

Organisational features of higher education; Denmark, Finland, Norway & Sweden

Sakari Ahola, Tina Hedmo, Jens-Peter Thomsen & Agnete Vabø

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Preface

In 2011, the research network Nordic Fields of Higher Education was established with financial support from NordForsk. The network is headed by Professor Mikael Börjesson, Sociology of Education, Uppsala University, and consists of research groups from various higher education institutions and research institutes in Denmark, Finland, Norway and Sweden. In 2012, some members of the network, representing Uppsala University, the University of Copenhagen, the University of Turku, the Centre for the Study of Professions at Oslo & Akershus University College and the Nordic Institute for Studies in Education, Research and Innovation (NIFU), were successful in a grant application to the NordForsk research programme Education for Tomorrow to conduct a research project on the topic of network. We are taking the opportunity to disseminate some preliminary results of this research project in a working paper distributed in connection with the closing conference of the network in Oslo, October 8-9, 2014.

This working paper on the organisational features of higher education in the Nordic countries from 1970 to 2010, is part of a more comprehensive study of the Nordic model of higher education that will be completed next year.

We wish to thank Chris Allinson (Brighton) for copy-editing this paper and Tove Hansen (NIFU) for technical assistance.

Oslo, October 2014

Sveinung Skule
Director

Nicoline Frølich
Head of Research

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Summary and preliminary conclusions

An overarching motive for the analysis presented in this working paper is to obtain a more systematic, empirically and comparatively based understanding of the Nordic model of higher education. A key objective is to gain a better understanding of the distinctive features of national systems that help explain recruitment patterns of students in their transition from secondary to higher education. The study has focused on the period from 1970 to 2010.

Similar to most countries in the western world during the 1960s and 1970s, higher education in the Nordic region was characterised by rapid expansion in numbers of students and the establishment of many new institutions. All Nordic countries supported the ideas of human capital; that investment into education would be beneficial for society as a whole, harmonised with the idea of higher education as a tool for the development and realisation of the goals of the welfare state. In all countries emphasis on the spread of higher education resources, geographically and socially, was important in the formative phase of the expansion.

All the same, alongside such **common characteristics** quite **different national models** of higher education have developed over time. Denmark and Finland are characterised by a typical binary system where shorter vocational and professional study programmes are offered in the college sector, and longer academic studies in the university sector: the two sectors function as two separate qualification pillars. Although the Norwegian and Swedish systems have some of these characteristics in common, such as a main emphasis on shorter professional programmes in the university college sector, they function as an integrated system for qualifications, where students can combine and move between studies in all types of institutions.

In the course of the **Bologna process**, all Nordic countries have adjusted to the 3+2+3 year degree structure, as well as the same credit points/grading system. This highlights the importance of the Bologna process for understanding system convergence at a national level pushed by the international standardisation of higher education. Due to different traditions and system features, however, in practice we find that the now seemingly identical degree structures entail differing admission criteria and study tracks.

Before the implementation of the Bologna process the national systems represented different solutions to meet the need for diversifying a mass system of higher education. This however set different starting points for complying with the international standards introduced through the goals of the Bologna process in the Nordic countries. In Norway for example, the education authorities were more active in terms of standardising the degree structure than in Sweden, because it coincided with the goal to shorten the duration of study that they had been following. In Sweden, in 1977 the relationship between the need for mass and elite education was solved by introducing a distinction between lower

(vocational) and higher research-oriented degree programmes. Amongst other things, this meant tailored study programmes in line with the anticipated needs of the national labour market. Against that backdrop, in Sweden there was not the same urge to reorganise the study degree system in line with the Bologna agreement.

In the last decade in particular, the higher education system in all Nordic countries has been affected by **processes of globalisation and internationalisation**. In general there is a great concern for the need to take part in the global development and exchange of knowledge required to cope with the current and future needs of the economy. The number of incoming and outgoing students has increased and study programmes taught in English have been developed. Empirical data from Finland and Norway indicate that the level of international activities, such as mobility and instruction in English, corresponds with established patterns of diversification in the Nordic higher education system: we find the highest levels of international activities in the university sector and at graduate levels.

In Nordic higher education, within the period of development of a mass system, tuition fees have hardly displaced free access to higher education. However, Denmark and Sweden have introduced fees for students from outside the EU region, and hence the recruitment pattern of international students has changed, both geographically as well as in numbers.

As regards **governance** we find that measures have been undertaken to strengthen institutional autonomy within all national systems. The steering regime gradually introduced in the last two decades has been characterised by delegation of state authority to the institutions, by the use of performance-based funding and emphasis on soft and lateral forms of steering, such as quality and stakeholder-oriented external evaluations of research and education. Democratic collegial modes of steering have largely been replaced with managerial forms of steering. Denmark and Finland have introduced the most “extreme” versions of autonomy reforms, as higher education institutions are now being organised as independent foundations. All these developments emphasise accountability for researchers and institutions, make funding more performance-oriented in the attempt to establish elite institutions. The creation of new competitive structures for the (best) allocation of assessment, ranking and funding – such as the introduction of tuition fees, Centers of excellence; PhD schools; the transformation of faculties and basic units into “schools”; the mergers of university departments - are symptomatic of the transformation of the Nordic model of higher education as part of the process of transition from the welfare state to the welfare society. In this transition the state no longer solely takes the role as a protector, while to a greater extent expecting the higher education institutions to operate as entrepreneurs in a global market.

Given that the state still is a main funder, institutions remain subject to a relatively detailed level of steering, not at least through lateral agencies like the bodies for quality assurance. It is ambiguous to what extent so-called autonomy reforms actually have resulted in increased room for strategic maneuver at the institutional level.

A higher degree of institutional autonomy nevertheless implies that the institutions in principle have more influence on their strategies for designing **study programmes and student recruitment**. As also concluded by Fägerlind et al. (2004), diversity, flexibility, and new technology to maximize accessibility are important features of the lifelong learning policies for higher education in all Nordic countries: this remains the case in distance education as amongst other things in recent developments. Nevertheless as indicated above, more than ever before the Nordic approach with regard to accessibility is ambiguous, and we also find examples where stricter criteria for selection have been introduced as a strategy for enhancing quality and status. Further elite tracks are under development, such as the organisation and selection of pupils and students for elite schools or for research tracks in secondary school. As concluded in the Swedish case (Hedmo) a general conclusion might be that the Nordic higher education system has moved towards being “more pluralistic and fragmented, with inherent dynamics and mechanisms promoting homogenisation/divergence, cooperation/competition and inclusion/exclusion” and furthermore, “the systems now include a

remarkable number of institutions of different size, profile and traditions, competing for excellence, visibility and not at least resources”.

As revealed in this analysis the history and traditions of **national systems vary considerably**, and continue to shape contemporary higher education systems, structures and policies. Structures and organisations differ in terms of features such as the degree system, positional hierarchy and typical institutional forms. Policy features such as modes of steering, modes of governance, management models and access policy also vary. The role higher education is expected to play in society also varies between countries, with higher education systems organised differently, such as the organisation of vocational and academic tracks and the links between them. The countries differ in how far established the relationships with wider national structures of social stratification are, the professions and the world of work, or economic and innovation systems. So, given the significant differences between higher education systems and social structures (e.g. class structure) in the Nordic countries, it is somewhat problematic to treat them as similar systems.

We might conclude that the Nordic model of higher education has to be understood as an ideal type: in practice we find various national models reflecting a different set of policies and rules in every country; each of the Nordic countries has its own economic and social models. The outcome of seemingly homogenous processes of change depends on the national and institutional context, and the question of convergence or divergence depends on what level we study. In our further investigation we attempt to distinguish between a) how and why the Nordic HE model changes, and b) if the respective national systems are becoming more homogeneous or diverse as a result of globalisation and international standardisation processes and c) which effects the recent changes of the government structures bring about.

1 Introduction

Agnete Vabø

The Nordic model is strongly influenced by egalitarian traditions, particularly in terms of the accessibility of HE and progressive recruitment patterns, amongst both students and academics.

In the postwar period, egalitarian ideas of higher education as a public good have had a major impact on the policies of the Nordic governments (Välilmaa 2005). In contrast to liberal (USA, Canada, Australia) or corporative welfare state models (France, Germany), the social democratic welfare state model of the Scandinavian countries to a larger extent builds upon the universal welfare rights of the citizen independent of economic status and labour (Korsnes, Andersen & Brandte 1997). HE institutions were assigned an important role effectuating central policy goals of the welfare state. The egalitarian values mainly concerned education. The research system was characterised to a larger degree by elitist values regulating the principles of scientific quality. The rapid expansion and development of a mass system of higher education in the Nordic countries in the 1960s and 1970s were characterised by (relatively) progressive patterns of social recruitment. Furthermore, the egalitarian aspect of the HE system could be illustrated by relatively similar financial and legal conditions provided to the institutions by the state. As a social system, higher education will always be characterised by informal hierarchies, given the differences in social and academic capital or status between various fields of science and educational segments (Bourdieu 1988). Nevertheless, a formalised institutional hierarchy dividing elite and mass institutions in higher education has been lacking in the Nordic countries.

Since the 1980s, a growing concern that higher education has been pressed into a key economic role in the global competition of the knowledge society, has led to major reforms of the Nordic HE systems. The changes taking place in Nordic higher education today: market oriented modes of governance; performance based funding; more variety of funding sources; and public-private partnerships within research and researcher training, are related to the same global processes. These processes are characterised by a gradual de-coupling of the state as guarantor of academic quality, autonomisation of governing bodies, dependence upon production, more power to external stakeholders and administrators as planners and organisers of the academic community (Ferlie, Musselin & Andreasani 2007).

An overarching motive for the analysis presented here is to obtain more systematic, empirically and comparatively based understanding of the Nordic model of higher education. Although it is reasonable to assume certain common Nordic patterns, the history and traditions of national systems vary considerably, and continue to shape contemporary higher education structures and policies. This can be seen in the course of the Bologna process and other attempts at international standardisation of

higher education. Structures and organisational forms vary in features such as their typical institutional form and the degree system. A key objective is to gain a better understanding of the distinctive features of national systems that help explain recruitment patterns. Thus bearing in mind that the primary aim of the project is to produce new knowledge about the structures of the Nordic fields of higher education and their transformation, through studies of Sweden, Denmark, Norway and Finland, with regard to: 1) Organisation: the state of the Nordic model of higher education in light of rapid transformations of the global higher education landscape; 2) Recruitment: a comparison of recruitment patterns in the fields of higher education; and, 3) The relationship between recruitment patterns and the organisation of higher education.

These aims are broken down into the following research questions: 1) How have the systems of higher education in Denmark, Finland, Norway and Sweden been structured and organised over the last three decades? How has the whole landscape of higher education institutions been organised over time in the four countries? What role and weight are given to private actors? How is the traditional divide between universities and colleges accommodated? How have the different subjects and disciplines developed in each country? How has the Bologna process been implemented?

Our analysis is partly based on a synthesis of existing research, research literature of general relevance, reports, public and other documents, web sites, statistics and budgets.

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2 Denmark

Jens-Peter Thomsen

2.1 The Danish Higher education system and national policies for expansion

The history of the Danish post WW2 higher education system is one of educational expansion and massification, of shifting policies aimed towards equality of opportunity on the one side and towards efficiency and qualifications on the other. Not least, it is also a story of increasing external influence, governmental steering and regulation. As is the case in the other Nordic countries, Denmark has witnessed a massive increase in the number of students enrolled in higher education since the Second World War. A greater and greater share of a youth cohort attends a higher education programme. The massive rise in admitted students is striking, more than a tenfold increase in the last 60 years. The increase in student numbers was especially apparent in the 1960s. The massive economic growth from the end of the '50s to the start of the '70s, gave way to a vast increase in intake to higher education, and in this period many first-generation students gained access to higher education. The service sector grew rapidly leading to a shortage of highly qualified labour. As a consequence politicians took an increasing interest in higher education because the shortage of labour was seen as inhibiting economic growth (Mathiesen 1974). At the same time, free access to HE led to an explosion in the number of students - from 14,000 in 1957 to 71,000 in 1972 (Source: Statistics Denmark, ten-year reports). It is with this background that higher education moved to the centre of educational policy in the 1960s (Mathiesen 1974). Economic growth also allowed for the conjunction of the two dominant educational policy goals in the 1960s: qualification of the workforce and equality of opportunity (Christensen 1982, p. 50ff). At the same time human capital theory enters the scene and education is increasingly seen as a source of growth in itself. In short, in the 1960s higher education was seen as an investment benefiting society as well as the individual student. The Social Democratic Party, almost exclusively holding office from the mid-1950s to the early 1980s, concomitantly lists two ambitions in its party programme from 1961: economic investment and equality of access. Free access to higher education was believed to cater for both goals (Christensen 1982).

With the economic recession in the 1970s, general *numerus clausus* policies were introduced, trying to regulate the intake according to the needs of the labour market. A limit on the higher education intake was introduced, leading to a much slower growth or even drop in number of admitted students seen in relation to a youth cohort. The 1970s marks the beginning of increasing government steering and policy interventions, coming in the shape of New Public Management from the 1980s onwards. As is the case with the introduction of the NPM principles elsewhere in government administration, the official aim has been to infuse HEI with some of the competitiveness, efficiency and dynamics that is

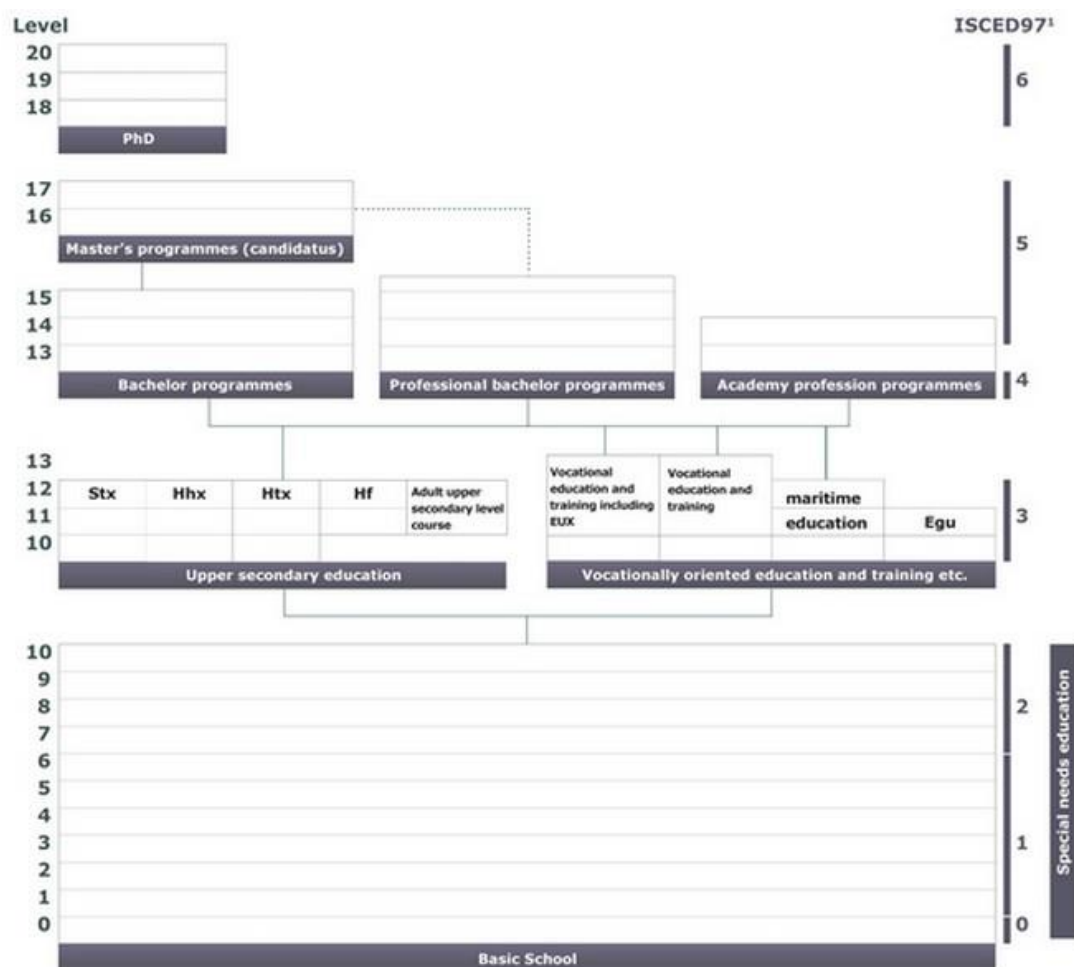
often ascribed to market principles. Key words have been governance, leadership, contract steering, efficiency, and quality, most significantly witnessed in the university reforms of 2003. Wright identifies four discourses, with new views on: "Universities as corporations, managers as strategic leaders, academics as professionals, students as consumers." (Wright 2005, p. 200). The Bologna and Lisbon processes aimed at harmonising European education and strengthening higher education as a driver of economic growth in Europe, has further aided in the transition towards a higher education system that is more internationalised, market-driven, and oriented towards the wider contribution to society, and to external stakeholders.

Through the 1990s, HEI kept on expanding and institutions have accepted more and more students. This development seems to continue, as the ministry of education expects that no less than 62 per cent of all 15 year olds in 2012 will eventually complete a higher education degree programme. This development has recently led the minister of education, for the first time ever, to question the need for an increasingly higher educated work force in the future (Politiken, March 20th, 2014). It has also fuelled ongoing discussions about the relatively old graduation age, and the increasing costs of the universal government grant system (as more and more students enrol in higher education).

2.2 The institutional landscape of Danish Higher Education

Figure 1 depicts the Danish Education system. the figure shows, the Danish higher education system consists of three tiers: business academies (short cycle programmes, qualifying primarily for jobs in the private sector; usually 2-3 years), university colleges (medium cycle programmes primarily educating welfare state professionals such as teachers, nurses, child care or social workers; usually 3 to 4 years) and university institutions (long cycle programmes, consisting of a bachelor's and master's degree, with a range of traditional and professional programmes; usually 5 (3+2) years (the vast majority of Danish university students continue to pursue a master's degree). All higher education institutions in Denmark are public.

Figure 1. the Danish educational system



Source: The Ministry of Education

The oldest higher education institution in Denmark, University of Copenhagen, founded 1479, was for a long time the only higher education institution in the country. In 1829 what is now the Danish Technical University was established, followed by the two art institutions of the Royal Danish Art Academy (1857; comprising architecture and creative arts) and the Royal Danish Music Conservatory (1867). These are the oldest university-type institutions in Denmark where today competition for study places is often most intense. In the 20th century up until the Second World War, came the establishment of Copenhagen Business School (1917), the multi-faculty university of Aarhus (1928), and Aarhus School of Business (1939). A range of new art institutions was also added: the Design School (1989) Aarhus School of Architecture (1965), along with what are today three new music conservatories. In the wake of the great educational expansion three new multi-faculty institutions were established in the 1960s onwards: Odense University (later: University of Southern Denmark) (1965), Roskilde university (1972), and Aalborg University (1974).

University institutions comprise older and newer multi-faculty university institutions, mono-faculty universities, as well as art institutions. The older multi-faculty university institutions are often the largest, with the highest number of employees and students in the field of higher education, and the most prestigious in terms of selectiveness (the universities of Aarhus and Copenhagen). The newer

multi-faculty universities of Aalborg, Roskilde, and Southern Denmark, established between 1965 and 1975, are smaller and situated further from the major cities in Denmark. In the late 1960s there were moves towards expanding higher education capacity, and to direct students to shorter, more applied courses, and to make programmes more flexible, something that was introduced with two new university centres of RUC and Aalborg. The idea of the university centres did not gain a foothold, however (Rasmussen 2004, p. 57-58)). The above institutions all educate graduates towards a wide range of occupations.

The Mono-faculty universities can also be divided into older and newer institutions. The old institutions are the Danish Technical University, The Royal Veterinarian and Agricultural School and the Pharmaceutical School (the latter two were merged into the University of Copenhagen in 2007), while the newer institutions count the two business schools (one of them being merged into the University of Aarhus) and the IT university. The graduates from these institutions will often be more specialised and often be more oriented towards private enterprise, than graduates from multi-faculty institutions. Finally, there are the art institutions. Unlike the other higher education institutions, these have until recently been under the domain of the Ministry of Culture. These institutions include the two schools of architecture, the music conservatories and the school of fine arts. Graduates are trained in quite specific professions at these institutions. The above higher education institutions are all university institutions, which means that they are formally governed by the same university act, and that they all have extensive research activities and have master's and PhD programmes.

Regarding the university colleges, they originate in the long Danish tradition of having seminaries (the oldest dating back to 1760s), detached from the other higher education institutions, and traditionally educating teachers, and later on childcare and social care workers and other welfare professional programmes. In 2007, a law was passed merging a number of older and smaller seminaries and likewise institutions into eight university colleges. The university colleges are not university institutions and they only have a fraction of the research activities of the universities. University colleges grant the title of professional bachelor, often 3 to 4 year programmes, including some of the large welfare professional programmes of teacher, nurse, social worker, and childcare worker.

Finally, at the level of short-cycle higher education educations, nine business colleges were formally established in 2009, hosting a range of programmes formerly taken at a number of smaller trade, technical and agricultural schools. There are eight business colleges in Denmark today, training students in private sector oriented programmes of shorter duration (2-3 years).

The last couple of years have seen moves towards centralisation of the higher education institutions – mergers have taken place at all levels (see later), and the higher education institutions have formally all been placed under the jurisdiction of the Ministry of Education and Research.

Overall, the Danish HE system can be characterised as a binary system separating the two major higher education institution types of universities and university colleges. Universities are research intensive institutions, with bachelor's, master's and PhD programmes, while university colleges have very few research activities, educating primarily for professional bachelor's degrees. Despite moves to increase collaboration and mobility between universities and university colleges, the two tracks are still quite separate. A university college bachelor's does not automatically grant access to a university master's programme, and the transition from profession bachelor's to a university master's programme remains the exception in the Danish HE system.

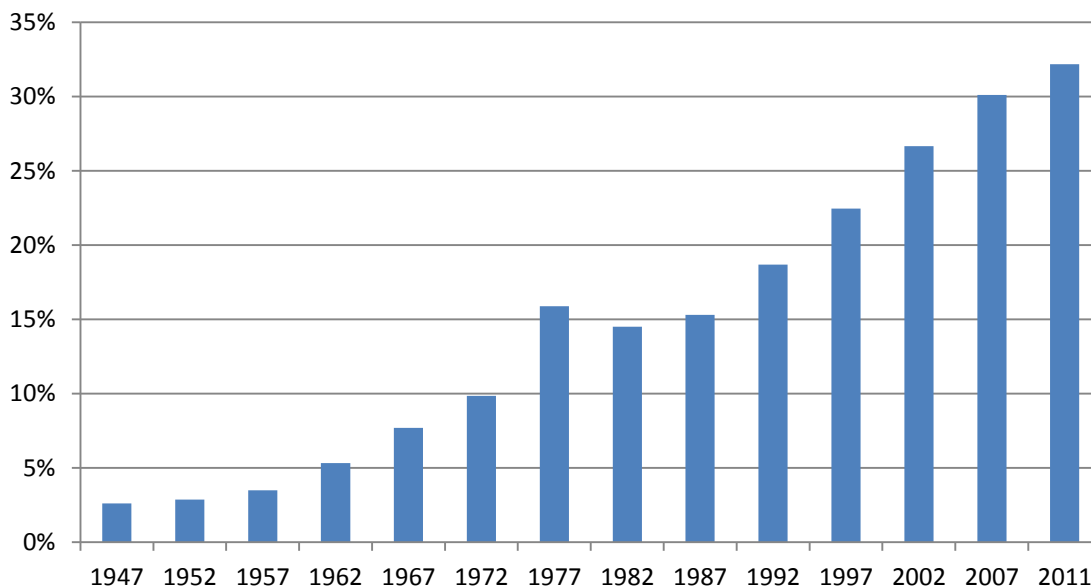
2.2.1 Expansion of higher education institutions

As noted above, Denmark has witnessed a massive increase in the number of students enrolled in higher education, with a bigger and bigger share of a youth cohort embarking on a higher education programme.

Figure 2 shows the expansion of the HE system. From figure 2 it is evident that a larger and larger share of a youth cohort attends universities and university colleges. Of the 15 year-olds finishing primary school in 2012, 5 per cent are ultimately expected to finish a business academy degree, 28 per cent a business college degree, and 29 per cent a university degree. As stated above, this development has recently led to historically new reservations regarding the need for an increasingly higher educated work force in the future.

From figure 2 we can read the changing policies aimed toward the expansion of the higher education system. During the post war period, with massive economic growth from the end of the 1950s to the start of the 1970s. There was a vast increase in intake to higher education in the 1960s, when the economy was booming. The recession in the 1970s and '80s led to a dampening of this intake, but it has been on the rise from around 1990 onwards.

Figure 2: Share of 20-29-year olds enrolled at universities and university colleges, 1947-2011.



Source: Statistical yearbooks, Statistics Denmark.

2.2.2 The current size of the higher education institutions – student and faculty

Table 1: Total number of students (2012) and admitted students at Danish higher education institutions (2013)

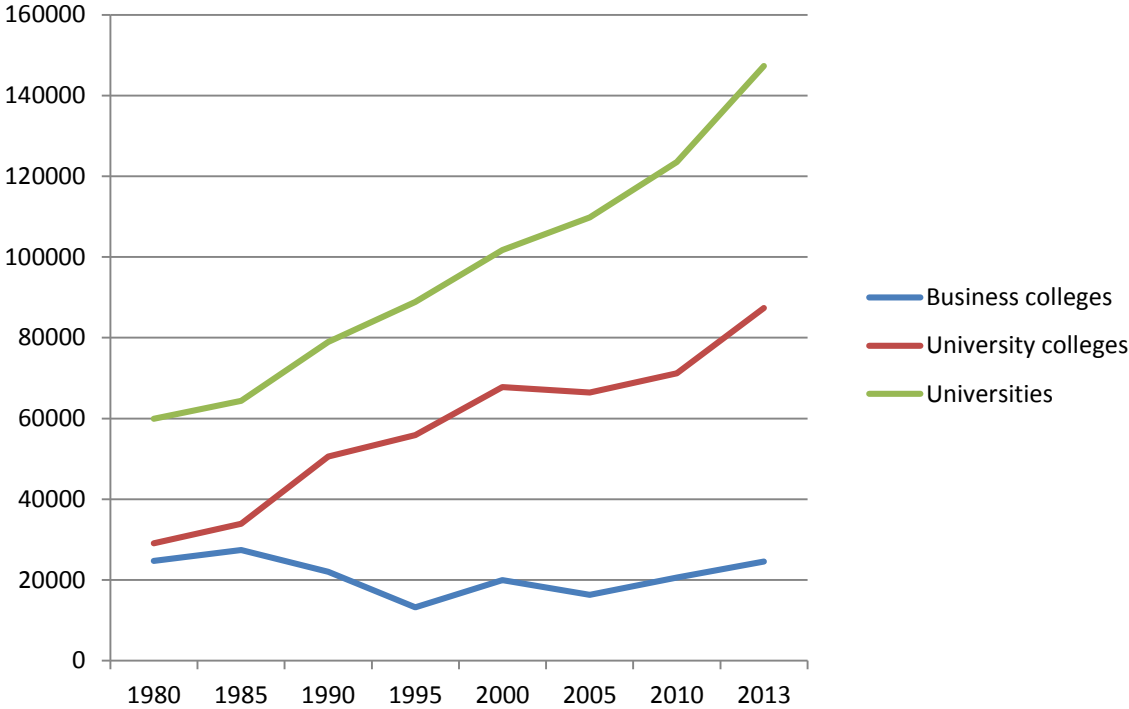
Higher education institutions	Number of students (2012)	Admitted (2013)	Share of the total admittance (2013)
Universities			
University of Copenhagen	39,876	7,717	12.1%
Aarhus University	35,655	7,272	11.4%
University of Southern Denmark	26,034	5,037	7.9%
Copenhagen Business School	16,227	2,783	4.4%
Aalborg University	15,684	4,912	7.7%
Roskilde University	8,159	1,724	2.7%
IT University of Copenhagen	1,853	226	0.4%
Danmarks Tekniske Universitet	6,913	1,918	3.0%
The Royal Danish Academy of Fine Arts, Schools of Architecture, Design and Conservation	1,874	387	0.6%
Design School Kolding	370	62	0.1%
Aarhus School of Architecture	672	156	0.2%
University colleges			
University College VIA	18,680	5,365	8.4%
University College Metropol	10,122	3,202	5.0%
University College UCC	9,427	2,741	4.3%
University College Northern Denmark	7,973	2,792	4.4%
Zealand University College	7,473	2,389	3.7%
University College South Denmark	6,716	1,819	2.8%
University College Lillebaelt	5,379	2,056	3.2%
Danish School of Media and Journalism	1,790	557	0.9%
Business academies			
Copenhagen <i>Business</i> Academy	4,923	2,015	3.2%
Business Academy KEA	4,691	1,495	2.3%
Business Academy Aarhus	3,500	1,446	2.3%
Erhvervsakademiet Lillebælt	3,294	1,341	2.1%
Business Academy Zealand	2,870	1,115	1.7%
Danish Academy of Business and Technology	1,893	1,052	1.6%
Erhvervsakademi Southwest	1,127	514	0.8%
International Business Academy	1,072	464	0.7%
Erhvervsakademi Midwest	665	305	0.5%
Bornholms School of Nursing and Health Care	193	24	0.0%
Other institutions	2,659	940	1.4 %
Total	247,764	63,826	100%

Source: Statistical yearbooks, Statistics Denmark, Danske professionshøjskoler(2013):
Professionshøjskolerne i tal 2013

Table 1 depicts the higher education institutions by type and the number of students enrolled in 2012 and admitted in 2013, respectively. As can be seen from table 1, the major HEIs are the old universities of Copenhagen and Aarhus, along with the newer multi-faculty institutions of University of southern Denmark and Aalborg, as well as Copenhagen Business School. In 2013, universities admitted about 50 per cent of all new students, the university colleges 32 per cent and the business colleges 15 per cent.

