture took over responsibility.

Austrian higher education and research is regulated by different laws. Mostly important is the Universities Act 2002 which replaced the former regulations on the organization of the university, university studies and university tuition and fees. Employment at universities is now mainly regulated by the Employees Act (*Angestelltengesetz*). For university teachers being employed as civil servants the 1979 Civil-Servants' Service Regulations Act (*Beamten-Dienstrechtsgesetz*) is still applicable.

The legal base for universities of applied science is the *Fachhochschule* Studies Act 1993 (*Fachhochschulstudiengesetz* 1993), private universities are mainly governed by the University Accreditation Act of 1999 (*Universitäts-Akkreditierungsgesetz* 1993).

5.2.2 *Main Actors and Intermediary organizations*

The Ministries for higher education are the Ministry of Science and Research and the Ministry for Education, the Arts and Culture (see above). As Universities now are autonomous units which are mainly steered by the performance agreement and a global budget the tasks of Ministry of science and research are now limited to limited to legal supervision, negotiating the performance agreements and a three-year global budget, receiving the performance reports, as well as controlling and monitoring. Also, the Federal Minister has to set up university councils (*Universitätsräte*) as self administration bodies of the universities (see Section 5.3.1).

The Ministry of Science and research is supported by several intermediary organizations: the Austrian Science Board (*Wissenschaftsrat*), the *Fachhochschule* Council (*Fachhochschulrat*) and the Accreditation Council (*Akkreditierungsrat*).

- Austrian Science Board (Wissenschaftsrat)

The Austrian Science Board was established in 2003, its legal base is the universities Act of 2002. The board is the main advisory body to the federal ministry of science and research, parliament and the universities, in all university-related matters. It is an organ of the state and controlled by the Federal Minister. Besides advising the

Ministry its second main task is to monitor and analyse the Austrian university system and to give recommendations on its further development.

The Austrian Science Board has about twelve members from different spheres of society. They have to be acknowledged experts but do not have to be Austrians. Four board members are appointed by the Federal Government, who make recommendations to the Minister for the nomination of the further eight members. The terms of office are six or three years, actual duration will be determined by the ministry. Once every three years the Board has to send a report of activities to the National Council.

- *Fachhochschule Council (Fachhochschulrat)*

The FH Council is an authority that is responsible for the external quality assurance (accreditation and evaluation) in the Austrian FH sector. The FH Council consists of 16 members; half of them are required to have the relevant post-doctoral lecturing qualification (Habilitation) and the other half are required to prove that they have worked in the fields relevant for FH degree programmes for several years.

The members of the FH Council are appointed by the Federal Minister of science and research. Four members are appointed on the basis of suggestions of the advisory board for economic and social issues. The term of office is three years, and members can be re-appointed once for a consecutive term. Pursuant to a constitutional provision, the members of the FH Council are not bound by any instructions when performing their responsibilities.

- *Austrian Accreditation Council (Österreichischer Akkreditierungsrat)*

The Austrian Accreditation Council is also an independent state authority which is not bound to any directives and has autonomous decision power. The accreditation of private universities, the accreditation of academic programmes of already accredited private universities, the re-accreditation and supervision of accredited private universities are the main tasks of the Austrian Accreditation Council.

The Accreditation Council comprises eight members, who are acknowledged experts in the field of international higher education. Its members are appointed by the federal government. Four of the eight members are nominated by the Austrian University Chancellors' Committee. Annual report on its activities have to be sent to the parliament.

- *Universities Austria (UNIKO - former Austrian Rectors' Conference)*

Universities Austria is a non-profit association under private law. Its purpose is to assist the Austrian universities in the fulfilment of their tasks and responsibilities and thus to foster scholarship and research. Universities Austria handles the internal coordination of the 21 public Austrian universities, it represents them in national and international organisations and is the public voice of the universities. Furthermore, Universities Austria provides administrative and organisational support to the National University Federation (*Dachverband der Universitäten*). Universities Austria is funded through membership fees, paid by the universities. The fees are graded according to the size of the institutions.

