## **Denmark**

## Introduction

According to the analysis in St. Aubyn (2009), the tertiary education system in Denmark seems to perform very well in terms of quality and efficiency. As regards changes over time (DEA analysis), Denmark exhibits the best comparative performance: it increased both weighted graduates and weighted publications between the two periods (1998 to 2001 and 2002 to 2005). Denmark was found on the efficiency frontier in the second period 2002 to 2005.

## **Indicators**

Table - Summary of indicators in St. Aubyn (2009) and additional statistics provided by Denmark

Scores of efficiency indicators							
	Average ISI citation		Recruiter	Recruiter review		Peer review	
	Score	Rank	Score	Rank	Score	Rank	
DK	5,37	4	1,30	7	1,75	6	
best performer	NL - 5,51	1	IE - 2	1	FI - 2	1	
worst performer	RO - 1,63	26	CZ -1.06	16	GR - 1.02	16	

Indicators of main determinants of efficiency						
	Funding rules		Staff policy		Evaluation	
	Score	Rank	Score	Rank	Score	Rank
DK	5.30	8	10	1	4,6	15
best performer	PT - 7,8	1	CZ, DK, NL, AT, SK, SE,	1	HU - 8,3	1
worst performer	SK - 2,9	18	FR - 1,8	18	GR - 2,3	18

Descriptive indicators							
	Academic staff	Students	Graduates	Publications	Students	Graduates	Graduates
		per capita			per acade	mic staff	per student
DK	2,2	38,4	9,4	1,0	16,0	1,8	24,3
EU27	1,9	33,7	7,1	0,6	17,8	3,7	19,8

Note: sources and definitions of academic staff per capita and students/graduates per academic staff for Denmark are not comparable with the EU27.

	PISA		
	Score 2000* Rank		
DK	497	10	
best performer	FI - 540	1	
worst performer	RO - 410	18	

Average years spent to obtain a BA degree			Investment	Investment in research		
		(Universities only)		% GDP		
	ВА	MA	Private	Public		
DK	3,42	3,17	1,65	0,85		

Denmark combines strong quality of research and teaching.

As regards the efficiency indicators, the staff policy indicator has the maximal value (together with Austria, Czech Republic, the Netherlands, Slovakia, Sweden and the UK). Funding rules are above-average while the evaluation indicator scores on the lower bound.

Denmark has a 20-year track record experience in output based basic funding for teaching and 10-year experience as regards research. The performance-based allocation of basic funding was reformed in 2009. New taximeter scheme to measure output in terms of exams passed. Denmark is implementing a gradual shift of focus towards faster completion of the programme by providing incentives (35% of bachelors study within the prescribed period).

There are large numbers of graduates per capita, graduates per student and publications per capita (statistics provided by Denmark). The tertiary education system combines quantity (large number of publications per capita and large production of graduates) with quality (high impact of research in terms of citations and above average quality of teaching).

Graduates per academic staff are below average. The academic staff is comparatively large.<sup>1</sup>

Denmark aims to attract new people to enrol or complete tertiary education and a 50% target of young people to enrol was set. This can be seen as a response to the need for skilled workers in the economy and the recent productivity slowdown. The private returns to education are relatively low according to available estimates. The supply of graduates may be constrained by wage compression or insufficient economic incentives that may limit the returns to investment in education.

There are no tuition fees in Denmark and support programmes for students are extensive.

The degree of openness is remarkably high: international advertisement of posts for Professor/Associate Professor is compulsory. Many Professors/researchers have studied abroad.

There is an important role for private investment in research. A new performance-based allocation of funding was introduced to further improve the quality (already excellent) of research. A new "bibliometric" research indicator will be introduced in 2010-12.

Enrolment depends strongly on secondary school average grade. 10% can be admitted according to other criteria.

Student choice is only half (or less) of total ECTS in Denmark, which seems to confirm a trade off between broad student choice and efficiency of the system.

## Policy developments

Research institutes are being integrated. There are relatively frequent adjustments of indicators for funding allocation.

<sup>&</sup>lt;sup>1</sup> The figure for academic staff provided by Denmark is very high relative to the figures provided by St. Aubyn for the other Member States.