Figure 3 shows the increase in number of students divided by type of higher education, from 1980 onwards. From this figure it is evident that the major expansions have been within the universities and university colleges, while the business colleges have an increasingly smaller part of the student share.

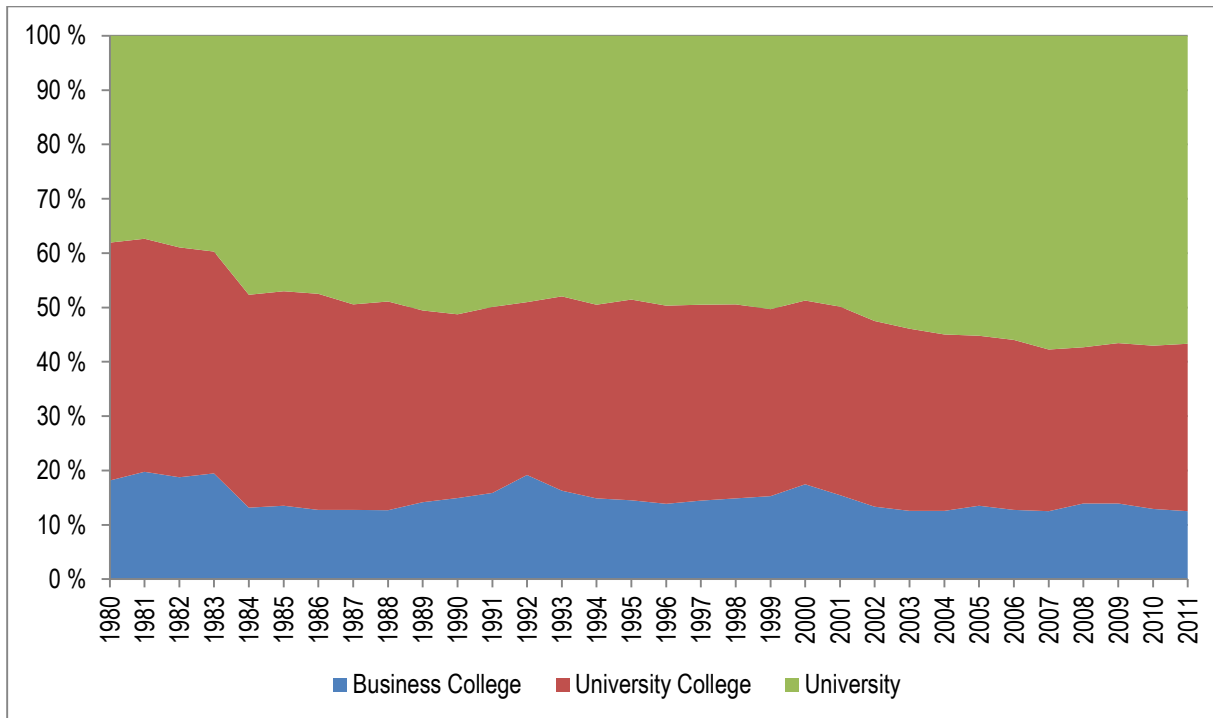
Figure 3. Number of students at the different HE levels



Source: Register data, Statistics Denmark

Figure 4 depicts the same numbers as percentages. From this it becomes evident that universities and university colleges have not expanded evenly. While the business colleges have had a constant small share of entrants, the universities have expanded their share and university colleges have seen fewer entrants relative to the other higher education institutions. Since many of the university college institutions have had capacity to admit more students than have applied in the period depicted, the figures also show the relative decrease in popularity of the university college programmes, and the parallel increase in popularity of the university programmes.

Figure 4: Entrants by level of higher education (Business College, University College, university) 1980-2011.

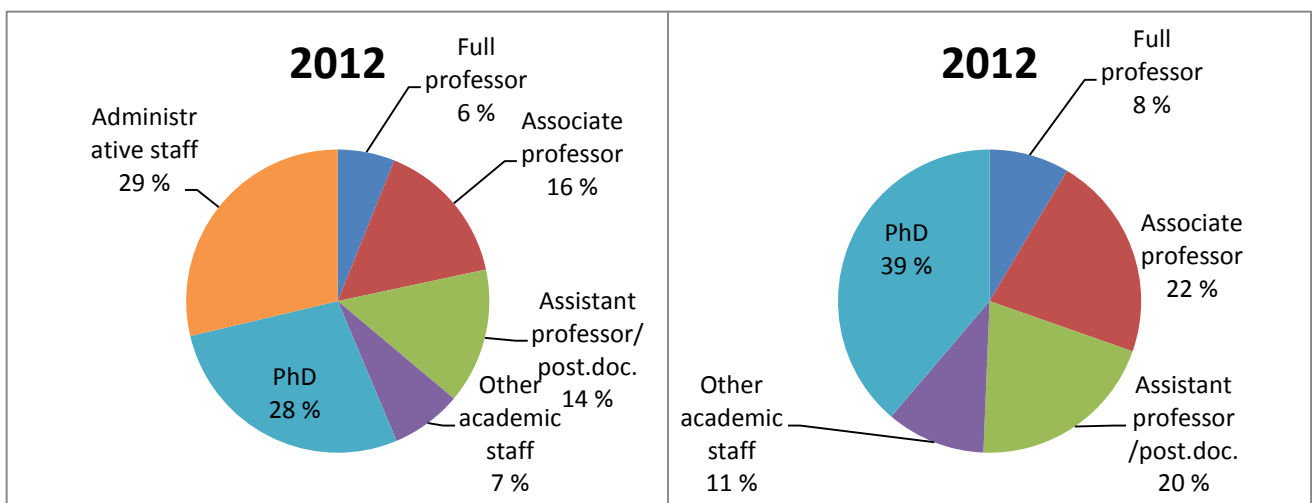


Source: Calculations based on register data from Statistics Denmark.

2.2.3 Faculty staff

On the one side the expansion of higher education has unsurprisingly led to an expansion of faculty staff. What is perhaps more noteworthy is the change in the composition of the academic staff. Here, Danish higher education institutions have witnessed a dramatic change in the composition of

Figure 5. Composition of staff at Danish universities. With and without administrative staff.



Source: Statistical Bank, Statistics Denmark

academic staff in recent years, the most conspicuous developments being that of the rise in first the PhDs and next in postdoctoral positions. From 1996 to 2012 alone, the number of awarded PhD degrees has risen from about 700 to 1,600. These changes are reflected in the present division between academic staff, as seen in figure 5. From the second pie chart it is evident that PhDs and assistant professors/postdocs make up 59 per cent of all academic staff, and that, together with other academic staff, non-permanent academic staff make up not less than 70 per cent of all academic staff.

2.2.4 Admission to higher education

In the Danish higher education system, access to HE normally requires an upper secondary (gymnasium) degree often in combination with specific gymnasium subjects at specified levels. Admission to higher education is either through the main channel of “quota 1”, where applicants are admitted on the basis of their gymnasium degree (and their GPA in the event that demand exceeds supply at the specific programme, see later), or through the alternative qualification channel of “quota 2”. In quota 2, applicants are assessed on the basis of a range non-scholarly qualifications and competencies, for instance if they have had relevant work experience or done volunteer work, etc. At the universities this will often be in addition to a gymnasium degree, while it is more common to be admitted on the basis of alternative merits exclusively at the business and university colleges.

While completion of the gymnasium formally grants access to higher education programmes, the highly sought after university programmes, where demand exceeds supply, almost exclusively found at the university level and among the old universities of Copenhagen and Aarhus, will often require a high gymnasium GPA to gain access. These institutions and programmes have a smaller quota granting access to people with alternative entrance qualifications that do not have the GPA needed to gain entrance through the main admission system. If, for instance, a given programme has 100 available places and 400 applicants, it will reserve 75 places for the students with the 75 highest GPAs, and the remaining 25 places for students with alternative entrance qualifications.

Quota 2 generally constitutes a smaller share at the universities (as low as 10%), while the share can be a lot higher at the university colleges. Additionally, as written above, quota 2 entrance to university institutions will normally be for those with an insufficient gymnasium GPA, while quota 2 at the university college level is more targeted towards people with qualifications other than a gymnasium degree.

Historically, quota 2 was implemented as a way of giving first-generation students a fair chance of gaining entrance to higher education institutions. In later years, however, quota 2 has been reduced in size on the argument that it is a costly admission procedure that leads young people to spend too much time gathering qualifications, adding to the already old graduation age. These more efficiency-based arguments have recently led to a political interest in increasing the share of quota 2 once again, now out on argument that students admitted through quota 2 are purportedly more motivated and less prone to later dropout, because the more difficult and time consuming admission procedure ensures that only really motivated students apply.

Students are admitted to a specific HE programme, with a more or less fixed subject content. Most often students will have the opportunity to select from different courses within the same programme, as will they be able to study for shorter periods abroad, or at another institution's programme, but they overall follow a specific programme and do not have the ability to shift track or programme at will.

2.2.5 Policies to promote student efficiency

Danish students finishing their master in 2011 were in general delayed with approximately 14 months. In 2013 new policies was enacted to promote study efficiency with the goal of reducing the average delay with 4,3 months in 2020 compared with the level in 2011 (Uddannelses- og forskningsministeriet 2014:14), leading to changes in the general structure of the HE and within the system of financial support for students.

Students who begin a higher education within two years of finishing the gymnasium HE preparation will have the opportunity to receive financial support for 12 months more than the stipulated time of the higher education programme. Students starting later than two years after finishing gymnasium only receive financial support for the estimated period of studying (Uddannelses-og forskningsministeriet 2013:2). Furthermore if students are delayed for more than half a year during their HE with regard to acquired ECTS-points the financial support stops. On the other hand, students finishing before the estimated time of their HE will receive a financial bonus (Uddannelses-og forskningsministeriet 2013).

The newly-passed progression reform is also being advocated under the headline of increased quality. The 2013 reform attempts to improve study efficiency through securing coherence within the HE system, especially regarding the conditions for admission to a master's education (Uddannelses-og forskningsministeriet 2014:16-17). This reform obliges universities to cut back study times each year, and failing to do so will result in substantial financial budget cuts. The progression reform is meant to reduce study time, and is the result of a political process that highlighted the problem of the rising costs of students' grants (and also had cuts in government grants as an initial possibility). The new progression reform forces students to register for 30 ECTS points each semester, with no possibility of postponing courses. Another initiative is to increase the possibilities of students being admitted to a master's education without having to supplement. Along these lines Danish universities are furthermore to develop more master's education specifically aimed at students with professional bachelor's qualifications (Uddannelses-og forskningsministeriet 2013:16).

2.3 The bologna process and changes in degree structures

The Bologna process initiated in 1999 as a pan-European cooperation on HE programmes, has as its official aim to increase mobility, homogenise programme structures and strengthen European HE internationally. Goals range from comparable degree certificates, a common system of merit (ECTS), cooperation on quality assurance, strengthening lifelong learning, and increasing the European dimension in education. Denmark is one of the countries that have gone furthest in implementing the initiatives in the Bologna process (Hansen, 241, 2010). Denmark introduced the bachelor's-master's structure in 1993, and has continually developed PhD programmes and schools, within the 3+2+3 structure, with ECTS-credit points being implemented on all levels. At the university colleges the title of professional bachelor was formally introduced in 2001. Table 2 depicts the year-by-year implementation of the Bologna process in Denmark 1999-2010.

Table 2: the Bologna process in Denmark

1999	<ul style="list-style-type: none"> • Denmark signs the Bologna Agreement • The Danish Evaluation Institute (EVA) is established
2001	<ul style="list-style-type: none"> • The European Credit Transfer System (ECTS) is introduced in Denmark • Law passed on assessment of foreign educational qualifications
2002	<ul style="list-style-type: none"> • Diploma Supplement introduced • Establishment of the Qualifications Board
2003	<ul style="list-style-type: none"> • Ratification of the Lisbon convention of 1997 on mutual recognition of educational qualifications • Law passed on the introduction of the 3+2+3 degree structure • Establishment of a Danish Qualifications Framework of higher education competences.
2005	<ul style="list-style-type: none"> • Act on mutual and parallel university programmes
2007	<ul style="list-style-type: none"> • Law on accreditation and establishment ACE Denmark (the Danish Accreditation Institution) • Act on new ECTS compliant grade scale
2008	<ul style="list-style-type: none"> • The European Qualifications Framework compliant National Qualifications Framework replaces the Danish Qualifications Framework • Law on recognition of 'realkompetencer'
2009	<ul style="list-style-type: none"> • Act on accreditation and National Qualifications Framework
2010	<ul style="list-style-type: none"> • the Danish Accreditation Institution becomes a member of the European Quality Assurance Register for Higher Education

Source: Uddannelses-og Forskningsministeriet: bolognaprocessen 2020 (2011)

As the table shows, Denmark has to a large degree implemented four of the major goals in Bologna: the degree structure, a system of merit, mobility, and quality assurance. In addition to the universal implementation of the degree structure and the European Credit Transfer System, Denmark has,

through establishing The Danish Evaluation Institute and The Danish Accreditation Institution, widely implemented a quality assurance system.

Even though the Bologna process has formally restructured the Danish HE levels quite dramatically, there have been more modest *de facto* changes in programme profiles and student flows. It continues to be the case that most students progress to a master's, and it continues to be very hard for a professional bachelor to be enrolled into a master's programme at a university. Recent years have however seen increasing cross-university shifts from bachelor's to master's programmes, a process also fuelled by the result-based funding of pay per student, giving institutions economic incentives to attract as many students as possible. The vast majority of programmes continue to be pre-packaged, with little flexibility in content. Recently, new interdisciplinary programmes have seen the light of day, primarily at newer higher education institutions. These new programmes may be viewed in conjunction with the Bologna process and as a result of new institutional strategies for attracting students in an increasingly competitive HE programme market.

2.3.1 Internationalisation and mobility patterns

The number of Danish nationals studying abroad, either as part of their programme or studying a full degree programme, has been on the rise. In 2012/13 the number of international students admitted to a whole education in Denmark was 14,617 which is 18 per cent more than in 2010/11 (Uddannelses- og forskningsministeriet 2014:14). During the same period the number of outgoing Danish students has risen with 12 percent. In general, more international students are coming to Denmark than Danish students are studying abroad. It is far more common for Danish university students to seek to study abroad, than for university college and business college students. The level and intensity of this student mobility varies from university to university. Copenhagen Business School has the highest share of outgoing students whereas Denmark's Technical University (DTU) has the highest number of incoming students among the Danish universities (Ibid.:17-18). The 5 most popular countries for Danish students seeking a full programme abroad are, in descending order, UK, Sweden, USA, Norway and Germany. Foreign students, studying a full programme in Denmark, most often come from Norway, Germany, Sweden, Romania, and Lithuania (2011-figures) (Ministeriet for Forsking, Innovation og Videregående Uddannelser 2013).

2.4 Changes in regulation of the higher education system

In the wake of the student rebellion in 1968, the old so-called "professor-rule" characterising the management of the universities was changed with the university law in 1970, introducing a wide ranging academic democracy with representation of the academic staff, administrative staff and students. In the years that followed, faculty staff and students had formal representation in programme councils (managing the student programmes); on institute and faculty boards, as well as on the university boards, known as "the consistories". Leaders at all levels were elected among academic staff by staff and students, and the majority of the university board seats would be held by faculty staff and students.

The first reform of institutional democracy was introduced in 1993, where the initial movements away from participatory institutional democracy towards leadership and governance were seen (Rasmussen 2004, p. 70). Institutional democracy as the university steering form was completely abolished in 2003, with the introduction of a new university law. The "government and leadership reform" as Hansen (2011: 236) calls it, had as its main purpose to strengthen leadership and efficiency, by introducing principles known from private enterprise. The management reform was wide ranging and changed the institutional democratic rule with its bottom-up election of leaders to a hired leadership management, where leaders were employed top down (Hansen 2012, p. 291). The boards now have a majority of external stakeholders, the board hires the rector, who again hires heads of faculties, who again hire heads of departments. The academic council and the institute council now only have advisory functions, with student councils being the only agencies that are more or less unchanged.

The state continues to strengthen its involvement in how HEIs are governed. Today, higher education institutions have formally all been placed under the jurisdiction of the Ministry of Education and Research. The mandatory three-year contracts made between the higher education institutions and the ministry have increasingly been used as a measure for the ministry to oblige HEIs to detail goals, and to demand specific results (for instance reduction in drop-out rates, unemployment rates, collaboration with the private sector, etc.). On the education side, these contracts go hand in hand with the system of financing education, where funding is dependent on students passing exams. This can then be supplemented by other measures stipulated in the contracts, for instance regarding the length of study times. Additionally, result-based financing of research and education, accreditation agencies with legal power to close programmes, as well as detailed quality reforms has been put into place, the latest in the shape of the progression reform described below.

In September 2014 the Minister of Higher Education and Science announced restrictions, effective from the autumn of 2015, on the number of master's programme study places each programme is allowed to offer each year, based on unemployment statistics. Programmes with a steady unemployment rate over a given average, are forced to cut back study places up to 30 per cent over a three year period. These announced cutbacks have especially hit humanities programmes. Arguing that nobody deserves to study for unemployment, ministers expect prospective students to shift preferences towards programmes with low or no unemployment. Even though a number of programmes at, e.g. the university colleges level, have historically been regulated, the policy changes represent a significant departure from a system where the universities have traditionally determined the number of study places themselves.

From the 1990s onwards there has been a steady flow of policy briefs and commissions including the word "quality" in their title. A range of measures have been implemented in order to monitor and increase promote what policy makes terms "quality". These measures range from the above mentioned contractual obligations regarding shortening of study times, and increasing number of classes each week (especially within the arts and social sciences), to making programmes more application-oriented. Most recently, the Expert Committee on Quality in Higher Education in Denmark has proposed, among other things, to revoke the right to a guaranteed access to a master's programme after the completion of a bachelor's programme, arguing that Danish students are over-educated (especially within certain fields).

In 1992 an external evaluation institute was put into place. This agency had an advisory function with a heavy emphasis in self-evaluation by the HE programmes and no direct authority. This changed in 2007 with the introduction of an Accreditation Agency, assessing the quality and relevance of programmes, endowed with the power to disapprove programmes that did not meet specified relevance and quality criteria (Hansen 2012, 289).

These developments, along with the former mentioned progression reform exemplifies the level of detail that the HEI are regulated with presently, and of how the ministry uses economic instruments and penalties in order to make the HEI implement changes that will often have wide ranging implications, not seldomly based on recommendations from commissions with a majority of external stakeholders.

The last couple of years have seen moves towards centralisation of the higher education institutions – mergers have taken place at all levels; business colleges have formed out of smaller institutions, university colleges have been formed out of individual seminaries; and at the level of universities a merger initiative eventually led 12 universities to be reorganised into eight university institutions, while merging the 11 sector-research institutions into the eight universities. While the merger process was up to the individual institutions, there was a strong pressure from above for the institutions to merge, under headlines such as synergy effects of management, critical mass of staff, quality, etc. In the wake of the mergers some of the regional universities have expanded heavily opening up branches in various parts of the country (Aalborg University now has a big branch in Copenhagen, for instance),

and launching a range of new, often more interdisciplinary, programmes. The binary system was upheld, however, as no universities were allowed to merge with university colleges.

2.4.1 Funding of students

In Denmark it is considered a public good to take an education and there are generally no tuition fees in order to be admitted in a higher education. Up until 2006 it was free for both Danish students as well as students from other countries. In 2006 these conditions were changed, so that students with non-European citizenship have to pay tuition fees and application fees for participating in programmes and courses in Danish HE (Andreasen et al. 2015:5).

Grants for students in Denmark are recognised as some of the highest in the world. They are twice as high as grants in Norway and three times as high as those given to students in Sweden (The Danish Productivity Commission 2013:15). Grants are allocated to the students monthly for the estimated period of studying and, as mentioned earlier, for an extra period of 12 months for students who started their HE within 2 years of finishing their gymnasium.

Regarding the general financing of HE, Denmark has a strong commitment to public resources, which is related to the general social welfare tradition in Scandinavia (Andreasen et al 2015). The public resources financing HE is partly characterised by a relatively fixed financial support allocated for research each year and financial support for basic administration. Funds for educational activities are, on the other hand, allocated according to a performance-based-model, called the taxameter principle, in which the amount of the funds depends on the number of students passing their exams (ibid.:7).

While the institutions' funding will be dependent on money per student exam passed, the basic money-per-student student unit varies depending on field of study, with the natural sciences harvesting much more per student money than the arts and social sciences. There are also historically based differences in how much basic funding per student each institution is granted. These differences often lead to discussions between HE institutions, the newer institutions (that are often receiving smaller basic funds) calling for reforms of the system, and an equal-for-all funding system.

2.4.2 Development of research financing and structure of research councils

The Lisbon process from 2000 has as one of its aims to put on the agenda education and research as drivers of economic growth (Hansen 2012, 287). The '80s marks the beginning of changes in a research funding system that has increasingly been changed to a "mode 2" type funding reflecting the ideals of the Lisbon process and the gradual introduction of new public management in HE.

While research funding was earlier primarily based on direct funding of the institutions with no strings attached, the 1980s witnessed an increase in external funding agencies, both in terms of free and strategic research agencies (Aagaard 2013). In this decade public research effort was increasingly deemed insufficient in so far that it lacked integration and cooperation with the outside world and the private sector. Universities were seen to suffer from a lack of competition and a lack of mobility. It was believed that the renewed industrial growth was to be based on central "generic" technologies like information technology, biotechnology and material science (and there was an increase of earmarked and strategically oriented funding for university research. A majority of these special programme fundings were placed in special committees outside universities and the already existing research council structure (Aagaard 2013). In the 2000s funding shifts toward more funds being competitive, research funds being more strategy oriented, grants becoming larger. A range of new research councils appears (RTI, the Strategic Research Foundation and the Advanced Technology Foundation). The basic research grant share goes from 84 per cent in 1980 to 56 per cent in 2010 (Aagaard 2013). In addition, the introduction of a bibliometrical model in 2009 (Schneider and Aagaard (2012)) has led to a new funding distribution; in 2012 university funding is made up of: 45 per cent educational funding; 20 per cent externally financed research activities; 20 per cent research activities as measured by the bibliometrical model; and finally 10 per cent number of graduated PhDs.

2.5 Conclusion

Since the Second World War, higher education institutions have expanded rapidly, leading to a mass HE system. The expansion first took place in a period of rising economic wealth, the 1960s, and then again at a more steady pace from 1990 onwards. Applying for a university programme has become so popular that recent political signals have advocated limits to expansion – a historically unprecedented signal.

With the growing size and cost of the HE system, it has been subject to increasing policy making and political intervention. Government policies have changed steadily towards a model of increasing marketisation but also of increasing detail regulation. HEIs have moved towards a mode 2/triple helix model with increasing government steering and external influence from stakeholders, etc. Academic autonomy has been replaced by leadership autonomy, but oriented towards overall goals that are highly regulated by parliament, e.g. in the contracts made with the HEIs. There has been an increasing weight placed on accountability, efficiency, utility, and performance. Today, the system is a results-based funding system of education as well as research.

Even though there has been a diversification of programmes, through new, interdisciplinary programmes and through a relative rise in vocational oriented programmes (business schools), business academies, university colleges and universities continue on quite separate tracks, with little mobility between the levels.

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3 Finland

Sakari Ahola

3.1 System features and institutional structures

3.1.1 *Expansion and evolution of the institutional structure*

The current institutional structure of Finnish higher education is the result of two major reforms. First was the founding of the polytechnics (AMKs) at the beginning of the 1990s. In this reform secondary vocational institutions were merged and upgraded, and they became part of the higher education system as the non-university sector with a mission different from the existing academic universities. In the second reform in 2009 the universities were separated from the state and made independent legal entities under public law, or foundations under private law. This was a big administrative change but it included also important mergers reducing the number of university institutions. Similar reform is now planned for the AMK sector.

Developments prior to the AMK reform basically resemble the development in other Nordic countries. In the first part of the 20th century the only university in the country (the University of Helsinki, established first as the Academy of Turku in 1640) got a few new additional institutions. Expansion was gradual and slow, but a loosely integrated higher education system started to take shape. During the education “explosion” since the 1950s several new institutions were founded around Finland. At first they were small, characteristically local higher education institutions which offered university-level degrees but lacked the multi-faculty character of the older institutions. During the years of expansion a tightly integrated state-controlled mass higher education system was formed. What is most distinct in comparison with the other Nordic countries is the late advent of the vocational higher education institutions, i.e. the AMKs.

Table 1 describes the development of the institutional structure from 1950 to 2013. In addition to the traditional multi-faculty universities there are technical universities, business schools, art academies and the AMKs. The group “other” prior to the AMK reform includes e.g. the College of Veterinary Medicine which was integrated into the University of Helsinki in 1995. The “big university reform” of 2009 included three mergers. Aalto University, also called the “innovation university” at the time of its planning, combines the former Helsinki University of Technology, the Helsinki School of Economics and Business Administration, and the College of Arts and Design. The universities of Kuopio and Joensuu merged, forming now the University of Eastern Finland, and the Turku Business School was merged with the University of Turku. The latest merger combined the remaining three art colleges (Sibelius Academy, Theatre Academy and the Academy of Fine Arts) called now the University of Arts Helsinki.

Table 1. Number of different types of HEIs 1950-2000

Type of HEI	1950	1960	1970	1980	1990	2000	2013
Universities	3	4	7	10	10	10	10
Technical universities	1	1	3	3	3	3	2
Business schools	4	4	5	3	3	3	1
Art academies	2	2	2	3	3	4	1
Other / AMKs	3	3	2	2	0	29	25

3.1.2 Student numbers and current size of the higher education sector

Tables 2 and 3 illustrate the institutional structure in terms of student numbers. In both tables the institutions are ordered according to the total number of students. The student categories, on the other hand, illustrate how the statistics treat different types of students. In this respect the different sectors of Finnish higher education have different traditions and, thus, different categories.

In the university sector students are classified according to the degree they are currently studying. The University of Helsinki is clearly in a league of its own with 35,000 students. The Aalto University is now the second largest with nearly 20,000 students. It is in the upper-mid league with five other institutions where student numbers exceed 10,000. The smallest institution is the Arts University with only 2,000 students.

Table 2. Total university students in 2013

	Bachelor	Master	Licentiate	Doctoral	Other studies ¹	ALL
Univ. of Helsinki	19,141	9,468	264	4,671	1,645	35,189
Aalto Univ.	10,101	6,042	477	2,766		19,386
Univ. Of Turku	9,673	5,192	140	1,770	648	17,423
Univ. Of Tampere	8,127	4,338	93	1,727	1,080	15,365
Univ. of Eastern Finland	8,696	4,604	127	1,498	428	15,353
Univ. Of Oulu	8,955	4,020	98	1,530	551	15,154
Univ. of Jyväskylä	7,301	4,527	111	1,362		13,301
Tampere Univ. Of Technology	5,672	2,756	177	1,221		9,826
Åbo Akademi Univ.	3,901	1,619	67	680		6,267
Univ. Of Vaasa	3,213	1,698		340		5,251
Lappeenranta Univ. Of Technology	2,465	1,955	6	385		4,811
Univ. Of Lapland	3,148	1,092	56	282		4,578
Hanken School of Economics	1,441	787		157		2,385
Arts University	894	930	8	207		2,039

In the AMKs total student numbers vary from 16,800 in the Metropolia AMK to less than 2,000 in the Humanities AMK. Following the old vocational tradition students studying the AMK degree are

¹ Mainly specialised studies in the medical field

classified according to the programme type, which are youth education programmes and adult education programmes. Upper AMK programmes are master's level programmes (see the section on the post-Bologna degree structure). In addition the AMKs are responsible for organising vocational teachers' training. They also offer some specialised professional programmes.

