

European Commission
Directorate-General for Economic and Financial Affairs
Economic Policy Committee

**Efficiency and effectiveness of public
expenditure
on tertiary education in the EU**

**ANNEX : COUNTRY FICHE
DENMARK**

**Joint Report by the Economic Policy Committee
(Quality of Public Finances)
and the Directorate-General for Economic and Financial Affairs**

Table of contents

Brief characterization of the tertiary education system	3
1. <i>Main features</i>	3
2. <i>Structure of institutions and funding arrangements</i>	7
3. <i>Governance and regulatory framework</i>	7
Explanatory factors for efficiency	9
1. <i>Staff Policy</i>	9
1.1. <i>Hiring/Firing</i>	9
1.2. <i>Wages</i>	9
2. <i>Output flexibility</i>	10
2.1. <i>Course content and exams</i>	10
2.2. <i>Offer of short studies and other diversifies studies</i>	10
2.3. <i>Student choice</i>	11
2.4. <i>Numerus clausus</i>	12
2.5. <i>Regional/ European/ global mobility</i>	13
3. <i>Evaluation</i>	17
3.1. <i>Institutional evaluation</i>	17
4. <i>Funding rules</i>	17
4.1. <i>Public funding</i>	17
4.2. <i>Impact of quality assessments on funding</i>	19
4.3. <i>Private funding</i>	19
4.3.1. <i>Tuition fees and/or households</i>	19
4.3.2. <i>Grants/loans</i>	19
5. <i>Impact on Employability</i>	21
6. <i>Recent and planned reforms of the tertiary education system</i>	21
6.1. <i>Description of recent reforms</i>	22
6.2. <i>Planned reforms (or reference to ongoing policy debate)</i>	22

Brief characterization of the tertiary education system

1. Main features

Tertiary education in Denmark is offered at three levels: Short-cycle higher education (ISCED 5B), medium-cycle higher education (ISCED 5A) and long-cycle higher education (ISCED 5A). Approximately 45 % of an age group completes a tertiary education. The responsibility for tertiary education is divided between three ministries, namely the Danish Ministry of Education (short-cycle and medium-cycle), the Ministry of Science, Technology and Innovation (long-cycle) and the Danish Ministry of Culture (medium and long cycle education in the arts).

Three types of institutions offer tertiary education programmes in Denmark:

- **Business Academies of Professional Higher Education** offer 1.5-2.5 year professionally oriented, development-based academy profession programmes primarily in fields such as business, technology, and IT. The Academies can also offer professional bachelor programmes in partnership with University Colleges. Programmes combine theoretical studies, a minimum period of three months practical training through internships and a final project. As of January 2009 ten new academies of professional higher education (consisting of the existing business and technical colleges) have been established.
- **University colleges** offer 3-4 year development-based professional bachelor programmes in fields such as business, education, engineering and nursing. The Programmes combine theoretical studies, and a minimum period of six months practical training through internships and a bachelor project. As of January 2008, a merging of university colleges and centres of higher education took place which resulted in eight new regional university colleges, two engineering colleges and the School of Media and Journalism. The aim of the new Academies of Professional Higher Education and University Colleges new structures is to strengthen the development and cooperation of medium- and short-cycle higher education.
- **Universities** offer research-based, long-cycle higher education programmes. Universities offer three-year bachelor programmes (BSc/BA), two-year candidates programmes (MSc/MA) and three-year PhD-programmes. Following the University Act of 2003, all universities are organised as self-governing institutions funded by the state. In 2007, a merging of several institutions took place and thus reduced the overall number of universities to 8. The aim was to create new and stronger universities with better services as part of the Danish government's globalization strategy.

The main government funds to universities can be divided in three main components 1) basis funding for research 2) public research funds distributed via academic competition 3) taximeter-funds for education corresponding to number of exams passed.

The proportions of these three funding components are as follows:

Funding component	Proportion
Basis research funding	32 %
Public research funds distributed via academic competition	22 %
Taximeter-funds for education corresponding to number of exams passed	28 %
Other	18 %

It is important to point out, that these funds are *not* bound to the specific areas (e.g. Research funding is not bound to research activities). The universities can allocate the funds freely to any of the prescribed purposes of the universities e.g. education, research and dissemination of knowledge.

Qualitative explanation behind the main variables, in particular graduation rates, quality measures and scores for the main indicators relevant for efficiency, e.g. the scores for the Funding Rules Indicator, the Evaluation Indicator and the Staff Policy Indicator. Provide details if, for example, one dimension is particularly determinant for the score of an indicator, for example if the staff policy indicator mostly reflects the degree of autonomy of tertiary education institutions on hiring/dismissing staff, or on promoting and establishing incentives and salaries.

Note on academic staff: In Denmark PhD-students (ISCED 6-students) both do research and teach students, and are employed on similar terms as the other academic personnel, and are therefore often viewed as part of the academic staff. However, in the figures in this table the PhD-students are counted as students only, and not as staff, in order to avoid counting them twice. This lowers the figures for academic staff by approximately 50 percent.

Note on time spent by students: The figures for time spent to obtain a MA are a total time spent on BA+MA (nominal 3+2=5 years).

Note on funds from non-public sources: The data is share of non-public expenditure on educational institutions.