5.3 Governance in universities and universities of applied science

5.3.1 Governance in Universities

The universities act 2002 changed the governance structure of university. Becoming full legal entities under public law the role of the rector changed, also the university council was introduced as a new body of the university. While being free in organizing the actual procedures of governing an university, the law prescribes that senior governing bodies/officers of the university shall be the university council, the rectorate, the rector and the senate.

University Council (Universitätsrat)

The university council consists out of up to nine members. One half of these are appointed by the senate, the other by the Federal Government on the recommendation of the Minister. The last candidate is appointed by both bodies on mutual agreement. Members of the university council have to acknowledged experts and should be able to contribute to the goal attainment of the university. As a strategic and supervisory body its main tasks are the:

- approval and dismissal of the rector and the vice rector,
- approval of the development plan, the organisation plan and the draft performance agreement of the university,
- supervision of the preparation of the performance report, the intellectual capital report and the closing of accounts.

The Rectorate and the Rector

The rectorate is the operating body of the university. It comprises up to four vice-rectors and one rector. Its members are elected by the university council on the basis of short lists of three (for the rector) prepared by the senate and by the rector (for the vice-rectors). Its main tasks are:

- to prepare decisions for the university council and the senate,
- to appoint the intra-university executive staff,
- to allocate budget and human resources,
- to enter into intra-university target agreements,
- to submit reports, and
- to make evaluations.

The rector chairs the rectorate; he/she represents the university to the Ministry when entering into performance agreements. His/her further tasks are:

- to appoint university professors on the basis of proposals by an appointment committee,
- to sign employment contracts of the university staff members as their highest superior.

The Senate

The senate (twelve to twenty-four members) is the executive body of a university, each member group of the university (professors, academic/non-academic staff/student) appoints and elects their representatives individually. As it therefore represents the different groups of the university co-determination is concentrated in the senate. Further its main tasks are:

- to enact and amend the statute,
- to issue the curricula for degree programs and university courses,
- to set up collegial boards with or without decision-making competences, as well as - to approve their decisions,
- to advertise the function of rector and to prepare a short list of three for the election by the university council, and
- to exercise various rights of co-determination in matters of the rectorate and the university council.

5.3.2 Governance in Fachhochschulen

Unlike universities the governance structure of universities of applied sciences is not regulated by a special organizational law. As universities of applied sciences are driven by “*Erhalter*” who can legal bodies under public or private law their internal governing structure can take on different. The *Fachhochschule* Studies Act only prescribes that a *Fachhochschulkollegium* has to be implemented by each university of applied science. The *Kollegium* consists out of the leaders of the different study programs, at least eight elected representatives of the teaching and research staff and finally of representatives of the students. Its main task is to organize and supervise teaching and examination at the university of applied science.

6 QUALITY ASSURANCE

6.1 Developments in Austrian Higher Education Quality Assurance

The second reform cycle in Austrian higher education (see section 5) led an encompassing implementation of quality assurance systems. One first step was here the introduction of the universities of applied sciences beginning of the 1990 which were subjected to continuous evaluations. The University Organization Act of 1993 also committed universities to introduce systematic and comprehensive evaluation programs which address the quality of teaching and instruction in particular. In line with this different initiatives and stakeholders started to work out adequate methodology and evaluation instruments for higher education institutions. The Universities Act of 2002 finally obliged all universities to establish internal quality assurance systems. Since 2004 the Austrian Agency for Quality Assurance (AQA), an independent institution driven by different stakeholders in higher education, supports this process.

6.2 Quality Assurance in Universities

According to the University Act 2002 all universities are required to implement an own quality management system. This system should reflect the whole performances of the university and assure the quality and the attainment of performance goals. Therefore this quality management system is strongly linked to the performance agreement of the university as the areas to be evaluated must be determined in the performance agreement. Universities are free to design their own system of evaluation and quality assurance but they have to lay down their general principles and routines for evaluation in their statutes. The universities act 2002 prescribes that

- quality assurance has to apply international standards for evaluation,
- internal evaluations have to be conducted continuously, and
- the performance of all teaching staff has to be evaluated at least every five years.

Also the evaluation of teaching has to include student's assessment of teaching. These student evaluations also have to be included in the performance agreements of the universities. The results of the internal evaluations have to be used for the decision making of the bodies of the universities. Universities can also be subjected to external evaluations but these have to be induced by the rectorate, the university council or the Ministry of science and research.