Table 3. Total AMK students in 2013

AMK	AMK-degree (youth)	AMK-degree (adults)	Upper AMK prog.	Voc. teacher training	Specialised studies	ALL
Metropolia AMK	12,274	3,026	1,033	478		16,811
HAAGA-HELIA AMK	7,149	2,237	674	188	641	10,889
Tampere AMK	8,074	1,002	554	195	652	10,477
Turku AMK	7,999	1,142	547	10		9,698
Oulu AMK	6,376	1,053	437	131	627	8,624
Jyväskylä AMK	5,534	654	838	111	804	7,941
Laurea AMK	6,165	956	624	66		7,811
Häme AMK	4,758	1,582	514	2	869	7,725
Savonia AMK	5,300	734	196	75		6,305
Satakunta AMK	4,486	830	334	109		5,759
Lahti AMK	4,074	783	348	39		5,244
Seinäjoki AMK	3,846	836	243			4,925
Mikkeli AMK	3,205	756	361	2		4,324
Kymenlaakso AMK	3,211	773	230	24		4,238
Novia AMK	3,295	378	116	162		3,951
Karelia AMK	2,965	661	208	37		3,871
Centria AMK	2,651	545	171			3,367
Vaasa AMK	2,737	453	120			3,310
Rovaniemi AMK	2,295	774	182	24		3,275
Diaconia AMK	2,212	767	108			3,087
Saimaa AMK	2,408	444	220			3,072
Kemi-Tornio AMK	1,704	868	183	35		2,790
Arcada AMK	2,190	19	144	145		2,498
Kajaani AMK	1,732	311	138	86		2,267
Humanities AMK	1,167	243	43	89		1,542

In relative terms Finnish higher education is quite extensive. The total student number (310,129) is 5.7 per cent of the country's population: this proportion is highest of the Nordic countries². Currently there are places for about 80 per cent in relation to the size of the cohort of 19 year olds.

² According to 2011 OECD data, in Sweden the ratio was 4.9, and in Denmark and Norway 4.7 (see stats.oecd.org).

3.1.3 Admissions

Admission to university has developed from a basically open access to all who completed the matriculation examination to *numerus clausus* and, subsequently, to a highly decentralised system with extensive entrance examinations. In the era of the elite university the matriculation examination was an academic entrance examination performed at the university. Since 1919, due to the growing number of matriculated students and the founding of new universities, matriculation examination became the final examination of the gymnasium (upper part of the general secondary school). Restrictions of entrance, in the form of *numerus clausus*, related to the uncontrolled expansion of secondary education. In the Technical University, restrictions were already in force in 1915 due to overcrowding. At the university they were applied during the 1930s first in the medical faculty also due to practical reasons relating to difficulties in organising laboratory courses. During the 1960s, due to the expansion and massification of the universities, entrance examinations became everyday practice in all fields and institutions (Ahola 1995).

Currently admissions are handled through a centralised application system (see <http://opintopolku.fi>). A centralised internet-based system was first applied in the AMK sector. It was a natural continuation of the old system where the upgraded vocational institutes were part of the centralised application system of secondary education. In the university sector a separate system was built during the late 2000s, and it started operating in 2009. The latest development led to the merging of the two systems. The government issued the related decree in April 2014, and it will be effective from the autumn application round. According to the decree, applicants can apply for a maximum of six higher education places in their preferred order. The applicant will get one offer to the highest target on the list to which his/her results suffice (Decree 293/2014).

In addition to this main admission, institutions may conduct separate student selection using specialised criteria for targeted groups. One example is those who have studied at the open university. Departments and degree programmes can decide the selection criteria and quotas for these groups.

The interest in developing and changing the admission system has been constantly on the policy agenda of the Ministry of Education. The application phase is an important part of the whole study process, and it relates to various problems of the higher education system. Admissions, however, belong to the sphere of the autonomy of HEIs, which has hampered progression in these matters. There seems to be a constant struggle between the autonomy interests of the HEIs and the steering interests of the Ministry. The HEIs have been developing their entrance examinations mainly from the point of view of attracting the best possible students (Ahola & Kokko 2001). During the 1980s a parliamentary committee observed the admission system and procedures concluding that the system ought to take better account of applicants' skills and facilities, and enable the intake of motivated students (Com 1986). This type of formulation increased HEIs' eagerness to expand the entrance examinations rather than to simplify the system (Ahola 2004).

During the 1990s, with the changing higher education environment and policy, discussions on admissions were related to the new ideas of efficiency, steering, and evaluation. Higher education moved from regulated autonomy to autonomy by performance evaluation, and, from the admission point of view, from controlling the number of study places (input) to controlling the number of degrees (output). Now also admissions were a function where efficiency and cost saving was required (Ahola 2004).

The founding of the AMKs in the beginning of the 1990s also directed the development towards a more centralised system. The first step was establishing a national register of applicants (HAREK) in 1998. It was related to the excess demand, and need to control the number of study places accepted by individual applicants. Discussions at that time emphasised the unfair situation where many applicants were left without a study place while some got more than one place. The issue was made much bigger than the actual numbers suggest but, notwithstanding, the 1997 University Act provided that an applicant can take only one offer per year (Act 645/1997).

A second lasting policy issue, also related to the matriculation backlog³, is how to develop admissions in order to enhance the situation of newly matriculated students and those who are seeking their first higher education place. There have been various strategies and reform proposals to accomplish this goal. One, relating to the joint application system, is an effort to reduce and lighten the separate examinations, and to increase the weight of the matriculation examination and other school marks in the selection process. The other, more direct, was to give additional points to the recently matriculated applicants. This practice was criticised, however, by the Parliamentary Ombudsman after several complaints made by applicants, and the practice was revoked.

Under current legislation the Ministry has resorted to new strategies in order to combat the problem of delayed entry. In addition to the old provision that applicants can be divided into separate groups on the basis of their educational background, in which case the admission criteria must be consistent within the groups, the law further states that some study places can be reserved to applicants who do not already have a study place or possess a higher education degree. Those who are studying and/or already have a degree should, however, have reasonable opportunity to apply, and their chance to get a place in higher education should not become too unequal in comparison with the newcomers (Act 558/2009). This is, of course, a highly problematic formulation from a legal point of view: what is unfair, how is this measured, and who decides? The problem is similar as in the previous rulings of the Parliamentary Ombudsman on the extra points issue: they were not strictly illegal but highly problematic from the point of view of both general and educational equality. On a general level these developments in policy and legislation illustrate how the definitions and interpretations of educational equality change as the Ministry is fighting the intensifying functional problems of a mass higher education system.

As a result of expansion and the emphasis on equal educational opportunities, the concepts and regulations on eligibility have changed. The matriculation examination as the traditional prerequisite for higher education has been supplemented with other types of educational background and, finally, with practically all whom, according to the legal formulation, the HEI judges to have sufficient knowledge and skills for the studies (see appendix 1). The idea is that everyone should have the opportunity to progress in the education system, and there should be no dead ends. In reality, however, the matriculation examination has retained its status as the main route to higher education, especially in the university sector. The following figure describes the current situation.

In the university sector those with only the matriculation examination (ME) represent nearly two thirds of new students. They are those who enrol relatively shortly after completing secondary school. In addition, a quarter of new students have made a “detour” through the vocational education system. Thus, a great majority still comes through the traditional route. In the university sector, those with only a vocational degree or diploma represent less than five per cent of new students. In the AMKs the situation is similar, except for the clearly larger share of those with only a prior vocational degree or certificate. In both sectors also the number of those with only basic education (or unknown prior education) is relatively low, less than 10 per cent.

³ This refers to the phenomenon where applicants of higher education tend to pile up in growing numbers due to the discrepancy between the number of applicants and the number of places in higher education.

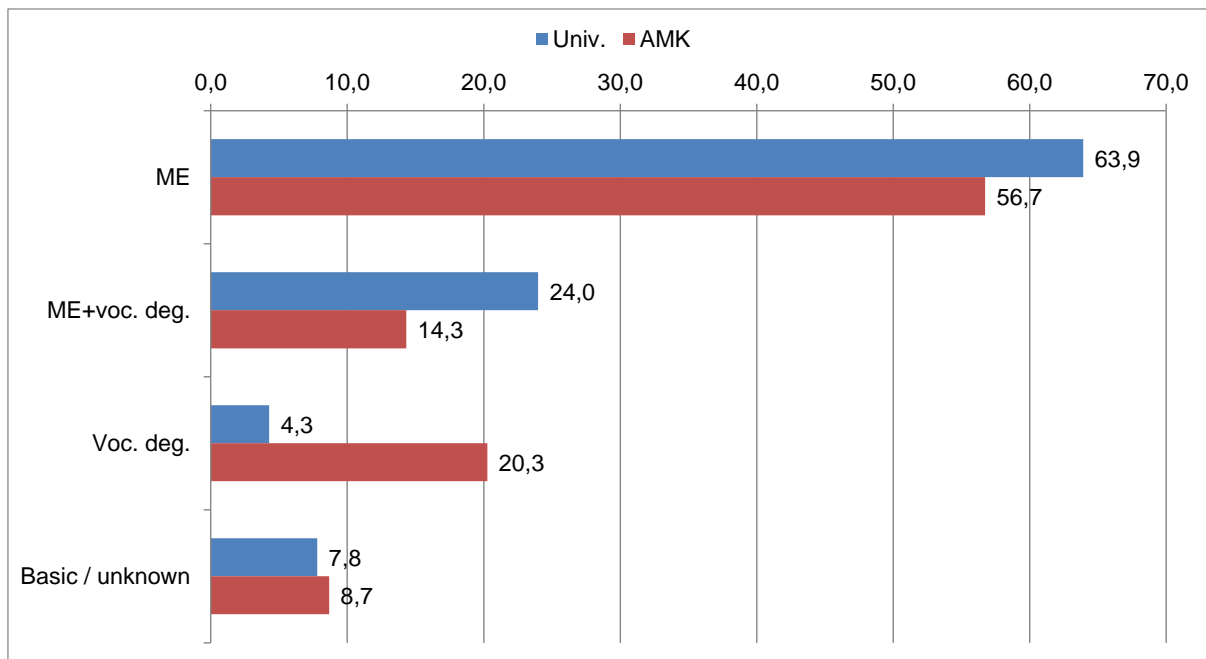


Figure 1. New students in 2011 by sector and prior education (%)

As pointed out above, various features of the Finnish education system, especially the matriculation backlog, have resulted in excess demand which means, from the applicant's point of view, that entering higher education in Finland is relatively difficult, and the application phase takes a relatively long time. The problem is especially acute in those fields popular among young people. The following figures describe the current situation in terms of application and admission.

In the universities the rate of acceptance ranges from 43 per cent in natural sciences to less than 5 per cent in the field of fine arts. From all applicants (82,000) only 31 per cent was accepted. In the AMK sector the average acceptance rate was 35 per cent and the total number of applicants 120,500. In the university sector the study fields can be classified into three groups. First are the big fields with plenty of study places – and applicants – which can be further divided into two groups: the above mentioned fields with a relatively high acceptance rate and the four other fields with acceptance rates between 20 and 25 per cent. The third group is composed of the smaller fields where acceptance rates vary greatly, from 5 to 35 per cent, but there is no clear separation into subgroups (fig. 2). In the AMK sector there are more clearly four groups: both the big fields and the smaller ones have a subdivision into the more easily accessed, and the rest. Relatively easily accessible in the big fields are technology, and in the small fields natural resources (fig. 3).

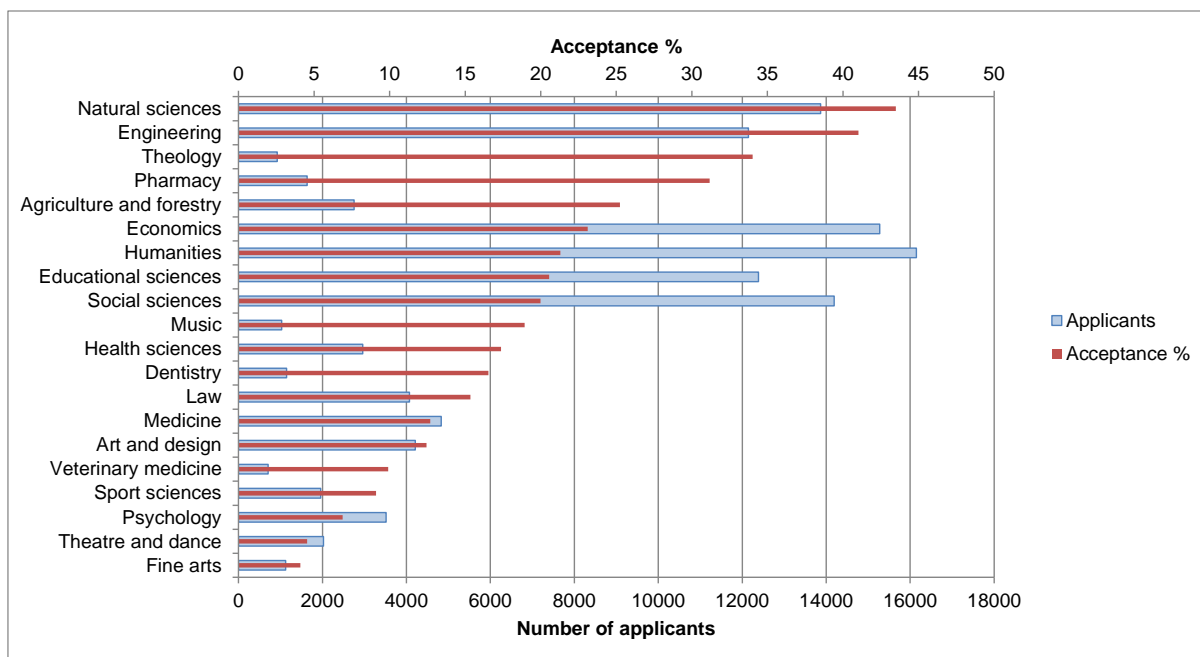


Figure 2. Applicants and acceptance rate in universities in 2011 (autumn term admissions)

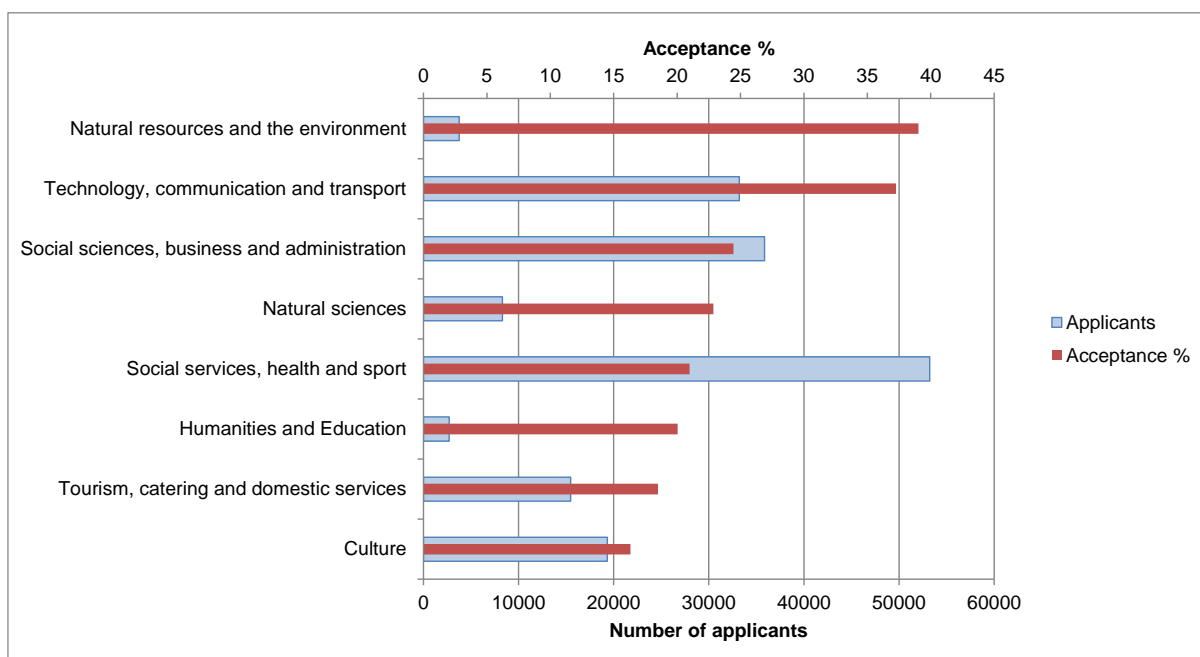


Figure 3. Applicant and acceptance rate in the AMKs in term 2010-11

3.1.4 The principle of free education

One of the most salient features of the Nordic model is the principle of free education, i.e. there are no tuition fees (cf. Eurydice 2011). In Finland this principle has survived occasional attacks since the changing HE policies from the late 1980s reflecting the need to “diversify the funding base” (Clark 1998). The principle of free education relates closely to the ideas of equal opportunity. The previous Development Plan of Higher Education and Research states, under the heading of “equal educational

opportunity”, that “a high level of education and the availability of high quality, free education are the cornerstones of the Finnish welfare society” (DP 2008, 18). The effective Plan concludes that “[M]easures have long been taken to promote equal opportunities in education. There is an extensive provision of higher education, education leading to qualifications is free of charge for students, students can apply for student financial aid, and there are higher education institutions in different parts of the country” (DP 2012, 10). Thus, in addition to free education there is an extensive and quite affordable student aid and loan system, which is also common to the other Nordic countries.

The principle of free education guaranteed by legislation applies also to students from other European Union countries⁴. In 2010 the Ministry launched an experiment where HEIs could charge fees from students coming from other countries. During the planning and execution of the experiment there was much discussion, and fear, that this would be the first step to expand fees also to other students groups, finally including also all native students. The experiment was more or less a failure. Interest in participating was low at the outset, and there were no real monetary benefits involved. For instance, participating institutions were obliged to develop a scholarship scheme, which was in practice applied to a majority of the fee-paying students (MinEdu 2014).

A new threat to those opposing fees of any kind is caused by the government’s endeavours in the field of education export. Finland is known as the “education model country” – mainly due to the PISA results – and exporting education and educational knowhow is one priority of the current government. Recently a working group proposed changes in the legislation which would make all higher education not taught in native languages (Finnish or Swedish) subject to a charge to students from non-EU countries. According to the proposal HEIs would decide the level of fees but they should cover all the real costs (MinEdu 2013).

As pointed out above, free education is further supported by student financial aid. It includes three forms of aid, study grant, housing supplement and government guarantee for student loan. The level of aid depends on student’s age and marital and housing status. Parental income also affects those under 20, and the study grant is taxable income. For those studying full time for 9 months, drawing a monthly grant, the annual limit for other income is about €12,000. A recent comparison with student aid in the Nordic countries shows that in Finland the maximum aid is the lowest (see <http://www.kela.fi/documents/10180/1151585/nordstod.pdf>).

3.1.5 Faculty and other staff

At the universities, academic staff have been traditionally divided into professors, other teachers, and researchers. Regarding actual working tasks, the division between teaching and research in the different staff categories has become increasingly blurred⁵. The separation of universities from the state in 2009 meant that the old status as civil servants ceased, and university personnel became regular employees (see section on governance and financing). Also occupational titles changed somewhat. The Universities Act (558/2009) provides only that universities have professors, other teaching and research staff, and other personnel. Further provisions on competencies and recruitment are given in the ordinances of each university. At the same time as the university reform the creation of a research career system (see MinEdu 2008:15) led to new statistical categories corresponding to the four phases of the research career i.e. from doctoral students (phase 1) to professors (phase 4). This makes comparisons between old and new figures difficult. Furthermore, as a rule, the figures describe person-years, not individuals.

Figure 4 describes the development before the university reform. It shows how the number of other staff has grown, especially in relation to teaching staff. Another feature is the rapid growth of researchers indicating the growing importance of university research in the knowledge economy. From

⁴ Including also the three remaining EFTA countries.

⁵ According to the 2006 time use survey (Statistics Finland 2006) researchers used 15 % of their working time in teaching. Lecturers used 16 % of their time in research. Professors used almost half (44 %) of their working time in teaching. The share of research was 32 % leaving 24 % for administrative and other tasks.

1998 also doctoral students at the Graduate Schools (see section 2.1) have been counted as university personnel. In 2009, their number grew to 2,300, while the total number of teaching and research staff was 16,500.

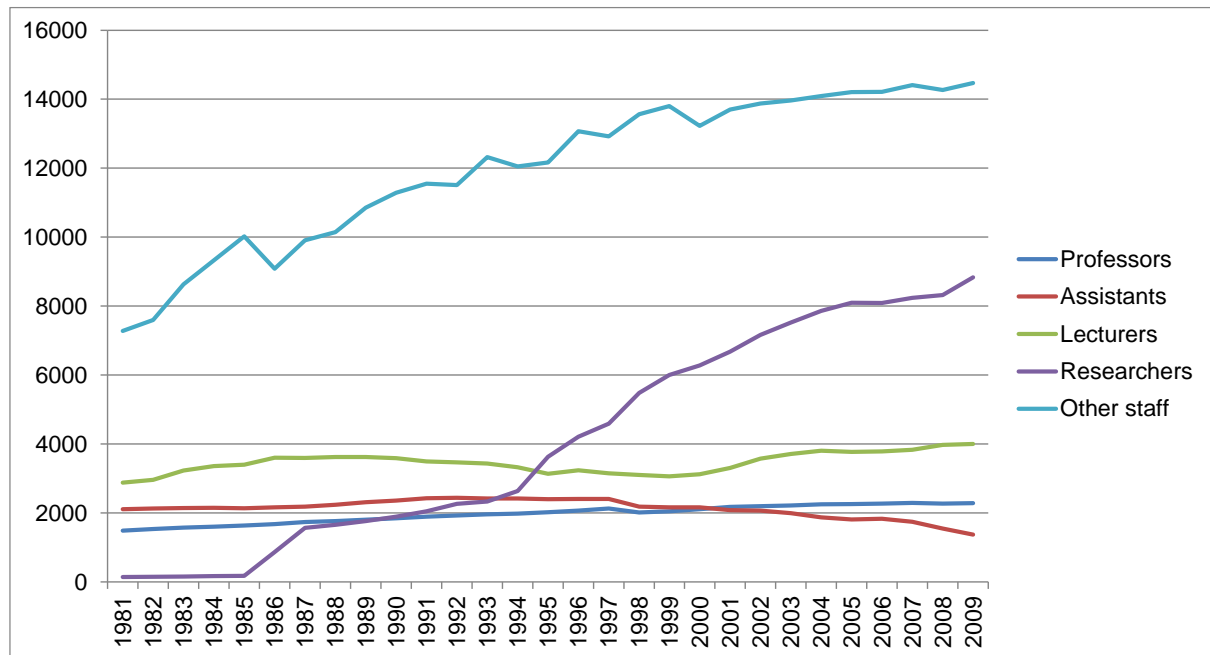


Figure 4. University personnel 1981-2009 (source: KOTA database)

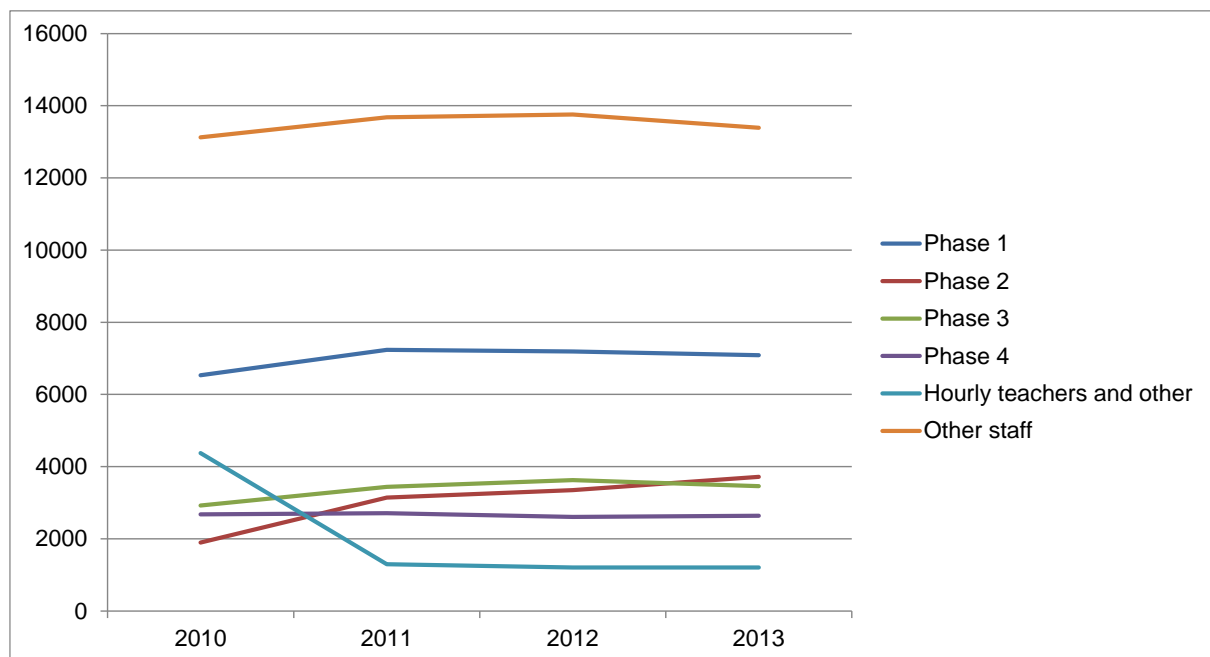


Figure 5. University personnel 2010-2013 (source: Vipunen database)

Comparing the 2009 figures with the new statistics of 2010 in figure 5 shows that the changing definitions somewhat lowered the number of other staff and increased the number of teaching and research staff (altogether 18,400 in 2010). From the teaching and research staff only the personnel belonging to research career phase 4 correspond fairly well to the old group of professors. The other phases do not have a clear correspondence to the old categories.

The AMKs differ from the universities mainly in that they do not have any professors. This results from a deliberate policy as the AMK reform was launched relating to the strong dual policy and vocational profile of the AMKs. According to the Polytechnics Act (351/2003) AMKs have principal lecturers and other lecturers. The Government Decree on Polytechnics (352/2003) provides that principal lecturers must have a doctoral degree or an applicable licentiate degree. According to the mission statement (section 4 in Act 351/2003) the AMKs shall also carry out applied research and development that serves their education, supports working life and regional development taking the regional industrial structure into account. In 2013 the number of R&D personnel in AMKs was 1,100, which is 23 per cent of the total other staff shown in figure 6. Overall the AMKs are more teaching-centred than the universities where the number of other staff did not exceeded the academic staff until the turn of the millennium. The increase in academic staff was mainly due to the inclusion of doctoral students in the university personnel.

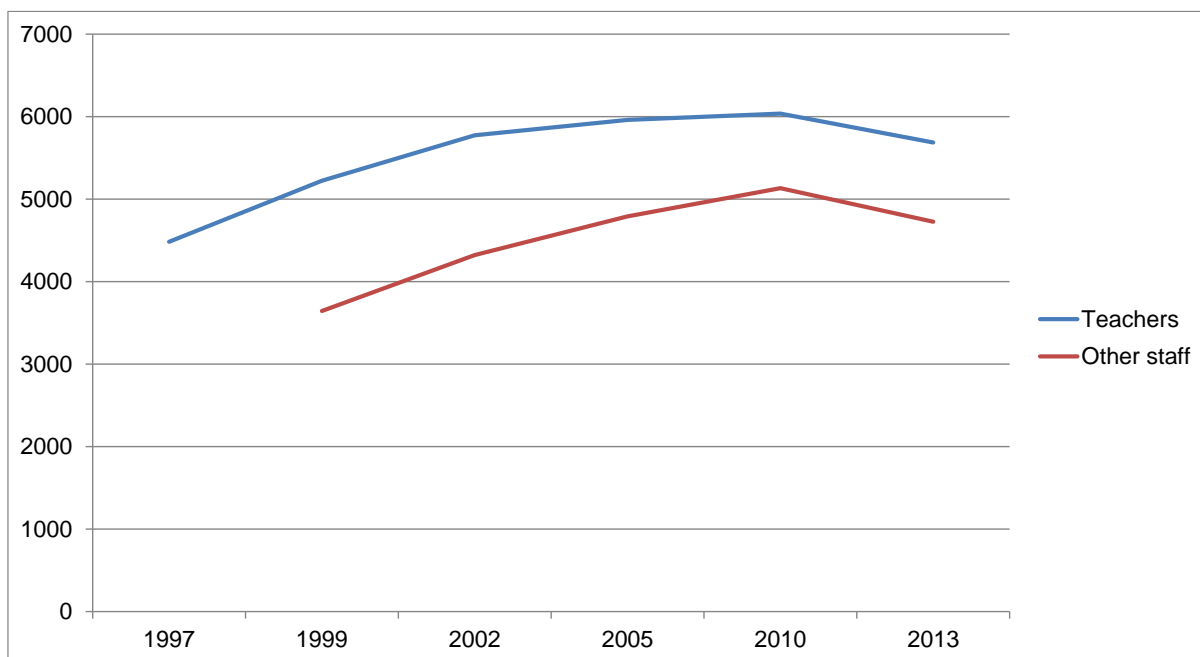


Figure 6. AMK personnel in 1997-2013 (source: MinEdu 2006; Vipunen database)

From the point of view of the Nordic model one interesting question is how the expansion has affected the student-teacher ratio which, at least in Finland, became an issue when the first world university rankings by the Times Higher Education were published. For instance, in the 2007 THE ranking the University of Helsinki was in the hundredth position. Taking only the teachers per students variable, Helsinki would have sunk to position 172 (Ahola 2009)⁶. Currently the total student number in the

⁶ Comparing the ten Nordic universities in the THE 2007 ranking shows that the student/staff score for the University of Helsinki was exceptionally poor, casting serious doubt on the reliability of the figures. Anyway, the point here is just to illustrate the policy discussion which these rankings at the time brought about.