Note on tuition fees: Only non-EU/EEA citizens pay tuition in Denmark

Note on Total public expenditure on grants, loans etc: /

Note on peer and recruiter view country indicators: Not all of the Danish universities are included in THES – QS university rankings, and this potentially influences the indicator negatively.

1/ TEACHING	Denmark											
	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	
Academic staff per 1000 inhabitants relative to the average	2.17	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Number of students per 1000 inhabitants <u>Source: Danish Ministry of Education, Statistics Denmark</u>	34.3	35.6	36.8	37.6	37.7	37.7	37.7	37.9	38.2	38.3	N/A:	
Number of students (graduate and post-graduate) per 1000 inhabitants <u>Source: Danish Ministry of Education, Statistics Denmark</u>	30.0	31.1	32.0	32.9	33.5	34.0	34.0	34.1	34.5	34.6	N/A:	
<i>From public institutions</i>	30.0	31.1	32.0	32.9	33.5	34.0	34.0	34.1	34.5	34.6	N/A:	
<i>From private government-dependent institutions</i>	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
<i>From private independent institutions</i>	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Ratio of students per academic staff <u>(Data for the universities only)</u>	15.9	16.73	16.48	17.16	16.95	17.13	15.92	15.55	15.96	N/A	N/A	
Ratio of graduates per 1000 academic staff <u>(Data for the universities only)</u>	:	1,333	1,380	1,470	1,576	1,595	1,627	1,718	1,753	N/A	N/A	
Standardized recruiter view indicator (graduates' employability as perceived by recruiters)	:	:	:	:	:	:	:	1	:	:	:	
Standardized peer view country indicator (quality perceptions among peers)	:	:	:	:	:	:	:	1	:	:	:	
PISA scores	:	:	497	:	:	494	:	:	501	:	:	
Average total time (years) spent by students in order to obtain a BA degree <u>(This only includes universities – NOT university colleges)</u>	3.35	3.43	3.47	3.49	3.68	3.55	3.65	3.51	3.56	3.49	3.42	
Average total time spent (years) by students in order to obtain a MA degree	3.31	3.36	3.27	3.29	3.23	3.25	3.28	3.38	3.35	3.30	3.17	
Remuneration of a tenured university professor with 10 year seniority	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
2/ RESEARCH												
	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	
Publications per 1000 inhabitants <u>Source: NSI database – not ISI</u>	1.46	1.46	1.48	1.51	1.46	1.65	1.55	1.75	1.72	1.74	1.96	
	1998-2002	1999-2003	2000-2004	2001-2005	2002-2006	2003-2007						
Quality of research (position in the ISI citation index) <u>Source: NSI database – not ISI</u>	5.63	5.90	6.11	6.48	6.65	7.06						
% of research done in cooperation with industry <i>Denmark</i> <i>Private investment in research, pct. Of GDP</i> <u>Source: OECD, Main Science and Technology Indicators, 2008/2</u>	1.32	1.41	..	1.64	1.73	1.78	1.69	1.67	1.65	1.65	N/A	
<i>Denmark</i>	0.91	0.89	0.82	0.81	0.79	0.78	0.76	0.76	0.78	0.85	0.90	

Public investment in research, pct. Of GDP
Source: OECD, Main Science and Technology Indicators, 2008/2

3/ EXPLANATORY FACTORS FOUND RELEVANT FOR EFFICIENCY											
	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Main categories of composite indicator											
Funding Rules Indicator	:	:	:	:	:	:	:	:	:	5.3	:
Evaluation Indicator	:	:	:	:	:	:	:	:	:	4.6	:
Staff Policy Indicator	:	:	:	:	:	:	:	:	:	10	:
4/ EXPENDITURE											
	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Total public expenditure on tertiary education institutions as a percentage of GDP	1.53	1.56	1.56	1.81	1.89	1.75	1.81	1.70	1.66	N/A	N/A
Total expenditure per student (€)			11,15	12,58	13,17	11,76	12,82	12,42	12,82		
<u>Source: Eurostat</u>	N/A	9,324	8	3	1	5	2	2	1	N/A	N/A
Private expenditure on tertiary education institutions as a percentage of GDP	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.06	N/A	N/A
Total expenditure on education as a percentage of GDP	8.30	8.09	8.28	8.44	8.44	8.33	8.43	8.28	8.05	N/A	N/A
Private expenditure on education as a percentage of GDP	:	0.27	0.27	0.27	0.28	0.32	0.32	0.57	0.59	N/A	N/A
Funds from non-public sources as % of total income (fees, earned income, investment, other)											
<u>Source: OECD – Education at a Glance 2009, Table B3.3.</u>	:	:	2.39	2.11	3.31	3.29	3.29	3.55	2.39	N/A	N/A
Tuition fees as average of the cost of tuition	0	0	0	0	0	0	0	0	0	0	0
Percentage of funds received by private government-dependent institutions from public sources	0	0	0	0	0	0	0	0	0	0	0
Total public expenditure on grants, loans, and other programmes to cover education and/or maintenance of students (universal programmes / by categories such as merit or socio-economic status) as percentage of GDP											
<u>Source OECD – Education at a Glance</u>	:	:	:	:	:	:	0.76	0.73	0.67	:	:

Source: Eurostat, OECD, UOE and Member States.