The university report of 2005 indicates that most universities started implementing an encompassing system of quality assurance. While they used different techniques most of them established own evaluation departments. Also some universities reported that they linked the internal appropriation of funds to the results of evaluation. Up-to-date information on the state of the art of the introduction of quality assurance in universities was not yet available.

Recently, the specific characteristics of Austrian quality assurance were criticized. Especially the individual design of quality management systems of universities were

dispraised as they do not allow real external evaluations and hinder comparisons among universities (see ÖAR 2008 - Positionspapier). As especially excellence of performance cannot be evaluated a renewal/restructuring of the Austrian quality assurance systems is claimed.

6.3 Quality Assurance in Universities of Applied Sciences

The Austrian FH sector has wholly integrated external quality assurance. This means that initial accreditation, evaluation and re-accreditation are all connected. In other words, a new FH degree programme, first of all, needs to be accredited by the FH Council, with the accreditation granted in each case for a maximum of five years. After this approval period a re-accreditation is required, which follows an evaluation and a formal follow-up procedure. For universities of applied sciences quality assurance is strongly linked to an accreditation policy. The *Fachhochschule* Studies Act stipulates that degree programs of universities of applied science have to be accredited by the *Fachhochschul* Council (see Section. x) which serves as the main actor in quality assurance. For every extension of the accreditation an evaluation report must be submitted. The *Fachhochschule* Council is responsible for conducting the evaluations and the ongoing evaluation of the entire sector of universities of applied science. Therefore the council established a “wholly integrated external quality assurance system”. All accreditations, re-accreditations and evaluations are done by the *Fachhochschul* Council.

Another important actor in the quality assurance of universities of applied sciences is the *Fachhochschulkollegium*. One of its main tasks is to evaluate the teaching and examination activities, as well as the curriculum and the examination regulations (see section x).

6.4 The Austrian Agency for Quality Assurance (AQA)

The Austrian Agency for Quality Assurance was established as an autonomous institution at the beginning of 2004 at the joint initiative of the former Austrian Rectors' Conference (ÖRK - now UNIKO), the Austrian Conference of Universities of Applied Sciences (FHK), the Austrian Union of Private Universities (PU), the Austrian National Union of Students (ÖH) and the Federal Ministry for Education, Science and Culture (BMBWK). As a non-profit organisation the AQA offers services to all tertiary educational institutions in Austria but which can also become active in other countries. The Association currently has four ordinary members (UNIKO, FHK, ÖH, BMWF). An umbrella organisation of Austrian private universities (PUs) and an umbrella organisation of Austrian universities of teacher education (PHs) shall be invited to join as ordinary members. The Association's executive bodies include the General Meeting (13 delegates) and the Board (5 members). The latter is appointed to a term of two years.

The Scientific Steering Group shall support the quality and the scientific approach of the work carried out by the Agency and shall ensure the independence of its methods. The Scientific Steering Group shall advise the Board and the Management on all

matters of quality assurance, giving special consideration to international developments.

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Important WWW-Addresses:

- Austria Wirtschaftsservice: <http://www.awsg.at/portal/>
- Austrian Academy of Sciences: <http://www.oeaw.ac.at/>
- Austrian Accreditation Council: <http://www.akkreditierungsrat.at/cont/de/index.aspx>
- Austrian Agency for Quality Assurance: <http://www.aqa.ac.at/>
- Austrian Rectors' Conference: <http://www.reko.ac.at/>
- Austrian Science Council: <http://www.wissenschaftsrat.ac.at/>
- Bundesministerium für Bildung, Wissenschaft und Kultur: <http://archiv.bmbwk.gv.at/>
(Archive)
- Bundesministerium für Wissenschaft und Forschung: www.bmwf.gv.at
- Fachhochschul Council: <http://www.fhr.ac.at/>
- FFG – Forschungsförderungsgesellschaft: <http://www.ffg.at/content.php?version=2>
- FWF - Wissenschaftsfond: <http://www.fwf.ac.at/>
- Information on study grants: www.stipendium.at
- Ludwig Boltzmann Gesellschaft: <http://www.lbg.ac.at/>