	Stud/Staff	Overall score	Rank
Uppsala University	81	73	71
University of Copenhagen	51	70.1	93
University of Helsinki	28	68.2	100
Lund University	43	66.9	106
University of Aarhus	89	65.6	114
Technical University of Denmark	86	63.8	130
Helsinki University of Technology	94	58.7	170
University of Oslo	54	56.6	188
KTH, Royal Institute of Technology	51	56.1	192

universities is 166,300 and the total academic staff, according to the new classification 18,100. The teacher-student ratio is thus 9.2. In 2009, taking only the three teacher categories, the ratio was 21.4. Comparing this figure with the situation 30 years earlier, when the ratio was 13.3, clearly shows that in terms of the core teaching staff the situation has grown considerably worse.

3.2 The post-Bologna degree structure

3.2.1 The university sector

In many European countries various higher education reforms, some of which later became included in the Bologna agenda, were already under way in the late 1990s. This was also the case in Finland. One driver of change was the increasing internationalisation of higher education. Bachelor's degrees, for instance, were introduced already in the early 1990s as intermediate degrees in most fields of study. The intermediate degrees were voluntary for students as compared with the post-Bologna structure in which bachelor's degrees are both obligatory and more comprehensive. Furthermore, in the reform the target completion times for bachelor's and master's degree were set to three and two years. Thus, as the Bologna declaration was signed, a two-tier structure was basically in place, and Finnish policy makers considered joining the European process to be a relatively uncomplicated matter (Ahola 2012).

The objectives of the earlier reform were basically the same as those rewritten at the end of the decade in the emergence of the Bologna process which added some new, common European concerns on the agenda. The problems, proposed actions and reform objectives are described in table 4 as they were outlined in the Finnish Bologna implementation. The problems range from the traditional domestic concerns of long study times to issues of the changing labour markets and employability. Long study times are partly due to the nature of the old long master's degree which was considered oversized and "stuffed". Low level of mobility, on the other hand, was no problem before the European process started, with its emphasis on all forms of mobility.

The role of the new two-cycle degree structure is evidenced in the proposed actions by two ministerial working groups. At a general level, the bachelor's-master's structure represented a technical solution to the problem of long degrees. Furthermore, the bachelor's degree, as a proper degree obligatory for all, was considered a remedy to high dropout rates. Similarly, there were hopes that the cycled system would offer a better platform for mobility (Ahola 2012; KKA2012).

As pointed out above, the 3+2 structure was in force already in 1994 when the target study times were included in the old degree ordinances. At that time the scope of the bachelor's and master's degrees were measured in study weeks which were defined inconsistently between the lower and upper degrees in relation to the target times⁷. In the Bologna reform, including the implementation of the ECTS study points (180+120), this problem was solved – technically at least. In the 1994 legislation the requirement related to study times was formulated in the following way: "The university shall organise studies so that they can be completed in three/five years" (e.g. Degree 245/1994). After the implementation of the Bologna structure in 2005 more strict amendments were included in the Universities Act. They restricted the total study time for the master's to seven years. For those who studied only for the bachelor's degree the limit was four years. The law also provided certain legitimate reasons for absence, like military service or maternity leave, and procedures according to which students may apply for additional time to complete their studies. In this case students must draw up a plan and timetable for the rest of their studies (Act 556/2005). Experience until now indicates that

Chalmers University of Technology	42	55,5	197
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⁷ One study week represented an average of 40 hours weekly working. The three year Bachelor's degree was 120 study weeks and the whole five year Master's degree was 160 study weeks.

practice at the universities has been relatively flexible, and a great majority of those who have reached the limit and applied for an extension have also got it.

Table 4. National problems, proposed actions, and reform objectives in the Finnish Bologna reform

Bologna action lines					
Easily readable and comparable degrees	Two cycle system	Common credit system (like the ECTS)	Promotion of mobility	Co-operation in quality assurance	Promoting the European dimension
↓					
National problems (MinEdu 2002)		Proposed actions (MinEdu 2001 / 2002)		Reform objectives (Bill 10/2004)	
<ul style="list-style-type: none"> - long study times - high dropout rates - long (oversized) degrees - low level of mobility - need to better respond to the changing world of work - concern over innovations and competitiveness 		<ul style="list-style-type: none"> - introduction of PSPs - monitoring study progress - introduction of ECTS - first-cycle degree, obligatory for all - degree reform - strengthening the position and role of the bachelor's degree - two cycle degrees - ECTS - increasing the participation of working life in curriculum development - enhancing the employability of bachelor's degrees - introducing international master's programmes - developing postgraduate (doctorate) training 		<ul style="list-style-type: none"> - shortening study times - decreasing dropout - more efficient use of study places - reforming curricula - better international comparability of studies - enhancing mobility - removing obstacles of recruiting foreign students - new and better matching skills for working life - enhancing the competitiveness of Finnish HEIs 	

One important feature of the Finnish system, which was much discussed when the planning of the Bologna reform started, is that admitted students get the right to study up to the master's degree. With the exception of separate international master's programmes there is no additional student selection between the first and second cycle. In the national evaluation of the Bologna reform this was considered problematic. According to the universities, the current structure is not genuinely a two-tier structure. The problem is twofold. In the first place, the bachelor's is not recognised as a self-standing degree but is considered to be an intermediate degree, as before. It lays ground to master's level studies but, with a few exceptions, has low employability. Secondly, the transition from bachelor's to master's is not clearly defined. From the students' point of view this kind of flexibility is mostly positive, but from the system's perspective it can be dysfunctional (cf. Galli & Ahola 2011). The opportunity to embark on master level studies and delay taking the bachelor's degree further obscures the role of the new first-cycle degree. Sometimes the bachelor's degree is completed simultaneously with the master's. This causes problems especially at the international level (KKA 2012).

The obvious solution to the problem, i.e. clearly separating the two cycles, turned out to be more complex than than expected, according to the evaluation. The respondents of the evaluation survey proposed a “genuinely two-cycle system” but it remained unclear what they actually meant by “genuine”. The respondents were also asked directly whether students should be admitted first to the bachelor’s degree only. At the institutional level seven universities (N=20) and at the study field level only two faculties (N=22) replied positively. In addition to the various fears attached to the new round of student selection to master level studies, the argument circulated around the highly problematic employability issue. On one hand employability was considered to be the pre-requisite for creating a genuinely two-cycle system. On the other hand the fact that there is no employability blocks the obvious solution (Ahola 2012).

Doctoral studies as the third cycle was added to the Bologna degree structure officially in the Berlin ministerial conference in 2003. This related to the growing importance of research as an essential part of the European Higher Education Area (EHEA), i.e. the European Research Area (ERA). In the Berlin Communiqué (2003) the ministers called for better links between the two processes which they called “two pillars of the knowledge-based economy”. In Finland the legislation sets general objectives for doctoral studies, and the basic structure and content of the degree. The legislation does not set either ECTS points or target time to doctoral degrees. However, the universities have set directive guidelines which are 240 points and four years of full time study.

Investment in doctoral education, both its volume and quality, has been a key issue in Finnish higher education and science policy since the beginning of the 1990s. The increased interest in doctoral training relates to the national innovation strategy and the strong commitment of the Finnish Government to fulfil the international standards regarding the level of R&D investment. An important driver to modernise Finnish postgraduate training came already in 1987 when the OECD review of Finnish science and technology policy bluntly concluded that our postgraduate training was poorly organised or even totally disorganised (OECD 1987). It was obvious that something had to be done (Ahola, Kivinen & Kokko 1999).

At the beginning of the 1990s, during the years of recession, a special policy of “structural development” was launched in order to reform the higher education system to survive considerable budget cuts. Enormous amounts of resources were redirected to compensate for the huge unemployment, using education as an instrument. Higher education had its share, which enabled rapid decisions concerning the new graduate schools. Thus, the graduate school reform was partly launched as protection against graduate unemployment. The first application round was announced by the Academy of Finland in 1994 and the first graduate schools (GS) started work in 1995 (Ahola 2007).

The growth of doctoral degrees started already in the mid 1980s and accelerated during the 1990s. In 1990,490 doctoral degrees were completed. By 2013 the numbers had grown 3.5 times. The founding of the GSs and the consequent expansion meant also better opportunities for female postgraduate students. At the beginning of 1990s only a third of the degrees were completed by females. In 2007 their share reached 50 per cent. In recent years the growth of female doctorates has levelled, however, and their share shows even a decreasing trend (see figure 7).

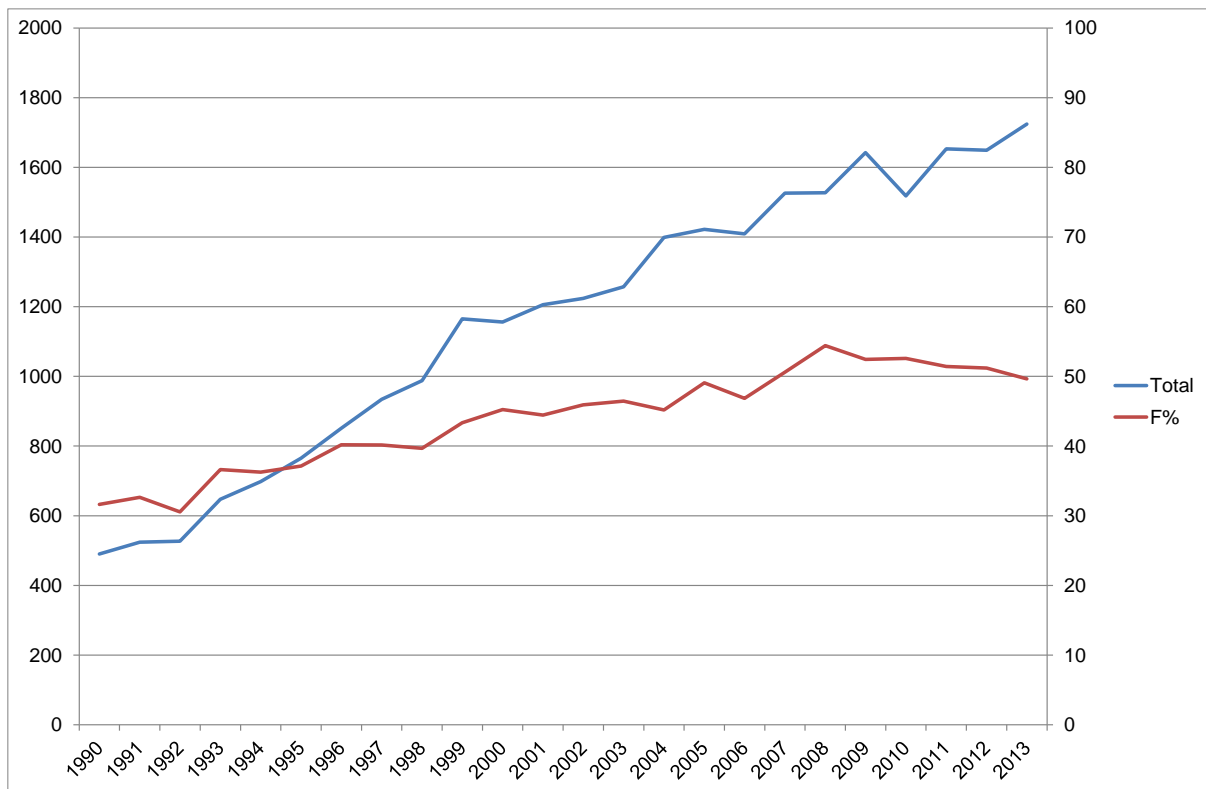


Figure 7. Doctoral degrees and the share of female doctorates in 1990-2013

After the introduction of the GSs, Finnish doctoral education consisted of three layers. The GSs were specific, usually inter-university and interdisciplinary or subject-oriented programmes. Students worked full time, received full pay, and were expected to complete their studies in four years. GSs usually offered taught courses, and tutoring was well organised. In fact the GSs were a special funding instrument of the Ministry of Education aimed to realise the above-mentioned goals. The Academy of Finland was responsible for the scientific evaluation of the proposed GSs. According to these evaluations, the Ministry of Education made the final funding decisions.

In addition to the GSs, institutions and departments organised their traditional forms of postgraduate training, as part of their general research and teaching tasks, financed mainly from the regular higher education budget. The two other layers consist of students in this system, who can be divided in two overlapping groups. In the first place, there were teachers and researchers in the departments and various projects who studied for a postgraduate degree. For them studying was to some extent mixed with their normal duties. The second group worked typically outside the university full time or they received small grants from various independent foundations. From an individual point of view, a postgraduate research career was in most cases a mix of different posts and varying funding sources (Ahola 2007). This is basically also the current situation.

In 2011 the Academy of Finland proposed transferring the responsibility for doctoral training more clearly to the universities themselves (Academy of Finland 2011). The Ministry considered this wise also because of the new legal status of the universities after the 2009 reform. The funding of graduate schools will be transferred to the regular university budgets, and the old type graduate schools cease gradually by 2015. All universities have now established their own graduate schools to cater for all their postgraduate students in the future.

3.2.2 The AMK sector

The AMKs had started to plan their own upper-level degrees already a few years before Bologna. Notwithstanding, as the Bologna process was initiated at the European level discussions in Finland were almost solely related to the university sector. As the Bologna process matured, discussion on the role of the AMKs in the European-wide reform intensified, however, and it became evident that the two-tier structure would be applied also in the AMK sector. Upper AMK degrees were launched on an experimental basis in 2002 and regularised a few years later, in 2005. During the planning process the issue itself remained quite controversial, but the Bologna process helped in consolidating the acceptance of the new second-cycle degree (Ahola 2006).

These new degrees are in principle “Bologna equivalent” master's level degrees. The requirement for polytechnic master's studies is a bachelor's level polytechnic degree (or equivalent) and at least three years of work experience (see appendix 1). Relating to the strong Finnish dual higher education policy (Ahola 1997), the new degrees are quite original in design and, as a consequence, they are not entirely compatible with the European model. These degrees are strongly work-based, with strong emphasis on working life development. They are offered mainly to AMK graduates who already have experience of working life (Ahola & Galli 2012).

According to the Government Decree on Polytechnics (Degree 352/2003) the scope of AMK degree (bachelor's) is from 180 to 270 ECTS points. In current practice, however, the shortest degrees are 210 study points. The upper AMK degrees (master's) are 60 or 90 study points.

3.2.3 Internationalisation

In Finland internationalisation emerged on the higher education policy agenda in the late 1980s in connection with the integration of the European Union and its specific mobility programmes. In 1991 the Centre of International Mobility (CIMO) was founded under the Ministry of Education. Its task was to co-ordinate student and teacher mobility, and actively promote Finland as an “education society”. The problem of Finland at that time was that not so many foreign students wanted to come to Finland, and the number of outgoing exchange students was low.

In 2001 the Ministry of Education published a working group report aiming at an enhanced internationalisation strategy for higher education (MinEdu 2001). Changes in the environment by the end of the 1990s included, for instance, the establishment of the AMKs, and joining in the Bologna process. The objectives set in the report were relatively ambitious. According to the working group:

The vision is that in 2010 Finland will constitute a well-known and influential part of the European education and research area and produce competitive knowledge. Its higher education community will be international and the demands of internationalisation will have been taken into account in educational content. There will be 10,000 – 15,000 foreign degree students in Finland and the total volume of student exchanges will be around 28,000 persons annually. (MinEdu 2001, 48.)

If we look at figures 8 and 9 below, it seems that the prognosis for foreign degree students has come true but student exchange has not been developed as hoped for. During the 2000s, especially after 2005, the number of foreign degree students in Finland grew rapidly, and in 2010 it was nearly 16,000. In 2013 the figure approaches 20,000. In 2010 the total number of exchange students, incoming and outgoing, was 19,113.

The working group report draws on two major international challenges which affect Finnish higher education. The first one is the intensifying educational policy making of the EU, including especially the Bologna process. The Finnish government was then highly committed to the objectives of the Bologna process and, as one of the smaller EU countries, it has been actively working in order to bring the Bologna process closer to the official policy making structures of the EU. Furthermore, Finland favours active European co-operation in education policy because it promoted the development of the

Finnish education system and because jointly established European goals and co-operation were considered important (cf. Ahola & Mesikämmen 2003).

The second major challenge envisaged by the internationalisation memorandum comes from the marketisation of higher education. The objectives of the Bologna process, for instance, clearly relate to the competitiveness of European higher education in the global market i.e. the Lisbon agenda. The national challenges, on the other hand, relate to the quality and visibility of Finnish higher education as part of the European Higher Education Area.

One facet of the overall marketisation is commercialisation. Increasing transnational education is something of a threat to the Nordic model where higher education is considered a public good, and, thus, free of charge. There has been, however, discussion about various possibilities to introduce course fees for foreign students (see section 1.4). The working group does not take a clear-cut stance towards this question. In its SWOT analysis, free higher education is mentioned as one of the strengths of Finnish higher education. It can outweigh other financial and cultural obstacles faced by foreign students while contemplating whether to choose Finland or not.

Another point made by the working group regarding marketisation of higher education relates to quality assessment and accreditation. After the Bologna declaration there has been a lot of discussion about European level accreditation, and we can clearly see the development of a growing market for quality assessment and evaluation. The stance taken by the working group was that there was no need to introduce outside accreditation systems. However, the group advises institutions of higher education to be prepared for Europe-wide ranking lists – which now are everyday reality.

In 2009 the Finnish Ministry of Education and Culture drafted a new strategy paper on internationalisation as a response to increasing globalisation of higher education and the new challenges posed by the Bologna process. According to the strategy, the overall quality of Finnish higher education has improved, and international networking has increased but, as compared with many other European countries, the level of internationalisation is still low. Students' interest in studying abroad has not increased as hoped for (MinEdu 2009).

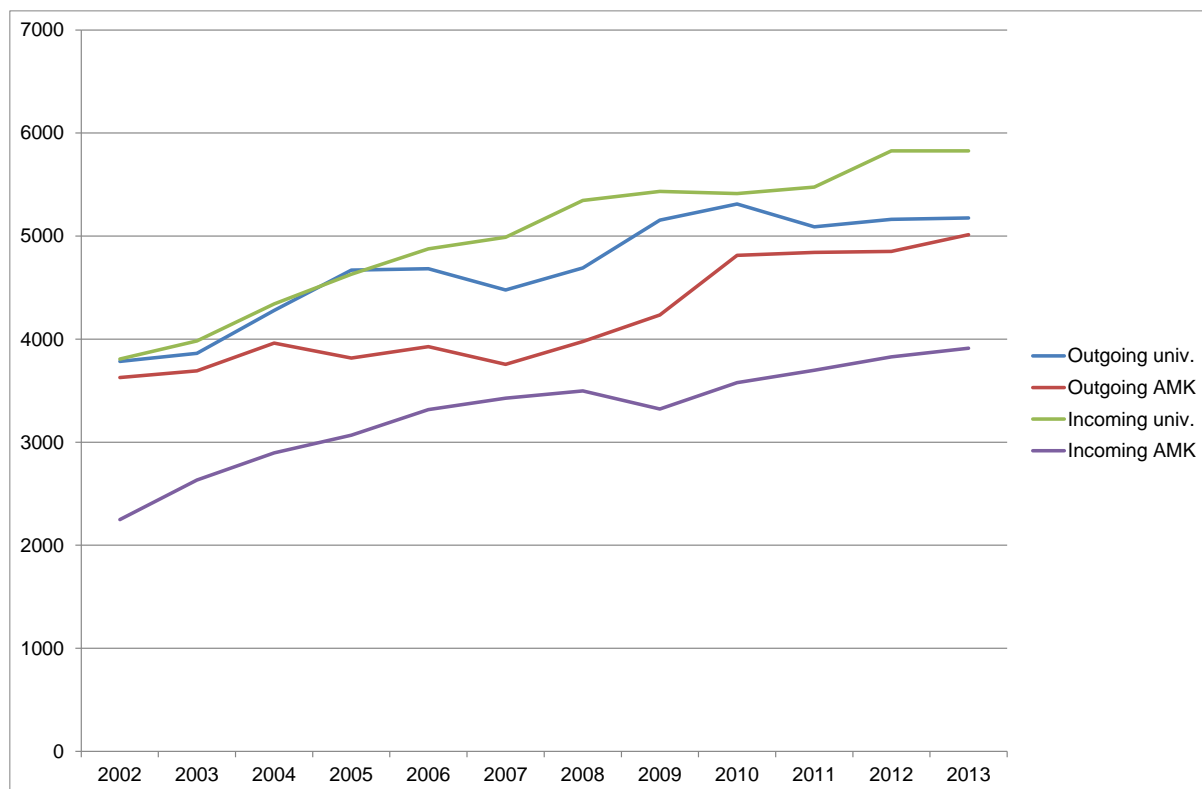


Figure 8. Student exchange mobility (minimum of 3 months) in 2002-2013 (Source: CIMO⁸)

The current situation in Finland, regarding outgoing and incoming mobility, and the development during the last decade, is shown in figure 8. The overall trend is growing. In the university sector, for instance, allowing for occasional fluctuation, there has been an increase from 3,800 mobile students in 2002 to just over 5,000 in 2013. In the Ministry's new strategy the target for 2015 was set at 8,000 outgoing university students. Especially taking into account the latest levelling of the growth, it is evident that the target is already out of reach. The proposed measures pertinent to outward mobility included a lucrative temporal funding programme for 2010-2015 stipulating €5m per year. In addition the strategy proposed that all degree programmes include a special internationalisation module supporting mobility, and that HEIs streamline their credit recognition procedures. Regarding the additional funding, there is no record that any of it ever materialised, highlighting the overall funding crisis of higher education.

In the AMK sector outgoing mobility was relatively stable until 2007, after which there was rapid increase to 4,800 mobile students in 2010. After that growth slowed down, and the number of outgoing AMK students was 5,000 in 2013. In the university sector one problem during the previous years was the imbalance between outgoing and incoming mobility. The balance was struck in 2002, and since 2005 there have been more incoming foreign students than outgoing native ones. At the AMKs the situation is reversed, and it seems that the vocational higher education sector is not as attractive for foreign students as are the universities.

⁸ http://www.cimo.fi/nakokulmia/tietoa_ja_tilastoja/opiskelijoiden_ja_oppilaitosten_kv-liikkuvuus/opiskelijoiden_liikkuvuus

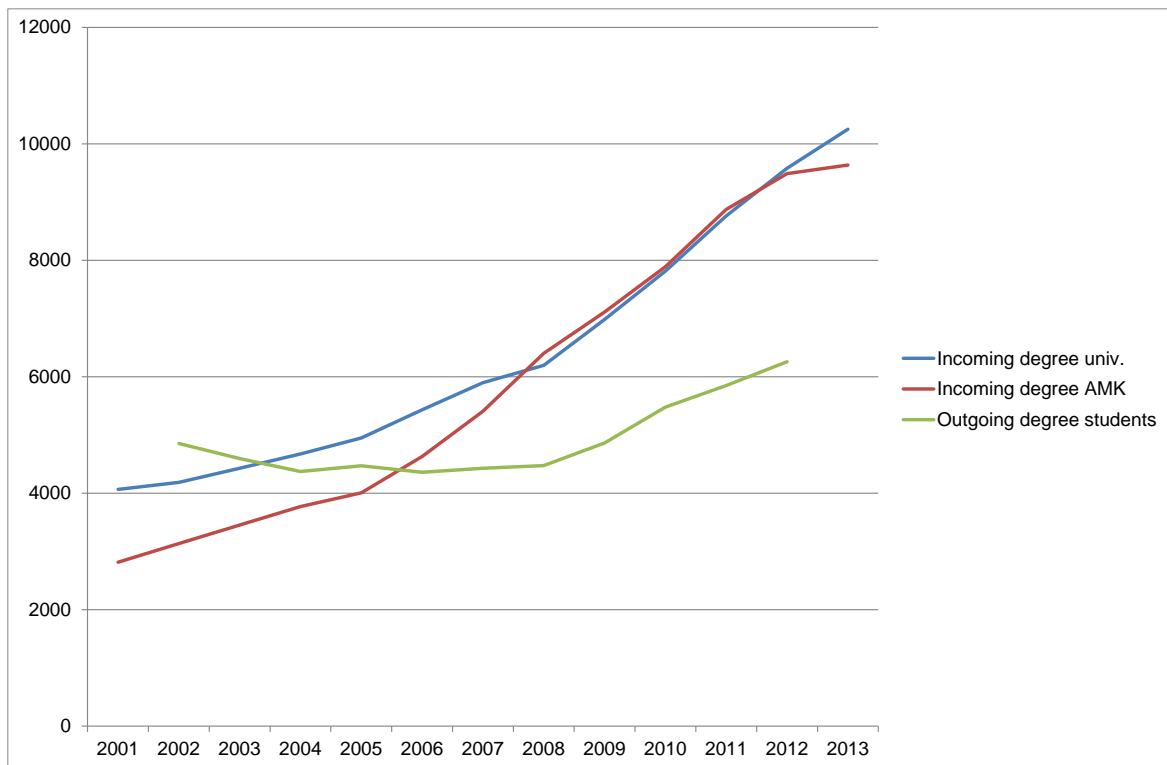


Figure 9. Degree student mobility in 2001-2013 (Source CIMO⁴)

As regards degree student mobility there has been rapid increase in both sectors. At the universities the number of foreign degree students rose from 4,000 in 2001 to a little over 10,000 in 2013. At the AMKs growth has been even larger, from 2,800 to 9,600. The figures for Finnish degree students abroad come from the register of the Social Insurance Institution of Finland (KELA), and describe the number of students who have received KELA's student aid for degree leading studies. From 2002 the numbers decreased at first but since 2008 they have risen from 4,500 to 6,200 in 2013.

Overall it is evident that increasing internationalisation is regarded highly important for Finnish higher education. The 2009 working group points especially to the fact that Finland's own resources are limited and that most new knowledge is produced abroad. Participating in the scientific and technological development and the related decision making in the EU and OECD is considered vital for Finland's economic and cultural interests. There is also a strong conviction that internationalisation enhances quality and that it is a prerequisite for the solving of global problems (MinEdu 2009, 15-17).

3.3 Governance and financing⁹

As in many other countries, the neo-liberal policies and ideas of new public management (NPM) started to change the course of Finnish higher education policy already in the late 1980s. Economic efficiency and effectiveness, and the accountability of HEIs became major concerns. Emphasis turned from the old detailed planning of input, and the related resources, to output – especially the quality of output. The government adopted a new mode of steering called “management by results”. The new policies emphasised institutional autonomy but, at the same time, required more professional leadership and management. For instance, the access to the university boards for outside members was opened already in the 1997 Universities Act (645/1997).

In the current system, in addition to the new legal status of universities, the important administrative changes relate to the role of the rector, and the functioning of the new entity, the collegiate body. The

⁹ This section deals mainly with the universities. At the end there is a short description of the AMKs which are currently under profound change regarding their governance and financing.

collegiate body is important because it elects the outside board members, and can dismiss a member on the proposal of the board. The collegiate body also elects the chartered accountants of the university, confirms the financial statements and the annual report, and discharges board members and the rector from liability.

The board, which is the highest executive organ of a university, is composed of four groups. Three of the groups representing the university, professors, other teaching and research staff and other personnel, and students, elect their own members. The size of each group must not exceed half of their total number. The fourth group, the so-called outsiders, is elected by the collegiate body. At least 40 per cent of the board members must belong to this group. Also the chairperson, which the board elects among from its members, must belong to this group.

In the old public university the academic community elected the rector. In the “corporate” university it is the board that elects the rector. The board can also dismiss the rector “if there is a legitimate and well-founded reason for it in consideration of the nature of the office” (Act 558/2009). This makes the rector the executive manager of the corporate university (cf. Välimaa 2012).

In spite of the new legal status of the institutions, the state still bears the main responsibility for financing the universities within the limits of the state budget. The new Universities Act abolished the Development Act of Higher Education (1052/1986) which guaranteed a certain annual increase in state financing. A similar paragraph was included in the Universities Act promising increases according to a special university index. Due to the tight state economy, however, the index was cut in half in 2011. After the parliament approves the state budget, universities get their basic funding according to a complex funding formula (see appendix 2). The new legal status of the universities has made the system relatively opaque, and currently there are no system-level figures on the financing available. Individual universities report their situation, however, in their financial statements. At the University of Turku, for instance, total revenues were €267.8m in 2013. Of this state basic funding was €167.8m which is 63 per cent (see <http://www.utu.fi/fi/Yliopisto/avaintiedot/Sivut/home.aspx>).

The AMKs, which for now are basically municipal institutions, get their state funding through the central government transfer system by which the state compensates a wide variety of statutory services to the municipalities. The rest is paid by the municipalities themselves. The amount of basic funding is based on student numbers, and computational unit costs. Currently the share of the state is 58 per cent and the municipalities pay 42 per cent. The system is going to change, however, as the government plans to turn all AMK into public corporations, and take all the financing as the state’s responsibility, with a similar funding system as currently in the university sector. The government has presented a bill to the parliament on the required legislative changes (Bill 26/2014).

3.4 Conclusions

In Finland the expansion of higher education has produced a relatively large system with a distinct division between the university sector and the AMK sector. The universities can be divided into the traditional multi-faculty institutions and specialised institutions. They are engaged with research and confer doctoral degrees. The AMKs are vocationally oriented professional “polytechnics” centred on teaching but also with strong regional R&D functions. In terms of the number of institutions, a system of 13 higher education institutions in 1950 has evolved to a dual system with 20 university-level institutions and 29 AMKs at the beginning of the 2000s. Since then, rationalisation and mergers have been inevitable. Currently there are 25 AMKs with a total of 143,800 students and 14 universities with a total student number of 166,300.