2. Structure of institutions and funding arrangements

In Denmark, higher education is provided by universities, university colleges and Academies of Professional Higher Education. There are eight public universities in Denmark, all of which are primarily publicly funded.

The following pertains only to the university sector.

The proportion of public expenditure on educational institutions for tertiary education was 96.7 % in 2005¹.

Public expenditure on tertiary education as percentage of GDP amounted to 2.4 % in 2005².

The universities are charged with four activities: Research, education, dissemination of knowledge, and public-sector consultancy services. The universities provide research-based education in all three Bologna-cycles: Bachelor's, Master's, and PhD.-level.

3. Governance and regulatory framework

The Danish Act on Universities (the University Act) of 2003 defines the status of the universities as self-governing institutions within the public-sector.

The universities are charged with four activities: Research, education, dissemination of knowledge, and public-sector consultancy services. The universities provide research-based education in all three Bologna-cycles: Bachelor's, Master's, and PhD.-level.

The task of the university management is to *'safeguard the university's interests as an educational and research institution and determine guidelines for its organisation, long-term activities and development'*³.

Correspondingly, the Minister for Science, Technology and Innovation (Minister of Science) is charged with:

- Formulating the framework for the universities' activities
- Determining society's requirements for the universities' activities and the size of subsidies from the Danish state to support these activities
- Safeguarding the operational reality facing the university management and encouraging the management to make sensible decisions from a socio-economic perspective
- Supporting that the university's decisions – e.g. in respect of the legal rights of students – also otherwise live up to society's expectations.

¹ OECD (2008): 'Education at a Glance', table B3.2b.

² OECD (2008): 'Education at a Glance', table B4.1.

³ Draft bill no. L125 of 15 January, § 10.

The objective is a distribution of tasks and a division of responsibility according to which the university management is in charge of the university's activities (research, education, dissemination of knowledge, and public-sector consultancy services) and its development as an institution.

The universities are not part of the public-sector hierarchy and they are not subject to instructions from the Minister of Science. It should be noted that the universities are covered by the Danish Public Administration Act, the Danish Access to Public Administration Files Act, the Danish Ombudsman Act etc.

As prescribed in the University Act, the Boards are the highest authority of the universities. The Board safeguards the university's interest as an educational and research institution and determines the guidelines for its organisation, long-term activities, and development. It also employs and dismisses the Rector.

The Board comprises both internal and external members, but with an external majority. The Board elects a Chair from among its external members. New Board members are found and approved by the Board itself or, in the case of certain universities, through a procedure involving a wider section of the university.

Significant policy measures

As a wide variety of policy measures will be detailed in section II on 'explanatory factors for efficiency' below, only the following two recent policy measures will be mentioned here.

Evaluation of university mergers and selected policy areas

The new University Act of 2003 included a comprehensive reform of the university management structure and the definition of a new status as self governing institutions for the universities. In 2007 this was followed by the merging of 12 universities and 13 government research institutions into 8 universities and 4 government research institutions.

In 2009, the Minister of Science undertook a major independent evaluation, focusing on the following areas:

- Fulfillment of the purpose of university mergers:
 - More education
 - Greater international impact of research
 - More innovation and collaboration with industry
 - Attraction of more EU-funding
 - Continued competence in commissioned services to government
- Codetermination for employees and students
- The free academic debate
- Research freedom
- Degrees of freedom

The evaluation has been organized and undertaken by an independent panel of experts appointed by the Minister of Science. The evaluation will be finalized before the end of 2009.

Reform of the performance-based allocation of basic funding for research

In 2009, the distribution of basic funding for research (block grants) to the universities was partly reformed by the introduction of a new performance-based allocation model.

The basic funding for research has traditionally been allocated on the basis of historical factors, i.e. a price and salary compilation of previous years' funding granted to the individual university plus or minus a – typically small - correction in the individual year.

New basic funding for research available for allocation has typically been allocated according to a performance-based model taking into account the universities' education activities, their attraction of external research funds, and their number of PhD.-graduates.

This model has been reformed with the introduction of a new bibliometric research indicator, which is set to be gradually introduced in the period 2010-12.

Explanatory factors for efficiency

1. Staff Policy

1.1. Hiring/Firing

Generally, the universities themselves decide on the number of positions to be established, advertised and filled. However, the Ministry of Finance generally limits the number of administrative management positions (pay grade 37 or above).

The joint government rules on advertisements and appointment apply to both the academic and the administrative positions. The rules contain, among other things, requirements concerning the prohibition of discrimination, open advertisements and reasoned statements.

As concerns the *academic staff*, these rules are supplemented by the Danish Ministerial Order on the Appointment of Academic Staff at Universities (*Ansættelsesbekendtgørelsen*), which, among other things, stipulates that professorships and associate professorships must be advertised internationally and that assessment committees must be appointed. The objective of the Order is, among other things, to promote the mobility of researchers internationally and ensure an academic and objective assessment of applicants.

1.2. Wages

The Minister of Finance negotiates collective agreements on behalf of the public sector employers, including the universities.

For *employees* academic, technical and administrative staff the collective agreements fixes a base pay only, and the universities are thus free to offer both permanent pay supplements and one-off bonuses. There is thus no upper limit to the remuneration of employees.