The size of the system is reflected in admissions, and in a special problem called matriculation backlog. The admission system is characterised by extensive entrance examinations, although the policy is moving towards a more centralised system with an internet-based joint application system, now common to both sectors. In spite of the relatively large size of the HE system, demand

considerably exceeds the number of study places. Currently the overall acceptance ratios are 31 per cent in the university sector and 35 per cent in the AMK sector. This has caused a problem of delayed entry which is one of the main policy priorities currently in Finland.

In Finland the principle of free education is still a basic policy doctrine closely related to ideals of equal opportunity. This principle has survived occasional attacks since the changing HE policies from the late 1980s. The principle of free education, guaranteed by the legislation, applies also to students coming from other European Union countries. In addition to free education there is an extensive and quite affordable student aid and loan system. In the future free education principle is possibly threatened by the government's endeavours in the field of transnational education - exporting education and educational knowhow is one priority of the current government.

Especially in the university sector the number of staff has not kept pace with the growing student numbers. This has led to deteriorating student/staff ratios in the long run. One feature is the rapid increase of researchers, emphasising the growing importance of research in general in the knowledge society. Another feature is the steady increase of administrative staff while the number of professors has grown very little – if at all.

Regarding the post-Bologna degree structures, in Finland bachelor's-level degrees were reintroduced already in the beginning of the 1990s, and after the Bologna-related degree reform they have consolidated their position in most fields of study. They, however, suffer from low employability, and are more like intermediate degrees, as in the old system, than self-standing degrees in their own right. The master's degree is the basic university degree in Finland. The AMK degrees are bachelor-level equivalents, and nowadays, due to the Bologna process, the AMKs also have their own master's-level second cycle degree. Their number has grown fast since their introduction in 2005, but their share is less than 10 per cent of the total AMK degrees.

The growth of doctoral degrees started already in the mid 1980s and accelerated during the 1990s. One driving factor was the establishment of special graduate schools which got their funding from the Academy of Finland after a highly competitive application phase. Currently doctoral training has been integrated back into the normal functioning of the universities which are now running their own graduate schools. Currently the number of annual doctoral degrees has exceeded 1,700.

Another feature of the Bologna process is the rapid internationalisation which has been a policy priority already since the late 1980s. The numbers of outgoing and incoming students do not, however, satisfy the Ministry of Education and Culture, and new strategies urge for increasing all mobility numbers. Currently the number of incoming degree students is around 10,000 in both sectors. Student exchange ranges between 4,000 and 6,000 annually. In the university sector, for instance, the number of outgoing students, a little over 5,000, already satisfies the EU mobility benchmark i.e. that 20 per cent of HE graduates have been abroad. Relating to internationalisation, the current policy is looking for new opportunities in the field of education export.

Finally, as regards governance and financing, the latest university reform represents an important development and, perhaps, a deviation from the traditional Nordic model, namely the separation of the universities from the state and its bureaucratic budgeting procedures. Although the state still guarantees the basic funding, universities are liable for their own economy and, at least in principle, subject to bankruptcy. The new legal status with new management structures poses both opportunities and threats. Currently similar reform is planned for the AMK sector.

In conclusion, in the big transformations during the years of expansion, Finland has retained the basic features of the Nordic model: ever stronger commitment to the ideals of educational equality and widening access, including the principle of free education and investment in relatively affordable student aid. On the other hand, the system has had to adapt to the increasing market forces and internationalisation, meaning, for instance, the introduction of new public management and “academic capitalism”. Only the future will show how compatible these two trends are.

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Appendix 1

Eligible for studies leading to a first-cycle polytechnic degree are persons the

- who have passed the national matriculation examination;
- who have a three year vocational qualification or an equivalent prior qualification;
- who have a vocational qualification, a further vocational qualification or a specialist vocational qualification referred to in the Vocational Adult Education Act (631/1998) or an equivalent prior qualification conforming to further provisions issued by Ministry of Education Decree; or
- who have a foreign education which in the country in question gives eligibility for higher education.
- other persons whom the polytechnic judges to have sufficient knowledge and skills for the studies.

Eligible for studies leading to a second-cycle polytechnic degree are persons

- who have completed an applicable polytechnic degree or another applicable degree and who have a minimum of three years of work experience in the field concerned after graduation. In regard of a holder of an upper secondary or a post-secondary qualification awarded by a vocational college, who has subsequently studied for an applicable university or polytechnic degree, the acceptable requirement may also be work experience acquired before the completion of the higher education degree.

At the universities, eligibility to studies leading to only a lower university degree or to both a lower and a higher university degree is defined similarly as in the first-cycle polytechnic degree.

Eligible for studies leading only to a higher university degree (master's) are persons

- who have an applicable lower university degree;
- who have an applicable polytechnic degree; or
- who have an applicable education completed abroad which in the awarding country gives eligibility for corresponding higher education.

The university may require a student in these groups to complete supplementary studies of an extent requiring a maximum of one year of studies in order to acquire the knowledge and skills needed for the studies.

Eligible for studies leading to an academic or artistic postgraduate degree are persons who have completed

- an applicable higher university degree;
- an applicable higher polytechnic degree;
- an applicable education completed abroad which in the awarding country gives eligibility for corresponding higher education.

The university may require a student admitted to study for an academic or artistic postgraduate degree complete the necessary supplementary studies in order to acquire the knowledge and skills needed for the studies.

Universities can also admit a person who they otherwise judge to have sufficient knowledge and skills for the studies.

Appendix 2

University funding formula

	EFFECTIVENESS	QUALITY	INTERNATIONALISATION
EDUCATION 41 %	upper university degrees 15 %		upper degrees by foreign students 1 %
	lower university degrees 9 %		
	study points at open university 2 %	proportion of students who earned 55 study points 11 %	student exchange 2 %
	employed graduates 1 %		
RESEARCH 34 %	doctoral degrees 9 %		doctoral degrees by foreign students 1 %
	publications 13 %		foreign staff 2 %
	competitive research funding 9 %		
POLICY OBJECTIVES 25 %	strategy based funding 10 %		
	field based funding 8 % (arts, engineering, natural sciences, medicine)		
	nation-wide duties 7 %		

4 Norway

Agnete Vabø & Elisabeth Hovdhaugen

4.1 Introduction

4.1.1 *The system*

To understand Norwegian higher education, it is important to note that it is shaped within the context of a young nation, (the oldest university established in the capital Oslo in 1811), a small country (app. 4.5 million inhabitants) and an oil-producing economy, with good conditions to achieve the welfare state policy objectives in a social democratic regime, placing great emphasis on higher education as a strategy to reduce social inequality (Vabø & Aamodt 2008).

From 1380, Norway was under the Danish monarchy, and until 1811 the main university for Norwegians was the University of Copenhagen. The issue of a Norwegian university was rooted back in the 17th century. It were seen as decisive for more people to become educated as civil servants in ways relevant to domestic affairs, and for students to avoid long journeys to, and expensive stays in, Copenhagen.

Hence, in comparison with the other Nordic countries, Norway was late in getting its first university established, and the further expansion and development of several more universities happened much later. The state policy underlying the development of the higher education system in Norway in the 1960s and 1970s can be interpreted as active efforts by the central government to abolish the elitist character of higher education. The University of Oslo had a monopoly in the education of a small group of government officials. Until the end of 18th century University of Oslo in particular had this elite status due to its monopoly as educator of civil servants. Most students had a bourgeois background, they were selected through gymnasiums emphasising Latin. Due to educational reforms, like the establishment of gymnasiums in rural districts in the first half of the 19th century, the pattern of recruitment was slightly more progressive, with more students with farming and/or working class backgrounds at UiO (Lindbekk 1968/1977).

The Norwegian public higher education system of today is made up by three kinds of institutions: research universities, scientific colleges, and state colleges. With respect to the universities, the University of Oslo, was established in 1811, the University of Bergen in 1948, the University of Trondheim in 1969 and the University in Tromsø in 1972.

Usually, fields of education and science such as medicine, law, humanities, social sciences and natural sciences constitute separate faculties. Each faculty is divided into departments that make up

the basic units of the faculties. University education is usually divided into different tracks and a main division may be drawn between professional education (medicine, dentistry, law, psychology) and liberal arts studies in the humanities, social sciences and natural sciences.

There are eight scientific colleges such as the Norwegian School of Economics and Business Administration and the Norwegian College of Agriculture.

There are 22 university colleges including colleges of teacher training, engineering, social work, nursing and a number of smaller educational programmes. Thus, the state colleges have increasingly been organised in accordance with the Norwegian university model, with faculty-like subdivisions and departments, like primary units. The types of education offered are more varied than is the case within universities and scientific colleges. However, a rough distinction may be drawn between vocational education (teaching, engineer, nurse, social worker) and other kinds of education. In recent years however some state colleges and scientific colleges has been granted university status.

Among its accredited institutions of public higher education Norway has seven universities in which disciplinary areas such as medicine, law, humanities, social sciences etcetera constitute separate faculties. In addition come nine so called specialist universities offering education in certain areas such as architecture, music and business-administration; 22 university colleges and two national colleges of art. With the exception of a relatively small private sector, all higher education institutions are state-funded. Approximately 86 percent of students are enrolled in public institutions.

Apart from the Norwegian School of management (BI), most private institutions are quite small. In total 15 percent of the student population are enrolled in private institutions (2013), the rest attend public HEIs. Public HEIs do not charge tuition fees.

All institutions, first and foremost the universities, are responsible for conducting basic research and researcher training.

Table 1 Student numbers, by institution

	2012
UiO	27,100
UiB	14,257
NTNU	22,043
UiT (+HiT fra 2009)	9,436
NLH/UMB (fra 2005)	4,344
HiS/UiS(fra 2005)	9,530
HiA/UiA(fra 2007)	9,824
HiBø/UiN (fra 2011)	6,009
HiØstfold	5,201
HiAkershus	
HiOslo	
HiOA (fra 2011)	17,081
HiHedmark	7,394
HiGjørvik	2,855
HiLillehammer	4,724
HiBuskerud	4,350
HiVestfold	4,333
HiTelemark	6,547
HSH	3,031
HiBergen	7,341
HiSF	3,759
HiÅlesund	2,167
HiVolda	3,721
HiST	8,263
HiNT	3,843
HiNarvik	1,573
HiNesna	1,086
HiHarstad	1,234
HiTromsø (inngår i UiT fra 2009)	
HiFinmark	1,967
Sámi allaskuvla - Samisk høgskole	158
Høgskolen i Molde (vit HS fra 2010)	2,103
Norges Handelshøgskole	3,468
Norges idrettshøgskole	1,383
Norges musikkhøgskole	660
Norges veterinærhøgskole	481
Arkitektur- og designhøgskolen i Oslo	618

Although Norway in principle operates with a binary structure, universities and colleges do not function as separate qualification pillars, rather as an integrated sector where undergraduate studies from a college are basically approved by the universities. Colleges are also required to conduct research and many also offer graduate degree programmes. Given such features of the college sector, university colleges is their preferred term.

The number of students spreads relatively evenly between universities and colleges, but the universities have the highest number at master's and PhD level as well as a much wider variety of study programmes.

As regards PhD level Norway has had a significant expansion in the recent decade (NORBAL 2010) although in Nordic comparison still lagging behind Finland and Sweden.

4.2 Reform and change 1970-

The Norwegian system of higher education has gone through the same enormous growth since the end of World War II as other industrialised countries. The growth started somewhat later in Norway than in many comparable countries, and did not set in before the late 1950s. From 1960 the system experienced a rapid growth, and the number of students grew from 10 000 in 1960 to 40 000 in 1975. (Aamodt 1995: 64). Since then the growth has continued (Vabø and Aamodt 2005: 23).

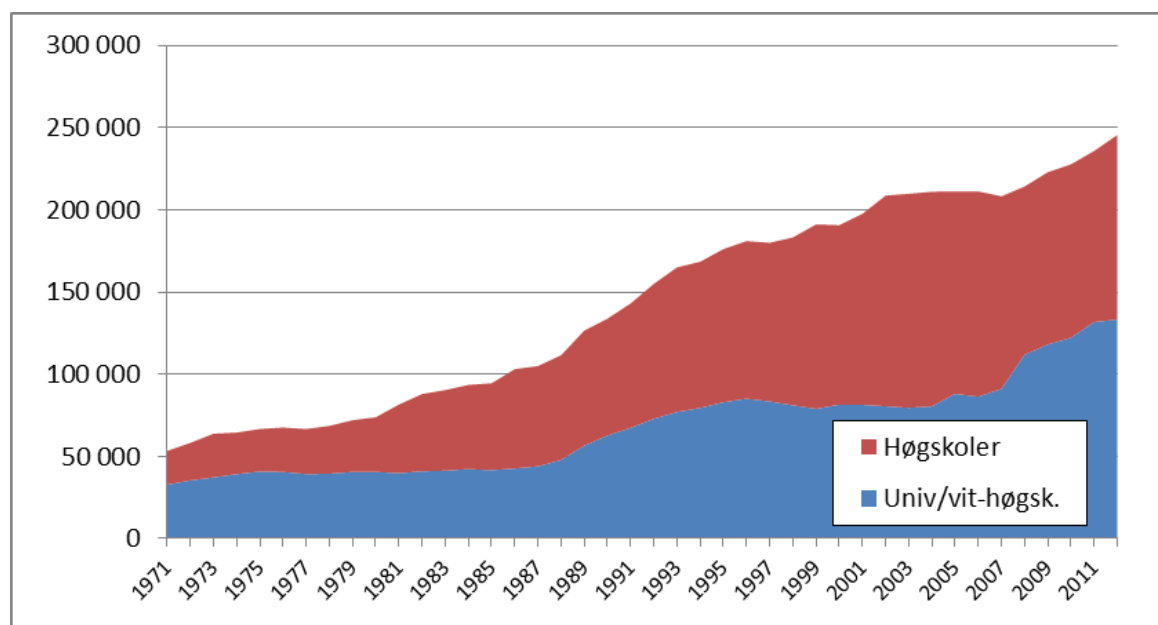


Figure 1. Students Norwegian universities and state colleges 1971-2012. Source: SSB

The expansion of higher education in the 1960s was marked by the social democratic era where both social and geographical equalisation of education was normative for the central dimensioning of the number of students, numbers of institutions as well as their geographical location high level of institutional standardisation; It was emphasised that the universities in Bergen and Trondheim would not be second rank universities. The four main universities received broadly the same courses within a given set of disciplines / faculties, and were subject to equal rules for resource allocation from the state. Academic staff at all institutions were subject to the same wages and working conditions. There was no formal hierarchy of institutions, something also illustrated by geographical recruitment patterns indicating that the brightest students in the country, or those who aspire to belong to a particular study, or social elite, were attracted to a particular university. Status differences in higher education and ditto social strategies can best be identified in the analyses of different recruitment patterns between the

study segments. Thus, as we shall return to, in the future changing market conditions are most likely to contribute to a clearer institutional hierarchy.

University-based professional education expanded less than the humanities, natural sciences and social sciences, though not because of low demand. The Faculty of Medicine and Dentistry has always had stringent academic qualifications and few students. The study of law has for long periods been open, but the number and quality of candidates has been limited by rigorous graduation requirements and ranking of candidates' professional value by a standard measure. So also in the Norwegian model, the university-based professions, through their knowledge and professional monopoly had the power to structure the market of which they are part.

As goes for most western countries the basic structures of the HE system were shaped within the framework of several waves of expansion taking place from the late 1950s onwards.

The first period of expansion, during the 1960s, led to a further development of the university system, amongst other the establishing of a fully-fledged university in Trondheim and in Tromsø. This was in line with the suggestions of a committee appointed (in 1960) by the government (the so called Kleppe committee - led by Per Kleppe, an economist in the department of Finance). The Kleppe Committee was influenced by human capital theory - that investment in education would lead to economic growth and development as well as the ideology of the then labour party aiming at developing a welfare state and welfare goods of individuals, within the framework of Keynesian principles of the state as playing an active regulating role in the market. The number of students increased, however, much above the number stipulated by the Kleppe committee, (in 1970 the number of students in higher education was 30,000 not 18,000 as stipulated) and yet another government committee was appointed to suggest how the HE system should be further developed to cater for the rapid expansion. The so-called Ottosen committee (led by Kristian Ottosen) launched the idea of district colleges. According to the recommendations of the committee the district colleges were meant to develop study tracks alternative to universities; study programmes of shorter duration that were more vocationally-oriented. District colleges were also meant to offload the high number of students at universities by offering lower level university courses qualifying for school teaching. The broad central and regional support of district colleges was the idea that HE expansion should contribute to social equality, between classes and gender; furthermore that HE policy should contribute to a more equal spread of HE resources geographically. Between 1969 and 1990, a total of 14 district colleges were established in cities without a university, Stavanger and Bodø, but also in less developed cities such as Alta, Bø and Volda. This was partly through the upgrading to colleges of former special schools of engineering, social work, nursing, teaching and maritime education. In 1980 specific studies - technological sciences, ICT, finance and administration, were given higher priority. District colleges became very popular among students and this led to a larger number of institutions established than first stipulated (Jerdal 1996).

As a consequence, in 1984 Norway had around 200 so-called regional colleges. A scattered system and a high number of institutions represented some of the backdrop for an extensive process of institutional mergers to take place. The merger reforms were *inter alia* justified due to the need for achieving economies of scale, academic and other forms of synergy between institutions and educational programmes.

4.2.1 Changing institutional landscape

The first wave of institutional mergers were implemented in 1994, on the initiative of central authorities when 98 so-called regional colleges were merged into 26 larger so-called state colleges. A decade later, the Quality Reform with, amongst other things, its emphasis on results-based funding, encouraged the institutions to develop more robust and (nationally and internationally) attractive study portfolios. A range of initiatives were taken to further mergers of institutions or other collaborative initiatives like the creation of alliances and networks. In some cases considerable time and resources were invested to form agreements to merge, which however failed.

It is reasonable to expect the most prestigious universities to be benefiting most efficiently from the new policies aiming at creating more research intensive institutions; to allocate more resources in order to produce top quality research, foster excellence, attract the most talented researchers and students, *et cetera*. A tendency found in Norway is that the oldest universities adopt a strategy to become more elitist and international (by introducing “stricter” entry requirements, reducing the number of students and participating in international rankings). Larger university colleges aspire to full university status by recruiting more students at the bachelor level in order to develop and finance the master and doctoral levels. Small colleges are aiming at specializing within certain “niche” areas, offering study programs at the bachelor level (Stensaker & Østergren 2007). Such development will contribute to a clearer distinction between A and B universities.

The recently appointed conservative government has announced that, in the course of spring 2015, they will submit white paper on the structure of higher education. Its main aim of investigation is to improve the quality of all study programmes in higher education by letting quality determine structure not vice versa. The Minister of Education and Research claims that the structure of higher education might also be subject to significant transformation, also in the near future. There will be a further decrease in the number of institutions, though not necessarily in the number of study sites. The white paper will also contain analysis of the effects of the current funding system. The relationship between the higher education sector and research institute sector will also be subject to attention. The recently merged Oslo Akershus university college was recently further merged with two research institutes in social science, AFI and NOVA: it remains to be seen whether further mergers between the two sectors will take place in the wake of the upcoming structural reforms in the higher education sector the number increased from 18 per cent in 2001 to 25 per cent in 2009.

4.3 Degree structure in a post-Bologna landscape

In line with the Bologna Declaration of 1999, the bachelor's/master's study structure (3+2 years) was implemented mainly at all levels of the Norwegian universities, scientific colleges and state colleges in the autumn of 2003.¹⁰ In Norway, the introduction of this new degree system is part of a larger reform process called “The Higher Education Quality Reform”. This reform represents an attempt to achieve a higher degree of efficiency through devolution of authority to the higher education institutions; the provision of stronger leadership; increased emphasis on internationalisation; the formation of an autonomous central institution for quality assurance and accreditation and the development of criteria for institutional audit; and new pedagogical designs as well as a new funding model that is supposed to provide stronger incentives for improvement.

The Bologna process, with the introduction of a new academic structure and organisation of higher education study programmes has brought an important structural change, partly because modularisation and organisation of the study allows tailoring of the education programme. New programmes of study are often interdisciplinary, and focused on specific skills needed in working life, as well as individual modules which can be practice-based. The Bologna process also involves a shift towards greater emphasis on candidates' learning, and bachelor's and master's studies were meant to enhance graduate employment. New criteria for quality and accreditation of higher education and the introduction of qualifications frameworks are also important formal means to develop the relationship between higher education and employment. Both in Norway and Europe in general this opportunity has been used to reorganise existing programmes and develop new ones with an emphasis on market-relevant skills (Alesi et al. 2005).

Some professional education (theology, psychology, medicine and veterinary studies) was exempted from the study reform. Teacher training will also keep to its four-year time schedule. The new study

¹⁰ Following proposals in a report to the Storting (the Norwegian parliament) on higher education submitted by the Government in March 2001: (report No. 27 to the Storting (2000-2001)).

structure represents a radical break with many of the traditions in Norwegian higher education since the aim is to abolish most of the old study and degree structure.

One very important part of the reform was the formation of an autonomous central institution for **quality assurance and accreditation (NOKUT)** in 2003, and the development of criteria for institutional audit. Authority was devolved to the new body, securing its formal independence from the ministry. In 2004 all Norwegian institutions were required to develop their own quality assurance systems. Within the new framework the institutions are held responsible for all aspects of quality assurance, and they are required to demonstrate how this responsibility is taken care of by an elaborate system of quality assurance. A precondition for the status of an accredited institution is the existence of such a system which is supposed to comply with national requirements.

It has been a major political concern that the new bachelor's and master's programmes should lead to better teaching and learning. They are accompanied by more emphasis on group work, problem based learning, written work, more regular feedback to students, and by the use of portfolio assessment. Educational institutions are to enter into agreements with students concerning courses, clearly outlining the rights and responsibilities of the institution and the student in relation to each other.

Students at faculty and programme level seem much more ambivalent about the quality system and the new requirements regarding participation.

The new programme structure were supported by the institutional leadership, amongst other things because it is considered a good recipe for a more efficient system regarding duration, high dropout rates and the need to increase international student mobility. For instance, a self-evaluation by the University of Oslo (UiO), published in 2002, indicated the need for a thorough revision of strategy in that UiO was described as a huge, complex and heterogenous organisation governed by a decentralised and collegial management structure. Opportunities for establishing new and untraditional interdisciplinary courses were regarded as limited. Completion rates and the quality of studies were generally regarded as good in the professional programmes but less satisfactory across the board. The university showed a low production of credits and comparatively high dropout rates. According to the self-evaluation, the University of Oslo was struggling with its reputation as a mass university that did not manage to become a good student community.

The implementation of bachelor's and master's programmes has created an opportunity for students to combine disciplinary subjects previously less common and/or even impossible to combine. The teaching institutions have allotted considerable resources for the development of new lines of study and the professional circles have demonstrated great creativity in developing new study programmes with, in part, brand new subjects combinations. The new bachelor's and master's programmes are said to be more "vocational, modern, new and interdisciplinary oriented" than the old studies. The Bachelor in Digital Media composed of subjects from law studies, mathematics, social science and the humanities, could illustrate this trend.

Programmes with a diminishing demand have turned out to be reorganised after a certain testing period. The majority of the institutions have improved the information offered to applicants. The studies offered appear more transparent, and it has become easier to gain an overview of the different offers and study programmes.

Balancing the intention to maintain a high professional level in combination with reduced time frames and reduced scope of the different measures has been difficult for a number of professional circles.

Many of the traditional combinations are reproduced through the "new" study programmes.

It seems like the new bachelor's and master's programmes contribute to more uniformity between different types of higher education institutions since the process gives room for the creation of new master's programmes and a stronger academic orientation at the university colleges. It is still possible

for students to switch between studying at university and college, building their degrees from various combinations at different levels of the two sectors. The government regulates the new programmes through general directions in the Universities and College Act, concerning teaching environment and educational plans (§44 - §54). The common association for universities and colleges, the Norwegian Council for Higher Education, founded in 2000, may be said to be the Norwegian equivalent to a rectors conference. Formally it does not regulate, however it has the position as a consultative commentator of special importance for the government. One very important part of the reform was the formation of an autonomous central institution for quality assurance and accreditation (NOKUT) in 2003

4.3.1 Internationalisation

The internationalisation of research and education is an important trend in the Nordic countries. Norway has been very active at the European level, despite the fact that the country is not a member of the European Union (Gornitzka & Langfeldt, 2008). Following the goals of the Bologna process, Norway has invested a significant amount of time and money to ensure that all students have the opportunity to gain experience from studying abroad (Kehm, Michelsen & Vabø, 2010). For central political authorities, the internationalisation of higher education is increasingly seen as a strategy for quality enhancement in higher education. The number of foreign students in Norway has roughly tripled since the turn of the millennium and was estimated at over 21,000 in 2013.

The proportion of staff teaching or tutoring in English is significantly higher at universities compared with the university college sector (29 percent). This must be seen to some extent in the context of educational levels as there are more who teach and tutor in English at the PhD and master's levels than at the bachelor's level. Different practices between disciplines can be observed: the highest proportions of specialists who teach in English are in mathematics and science, technology, agriculture, fisheries and veterinary medicine. The lowest proportion is found in medicine and health sciences, including such vocational health professions such as nursing. At the undergraduate level we find the lowest percentage of staff teaching or tutoring in English (29%). The humanities and social sciences have relatively low proportions of staff who teach in English regardless of educational level.

Subjects and disciplines are also driving forces in differentiation processes in general. In the first instance, this means that internationalisation is defined differently in different academic contexts. In courses related to welfare state professional practices, i.e. health sciences, social sciences and humanities, English is less prevalent as the language of instruction (Vabø & Wiers-Jensen 2014).

4.3.2 Admission

There is a general aim of Norwegian HE that it should be open to all qualified applicants. There are some programmes that it is a lot of competition to get accepted to, for example medicine, civil engineering, law, but most programmes are offered at several institutions and a student that is determined to get a place in that specific education can apply at several institutions. The equity drive in Norwegian HE is also visible through the high participation rate: it is estimated that about 50 % will attend HE.

Norway has flexible pathways into and within higher education. Transfer among institutions and programmes is quite common, especially among undergraduate students (Hovdhaugen 2009). Rates of transfer is highest among undergraduate university students, and lower among students in nursing, social work and teaching at university colleges (Aamodt & Hovdhaugen 2011).

Distance learning is not very common, but does exist at university colleges, especially the more remote colleges in western and northern Norway. MOOCs are not very common but a few institutions have launched MOOCs:

Upper secondary school diploma, from an academic programme. Of a cohort about 50 % start on the academic track, and 50 % start on the vocational track in upper secondary education (Vibe et al 2012).

However, those starting on the vocational track can switch and get general admission to HE (but not to programmes that require specific subjects, such as for example medicine and civil engineering).

It is also possible to gain access through Accreditation of competences (Opheim & Helland 2006, Orr & Hovdhaugen 2014). The last form of access is granted by the institution, to a specific programme or course, based on documented competences in that field (achieved through work or elsewhere, but not through formal schooling in upper secondary education).

Norway does not have a widening participation policy as such. However, equity in education has been considered very important for a long time, and most institutions at least have some programmes that are open to most eligible applicants. This is also visible through the fact that Norway has generally high participation rates in HE: over their lifespan over 50 % of the population will attend HE (Aamodt & Stølen, 2003)

Before the HE reform in 2003 students applied to a faculty (such as the Faculty of Social science) and then choose their subject. After the reform students apply to programmes (combinations of subjects), which has created more competition for students in some popular programmes. This is especially visible in university programmes in humanities and social sciences, that might have some very popular programmes and at the same time programmes that struggle to recruit enough students within the same faculty.

Formally admission is an institutional responsibility, but the Norwegian Universities and Colleges Admission Service (NUCAS) coordinates admission to undergraduate education at all universities, university colleges and specialized university institutions. Students only send one application, but this includes a ranked list of the programmes of their choice.

As an effect of the 2003 HE reform the funding system changed, from a system that funded education based on the number of students admitted to the institution to a system where funding was at least partially based on the number of students completing their courses and degrees (performance-based - see below). This change had implications for institutions, increasing the institutional interest in retention and dropout rates (Hovdhaugen et al., 2013). Since the reform, institutions that have large numbers of students departing before course or degree completion lose money when students leave before receiving the qualification they entered the institution for. This has generated a greater institutional interest in retention and dropout rates, and the demand for more information on these issues is visible in Report no. 44 to the Storting (2008-09).

The report Education Strategy (Report no. 44 to the Storting, 2008-09:5) establishes that “equal opportunities to complete education are a prerequisite if we are to sustain and further develop the welfare state on the basis of the Norwegian model”. This report focuses primarily on the lower levels of education, as reaching these levels of education is a precondition for access to and success in HE. The report also acknowledges the general need for a more highly educated labour force; measures for achieving this include maintaining the principle of free HE, continued financial support to students, increasing the number of study places in HE and ensuring that a sufficient number of graduates are educated in all parts of the country through geographical redistribution between HEIs. There are also a few suggestions on how to enhance completion and reduce dropout; these themes are mentioned in the report, but only to the extent that a better knowledge base of the issues is needed. Suggestions include monitoring rates of completion and dropout and efforts to “contribute to enhanced learning between the institutions about how dropouts can best be prevented” (Report no. 44 to the Storting, 2008-09:12). Flexible education is another theme discussed, and this can have several meanings. Flexible education can be described as lifelong education open to mature students which allows for the opportunity to go back and forth between work and education, as well as flexibility in access to HE, allowing students that do not have formal requirements for HE to gain admission through accreditation of competences.

4.3.3 Student finance

The funding scheme for students from the State Educational Loan Fund (Lånekassen) has been in place since 1947, but the levels and form of support have shifted over time. The State Educational Loan Fund in Norway has three general aims: firstly, to remove inequality and promote equal opportunity to make the pursuit of education possible regardless of a person's age, gender, economic and social position or where that person lives; secondly, to provide the means for students to efficiently complete their studies; and thirdly, to ensure a steady supply of educated labour (Opheim, 2008).

As in other Nordic countries a public student finance system aims at reducing barriers to HE as well as social differences in achievement. The Student Educational Loan Fund has gradually become a universal benefit. Today, student support is provided independent of parents income. In 2002 a further increase in student loan support took place: progression dependent grants were also part of the new scheme. As an effect of this, Opheim (2011) finds an increase in the amount of time students spend in part time employment and study suggests increasing social differences in students' concern with the student loan repayment.

4.4 Changing modes of governance

Various processes of social change, such as increased public expenditure due to rapid growth and a growing concern that higher education needed to compete globally, have led to the justification of more market-oriented modes of governance management in higher education. These are characterised by gradual decoupling from state regulations and the creation of more autonomous governing bodies supposed to work within the framework of so called strategic management methods. As is the case in many European countries, the central authorities are aiming at developing a more indirect mode of steering (Ferlie et. Al 2009). Historically Norwegian universities have not been autonomous in their governance of values and organisational forms. They have developed an important administrative role in the implementation of educational policies within the framework of an encompassing hierarchical-bureaucratic order, formally subjected to the ministry of education (Bleiklie 1996:33-34). The relationship has been based on a contract of mutual trust. The universities were given the necessary autonomy to govern their academic tasks, in return for accepting the classical tasks of a university; e.g. producing certificated candidates.

The new reform policies emphasise the construction of new relations between the university and the state and new forms of governance, providing higher education institutions with more autonomy and more responsibility. More autonomy has been given at the institutional level, particularly the universities in the follow-up of the government proposals underlying the implementation of the new study structure, for instance regarding the creation of the new study programmes. Previously, new degree programmes had to be approved by the Ministry of Education and Research.

Within the framework of the business-inspired reforms in the governance arrangement in higher education, it has been emphasised that the boards to a lesser extent shall be dominated by their role as administrative organs for public policy as well as and specific interests of academic staff. In general academic and administrative leaders have gained a clearer and stronger position. The increasing use of appointed leaders, with effective decision making and strategic priorities, is believed to counterbalance potential interest struggle between different disciplines/groups. The general interests of society in higher education should now influence the institutions' leadership and management. Accordingly, the boards at all levels had fewer members. Academic staff have fewer representatives , and there has been more emphasis on external representatives .

The Universities and College Act provides clear guidelines for the organisation and composition of boards at the institutional level , but it is opened to significant institutional autonomy when it comes to questions about the use of elected or appointed leadership at the various levels, or to what extent one should use boards or advisory groups at faculty and department level .

Evaluations of governance arrangements in universities and colleges show that the HE sector is characterised by hybrid forms of governance with different and sometimes conflicting goals and expectations, which may be seen as the result of historical and national guidelines, partly as a result of the different targets universities and colleges are required to meet (Stensaker et al 2013), as agencies for the implementation of public policy, as knowledge institutions, as workplaces with several groups of employees, and as integral parts of the economy.

The hybrid character of the governing bodies involves tensions between different and sometimes conflicting goals and can be known as challenging for employees who experience reduced participation and academic authority on the one hand, and managers who have limited room for the exercise of effective strategic leadership on the other.

The introduction of corporate governance inspired models and emphasis on more interaction between higher education and society, as well as increasing investment in research, involves general increased use of external board members, both at universities and colleges. Since 2005 it has been mandatory for all main boards of higher education to have four external representatives. By this the institution is meant to bring in other skills (to the board) than the institution itself possesses, be it professional competence, networking, supply of ideas and legitimacy, or the interests of the various stakeholder groups. Consideration of openness and democratic transparency is also an argument for the use of the boards in public sector. That the meetings of university and college boards are open to interested observers and the press can be seen in the light of this reasoning, but this is not necessarily the practice in the higher education system in other countries and systems. (Larsen 2006, 2007, NOU 1993:24).

The ideological basis for the autonomy reforms and emphasis on managerialism was laid in the 1980s when the so called activity planning, or management by objectives (MBO), was introduced in higher education as a part of a larger state service reform (Christensen 1997). The aim was to gain better control with public spending - and even though activity planning instrument was met by heavy resistance particularly in the humanities, it served as a justification for organisational reforms within that field such as the merger of smaller university departments into larger units and rationalisation and managerialisation of the internal academic steering system. The 1989 university legislation reflected this new steering ideology and quest of more efficient steering of higher education. According to the legislation for instance the number of university board members should be reduced- for instance deans could no longer be represented (Bleiklie 1996, Bleiklie et al 2000).

4.5 The academic corps

The positional hierarchy of the academic profession is dominated by two categories; full professors and associate professors, whilst a teaching-oriented category – lecturers – is most prominent in the state college sector. Furthermore there are a number of smaller categories, such as postdocs, researchers, and teachers as well as adjunct positions. In international comparison, the positional hierarchy is relatively egalitarian, with small differences in duties and pay between professors and the other staff. Nevertheless, in Norway, universities and colleges have also been criticised for the apparent assumed heavy use of temporary staff.

As both universities and colleges are required to ensure quality through research-based teaching - the vast majority of academic staff have the conditions to conduct their own research. In Norway PhD students are considered part of the academic staff and have therefore higher salaries and better working conditions compared with other European countries.

The number of foreign academics is constantly rising.

In the public debate following the introduction of NPM in the university sector, increased attention was paid to the fact that the number of administrators has increased steadily during since the 1980s (Gunnes et al 2009), a development still considered a negative trend by many academics.

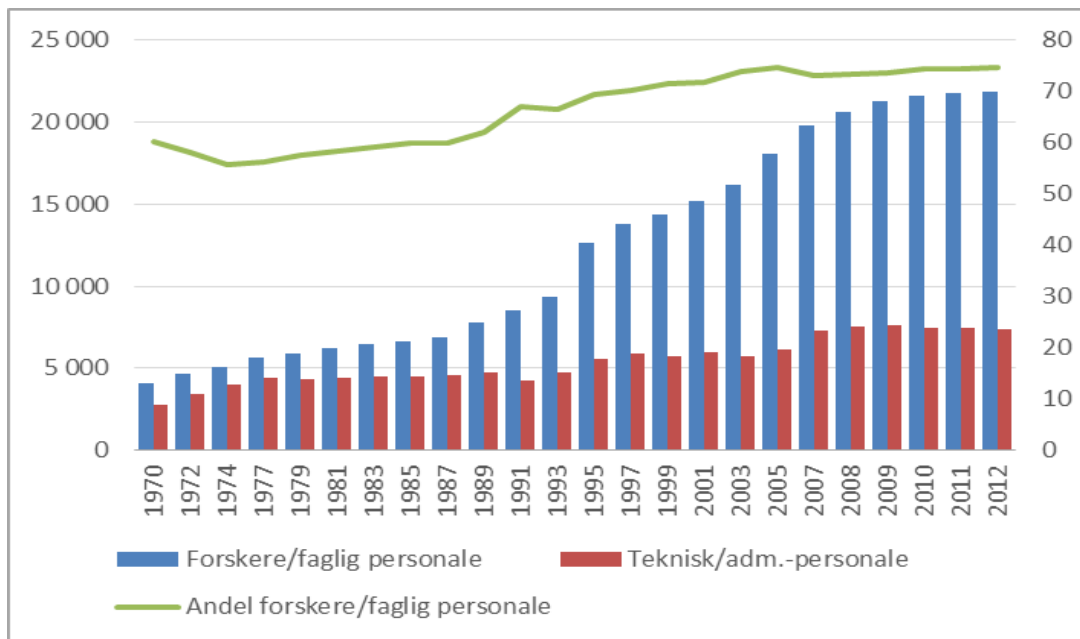


Figure 2. Scientific versus administrative/technical personnel 1970-2012

The administrators are criticised for exercising too much power over academics. The rise in the number of administrators can be explained by different circumstances, such as increasing numbers of students and a more diversified set of tasks. However in Norway, as in other European countries, the relationship between academics and administrators is changing due to the increasing importance of the administrators as planners and organisers on behalf of the academic corps and the institution. Furthermore the administrators are becoming increasingly powerful through the process of professionalisation, as they are now holders of more educational capital (it has become much more common for administrators to have master's degrees and even PhDs): the rise of third space professionals (Witchchurch 2012).

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5 Sweden

Tina Hedmo

5.1 Introduction

Since the end of the Second World War, the Swedish higher education system has been subject to continuous reform processes, having a profound effect on its size, operations, organisation and management (Bauer et al., 1999; Kim, 2004; Lundberg, 2008). The system has been challenged by both intrinsic and extrinsic pressures and demands, especially from politicians, using the higher education system as a tool for realising and optimising their political ambitions and ideologies. As with most other countries in Europe, it has moved from a more elitist system to a mass-education system. In the 1950s, the number of registered students was 17,000. In 2010, the number had increased to 350,000. In parallel, the system has changed in terms of centralisation, decentralisation and also, internationalisation. Since the late 1990s and the 2000s, the Swedish system has been strongly influenced by a number of trends and policy processes, operating beyond the national level, stimulating international mobility and the convergence of higher education structures into a comparable and competitive higher education market (Marginson and van der Wende, 2007). More lately, Swedish higher education institutions also have to respond more strategically to manage new demands concerning organisational autonomy, profiling, specialisation and excellence, leading to more heterogeneity and complexity in the higher education landscape. This chapter outlines the organisational features of the Swedish higher education system in the postwar era, with a focus on the 1970s to the early 2000s.

Methodologically, the Swedish case builds on the results of previous studies of higher education in general, and the Swedish higher education sector in particular, various reports and policy documents, such as Government Commissions (SOU), Government Bills, etc. Statistical data have been drawn from online databases, annual reports and messages and reports from the Swedish National Agency for Higher Education (*HSV*) and Statistics Sweden (*SCB*).

5.2 Systems features in the light of national policies for expansion 1955 –

In Sweden, the higher education system has been constantly expanding after the Second World War in terms of size and scope (see the enrolment report). With an increasing level of eligible students arriving from upper secondary school in the 1950s and 1960s, it moved towards a centralised system, being characterised by detailed regulation in the late 1970s. From the 1990s, the system shifted towards increased decentralisation and diversification. In parallel, and paradoxically, the higher

education institutions have been expected to be more integrated and receptive to the demands from external stakeholders operating in the surrounding society, and especially those belonging to the business sector. At the same time, the sector forms part of a larger European integration process and trends of internationalisation, globalisation and “marketisation” (Engwall, 2007; Engwall and Nybom, 2008; Hedmo and Wedlin, 2008a). Added to this development is a movement towards excellence, profiling and strategising.

The Swedish system has been determined primarily by three large reforms, which have left substantial “traces” in its higher education structure, i.e. the reforms of 1955, 1977 and 1993. During the last decade, these reforms have been followed by the implementation of the Bologna process (2007) with its profound effect on the degree structure and the internationalisation of the system; and finally, the Autonomy Reform (2011), aiming at strengthening the independence of the higher education institutions in relation to the state.

The 1955 Reform – Adapting to a Student Overload

After the Second World War, the admission rate to post-secondary education dramatically increased. This development was mainly a response to the reforming of the upper secondary school system in Sweden and the expansion of age cohorts. Between the 1950s and 1960s, the number of completed matriculation examinations doubled. This development paved the way for an increased demand for higher education, especially for education supplied by philosophical faculties (see below). The system was unprepared for such an explosion. The structure remained almost the same as in the early 1900s. The number of professors, and the disciplines they represented, was restricted. The system, only encompassing a handful of universities and specialised institutions, was rigid and state-regulated in large detail in terms of operations and faculties. Both the academic leaders of the universities and their faculties were appointed by the Government, albeit the candidate for the academic leaders, including the rector, followed the intra-academic collegial election principle of *primus inter pares*. The responsibility for the content and organisation of higher education was delegated to the faculties, being chaired by the discipline-oriented and powerful professors. (Askling, 2012, Andrén, 2013)

In order to respond to the quantitative and qualitative problems emerging from the increased inflow of students, the higher education institutions were reformed and expanded gradually in size and scope, starting with an enhancement of existing universities. The reform was largely driven by political ideals linked to human capital theories and the belief in more instrumental-oriented universities supplying society with a well-prepared and qualified labour force particularly in engineering, science and medicine science. The expansion of the system was problematic as it opened up for long completion times and a low frequency of graduates, especially in the philosophical faculties (i.e. the humanities, the social sciences and the mathematical-natural sciences), allowing free admission of students (see below). In comparison with other university faculties and post-secondary institutions, using more selective standards for admission, the completion rate at the free faculties was almost half. To come to grips with this undesirable situation, a new teaching category was introduced in 1959 – the lecturer – being a pure teaching position, and as such, generating a divide between the two core missions of universities – higher education and research. (Askling, 2012; Andrén, 2013) As such, the professors could devote themselves more strongly to research and the supervision of doctoral students.

The 1977 Reform – Widening the Access to Higher Education

The 1970s represents a period of comprehensive political reform programmes in Sweden more generally and the 1977 reform within the higher education sector was no exception. The 1977 reform, taking an overall grip of post-secondary education, was mainly a political project, which was preceded by numerous large-scale and dramatic university investigations in the 1960s (e.g. U68, UKAS, PUKAS). The reform was mainly driven by the political ideals of democracy, equality, uniformity (in Swedish, *enhetlighet*), and trust in central planning (Bauer et al., 1999). The overall aim of the reform was to widen the access to higher education for new target groups and hence, to expand the system both socially and geographically (Kim, 2004). To reach this aim, a common and unitary system was established, meaning that all post-secondary education (including academic, vocational and longer

and shorter professional programmes) was transferred into the higher education sector and as such, they became subordinated to a common higher education regulatory framework (Bauer et al., 1999). Both the new and old institutions were categorised under the same label, *högskolan*, as a means to overcome regional and generational injustice and to decrease status differences between various institutions and programmes (Askling, 2012). In addition, a number of new university colleges were founded and established in various regions of the country in order to stimulate the geographical spread. In many cases, these new organisations were based on previous colleges of education (Askling, 2012), and in contrast to the universities, which mainly were research-oriented, the new institutions' main mission was, at least in the beginning, to provide education at the undergraduate level. Accordingly, the number of study places outside the traditional university regions expanded radically. The "regionalisation" of the system introduced a second layer of governance into the Swedish system as the system was divided into six regions¹¹ comprising a number of universities and university colleges, being subordinated to a regional board respectively (SCB, 1986). These boards, together with the National Board for Universities and Colleges (*UHÄ*), planned the provision of education.

During this time, higher education at the undergraduate level was also re-structured in five broad sectors with fixed study courses. These had a clear vocational direction in order to fit the demands of the labour market (Bauer et al., 1999; Swedish National Agency for Higher Education, 2001; Askling, 2012). The planning of higher education was decided at the ministerial level including such details as volume and the number of students at each institution, structure and the curriculum of the general study lines. In addition, and even though the reform aimed at opening access to higher education, a blocked and centralised admission system was established (see section 2.6).

The "Freedom for Quality" Reform in 1993

More generally, the 1980s was a decade of stagnation in terms of student numbers. The U68 and the 1977 HE reforms were contested, while simultaneously the full implementation of the 1977 reform was hampered by a recession. The budget was cut down and the planned expansion of the system faded away. (Gadd, 2005) New political demands were introduced, emphasising the value of rationality, re-prioritisation and efficiency. It was obvious that the current central planning of the fixed study lines was much too rigid and obsolete. Students increasingly started to question the quality of education and the demand for more general knowledge escalated. A new view on education and its governance was introduced. (Askling, 2012)

At the beginning of the 1980s, and following criticism from academia, the Ministry of education, now ruled by a new right-oriented political regime, initiated an internal investigation of the organisation of higher education, the *Andrénska* investigation (SOU 1981:29). The investigation revealed that the 1977 reform had changed the system towards an unintended separation between education and research. The uniform Swedish system had become more binary-like as the new university colleges, unlike the universities, relied too heavily on education. Despite a common compulsory regulatory framework, the university colleges did not have the mission or resources to conduct research, except the former university branches located in Karlstad, Växjö and Örebro, being allocated some resources for research. (Gadd, 2005) In addition, the reform had increased the administrative burden within the system and allowed for increased inefficiency, as similar administrative tasks were managed simultaneously at various institutional levels.

At the end of the decade, the more general trend of New Public Management (NPM) infused the entire Swedish public sector – including higher education. Management-by-objectives was introduced, and a movement towards increased institutional self-regulation in parallel with an expansion of external evaluations and tools for accountability (Government Bill 1987/88:150; 1988/89:65). In addition, the

¹¹ The six HE regions in Sweden were Stockholm, Uppsala, Linköping, Lund/Malmö, Göteborg and Umeå. The largest region was Stockholm whereas Linköping constituted the fastest growing region during the 1970s and 1980s. (SCB, 1987)

responsibility for the organising of higher education was moved to the local level, and most of the general study lines were abolished. (Askling, 2012)

The new vision of the role of higher education during the early 1990s shifted to a large extent with the change in political power from a Social Democratic government to a Conservative-Liberal Alliance. At this time, a vision of society as a “knowledge society” was prevalent in political debates and discussions and appeared also in almost every government proposition dealing with higher education (Bauer et al., 1999). Unlike the emphasis in the 1970s, on democratising higher education to meet the demands of the society, the early 1990s focused on meeting the demands of various “markets” and one of the largest market “actors” was business. The Minister of Education claimed “Sweden now needed to increase education that had connections to the private sector and to business” (Government Bill, 1992/93:169, p. 3). Another crucial actor in the “higher education market” was the student, now being considered more or less as a “customer”. Students’ influence in university governance increased from now on. The students strongly criticised the quality of education, and this criticism was a driving force for a new higher education investigation, “*Grundbulten*”. The focus of the investigation was higher education and its content and implementation. (Askling, 2012)

The 1993 reform, entitled the “freedom for quality reform”, was hence a political victory for the Alliance, which struggled to create a competitive knowledge society or “higher education marketplace” on the basis of academic core values like quality, freedom, academic autonomy and academic excellence (Bauer et al., 1999). The new model of governing the higher education sector meant a shift from the state-level on the basis of regulation and input control, to governance through control of outcomes and through external forces acting upon the university and colleges (Bauer et al., 1999; Kim, 2004). This meant that the Government and the Parliament (Riksdag) established certain targets and frameworks (mainly of a financial nature) and the local institutions were delegated the task of meeting these objectives within a given framework. (Engwall, 2007) The decentralisation of decision-making increased the power of the local academic management, especially the board and the rector, and with the support of the local administration, they had to decide on strategic plans for the operations. Also the functions of the deans and the head of departments were clarified and strengthened. On the other hand, the professors lost power, as government no longer appointed them. Consequently, they could lose their chairs. The UHÄ was replaced by the Swedish Agency for Higher Education Services (*Verket för Högskoleservice*), with the central responsibility for managing student admission and statistics. In addition, a central secretariat was established for evaluating the operations of higher education institutions. This secretariat was later re-organised into the National Agency for Higher Education (*Högskoleverket*). (Askling, 2012) The centralised study-line system for higher education was abolished, and the orientation and planning of undergraduate programmes was decentralised to the local level. As an outcome, there was an explosion and flexibility of new programmes and courses at the local level and an increased inflow of new students in Sweden. (Askling, 2012) *In addition, the reform* opened up for an increased demand on single institutions for managing the quality of their higher education and to report their activities to the State (National Agency for Services to Universities and University Colleges, 1995).

The 1993 reform was also inspired by the principles of freedom of students to choose their own education and to adapt higher education to the demands of the students. A new Degree Ordinance was established, replacing the earlier centrally determined study programmes. It was established to define goals and the main directions for the recognised higher education degrees. Courses that could be combined into programmes were introduced as the basis for the new system of study. To interpose, the higher education ordinance (HEO) lays down which degrees may be awarded in Swedish higher education. Higher education, except for doctoral studies, is provided in the form of courses of different length, which may be linked together to constitute programmes with varying levels of individual choice. Students could also themselves combine different courses for the award of a degree.

The Bologna Reform 2007

The Bologna process has attracted considerable attention in higher education systems in both Europe but also in a range of countries outside the continent from the late 1990s and onwards. It is even argued that the Bologna Accord has moved towards being a “global frame of reference” for higher education (Hedmo and Wedlin, 2008b) and as such competing with other world role models like the American one. Sweden was a latecomer when it comes to reforming the system in line with the objectives set in the Bologna declaration (Lindberg-Sand, 2007), and unlike the situation in many other countries, it did not attract much media attention. Even though it was one of the first countries to sign the Declaration in 1999, the objectives were not translated into practice in Swedish higher education until July 2007. The reform process took its starting point in the belief of the political regime on the value of internationalising higher education, but its recommendations met resistance from the opposition, delaying the overall process. In addition, it was believed that a re-structuring of the system should be an easy manoeuvre as the Swedish structure generally already seemed to correspond to the Bologna degree structure; an idea that was more wishful thinking than fact. The reform was hence prepared during 2004, suggested in 2005, and after a long period of political preparations, debates and oppositions, decided on in 2006. In June 2006, a renewed HEA and HEO were laid down (including the European Qualification Framework) and subsequently the implementation at the institutional level took place in 2007, to be presented to prospective students the same year. (Lindberg-Sand, 2007) As such, the actual implementation of the reform in Sweden followed a fast track, as most institutions had to wait a long time for before the formal decisions were taken by the Parliament. Some institutions operated rather pro-actively, preparing new structures beforehand, whereas other responded at a slower pace. Some institutions managed the process top down, whereas others applied the opposite approach. The Government only modestly compensated the institutions financially. They were allocated about €3m, corresponding to only a twentieth of the system's annual budget. Institutions had to draw most of the time and resources from their local budgets. An estimated total amount for the implementation ended up as SEK1.1bn. (Lindberg-Sand, 2007; Vetenskapsradion, 2008-06-08).

In Sweden, most Government decisions at the system level corresponded to the Bologna recommendations, albeit a number of deviations were made to adapt to the Swedish conditions. Already in 2003, a Diploma Supplement, describing the degree programme and its place in the educational system was introduced. It was issued automatically, free of charge and in English, and was appended to all degree certificates within undergraduate education in Sweden at the bachelor's and master's degree level. In 2007, a Diploma Supplement was also introduced for doctoral education. The adoption of a new three-tiered system was also decided, as well as a new credit system (see more in section 3). Following an internal debate among higher education institutions regarding the pros and cons of introducing the seven level ECTS-system in Sweden, it was decided that such a system should be initiated on a voluntary basis. This voluntariness then opened up for a rich variation of grading systems in Sweden. Another issue raising a lot of tension was the possible conditions for implementing a new two-year master's degree, especially as such a degree would result in a shortening of the doctoral education to three years. The universities feared such a change, as it would lead to major consequences. As an outcome, the four-year long doctoral education was retained in the system and the development of the two-year master's was primarily a concern for those in charge of doctoral education at the institutions to make sure that the quality of the new master's programmes met their standards. The implementation of Bologna also led to a modified Swedish system for quality assurance (see more below). In addition, the admission system was reviewed and changed, including new criteria for gaining admittance to the master's level.

At the institutional level, the systemic changes were hard to handle, especially the task of formulating learning outcomes for each course and programmes. As argued by Lindberg-Sand (2007):

The step from a decentralised, modular curricular system, where progression towards the goals was treated only as a formal question of which modules could be combined to a coherent standards-based curricular system, where the set of expected learning

outcomes in one course really is qualitatively connected to the set in another, certainly is a slippery one. The only way to coordinate learning outcomes from the several courses in a fruitful way is by cooperation between teachers. (2007, p. 12)

Another problem referred to the institutions' construction of new degrees. The humanities and social sciences, where the traditions have been a "free choice of studies", had severe problems with constructing new degrees, as they had to start with designing a preliminary educational organisation on which to base their programmes. On the other hand, the long professional programmes (as in science and medicine) were obvious easier to handle. Even though their syllabi had to be revised, the character of their degrees did not have to change.

Nevertheless, at the end of 2007, every single syllabus in Swedish higher education was renewed, all programmes revised, and almost 700 two-year master's programme had been designed. In order to promote "employability", being one of the key recommendations in the Bologna declaration, some institutions had made their courses and programmes more practice-oriented. Increasingly spread at the institutional level was also the provision of courses in entrepreneurship, and career centres. (Lindberg-Sand, 2007; Vetenskapsradion, 2008)

The Autonomy Reform 2010

The Autonomy Reform has its roots largely in the 1993 "Freedom of quality reform" and its ideals of independence and freedom of higher education institutions, especially in relation to the state. When a liberal government came into power in 2006, these ideas got new fuel and became high on the higher education policy agenda. In 2007, a specific government investigation was appointed to find appropriate models for how public higher education institutions would be organised on the basis of such ideals. The aim was, among other things to protect the universities' autonomy and discretion in terms of resource allocation, the internal organisation and management etc. In 2008, the report "Independent universities" (SOU 2008: 104) was handed over to the Government and its suggestions gave rise to an echo and debate in the higher education landscape. It was recommended that Swedish universities should cease to be organised as government agencies and instead transform into new public bodies implying a radical change in governance, organisation and management. The proposal was rejected in the Government Bill "En akademi i tiden. Ökad frihet för universitet och högskolor" (Bill 2009/10:149), declaring that an increased freedom should instead be organised within the current agency form. It was decided that the decision-making of public universities would become more decentralised to promote quality and that the governmental control would be restricted to quality issues in research and education, accountability and justice (*rättfärdighet*). The reform led to a series of reductions in the higher education legislation and the universities were granted more freedom to re-shape their organisation, management, and decision-making structures on the basis of their local conditions. They were independent to recruit faculty (except the categories of professors and senior lecturers), and to plan the content and volume of education. The Government retained its control over the appointment of the chair and members of the university boards and also the appointment of the rectors, and funding.

In 2013, the Government presented an additional proposal (Ds 2013: 49), which aimed at increasing the freedom of action of the universities even further by transforming them into private foundations with "specific conditions". The proposal shared similarities with the 1993 reform when Chalmers Institute of Technology and Jönköping University were converted into private foundations, albeit with the modification of no financial compensation. The proposal attracted media attention and massive criticism from most stakeholders in the Swedish higher education landscape, and the proposal was postponed.

The consequences of the reform in Sweden have been marginally empirically investigated, but it is evident that the reform has led to strengthened top-bottom management and more powerful academic leaders, especially the rectors, at Swedish universities. In studies made by Ahlbäck Öberg (2011) and Sundberg (2013) it is argued that institutional autonomy had reduced the academic freedom in

Sweden. It is also stressed that most universities have replaced the traditional collegial steering system with the faculty boards in the forefront of more management-oriented models.

5.2.1 The Institutional Landscape of Swedish Higher Education

The Swedish higher education sector is defined as a “uniform” system, being governed by a common regulatory framework. There is a national qualification system, and the same degree awarded at different institutions has equal official value. The system is also described as promoting flexibility as there are no formal obstacles to prevent students from transferring to other institutions during the study period. When applying for education at an institution, students are entitled by national legislation to receive credit for courses or programmes they have completed at another institution. (The Swedish National Agency for Higher Education, 2006b)

The system encompasses a wide variety of institutions, spanning from old state and research-oriented multi-faculty universities, with ancient and prestigious academic traditions, to new and more narrow university colleges and specialised institutions with roots in professional education such as nursing, medicine, education and business studies (see Table 1).

For centuries, Sweden only had two universities: Uppsala University (founded in 1477), with the main obligation initially to educate clergy for the church, and Lund University (founded in 1668), with the aim of integrating the newly acquired Danish provinces (The Swedish National Agency for Higher Education, 2006b). During the 1800s, the system expanded by the proliferation of specialised institutions providing professional education. Originally, these institutions were not granted university status, but they acquired it in due course. The Karolinska Institute (founded in 1811, entitled to give examinations in 1861), was set up in order to provide qualified medical training. A few years later, the Royal Institute of Technology (founded in 1827, upgraded to academic status in 1877) in Stockholm and Chalmers Institute of Technology (founded in 1829, given full academic status in 1937) in Gothenburg were established to support industry and business with qualified engineers. At this time, special institutions were also founded for veterinary (1819), forest (1828) and agriculture personnel (1834). In the early 1900s, the latter institutions were transformed into colleges (*högskolor*).

The late 1800s saw the birth of two university colleges in Stockholm (1878) and Gothenburg (1891). In the mid-20th century (1960 and 1954 respectively) these colleges were transformed into public universities. (Engwall, 2007) The early years of the 20th century saw a growth of vocational and professional programmes and specialised institutions for example teacher-training seminars and colleges for social workers (The Swedish National Agency for Higher Education, 2006b) In the early 1900s, two business schools were established by private grants, the Stockholm School of Economics (1919) and Gothenburg Business School (1923). The specialised institutions are not multidisciplinary like the state universities mentioned above but they have the right to employ professors and to provide postgraduate education (Engwall, 2007). During this period, there was also an expansion of arts colleges.