For administrative *executives* and similar staff in high-ranking positions (pay grade 37 or above), the collective agreements fix the base pay. In addition, the agreements fix a limit to the permanent pay supplements permitted on average. Basically, there is thus no upper limit applying to the remuneration paid in respect of the individual executive position, but the executive salaries on average must not exceed a specific level. On the other hand, a one-off bonus can be granted without any limitations, and it is therefore possible to acknowledge special efforts.

The salaries paid to the employees are negotiated between the university and the employees trade union representatives. High-ranking academic staff, administrative and academic managers and similar high-ranking employees negotiate their own salaries with the university.

2. Output flexibility

2.1. Course content and exams

The universities, university colleges and academies of professional higher education have a high level of autonomy to set course content, design study programmes and subject contents, define educational methods, select methods of evaluation, and new pedagogical experiments. However, the content of some professional bachelors' programmes are to some degree set by law; teacher education and social education, and all academy profession programmes and professional bachelor programmes follow overall rules laid down by the Ministry of Education. All existing and new study programmes have to be accredited according to criteria regulated centrally regarding quality and relevance. Furthermore, research-based programmes developed by the universities are required to fit into the overall educational framework laid down by the Ministry of Science, Technology and Innovation (i.e. bachelor, master and PhD-level).

2.2. Offer of short studies and other diversifies studies

The Academy Profession degree (AP degree) is awarded after 1.5-2.5 years of study (90-150 ECTS points). Admission is possible on the basis of either general upper secondary education or relevant vocational education and training supplemented by adequate general upper secondary courses (e.g. maths, physics, English).

Furthermore, tertiary education institutions offer a range of well established programmes consisting of professionally oriented education and training for adults. These programmes include diploma programmes corresponding to the level of bachelor programmes and Master's

programmes corresponding to the level of candidatus programmes. Most of these programmes have a duration corresponding to one year of full time study.

2.3. Student choice

An academy profession programme consist of compulsory modules of at least 75 ECTS-points, including a minimum period of practical training of 15 ECTS-point, optional modules of maximum 30 ECTS-points and a final project of 10 or 15 ECTS-points.

A professional bachelor's programmes consist of compulsory modules of at least 120 ECTS-points, including a minimum period of practical training of at least 30 ECTS-points, optional modules of maximum 60 ECTS-point and a bachelor's project of 10, 15 or 20 ECTS-points.

At university level, all bachelor and Master's programmes consist of a number of modules in accordance to the 3+2 model. Each module consists of one or more courses that form a whole and provides the individual student with qualifications corresponding to a certain amount of ECTS. In addition to the various modules, all Bachelor and Master's programmes are required to contain at least one optional course (of minimum 10 ECTS). The timing and number of choices in each programme are laid down individually by the universities.

Part-time learners and learners with professional experience are mainly accepted into the adult education system. The admission requirements for the education programmes at the advanced levels within the adult education system are a relevant exam and at least two years of professional experience. However, institutions may accept applicants on the basis of other relevant qualifications.

Furthermore, the organisation of the content and teaching methods of the continued education programmes within the adult education system is also to a high degree based on the life and work experience of the adults.

The total tertiary enrolment in Denmark is not subject to a distinct registration between full-time and part-time students nor as distance-learners, and learners with professional experience, and therefore the data necessary to answer the question does not exist.

In the publicly funded tertiary enrolment all students are enrolled as full-time students, but can in practice complete their studies as part-time students, simply by not completing 30 ECTS per semester. However, students are only eligible to receive grants for 6 years, the equivalent of a bachelor and a master programme plus one year. In 2007 the total number of students was 208,373.

In addition to the above-mentioned possibility of finishing your education on a part time basis, there is a separate system of tertiary part time education programmes, which are not subsidized by the state and therefore require tuition from the students. Enrolment on these part-time programmes requires some sort of tertiary education grade and at least two years of

work experience. These programmes are intended for people (and employers) who wishes to complement or build on top of their (employee's) already achieved education.

The total number of students enrolled in these non-subsidized tertiary education programmes amounted to 73,752 persons in 2007. Translated into fulltime students this corresponds to 5,266 students.

Access to academy profession degrees and professional bachelor's degrees by exemption from formal admission criteria is possible if the individual institution assesses that an applicant has sufficient qualifications – other than those specified – to complete the programme.

Furthermore, legislation on increased recognition of prior learning (including non-formal and informal learning) in adult education and continuing training entered into force in 2007. Within higher education, recognition of prior learning encompasses two degree in the continuing education system: Academy Profession Degrees (short cycle) and Diploma Degrees (first cycle). Recognition of prior learning is possible in relation to entry requirements, parts of a degree or a full degree. Individual assessments of prior learning are carried out by the institutions and are subject to quality assurance including the right of appeal.

Regarding Master's programmes, it is up to the individual university to decide on which bachelor degrees and/or what courses and qualifications each student is required to have in order to gain access to the individual programme. Hence there is no general information on the level of access across different fields of specialisation.

Regarding informal training activity, both bachelor and Master's programmes can include project-oriented courses including courses taking place outside the university in or outside Denmark. Whether and to what extend students pursue this opportunity of sometimes more informal training activities depends on the individual line of study and university.

2.4. Numerus clausus

In many cases, admission depends on the fulfilment of specific requirements. These may either be a specific subject combination or requirements concerning the level of the subjects taken, the grades obtained, work experience etc. Admission to programmes in certain fields such as art and music requires an entrance examination based on talent.