After the Second World War, the scale and geographical spread of higher education institutions increased considerably. In 1965, the first northern university was founded in Umeå and a few years later, in 1971, the Luleå Institute of Technology followed suit. During this period, specific branches of the universities were set up in Örebro (Uppsala), Växjö (Lund), Linköping (Stockholm), Karlstad (Gothenburg) and Sundsvall (Umeå). In 1975, the Linköping University College was awarded university status. (Engwall, 2007)

With the 1977 reform, a formal unitary system was implemented in the Swedish system (see above, section 2.1.2) and as part of the reform, a large number of new university colleges were established on a regional basis across Sweden. This politically driven regionalisation of the sector set the scene for twelve additional regional university colleges to operate in Sweden. For instance, new institutions were set up in Eskilstuna/Västerås (Mälardalen), Falun/Borlänge and Jönköping (Engwall and Nybom, 2008). The bases for these establishments were mostly already existing teacher training colleges. The

regionalisation of the higher education sector also paved the way for the establishment of ten university colleges in the Stockholm area specialising in artistic performance and teacher training and a merger between the institutions of veterinary science, forestry and agriculture into the Swedish University of Agriculture Sciences, located in Uppsala.

The 1990s was an eventful period in the history of Swedish higher education expansion and restructuring. On 1 July 1994, the Chalmers University of Technology and the University College of Jönköping became on the basis of the resolved Wage Earners Funds, corporations owned by private foundations like the Swedish School of Economics (Swedish National Agency for Higher Education, 1996). In 1996, the Luleå Institute of Technology was upgraded to university status, and in 1997, the “new” university colleges could also apply for university status, at the same time as the institutions specialising in artistic performance and sports were adapted into the higher education system (SOU 2005:48). In 1997/98 new university colleges were established in Södertörn, Malmö and Gotland (Askling, 2012). In 1999, the government decided to award Karlstad, Växjö and Örebro university colleges university status. They were all formerly affiliated institutions, copying the structure and aim of traditional universities (Kim, 2004). Some years later, the Mid Sweden University was established. Since the late 1990s, all university colleges are also awarded specific appropriations for research. In 2005, Sundsvall was the last university college to be granted university status.

In 1996, Advanced Vocational Education (*kvalificerad yrkesutbildning*) was launched as a pilot project. In 2002, it was made permanent as a new form of post-secondary education in Sweden. The AVE-courses are based on close cooperation between businesses and various course providers, including public higher education institutions. In 1996, the number of AVE-students was 1,000. In 2004, the figure had increased to 20,900. At the end of 2013, AVE ceased to exist as a form of vocational-oriented post-secondary education in Sweden, being replaced by a new noun, *yrkeshögskola* (polytechnic). However, the polytechnics are not included in the higher education system as they are regulated by separate legal acts, the Vocational-Education Act (2009:128) and the Vocational-Education Ordinance (2009:130).

Table 1. Universities and University Colleges in Sweden 2014

Institutions with the right to award first, Second and third-cycle degrees	Institutions entitled to award first and second-cycle degrees	Private course providers
Accountable to the Government	Accountable to the Government	
Uppsala University Lund University Göteborg University Stockholm University Umeå University Linköping University Karolinska Institute Royal Institute of Technology (KTH) Luleå University of Technology The Swedish University of Agricultural Sciences (SLU) Karlstad University Mid-Sweden University Linné University Örebro University Blekinge Institute of Technology* Malmö University College* Mälardalen University College* The Swedish School of Sport and Health Sciences* Borås University College* Gävle University College* Halmstad University College* Skövde University College* Södertörn University College* University West*	Swedish National Defence College Dalarna University College Gotland University College** Kristianstad University College University of Dance and Circus*** Stockholm Academy of Academic Arts*** University College of Arts, Crafts and Design Royal Institute of Art Royal College of Music in Stockholm University College of Opera, Stockholm***	Evidens University College Stockholm Academy for Psychotherapy Training The Erica Foundation The Swedish Institute for CBT and Schemy Therapy
<i>Private</i>	<i>Private</i>	
Chalmers University of Technology Stockholm School of Economics (SSE) Jönköping University College	Beckmans School of Design Ersta Sköndal University College Gammelkroppa School of Forestry Johannelund Theological Seminary Newman Institute The Red Cross University College University College of Music Education in Sthlm Sophiahemmet University College Stockholm School of Theology Örebro School of Theology	

* University colleges to award third-cycle qualifications in one or several restricted disciplinary domains at the end of 2013.

** Gotland University College became part of Uppsala University on 1 July 2013. The university college will continue with providing courses and programmes in Visby under the banner "Uppsala University-Campus Gotland".

*** The University of Dance and Circus, Stockholm Academy of Dramatic Arts and the University of College of Opera merged on 1 January 2014 to become Stockholm University of Arts.

Source: The Annual Report, UKÄ, 2014, p.14.

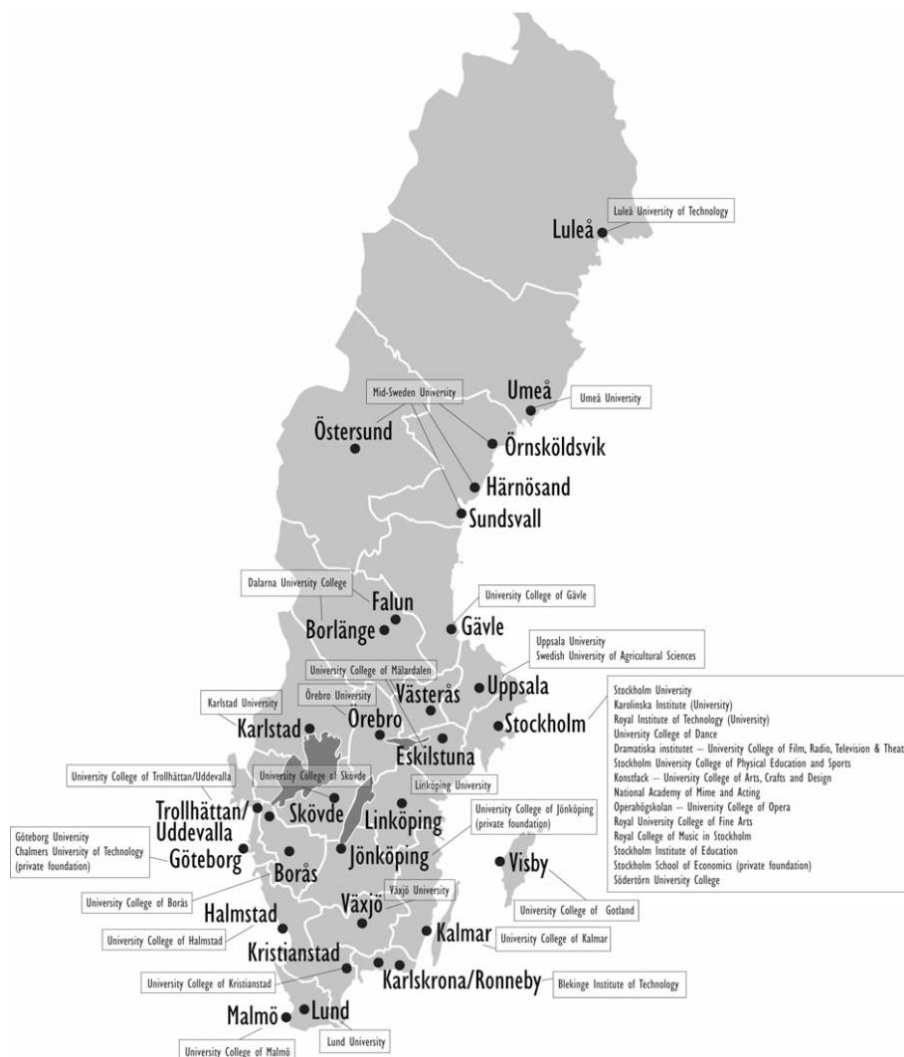
To sum up, the expansion of the higher education system in Sweden has been quite extensive, especially during recent decades. In 2013, the total number of higher education institutions was more than 50 (table 1). Half of them (25) are public institutions having the right to award first, second and third-cycle qualifications (including the Karolinska Institute and the Royal Institute of Technology). This

category includes all public universities (14). In Sweden, three private foundations have the right to award all or some third-cycle qualifications (Chalmers University of Technology, the Stockholm School of Economics and the University College of Jönköping). A large number of institutions (20) are entitled to only award first and second-cycle qualifications, including both public (10) and private (10) institutions. In addition, there are a few institutions (4) being independent and entitled to award qualifications in psychotherapy.

5.2.2 Geographical spread and Distribution of study programmes

In Sweden, there is a clear regional dimension to higher education. The geographical spread of higher education is a consequence (or a driver) of the postwar expansion of higher education. The regionalisation of the higher education sector was a core objective of the 1977 reform and a large number of new university colleges were established as a means to broaden the recruitment base of students, thereby opening access to higher education for new target groups. In addition, it was a means to raise the overall knowledge level of the Swedish population in order to better match the demands from the labour market. Consequently, the number of study places increased rapidly outside the traditional university locations. Today, there is at least one higher education institution situated in each of the country's 21 counties.

Figure 1. The geographical distribution of higher education institutions in Sweden



Source: The Swedish National Agency for Higher Education, 2006b, p. 24.

As most counties are located in the Mid- and South of Sweden, it means that fewest institutions are situated in the Northern part of Sweden (see figure 1). In addition, the majority of the institutions are located in the urban regional areas and around the larger cities with an emphasis on Stockholm.

It also appears that the geographical distribution of institutions and programmes do not correspond to students' priorities. Competition for students in the most remote geographical areas is continuously strong, whereas the opposite situation prevails for the older and large universities, located in more urban areas. However, all higher education institutions are treated along the principle of uniformity or *enhetlighet*. They are allotted the same assignments and they are expected to offer a broad repertoire of education independently if they are education-oriented new colleges or stronger research-oriented universities. As an outcome, the provision of education in Sweden is rather varied and geographically spread. However, during recent years we can follow a trend towards increased specialisation, profiling and merging; a development being forced by Government recommendations and policy agendas.

5.2.3 The Faculty in Higher Education

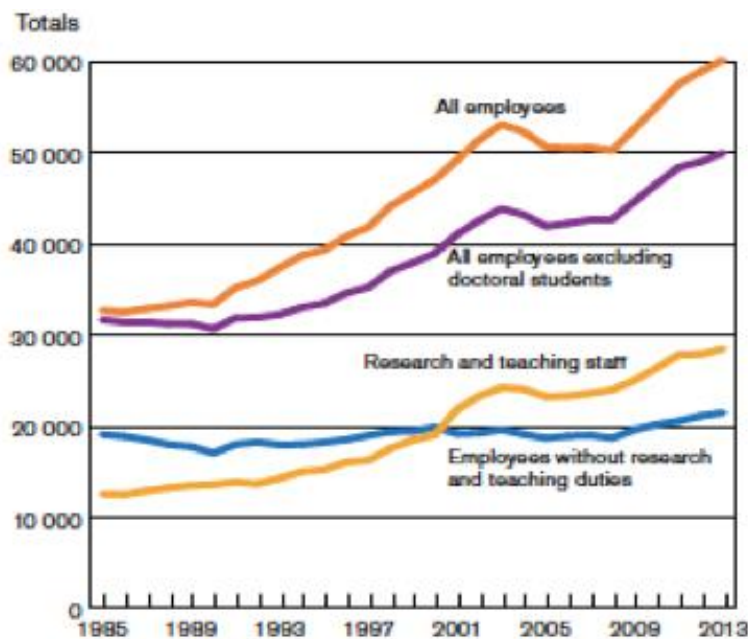
The expansion of higher education in Sweden has resulted in a steady demand for more staff at the single institutions. There has been a gradual rise in the number of employees since the beginning of the 1990s, apart from the period 2004-08 when the number temporarily declined. (UKÄ, Annual Report 2014) The increase during the late 1990s was partly due to the transfer of medium-length programmes in health sciences from the local authority nursing colleges to the public institutions and the inclusion of their staff in the statistics. Before the implementing of the Autonomy Reform in 2011, the following categories of teaching and research staff were employed in Sweden and as such, their employment and promotion was regulated by the HEA and the HEO: professor (including visiting professors and promoted professors), lecturer (senior lecturer including visiting senior lecturer), adjunct (lecturer, including visiting lecturer), research assistant (a temporary postdoctoral fellow), part-time teacher and guest teacher¹². Universities and university colleges made their own decisions regarding the employment and promotion of teachers on the basis of these rules. In 2001, the position as associate senior lecturer (*biträdande lektor*) was introduced to improve the opportunities for post-doctoral promotion in the Swedish HE system (Swedish National Agency for Higher Education, 2006). So far, however, the number of such positions has been limited.

The staff in higher education is well educated with two-thirds having an education at doctoral level in 2013 (SCB, UF 23 SM 1201). Over recent years, an increasing emphasis has also been placed on the pedagogical skills of the teachers in employment and promotion. With the Government Bill "*Den öppna högskolan*" (Government Bill 2001/02:15) in 2001, it was decided that all junior and senior lecturers holding permanent positions must have basic pedagogical training. Such training also became mandatory for doctoral students. (The Swedish National Agency for Higher Education, 2006b)

¹² Academic merits earned after the award of the PhD may lead to the title of docent, a quality marker indicating proven research proficiency and teaching skills. However, there is no formal position for holders of the *Docent* title in the Swedish higher education system (Swedish National Agency for Higher Education, 2006).

The distribution and quantitative development of the different categories of teaching and research staff 1985 - 2013 is illustrated in the figure (2) below.

Figure 2. Number of employees in higher education institutions in Sweden 1985-2013 (FTEs)



Source: UKÄ, Higher Education Status Report, 2014, p. 47.

Figure 2 illustrates how the number of employees in total in the higher education sector in Sweden (including doctoral students with paid appointments), has risen by more than 60 per cent between 1985 and 2013. In 2013, about 25 per cent of all employees at the Swedish state operated in the higher education sector. This year, the number amounted to 75,700 individuals or 60,200 FTEs (full-time equivalents), which is the highest number ever. The largest category of employees in HE-sector covers those having research or teaching duties, which totaled 57 per cent of the total number in 2013. This category mainly includes the positions previously being regulated by the HEA and the HEO, including professors, senior lecturers, post-doctoral research fellows, junior lecturers and visiting and part-time fixed-term lecturers. The single largest sub-category of employees in 2013 comprised senior lecturers (especially women), who accounted for 28 per cent of the staff with research and teaching duties, while professors and junior lecturers each accounted for 18 per cent. The number of professors has also risen, especially after 1999 when the “promotion reform” was implemented, enabling the promotion of qualified lecturers to professorships. The downturn in the category “other research and teaching staff” in the late 1980s-early 1990s is a consequence of a reform in 1986/87 that classified a number of different teaching and research posts as junior and senior lectureships.

Of all the research and teaching staff, almost 71 per cent of the FTEs operate at the 10 largest universities and institutes of higher education. Uppsala University is the institution with the most FTEs, 3,000. The development also makes clear the number of permanent positions is increasing, and in 2013 it reached 69 per cent. On the other hand, the employees are also aging and the group of 65 and older continues to grow. This situation is especially appealing for the professors.

As a consequence of the Autonomy Reform, the HEA now only regulates the employment of the professors and senior lecturers. Since 2012, new rules for fixed-term career development posts were introduced in the HEO, as the number of posts such as research assistantships, associate senior lectureships and post-doctoral research fellowships has declined in Sweden, in line with many other countries.

5.2.4 The Recruitment of Students

At least since the 17th century, Swedish universities have been responsible for training almost all kinds of higher civil servants in accordance with a rather strict degree system, which historically reflected the demands of the national state and its schools, church and judicial system (Bauer et al., 1999). From educating a few thousand students in the 1950s, higher education in Sweden grew from an elite university system to a mass higher education system with close to 360,000 students engaged in higher education studies in 2012. The expansion of student numbers is primarily an outcome of Swedish reform processes in the area of higher education sector after the Second World War. An historical review reveals that the recruitment of students across the higher education landscape in Sweden has undergone profound changes during this period. As in many other countries the high demand for educated people after the Second World War opened up a gradual expansion of the HE sector (SOU 1985:57). In tandem with an unregulated and rather “free” admission of students to the philosophical faculties the Swedish sector experienced a large increase of students, particularly in the 1960s. In the middle of the 1970s, the sector encompassed about 100,000 students. In the beginning of the 1980s, and as a result of the 1977 reform and the expansion of undergraduate education, about 150,000 people studied at higher education institutions (SOU 2007:81). The strong increase in student numbers in the 1990s also meant a geographical redistribution of higher education in Sweden. The growth rate was higher in the university college sector than in the traditional university sector. Irrespective of political power there was strong backing for the new universities and colleges during the 1990s. This policy did not favour the metropolitan regions in Sweden. The growth rate in these areas was lower than in other parts of the country (Kim, 2004).

Despite the expansion of higher education in the 1990s and 2000s, there is still a competition for entrance in most areas, especially to some of the more vocationally-oriented programmes. And the regional higher education institutions are struggling for attracting students whereas the old and large universities stumble with the opposite situation. A decline in the number of places offered and record numbers of applicants for each place has made it more difficult to be admitted to higher education more generally, particularly for the older age groups. The application rate continues to increase as explained by a large age cohort of 19 year olds and a deteriorating labour market. About 59 per cent of all applicants were offered study places during the fall 2013. (UKÄ, Annual Report 2014: 7).

5.2.5 The Admission system in Sweden – a historical background

In Sweden, the issue of admission to higher education has been the object of political interest and public debate since the 1970s. In a report investigating the development of the admission system between the 1950s and 1997 it is formulated that:

The form the [admission] rules have taken has faithfully reflected the general state of development of higher education in Sweden, with the reliance of the 1970s on large-scale unified systems, the cautious decentralisation of the early 1980s, the active purposeful decentralisation of the early 1990s and in the end of the 1990s, a cautious return to centralisation (The Swedish National Agency for Higher Education, Skriftserie 1997: 13 S, p. 12).

The reforms of education in the 1950s and 1960s and the strong expansion of students for the upper-secondary school demanded new admission rules for higher education. The entrance for higher education was at that time binary. As been mentioned earlier in this chapter, the student intake to studies at the philosophical faculties was free, whereas the admission to studies at the rest of the faculties (including medicine and odontology), and Stockholm School of Economics (SSE) and the Agricultural College etc was blocked, i.e. demanded a matriculation examination. As an outcome of the Competence Report (*Kompetensutredningen*) in 1969, and its ambition to broaden the recruitment base for higher education, a centralised and uniform system of eligibility and admission to higher

education was introduced in 1977, departing from an odd combination of restricted intake (the adoption of *the numerus clausus principle*) and expansion (Bauer et al, 1999; Kim, 2004). The motive behind this change was the belief that a restricted intake should force the higher education system towards increased equality and geographical dispersion.

Accordingly, the recruitment base for higher education was extended. Besides obtaining general eligibility by completing a minimum of a two-year programme at an upper-secondary school (*Gymnasium*), it was now also, by the entrance of the 25:4 rule, possible for older people (those over 25 years) who had at least four years work experience and who satisfied specific course requirements to gain admission to higher education (The Swedish National Agency for Higher Education, Skriftserie 1997: 13 S). Simultaneously, the reform allocated a limited number of places to most courses. Selection was necessary and it was based on upper-secondary grades, with work experience and a test of suitability for higher education for those being eligible following the 25:4 rule, known as the national university aptitude test (*Högskoleprovet*), also being taken into account. Admission to the longest degree programmes, such as medicine and teachers, were dealt with by a national admission unit at the UHÄ. On the other hand, the institutions of higher education themselves were responsible for admissions to what were known as single-subject courses. Accordingly, a seemingly paradoxical and severely criticised system was introduced with parts of the admission system being centralised to state authorities and other parts being decentralised to the local institutions. The admission to a large number of studies provided by the philosophical faculties remained open even after 1977 (Swedish National Agency for Higher Education, 2006) to be closed in 1979 as a consequence of a Parliament decision (Government Bill 1978/79:93). In the early 1980s, the admission system was revised and, among other things, the position for young applicants was improved whereas the role of work experience, being a criterion favoring older people, was de-emphasised.

In 1991, and as an outcome of the proposals of a national commission, the eligibility criteria for undergraduate education were simplified and changed in order to facilitate the transition from upper-secondary school to higher education. In addition, the national university aptitude test was also made open for young applicants. But still the sets of eligibility were nationally determined and unified, i.e. the same rules of selection applied to all programmes except those in the fine arts. Work experience was de-emphasised as a criterion for selection. It was also possible to apply for special approval to use specific devised examinations, tests, interviews or other similar instruments of selection. (The Swedish National Agency for Higher Education, Skriftserie 1997: 13 S)

The 1993 reform changed the regulation of undergraduate education and the admission system for higher education was decentralised and diversified. Now all institutions were (and still is) responsible for the admission of students on the basis of basic eligibility requirements (The Swedish National Agency for Higher Education, Skriftserie 1997: 13 S; Swedish National Agency for Higher Education, 2008). The consequence of this reform was an increasing variation in rules of eligibility and selection, bringing in confusion among the potential students. The general requirements remained whereas each institution decided the specific requirements. General eligibility was attained by completing an upper-secondary school programme and obtaining a pass grade or better in courses comprising at least 90 per cent of the total number of credits required in the programme, or by providing proof of an equivalent level of knowledge (Swedish National Agency for Higher Education, 2008). In addition, most courses and study programmes also had specific entry requirements depending on the subject area and the type of course. Specific entry requirements in courses were open to new students taken the form of standardised entry requirements. Each higher education institution had to decide its own study programme and the appropriate organisational structure within the framework of a three-year "educational assignment" approved by the Parliament for each institution (see section "Funding of Higher Education"). The coordination of student admissions was at the national level managed by a public authority, the National Agency for Procurement and for Coordinated Admission to Higher Education (Swedish National Agency for Higher Education, 1996). The Swedish National Agency for Higher Education, *HSV* (set up in 1995), approved the programmes leading to a professional degree in accordance with the Degree Ordinance (Swedish National Agency for Higher Education, 2008).

In 1997, the admission system returned as a result of a new commission to a more centralised and unified admission system. Partly, the specific course requirements were decided nationally by the HSV and for the most part, selection was based on upper secondary grades and the national university aptitude test. The school-leaver's grade average/basic comparative score was calculated in the same for all programmes.

In order to broaden the recruitment to higher education and to facilitate life-long learning, new rules for so-called "real competence" were adopted in the early 2000s. This meant an option for an institution to make exceptions from the eligibility criteria if it was perceived that the applicant had the capability to graduate despite not meeting the eligibility requirements. (The Swedish National Agency for Higher Education, Report 2006: 3 R) For keeping track with the situation in other countries, and for promoting an increased transition rate between upper secondary school and higher education, a political goal was set in the early 2000s (Prop. 2001/02: 15) for making at least 50 per cent of an age cohort to enter higher education before the age of 25. Despite the political ambition and the long-term objective of increasing the transition rate from secondary school to higher education the social imbalance in the student body prevails.

Starting in 2007, it was possible for higher education institutions to use alternative selection criteria for admissions to 20 per cent of study places (The Swedish National Agency for Higher Education, 2006b), and in 2010, a number of changes were made in the admission system of higher education, following the recommendations and proposals of the Government Bill (Prop. 2006/07:10). In short, it was decided that some courses at upper secondary school should generate more credits (so-called merit credits). It also became more difficult to improve one's former credits from upper secondary school by courses in municipal adult education. Finally, the 25:4 rule was abolished (Swedish National Agency for Higher Education, 2009). The eligibility requirements of the revised admission system were also adapted to the new national qualifications being implemented in 2007 as an outcome of the Bologna reform.

The current system of admission

A uniform admission system, combining centralised and decentralised features, and following the ideals of justice, clarity and transparency, characterises the Swedish system. At the national level the rules are laid down in the HEA, the HEO¹³ and the regulations issued by the Swedish Higher Education Authority. The previous system relates to the new degree structure being implemented in 2007 and regulates the admission of new entrants to first-cycle courses and programmes. There are also regulations on admission to the second and third-cycle levels, but these are less comprehensive. In order to be eligible for higher education, specific prior knowledge is required. Entry requirements can be either general or specific. The general requirements apply to all courses and programmes; specific or additional requirements are also demanded for some education. If the number of places offered is limited to a course or programme, a selection process is used. All first-cycle courses and programmes, apart from those leading to the award of a qualification in the fine, applied and performing arts, use almost the same selection criteria. These are mainly based on two parameters; the school-leaving grades or the results from the Swedish Scholastic Aptitude Test. This test applies to all higher education programmes and measures general knowledge and skills, which are considered important in higher education studies. Apart from upper secondary grades and the aptitude test, applicants may also be selected, but only marginally, on the basis of special tests, for example interviews or proficiency tests, previous education and work experience (Swedish National Agency for Higher Education, 2008). The whole process is administered by a centralised web-based admission system. For the second cycle level, the applicant needs a qualification from the first-cycle level or a corresponding foreign exam.

The Government has decided that the Swedish Council for Higher Education is to issue further regulations regarding admission, for example concerning applicants with foreign grades. The vast

¹³ The HEO stipulates the general entry requirements that apply for all courses and programmes, as well as listing any selection criteria that may be invoked. It also contains regulations on the evaluation of final school grades.

majority of admissions are pooled and the Swedish Council for Higher Education is responsible for pooled admissions on behalf of the higher education institutions. The individual institutions, on the hand, decide on the admission of students.

5.2.6 Student Finance in Sweden

By tradition, equal access to education has been one of the pillars of the Swedish welfare system. Education up to higher education is mainly tax financed and until 2011, it was free of charge.

In 1965, a comprehensive public system for study assistance was implemented in Sweden, meaning that all students in post-secondary education could obtain financial support from the state for their living expenses, regardless of the socio-economic situation of the parents. The ambition of the system was, among other things, to equalise socio-economic differences between individuals. Before the entrance of the new system, students had the opportunity to get a public loan that was dependent on the income of the parents. The new loan system combined study grants and study loans. A requirement was that the student loan should be repaid by the age of 50. The size of the loan followed the general price trend and was expected to cover the life expenses of the students.

The funding system has been reformed several times over the past decades. In 1989, both the loan and the grant parts were raised by 30 per cent in order to stimulate the recruitment to higher education even further. From then on, it was also possible to apply for funding when studying abroad. The repayment of the loan was related to the income of the borrower.

In 2001, the proportion of the grant part increased from 27.8 per cent to 34.5 per cent. In addition, the system made it possible for students with constrained economy to get additional funding. The “free amount”, meaning the total amount a student could earn alongside his or her studies, was increased. Also the repayment period was changed to 25 years, or before the borrower reached the age of 60 at the latest. (The Swedish National Agency for Higher Education, Report 2006b) In 2006, the extra child allowance for parents receiving student aid was introduced. In addition, the maximum age for receiving student aid was raised from 50 to 54. (The CSN homepage, 2014-09-09) In 2013, the grant portion of student finance for an academic year of 40 weeks amounted to SEK 28,280 and the loan ceiling to SEK 61,960. Student finance could be paid for a maximum of 12 semesters or 6 academic years. The approval and distribution of the Swedish financial aid is administered by CSN (Centrala Studiestödsnämnden), a government agency. The cost of the system is funded through the state budget (The Swedish National Agency for Higher Education, 2006b).

5.3 The Degree Structure in a post-Bologna landscape in the light of national HE policy

Before the implementation of the Bologna reform in Sweden in 2007, Swedish higher education was formally divided into basic higher education (*grundläggande högskoleutbildning*), which roughly corresponded to the concepts of undergraduate and graduate studies, and research education (*forskarutbildning*), which corresponded to doctoral (PhD) studies (including the licentiate). The recognised degrees in basic higher education were divided into general and professional degrees. Goals for each degree were laid down in national legislation (the Degree Ordinance). In addition, there were more than fifty professional degrees (in medicine, teaching, engineering etc), organised according to a somewhat different structure and varying in duration (2-5 years).

The credit point system before 2007 was mandatory throughout the Swedish system. The workload of the students was expressed in points where one week of full-time equalled one credit point (one year = forty credit points) and the degree was built upon the accumulation of credits. The Swedish credit point system was compatible with the ECTS. Most general academic degrees as well as professional degrees met the formal requirements in order for students to gain admittance to doctoral studies within the specific field.

After the implementation of a new degree structure in 2007, all courses and programmes were ascribed to three cycles: first, second and third. The first two cycles correspond to what previously has been referred to as undergraduate education. The third cycle was designated at postgraduate level, e.g. the doctoral education and the licentiate. In Sweden, the first and second cycles are mostly defined as the *basic* and *advanced* levels of higher education.