The two ministers responsible for higher education (the Minister of Science, Tehcnology and Innovation, and the Minister of Education) may fix a maximum number of student admissions within certain fields of study. At the universities, the numbers of new students are regulated on six programmes by the Ministry of Science, Technology and Innovation:

- Medicine
- Odontology
- Veterinary medicine
- Bachelor in Public Health
- Human Biology
- Chiropractic

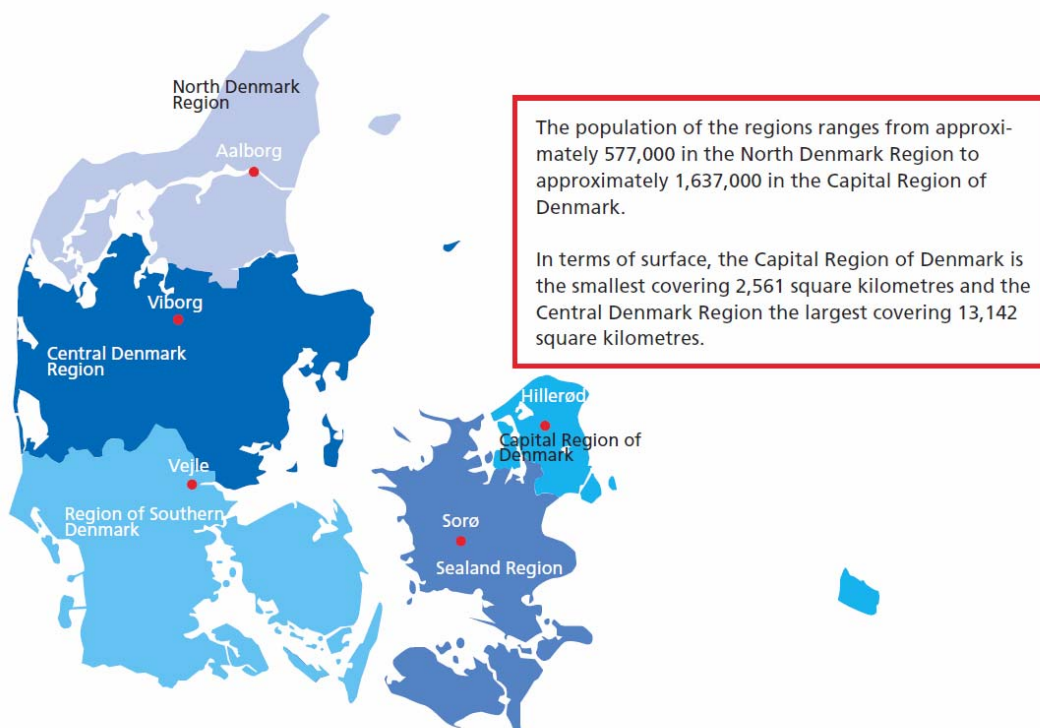
Apart from that, the universities are responsible for setting the optimal admission level under restriction of the number of researchers (to teach) and the available teaching facilities (rooms, laboratories etc.) and the employability of the graduates.

Students apply for admission through a Coordinated Enrolment System (KOT). Each institution selects students according to the general admission regulations. The available places are divided into two quota systems. Places in the first quota are distributed to applicants with Danish and equivalent upper secondary school leaving certificates on the basis of their grade average. Places in the second quota (10% of all places on the universities) are given to applicants on the basis of individual assessment by the institution.

Each institution selects students according to the general admission regulations. The available places are divided into two quota systems. Places in the first quota are distributed to applicants with Danish and equivalent upper secondary school leaving certificates on the basis of their grade point average. Places in the second quota (10% of all places on the universities) are given to applicants on the basis of individual assessment by the institution.

2.5. Regional/ European/ global mobility

Denmark has five main regions; Capital (Copenhagen), Sealand, Southern Denmark, Central Denmark and Northern Denmark. Copenhagen and Sealand lie in the eastern part of Denmark, while Southern Denmark, Central Denmark and Northern Denmark lie in the western part. The east and the west are separated by water as the map shows.



For more information about Danish regions;

<http://www.regioner.dk/DanskeRegionerWeb/OmDanskeRegioner/In%20English.aspx>

The following tables show tertiary student enrolment in the five regions 2005-2008. The rows show in which region the student enrolled and the columns show the region where the person graduated upper secondary education. In this way the tables show where in the country students move to study, e.g. how many that are enrolled outside their region of upper secondary graduation. Only Danish citizen are included, and a person only counts the first time he/she is enrolled. As the tables show, 84 percent of the graduates from Copenhagen also enrol in Copenhagen. Central Denmark also has a lower mobility (72% stays) while only 50 percent of the graduates from Southern Denmark enrol in the same region. The remaining part from Southern Denmark primarily moves to Central Denmark or the Capital region to study.

These trends are almost static in the period 2005-2008, as the tables show.

2008	Region of upper secondary graduation				
Region of tertiary enrolment	Capital (Copenhagen)	Central Denmark	Northern Denmark	Sealand	Southern Denmark
Capital (Copenhagen)	84%	12%	10%	62%	18%
Central Denmark	3%	72%	28%	3%	26%
Northern Denmark	1%	8%	58%	1%	3%
Sealand	9%	2%	2%	28%	3%
Southern Denmark	3%	6%	3%	6%	50%
Total	100%	100%	100%	100%	100%

Source: Danish University and Property Agency

2007	Region of upper secondary graduation
------	--------------------------------------

Region of tertiary enrolment	Capital (Copenhagen)	Central Denmark	Northern Denmark	Sealand	Southern Denmark
Copenhagen	84%	12%	10%	61%	20%
Central Jutland	3%	71%	28%	4%	25%
Northern Jutland	1%	10%	58%	1%	4%
Sealand	8%	2%	1%	27%	2%
Southern Denmark	3%	6%	3%	7%	50%
Total	100%	100%	100%	100%	100%

Source: Danish University and Property Agency

		Region of upper secondary graduation				
2006						
Region of tertiary enrolment	Capital (Copenhagen)	Central Denmark	Northern Denmark	Sealand	Southern Denmark	
Copenhagen	84%	12%	11%	60%	20%	
Central Jutland	3%	70%	29%	3%	23%	
Northern Jutland	1%	10%	56%	1%	4%	
Sealand	9%	2%	1%	29%	3%	
Southern Denmark	3%	6%	3%	7%	51%	
Total	100%	100%	100%	100%	100%	

Source: Danish University and Property Agency

		Region of upper secondary graduation				
2005						
Region of tertiary enrolment	Capital (Copenhagen)	Central Denmark	Northern Denmark	Sealand	Southern Denmark	
Copenhagen	85%	13%	12%	57%	18%	
Central Jutland	2%	70%	27%	3%	22%	
Northern Jutland	1%	9%	57%	1%	3%	
Sealand	9%	2%	2%	32%	2%	
Southern Denmark	3%	6%	3%	7%	55%	
Total	100%	100%	100%	100%	100%	

Source: Danish University and Property Agency

It is up to the individual university to decide on the courses and qualifications required for each student to be admitted into the bachelor or master's programmes.

In 2007 the international students amounted to 5.5 percent of the total tertiary enrolment in Denmark.

In Denmark, international students are defined on the basis of country of residence and not on the basis of where they have obtained their upper secondary education.

(Source: Education at a glance 2009, table C2.1)

In general the Danish higher education institutions are very open to students from other countries and especially from other Member states. Most institutions are highly international and offer many programmes in English – both full degree programmes and shorter programmes.

All universities have a large number of international students (both exchange and full degree students) and the majority of the international students are from other Member states. This is also the case at several university colleges and academies of professional higher education.

In 2007/08 there were 7,202 exchange students and 8,063 international full degree students in Denmark.

Higher education is provided free of charge for all EU/EEA citizens.

According to Danish legislation all individuals with foreign educational qualifications are entitled to apply for an assessment of their qualifications to CIRIUS, the Danish ENIC-NARIC office, (please refer to Assessment of Foreign Qualifications Act, cf. Consolidation Act No.74 of 24 January 2003, with the amendments following from Act No. 315 of 30 March 2007). In 2008 the average duration of a formal assessment was 27 days. There is no fee for applicants applying for recognition of foreign qualifications. The Danish recognition office is an agency within the Ministry of Science, Technology and Innovation and is thus financed through the state budget.

Among all the newly appointed researchers at the Danish universities in 2004-2006, the researchers with foreign citizenship who came from positions abroad, constituted approximately 9 %. In the category of professors, the share was 8 %, among associate professors 9 %, .and 11% among assistant professors

The internationalisation of the scientific staff was largest within the natural sciences and engineering and technology, where 14-15 % of the new appointees were foreign citizens coming from positions abroad. Researchers with foreign citizenship, from abroad positions, constituted merely 5-6 % of the new appointees within the humanities, the social sciences and agricultural and veterinary science. In natural sciences nearly every fourth newly appointed assistant professor (23 %) had a foreign citizenship and came from an employment in another country.

Appointment of professors, associate professors and assistant professors at the universities in Denmark (2004-2006). Number and percentage of appointees recruited from abroad.

Professors		Associate Professors		Assistant Professors		Total	
Numbers	%	Numbers	%	Numbers	%	Numbers	%
28	7.5	72	9.3	69	10.6	169	94

Source: Berthel Ståhle, UNI-C Statistics and Analysis.

The possibilities of exchange with institutions in other regions are very good and a large number of exchange students come to Danish institutions of higher education each year. The majority of these students are from other Member states.

All institutions of higher education in Denmark use the European Credit Transfer and Accumulation System (ECTS).

3. Evaluation

3.1. Institutional evaluation

According to the “law of transparency and openness” the Danish universities are obliged to publish information relevant to the student’s choice of education e.g. figures on completion rates, employment, drop out rates etc. as well as information regarding teaching quality, grades and the core values of the university.

4. Funding rules

4.1. Public funding

As a main principle, the financing basis of the Danish universities is based on two sources: State funding earmarked for the universities in the annual Danish Appropriations Act (Finansloven) under Section 19(2) – the so-called basic funding

Other income from research councils, the EU, private investors etc.

University basic funding is allocated to the main objectives – education, research and other purposes.