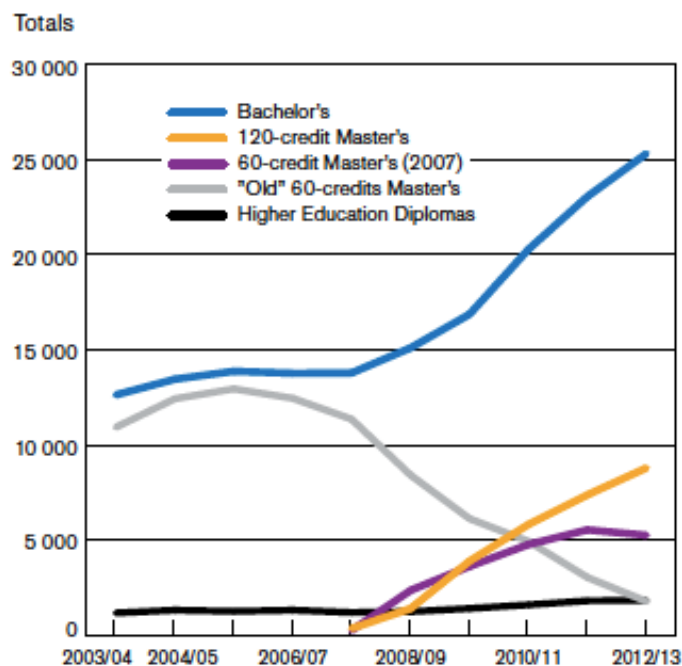
Each cycle (or level) is based on the former in order to promote interconnection and progression. All first and second-cycle educational offerings consist of modules or courses, which could be combined in various ways to form programmes. Both general qualifications and qualifications in the fine, applied and performing arts are assigned to the first, second and third cycle. When implementing the new structure it was decided that the long professional programmes (e.g. in medicine and veterinary science) should keep their first and second cycle together without offering the students a bachelor's degree (Lindberg-Sand, 2007). As already been mentioned, a two-year master's degree was introduced as a new second-cycle degree (120 credits). Simultaneously, the "old" one-year "magisterprogramme" (60 credits), being well established before the reform, was kept in the system. Many university colleges were allowed to arrange such programmes.

A new credit system was introduced in which one-year full-time study corresponded to 60 HE credits (Swedish National Agency for Higher Education, 2008). In 2010, third-cycle qualifications in the fine, applied and performing arts were introduced in the degree structure. Besides these qualifications, there are professional qualifications offered within the first (32) and second cycle (22). In addition to the programmes that lead to the award of qualifications, a wide range of freestanding courses are offered, especially distance learning. Students may select their own combination of these courses and be awarded a general qualification.

5.3.1 Trends of New Study Programmes

Since the introduction of the new degree structure in 2007, the number of awarded general qualifications has risen steadily. In the academic year of 2009/10, the number of general qualifications awarded exceeded the number of professional qualifications for the first time in, and the curve continues to point upwards. The number of qualifications in the fine, applied and performing arts, a new qualification category since 2007, rose to some extent in the academic year of 2011/12 and almost 700 students were awarded. The number of students taking freestanding courses, either on campus or through distance education has decreased during the same period. More courses are offered in complete programmes, in which younger students predominate.

Figure 3. Numbers of general qualification – Bachelor’s degrees, 120-credit and 60-credit Master’s degrees, “old” 60-credit Master’s degrees and HE Diplomas – awarded in the academic years 2003/04-2012/13



Source: UKÄ, Higher education annual report 2014, p. 30.

Figure 3 reveals that it is bachelor's and the 120-credit master's degrees that have increased most. During the last ten years, the number of bachelor's degrees has more than doubled in Sweden. Since the arrival of the 120-credit master's in 2007, more students continue to study on master's programmes. In the academic year of 2012/13 the number of beginners in master's programmes rose to 11,300, a rise of 12 per cent for both Swedish and incoming beginners. This means an increase of master's students and also an increase of students being awarded double degrees. One explanation for the “double-degree phenomenon” increase is that the 2007 Qualifications Ordinance requires possession of a first-cycle qualification before a second-cycle general qualification.

Of the 120-credit master's programmes, the incoming students have been in a majority since 2007. In 2012/13 more than 50 per cent of the master's degrees were awarded to incoming students. Whereas we can follow an increase in the number of new master's degrees (60 and 120 credits), the trend is the opposite concerning the “old” 60-credit master's degrees. One explanation of this is a decrease in the number of international students applying to these programmes. (UKÄ Higher Education Annual Report 2014)

5.3.2 Internationalisation

Globalisation and internationalisation of higher education are central objectives on the political agenda in Sweden and have been so for many years, even before the Bologna process. Swedish students were allowed to participate in the Erasmus programme already in 1992 and this had a major impact on the development of internationalisation. Sweden's membership of the EU in 1995 opened up the Union's educational programmes for Swedish participation and in parallel, a number of national programmes were developed to support the international activities of higher education institutions. The task of higher education in Sweden with regard to internationalisation is expressed in the HEA as follows: “The institutions of higher education should [...] in their activities promote understanding of other countries and of international conditions” (Chapter 1.5) In the 2004/05:162 Government Bill on

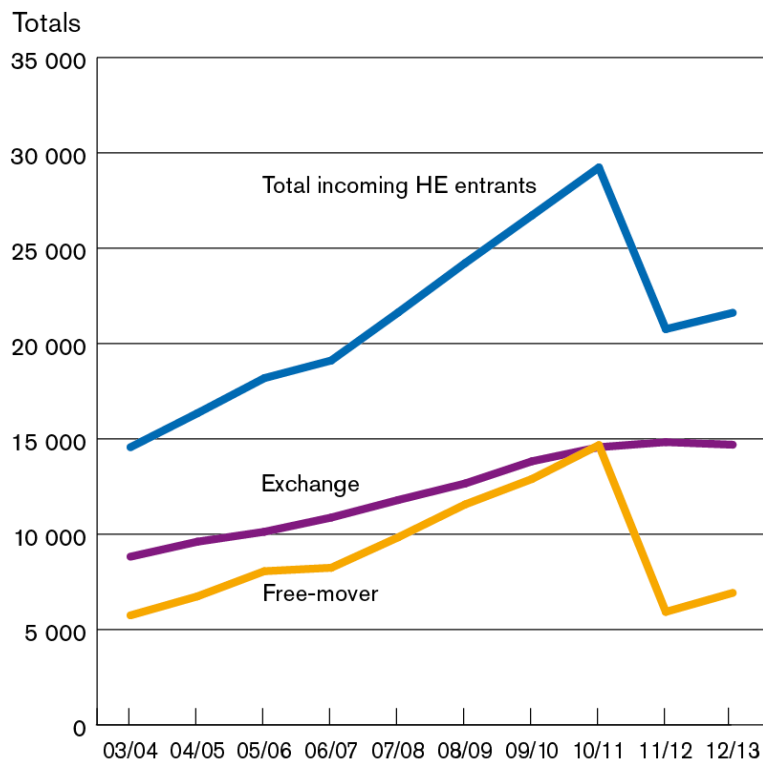
higher education (New World – New University), a national strategy for internationalisation was presented involving all parties in higher education, but with single institutions being responsible (including funding) for implementing the strategy. This means that institutions are themselves responsible for the work and internal organising of internationalisation. To illustrate, a common feature is the setting up of an international office that deals with the practical questions linked to internationalisation, in particular student exchanges and information. The subject specific responsibility for internationalisation is mostly delegated to the departments or faculty boards. Institutions increasingly collaborate with counterparts all over the world in networks, partnerships, joint degree programmes and such. (The Swedish National Agency for Higher Education, 2006b) More lately, Asia has been a popular target for exchange activities.

One effect of internationalisation is that more courses and degree programmes in Swedish institutions are taught in English. The master's programmes on the second-cycle level (and many magisterprogramme) are mostly taught in English and compete for students in an international market. Course and programme development is also taking place at several Swedish institutions in conjunction with institutions in other countries, and many situated in Asia.

One key aspect of internationalisation that needs to be more developed is the scope of student mobility. One educational target is that at least 20 per cent of Swedish students graduating from higher education should have studied for no less than three months abroad (2013). One indication of attainment of the target is that Sweden's national statistics show that among those graduating in the academic year 2011/12 (excluding incoming students) just under 15 per cent had studied abroad for a period. The proportion has been around this level for several years and is accordingly some distance from the EU target. (UKÄ Higher Education Report, 2014)

What can be discerned in the Swedish context in later years is a growth in the number of *incoming* foreign students to first and second-cycle programmes.

Figure 4. Incoming HE entrants during the academic years 2003/04-2012/13 both in total and divided between free-movers and exchange students.



Source: UKÄ, Higher Education Annual Report 2014, p. 41.

In the academic year of 2010/11 incoming students peaked with about 28,000 in total (both exchange and free-moving students). In the academic year of 2011/12 they reached 20,800 in number, which is a decline of 8,600 compared with the previous year. Just over 70 per cent of the new incoming students during the academic year of 2011/12 were exchange students from Europe, which indicates a trend of a declining proportion of free-moving students. In the academic year of 2010/11, there were more or less equal numbers of free-movers and exchange students. The reason behind this development is probably the introduction of tuition fees in 2011. The number of free-movers from countries in the EU/EEA and Switzerland has risen during the same period. Since 2011/12, the curve has changed direction, especially for the free-movers. The number of exchange students has stagnated. (UKÄ, Higher Education Annual Report 2014)

When considering the distribution of international entrants in single institutions, Lund University had the largest share of incoming students in Sweden in 2013 (2500), followed by Uppsala University and the Royal Institute of Technology (1,900 students each). These institutions have also had the largest numbers of incoming students for many years. The majority of the incoming exchange students takes courses rather than complete degree programmes. (Ibid)

5.4 Higher education, state and society in the light of public policies for regulation of the system

5.4.1 The governance of the Swedish system of higher education

The mission of the higher education institutions (particularly the universities) is threefold: to provide education, research and to interact with the surrounding community. By tradition, the state is responsible for the operations of higher education institutions in Sweden. They are, with a few exceptions, part of the public, central government administration, which means that they are subject to administrative, and labour-market legislation and the provisions of the Instrument of Government (UKÄ, Annual Report 2014). In addition, the Swedish higher education institutions are subject to sector-specific regulation (e.g. the Swedish Higher Education Act (HEA) and the Higher Education Ordinance (HEO)), setting the framework for what the institutions are allowed to do. Within this framework, they are quite free to organise their own operations, allocate resources and to decide the provision of courses and programmes.

The HEA is enacted by the Parliament and contains basic rules about the operations the institutions. For instance, it sets the framework for what should characterise the courses and programmes at different levels and it stipulates freedom of research. Before the Autonomy Reform in 2011, it also set the framework of how the institutions should be organised, governed and the principles for the recruitment of students. For instance, it stated that every institution must have a board of governors and a vice-chancellor. It also specified the duties of teachers and the role of students. Since the implementation of the new degree structure in 2007, it stipulates that each institution has the right to apply to SHEA for entitlement to award 120-credit master's degrees in one or more fields of study.

In many cases, the rules in the HEA are supplemented by the provision as laid down by the HEO, protecting the students' right to influence courses and programmes, rules about entrance qualifications and selection for courses and programmes. Until 2010, it also stipulated the framework for the appointment of teachers and doctoral students. The HEO also contains regulations on course and programme syllabuses, grades and qualifications (UKÄ, Annual Report 2014: 10). In addition, to these uniform regulatory frameworks that are common for all institutions, the Government lays down the directives for the institutions' operations in their yearly "regulatory letters" (*Regleringsbrev*) from government, prescribing the objectives to be achieved by each institution the coming year. The HEIs need to report back to the Government in their annual reports. All institutions report to the Ministry of Education, Science and Culture except for the Swedish University of Agricultural Sciences, which reports to the Ministry of Agriculture, Food and Consumer Affairs (The Swedish Bologna Report, 2004-05)

Besides these regulatory acts, the operations of the Swedish higher education institutions are governed by the funding decided by the Swedish Parliament within the framework of the annual central government budget process (The National Bologna Report, 2004-05; UKÄ, Annual Report 2014: 10).

5.4.2 Funding of Higher Education

In Sweden, first and second cycles are financed differently from third cycles and research. In 2013, most of the courses and programmes, at 87 per cent, were specified in the institutions' public service agreements and were funded by grants allocated directly to the institutions by the Swedish Parliament (The Swedish National Agency for Higher Education, Annual Report, 2013). Less than half of the funding for research and third-cycle courses and programmes (47 per cent) that year took the form of direct government allocations. For research and doctoral programmes, the state channels a considerable portion of the funding (26 per cent in 2013) through research councils and other government agencies. Other important funders of research and third-cycle courses and programmes are private foundations and non-profit organisations.

The previous funding system for higher education dates back to the 1993 reform and the introduction of a new performance-based funding system for undergraduate education.

Before the 1960s, the resources allocated to undergraduate education in the philosophical faculties were dependent on the actual number of students entering undergraduate education. The universities received funding in relation to the number of students starting programmes and courses, independently of how many of these actually completed their education. This was called the "automatic system" (introduced in 1958) and was considered to be a generous funding mechanism, particularly for the faculties of humanities and social sciences where access to study places was not restricted. Basically, the state did not control the volume of funding, which indicates a favoured and independent position for universities. At the national level, a strong administration was established for distributing the funds in accordance with the set rules (Bauer et al., 1999).

In the 1960s, with its expansion of student enrolments, combined with the automatic resource allocation and the new creation of senior lecturer positions (established in 1959), the system became very expensive. As a consequence, the funding of undergraduate education was reformed in 1977, which meant the abolition of the criticised and costly "automatic" system. Instead, a centralised resource allocation system related to national study lines and courses and based on fixed numbers of study places was introduced. In order to achieve the political goals of higher education, meaning social equality at the time, the government and the Parliament made decisions on how the resources were to be used in determining the size of each institution and the various types of education to be taught there (Bauer et al., 1999). For instance, the state controlled the number of students to be enrolled on individual programmes and the number of professors and senior lecturers that could be employed (the Swedish National Agency for Higher Education, 2006b).

A Government Bill (Prop. 1988/89:65) presented by the Social Democratic Government in the late 1980s marked the start of extensive development work on the central government budget and control system, and concluded with the implementation of 1993 reform: part of this reform was a new and more decentralised resource allocation system for education. In the academic year 1993/94, the institutions received increased financial responsibility for their operations and the former "input" based allocation system was substituted by a new system for higher education (excluding doctoral studies), being based on the quantitative performance of the institutions. Funding was dependent on the number of students being registered at each institution at the undergraduate level, but also on the credits earned by the students per year, with varying amounts of remuneration for various educational areas (Kim, 2004; Lundberg, 2008). This meant that from then on the institutions were given an "educational assignment" at the start of each three year period by the state.

Every year the Government determines a funding cap for the institutions, which lays down the maximum amount that can be paid to each. Institutions are expected neither to exceed nor to go below this ceiling. The amount of compensation differs between broad subject areas such as social science and the humanities, natural science and technology, medicine etc. All higher education courses are classified accordingly. Each institution is expected to use their new “freedoms” and to redistribute available resources according to their own priorities, but most of them use the “national price tags” in their internal allocation as well (Kim, 2004).

The present system of resource allocation, originating in the 1993 reform, has been the object of a number of state investigations during past years (see e.g. SOU 2005:48; SOU 2000:82; Högskoleverket Report 1997:27; and RRV Report 2003:13). Even though the system has been perceived as reasonable by many, it has also been heavily criticised because price and salary increases are not compensated by the system, eroding the grants for higher education. This situation is particularly striking in the humanities and social science, receiving less compensation from the state than the areas of natural science and medicine, for instance. In addition, the resources that are earmarked for education are used by the institutions for other and non-compensated activities, such as those falling under the “third mission”. Another problem is the short-term nature of the system and hence, its sensitivity to fluctuations in the number of students. This overall situation is explained as having negative consequences for the quality of courses and programmes at the first and second-cycle levels. In 2007 and 2012 the Government increased the appropriations substantially (700 and 600 respectively) to resolve this situation, but the effect was marginal.

Since 2013, the quantitatively based system has been complemented by a qualitatively oriented part. Now, 10 per cent of the resources for first and second-cycle programmes are allocated on the basis of the results of the national quality evaluations. Institutions that receive the highest rating should be given the incentive of additional funding (quality funding). Quality-based resource allocation is applied to public institutions as well as private ones such as Chalmers University of Technology and Jönköping University.

As been mentioned elsewhere in this report Sweden was one of the few countries in Europe in which higher education was completely free of charge for both Swedish students and those from other countries. In 2010, however, the Parliament enacted a provision in the HEA saying that “third country students”, i.e. students outside of the EU/EEA countries and Switzerland, have to pay an application fee and tuition fees for first and second-cycle higher education courses and programmes starting from the autumn semester of 2011. This means that the institutions have the responsibility to charge tuition fees that cover their total costs for these students. As a consequence and as no surprise, there has been a reduction in the number of applications from potential students outside the EU/EEA and Switzerland. The number of applications from this category of students rose substantially between 2008 and 2010 while declining ever since.

5.4.3 *New lateral forms of management in the Swedish system*

As outlined earlier in this report, the Swedish system has undergone a process of successive state deregulation during the last decades. As a response to the 1993 reform, and more lately the 2011 Autonomy Reform, Swedish institutions have been left with greater institutional autonomy from the state to organise their operations. This change has brought a new academic management, with more centralised decision-making in higher education institutions, and also an intensified belief in measurement, external monitoring and quality control of the entire sector. This development is not exclusive to Sweden: it characterises many systems around Europe. In Sweden this development is striking when comparing the outcome of the 1977 and the 1993 reforms, and more lately the 2011 Autonomy Reform.

The demands on the universities have increased and they have to develop an abundance of strategies for how to deal with quests for quality, excellence, globalisation, profiling, democratisation etc. Below

follows an outline of the development of quality assurance in the Swedish context, being one of the key features in new governance, and particularly in the paths of the Bologna reform.

5.4.4 Increased External Monitoring of the Quality of Higher Education

At the end of the 1980s, the word “quality” was introduced more systematically in the higher education context in Sweden. For instance, in the late 1980s the Higher Education Commission was set up by the Government as a response to student criticism on poor teaching quality. Quality became also the key concept of the 1993 reform. However, in contrast to the 1977 reform, the 1993 reform implied a quite new view regarding quality matters. It was competition, not social equity that was the most appropriate approach to achieve quality, trust and attention:

The university or college which does not always put quality first will quickly lose the confidence of the students, the employers, and the State as well as its reputation in the international scientific community (Prop. 1992/93:169, p. 18).

In addition, the increased institutional autonomy, being one of the cornerstones of the reform, had to be counterbalanced by a self-regulative model of institutional governance. The responsibility of universities and university colleges for the quality of teaching and research was confirmed and the role of government changed from providing rules and regulations *ex ante* to checking the attainment of goals *ex post*. A number of policy actions were discussed by government, including a system of performance indicators (or quality indicators) ranking the quality of higher education institutions and to link the results of external monitoring to resource allocation. However, the idea of performance indicators fizzled out as it was criticised by academics and interest organisations. Instead, an evaluation of the institutions’ internal quality management was proposed and accepted (Bauer et al., 1999).

In addition, many of the tasks of the former intermediary bodies were delegated to the local institutions. As a result, the institutional leaders, in cooperation with the university boards, created new kinds of “intermediary bodies” between the government and the academics for defining and fulfilling tasks which were quite new in the Swedish institutional context. The role of the UHÅ was reconsidered and in 1992, this government agency was closed down, and its remaining functions were split up among a number of new agencies, acting independently of the state and the institutions. The evaluative functions of the former organisation were taken over by the new Secretariat of Assessment and Evaluation, which for various reasons eventually was turned into “the University Chancellor’s Office” (*Kanslerämbetet*). (Bauer et al., 1999) This agency, led by the University Chancellor and assisted by leading academics and elite institutions, had a more general aim of supporting the development of higher education by the use of audits and national evaluations. The focus shifted also from quality control to quality improvements (Askling, 1997).

In 1993, the government earmarked resources for the institutions to be used for quality work. Each institution was asked to present an internal system for quality monitoring, including systems of quality assurance and strategies for improvement (Bauer et al., 1999). A Swedish model of quality assessment evolved, in which university and new colleges played a pivotal role as “learning organisations” with self-assessment and internal quality work being key elements. This soft-like approach to quality work soon attracted international attention. (Kim, 2004) In 1995, Government turned the “Kanslerämbetet” into the National Agency for Higher Education (*Högskoleverket, HSV*), to which was delegated the responsibility to audit the local institutions’ internal quality management programmes. In addition, HSV incorporated the former Council for the Renewal of Undergraduate Education (*Grundutbildningsrådet*) and parts of the former National Agency for Higher Education (*Verket för Högskoleservice, VHS*). Its areas of responsibility expanded over time to include a variety of obligations such as monitoring, evaluation, supervision of entitlement to award degrees, other types of supervision, quality audit and enhancement, pedagogic renewal, information concerning studies

and international questions in the HE sphere (Swedish National Agency for Higher Education, 2008a). Quality improvement rather than quality control was the focus of the audits by HSV and between 1995-98 all public higher education institutions were assessed. (Kim, 2004)

The HSV also became the national body for university accreditation of professional programmes and master's programmes (Swedish National Agency for Higher Education, 2007; Wahlén, 2007). A special examination procedure was developed, initially for granting small and medium-sized institutions the right to award bachelor's and master's degrees and in 1998, university colleges could apply for the right to be get full university status or the right to establish so-called "areas of research". Partly as a result of student dissatisfaction with the information value of the quality audits, the emphasis on quality monitoring activities by the HSV shifted in the early 2000s from the institutional level to programme and subject level (prop. 1999/2000: 28).

In 1999, the government instructed the Agency to carry out an examination of the quality of all disciplines and programmes (including postgraduate education) in HE once every six years, beginning in 2001. The subject and programme evaluations, also including the involvement of students, had three main purposes: (1) to contribute to quality development, (2) to examine whether the education offered matched the objectives and provisions set out in the Higher Education Act and Higher Education Ordinance, and (3) to provide information to interested parties. These examinations involved both a self-evaluation by the departments concerned and an assessment by peer reviewers. The team of reviewers was required to submit a report to the Agency including a statement of proposed measures (Engwall and Nybom, 2008).

As a consequence of an intense debate concerning rankings, the HSV carried out a number of theme-based evaluations of Swedish higher education institutions between 2000 and 2007. These evaluations concentrated on aspects such as equality, student influence, social and ethnic diversity, cooperation, internationalisation etc. These evaluations are unique as the results are compared and ranked in a list. In 2002, the HSV also conducted a complementary evaluation based on a survey of students' perceptions on learning and personal development. (The Swedish National Agency for Higher Education, Report serie 2012: 21R)

In the 2000s, and on the basis of experiences from previous evaluations a new model for quality evaluation was formed by HSV. The idea was to launch a simple system and to promote higher education institutions to take greater responsibility at the local level. The model was also partly inspired by the Bologna process and its ambition to create a common European Higher Education Area (EHEA) by 2010 on the basis of common standards and guidelines for quality assurance. In line with the Bologna quality principles the new system was to place greater demands on outcomes and effects of quality work. It was planned that the model should follow a six-year cycle of assessment in 2007-2012. (Swedish National Agency for Higher Education, 2007; Wahlén, 2007) In 2008, the evaluation following this model was interrupted because of strong academic criticism. In 2009, government delegated to the HSV the mission to develop a proposal for a new system, more strongly focused on results and learning outcomes. Another aim was to form a system that could be related to a system for resource allocation at the institutional level. Following an open method of coordination, including the main stakeholders of higher education such as the national associations for universities and students, a new proposal was presented to the government, "Kvalitetsutvärdering för lärande". Surprisingly, the government rejected the proposal and prepared a proposal of its own ("Fokus på kunskap"), being adopted by the Parliament in 2010. The consequence of this manoeuvre was not only strong criticism from the Swedish higher education establishment but also that the HSV lost its membership of the European Association for Quality Assurance (ENQA) in 2012. The latter considered that the HSV did not reach the European criteria for what was expected of a national quality assurance agency and it was also a reaction towards the strong political influence on its formation. The new HSV mission radically changed its quality direction from improvement to control and from focusing on the universities' internal quality programmes to evaluating the quality of

education (Askling, 2012). In 2012, the HSV was replaced by a new agency: the Swedish Higher Education Authority (Universitetskanslerämbetet).

Hence, the Swedish HE system has experienced a change in methods, scale and scope of quality monitoring. In part, this is a result of the move towards decentralisation in the Swedish HE system in the 1990s but also a reflection of international trends in practically all other policy areas as regards quality, marketisation, Europeanisation etc. The increased institutional independence in the sector in the 1990s was accompanied by demands for increased external monitoring, accountability and control of outputs. Hence, there was an increase in monitoring initiatives such as accreditation, rankings, and peer reviews. Simultaneously, there is a trend of increased internationalisation and/or “Europeanisation” in monitoring activities, especially as a result of the advancement of the so called “European Knowledge Society” and its two core protagonists – the EHEA (i.e. the European Higher Education Area) and ERA (i.e. the European Research Area).

5.4.5 Trends in the Swedish context

In Sweden, there have been a number of strategic initiatives to stimulate regional cooperation and to create larger units by merging some institutions, especially universities and university colleges over recent years. In 2004, for instance the new university colleges in West, Skövde and Borås initiated a joint effort to cooperate in the provision of education in areas being specific for regional university colleges (e.g. language, IT, education). The project was however cancelled. Another was the joint action taken between Växjö University, the University of Kalmar and Blekinge Institute of Technology in 2005. They signed a framework agreement to form a strategic alliance, the South East Academy. In 2009, the university boards at the university colleges in Växjö and Kalmar proposed to the Government to merge these institutions into the Linné University (Engwall, 2009). In 2010, the university was formally established. Blekinge Institute of Technology, on the other hand, decided to profile itself as an institution of applied IT and innovation for sustainability. The same year, the School of Education in Stockholm merged with Stockholm University and the Dramatic Institute and the Theatre Academy created the Stockholm Academy of Dramatic Arts.

Another simultaneous initiative was the one taken by Örebro University and Mälardalen University College. After a period of positive discussions, they decided to cancel their plan, continuing as autonomous institutions. (Askling, 2012) In July 2013, the University College at Gotland was merged with Uppsala University and the year after, in January 2014, the Stockholm University of the Arts was created as a merger between the Stockholm Academy of Dramatic Arts, the University College of Opera and the University of Dance and Circus.

5.4.6 Distance Education

In Sweden, distance education, especially via the Internet, has a long tradition and has grown considerably since the 1990s. Distance education can be defined as courses and programmes in which teachers and students are separated in time and/or place. It is the Government’s policy goal that higher education should be flexible and easily available both geographically and in terms of age in order to encourage life-long learning, and consequently, distance education has been used as an appropriate vehicle to reach this objective. In 2002, a Swedish Net University was inaugurated in order to support and promote the provision of information technology (IT) and supported distance education. In later years, however the boundary between on-campus teaching and distance education has become increasingly blurred as the ICT and the methodology initially used for distance education is now increasingly used on campus. The number of students opting for distance education, usually women, has risen since the beginning of the century from just over 18,000 in 2000 to 68,000 in the autumn 2011. Half of these students have a previous higher education qualification. The popularity of combining distance education with on-campus teaching has also more than tripled since the beginning of the century. (Swedish National Agency for Higher Education, 2011)

5.5 Conclusions

This report has described the organisational features of the Swedish higher education sector. The study has focused on the postwar era, with an emphasis on the period between the 1970s and the early 2000s. This is a time when the system moved through a dramatic expansion in size and scope, transforming the elitist system into a mass-education system. From being open to only a limited group of privileged students in larger cities, higher education has gradually become accessible also for new target groups simultaneously as education has been organisationally spread to more remote geographical areas. Initially, the principle of uniformity or *enhetlighet* guided the expansion, and all post-secondary education was transferred into a common higher education system. Suddenly, new university colleges and other specialised institutions were comparable and considered as “equals” with the old and prestigious universities. Later on, we can observe how this rationale becomes obsolete, being replaced by other ideals such as excellence, profiling and specialisation being central to defeating the competition in a knowledge market.

The report demonstrates how the structural changes characterising this period have been influenced by political reforms at a national level, with various rationales, ideals and objectives. However, such reforms do not develop in a vacuum, but are influenced by trends and developments operating beyond the national level. The Bologna reform and the recent Autonomy Reform are two such examples. In the Swedish context, three reforms seem to have played a pivotal role in the expansion and re-structuring of higher education in Sweden; the 1977 reform, the 1993 reform and the Bologna reform. These developments, being expressions of social, political and economic circumstances of their time, have forced the higher education system towards different “poles” in terms of centralisation - decentralisation and regionalisation - internationalisation. In the wake of the expansion, politicians also have dealt with how to manage and fund this development, opening up for shifts in the governance of Swedish higher education. The 1993 reform and more lately the Autonomy Reform, have urged a de-regulation of the system. History tells us, however, that the scale and scope of regulation did not decrease. Rather, the de-regulation, in tandem with an expansion and internationalisation of the sector, has led to re-regulation and the appearance of other forms to control and monitor the Swedish higher education sector, and primarily at a distance. The reforms being implemented since the 1990s have paved the way for the spread of softer and more “external” ways of monitoring both the management and academic performance of Swedish higher education institutions. The spread and expansion of peer reviews, quality audits, assessments, accreditations, rankings, quality criteria and the actors offering and mediating such instruments are clear evidence of this trend. This expansion is not confined to the Swedish higher education sector alone: an explosion of regulation and monitoring activities, has taken place in a variety of domains.

A concluding observation is that the structure of the Swedish system more generally has moved towards being more pluralistic, complex and fragmented, with inherent dynamics and mechanisms promoting homogenisation/divergence, cooperation/competition and inclusion/ exclusion. The system includes a remarkable number of institutions of different size, profile and traditions now competing for excellence, visibility and not least, resources, in what is believed to be a global knowledge market.

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