In the last 20 years, university education funding has been based on output control, while this principle has only partly been introduced for the allocation of research funding during the past ten years. The main tendency is for university basic funding to research to be increasingly subject to incentive administration focusing on university output. Below, the development in the financial tools since 2003 will be reviewed.

Funding for education

The calculation of the university education funding is based on the taximeter scheme. In the scheme, the education financing is based on output control in the form of funding allocated on the basis of the students’ academic activity measured in terms of exams passed. There are three different rates of taximeter depending on the experimental character of the programme.

Completion bonus

The political objectives for increased study completion were reflected in the taximeter scheme when, in 2004, a new taximeter type was established in the form of a completion bonus for the universities which was triggered when the students completed a Bachelor programme.

In 2006, the focus on study completion was intensified. The agreement held an education political objective of getting students to complete their study programmes *faster* and using the taximeter scheme actively to this end. The objective of getting the students to complete their programmes faster was to lower the age of the student at completion and increase the number of highly-qualified people in the Danish workforce.

In 2009, a new completion bonus was introduced which, unlike previous schemes, is conditional upon the duration of the study so that the universities are only paid the completion bonus upon the student completing his/her study programme within a specified period. Effective from 2009, the universities receive a:

Bachelor bonus when students complete a Bachelor programme within the prescribed study period plus one year. Master's bonus when students complete a Master's programme within the prescribed study period. The accepted bachelor-timeframe is +1 year to allow for change of study at bachelors level.

The current facts show that that 16% of the students complete their Master's programme within the prescribed study period and the corresponding figure for bachelors is 35%.

The intention is not for the new bonus schemes to replace the ordinary taximeter scheme which will continue in its current form. The new completion bonus is only intended as a supplement to the taximeter scheme with a view to adding a financial weight to a significant objective. As the ordinary taximeter scheme, the new completion bonus is based on three rate levels. It is expected that approx. 10-12% of the university education funding in future will be allocated on the basis of the new completion bonus.

Funding for research

As a main principle, the funding for research is historically conditioned and fixed according to 'incremental budgeting'. However, each year 2% of the funding is allocated to a restructuring fund which is redistributed to the universities according to the so-called 50-40-10 model. The model is structured in the following way:

- 50% of a given research fund is distributed according to the universities' education funding
- 40% of a given research fund is distributed in accordance with the universities' external research funding, i.e. research funding which the universities' have obtained in the research councils, from the EU etc.

- 10% of a given fund is distributed in accordance with the number of students having completed their PhD thesis.

The increased research funding, as a result of the globalisation agreement, has to a certain extent been distributed in accordance with political prioritisation of funding for Ph.D. studies, in particular within natural science, health science and technical science. All basic research funds earmarked under the globalisation agreements in 2006 and 2008 have been distributed on the basis of the 50-40-10 model.

Funding for other purposes

Funding for other purposes comprises financing of many different functions which currently are not subject to incentive administration and output control. Specifically, funding for other purposes primarily relates to university libraries, museums, collections and gardens – functions that are somewhat associated with the dissemination of knowledge. The funding is historically conditioned and is granted following a specific evaluation.

4.2. Impact of quality assessments on funding

The output control in the education area means that the universities are rewarded for attracting and helping students complete their study programme. The system also means that the individual providers (the universities) compete with other universities for the best qualified students.

As mentioned earlier a reform of the performance-based allocation of basic funding for research is being implemented from 2009. The purpose of the reform is to award the universities e.g. for highly estimated publications etc.

4.3. Private funding

4.3.1. Tuition fees and/or households

Tuition at Danish public and most private educational institutions is free for Danish students and for all EU/EEA students as well as for students participating in an exchange programmes

4.3.2. Grants/loans

Every Dane over the age of 18 is entitled to public support for his or her further education - regardless of social standing. Tuition at Danish public and most private educational institutions is free for Danish students and for all EU/EEA students as well as for students participating in an exchange programmes. From 2006 all other students have to pay a tuition fee. Society lends students a helping hand in covering living costs for a great variety of courses and studies. Support for students' living costs is awarded by the State Educational

Grant and Loan Scheme (Danish acronym: SU), a system managed by the Danish Educational Support Agency (Styrelsen for Statens Uddannelsesstøtte) in collaboration with the educational institutions and under the auspices of the Danish Ministry of Education.

There are two main support programmes:

1. For people over 18 following a youth education program: For people over 18 following a youth education program i.e. a general upper secondary, vocational upper secondary or vocational education and training program. Students must attend classes, sit examinations and in other ways demonstrate that they are active in their educational programmes. No time limits are placed on this type of support. Students are eligible for support for any number of courses, with the exception of certain upper secondary programmes. Until students are 20, their grants depend upon their parents' income. When that exceeds a certain amount the grants are reduced on a sliding scale, ending in a minimum grant.

2. For students over 18 enrolled in higher education courses: For students over 18 enrolled in higher education courses. Every student enrolled in a higher education course is entitled to a number of monthly grants corresponding to the prescribed duration of the chosen study, plus 12 months. Inside a maximum of 70 grants students can change from one course to another. If you are taking a higher education programme and have used up all your study grant portions, you can get a completion loan. You can receive a completion loan in the last year of your studies.

More than 300,000 Danes benefit from these two types of educational support every year. The annual budget amounts to over 11 billion Danish Kroner, around 0.8 per cent of Gross National Product. The average after-tax annual income of students receiving support and earning an average private income corresponds to roughly ten hours paid work a week. The maximum amounts awarded in 2009 are as follows:

Students living with their parents: DKK 2,574 per month.

Students living on their own: DKK 5,177 per month.

In combination with both types (1 and 2) of grants, students are offered supplementary state loans (grants 2/3, loans 1/3 of total support). The interest rate for these loans is set by Parliament.

As a rule, foreign students enrolled in Danish courses of study are not eligible for educational support. Exceptions are made on the basis of specific conditions for refugees and relatives of refugees and for other foreign citizens provided - among other stipulations - that they have been living and working in Denmark long enough. As far as EU rules and regulations make it possible, EU citizens can gain support from the Danish system.

Until students are 20, their grants depend upon their parents' income. When that exceeds a certain amount the grants are reduced on a sliding scale, ending in a minimum grant. This however only involves general upper secondary, vocational upper secondary or vocational education and training programs (the type 1 program).

In particular situations - mainly sickness and childbirth - students can apply for extra monthly grants. New mothers are eligible for 12 and new fathers for 6 extra monthly grants, with certain stipulations.

5. Impact on Employability

The table below shows the employment rate of people with either a secondary or a tertiary education as their highest completed education

	2002	2003	2004	2005	2006	2007	2008
Primary School	62%	60%	58%	58%	59%	61%	61%
Secondary education	77%	75%	74%	75%	77%	79%	80%
Academy profession programmes (short-cycled)	87%	85%	85%	85%	86%	88%	88%
Professional bachelor programmes (medium-cycled)	90%	88%	87%	87%	88%	88%	89%
University MSc/MA (long-cycled)	90%	88%	87%	88%	89%	90%	91%

Source: Statistics Denmark, UNI-C Danish Ministry of Education

In Denmark there are several links of tertiary education institutions with the labour market, including:

- External representatives in the boards of the universities, including representatives from the business world
- Both obligatory and optional credit(ECTS)-giving traineeships (depending on education and/or level of education)
- Possibility of writing thesis in cooperation with external parties
- Career-centres on the universities, that facilitates contact between students and employers

There are arrangements in place to facilitate transition from education to the labour market, both on the universities before graduation and/or via the unemployment insurance funds, after graduation. However, the relative high unemployment rate for new graduates from universities (relative to the general unemployment rate of university graduates in Denmark that is – the rate is not high relative to international rates) has let the Danish Government to invest 10 million Danish kroner in a range of new initiatives on the universities to aid their new graduates in the transition from education to job. These new initiatives are developed and implemented by the universities and their employment effect will be measured, the results of which will be available around January 2011.

6. Recent and planned reforms of the tertiary education system

6.1. Description of recent reforms

In April 2006, the Danish Government launched a new "Strategy for Denmark in the Global Economy". The strategy contains 350 specific initiatives directed towards improving education, research and entrepreneurship and the overall conditions for growth and innovation in the society. The main objectives on the educational front are that 95% of all young people should complete a general or vocational upper secondary education program, that at least 50 % of all young people should complete a higher education program and that education and training programmes should be top quality at all levels. In the Finance Act of 2009, DKK 1,722 million has been allocated to ensure that 50% of a year group is to complete an education at tertiary level (this amount is also intended to ensure that 95% completes a post-compulsory upper secondary education). The current government has a policy aim of allocating 1% of GDP to research and innovation. In 2009, research funds will comprise 0.94%; and in 2010 it is budgeted that the target of 1% will be met.

Since 2008 the following initiatives have, among others, been implemented:

- Tertiary admission requirements have been tightened and further standardised. The purpose of the adjustment is to enhance a higher academic entry point and hereby reduce dropout rates.
- From 2009 and onwards, the enrolment system has been adjusted in order to promote students to enrol at a younger age.
- A new direct-mail campaign has been launched; 43.000 personal letters were sent to residents in Denmark with a Danish upper secondary exam, who have not yet completed or enrolled in tertiary education.
- Careers guidance has been strengthened and universities are now committed to follow up on students who are more than six months delayed, e.g. by a conversation.
- DKK 329 million have been directed to the University Colleges and DKK 16 million to the Academies of Professional Higher Education in order to set measures and activities to reduce drop-out rates and hereby increase completion rates.
- A reform of the Academy Profession programmes has been carried out in order to increase the flexibility and professional orientation of the programmes, for instance by introducing compulsory periods of practical training in all programmes.
- In 2009 a new bonus model was introduced. The model implies that universities will receive a bonus for bachelors completing within the specified time *plus* one additional year, and a bonus for candidates completing within the specified time.

6.2. Planned reforms (or reference to ongoing policy debate)

Among the key topics are:

- 95% of all young people should complete a post-compulsory upper secondary education
- 50 % of all young people should complete a higher education program

- The basic funds of universities should be distributed according to results
- At least 50 pct. of the public research funds should be subject to open competition
- Government research institutions should be integrated in universities
- All higher education programmes should be evaluated according to international standards. A new independent accreditation body is established for that purpose
- Systematic dialogue with employers
- The number of PhD scholarships should be doubled in 2010 compared to 2004
- Special Master's programmes for outstanding students
- There should be a global perspective in all higher educations

Legislative initiatives have already been taken on several on the above initiatives.