

## Bruegel Policy Brief

### 'Why Reform Europe's Universities ?'

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#### Media Memo

#### **What is wrong with Europe's universities ?**

The problem which we address here is why Europe's universities score much lower than US universities in well-known international rankings such as the Shanghai Jiao Tong University Academic Ranking of World Universities or the Times Higher Education Supplement ranking. These rankings measure universities' research performance by totting up citations of faculty in key scientific journals and counting the number of Nobel prize winners.

#### **Do all European universities come off badly compared with US universities?**

No. The US is clearly ahead when it comes to the top 50 universities in the world. Indeed, the top four US states (Massachusetts, California, New York and Pennsylvania) score better than any European country. However, Europe does increasingly well as the ranking expands to the top 100, 200 and 500. (See bar Figure 1 in annex).

#### **Does it matter that Europe does badly in the top 100?**

Yes. There is a direct link between universities' research performance and ability to perform in a knowledge-based economy. If you do not invest in higher education and research, you do not allow your economy to contribute to, and benefit from, leading-edge innovation and hence higher growth.

#### **Who are the best performing European countries?**

There are major differences between European countries. Switzerland, the UK and Sweden do particularly well, even in the top 100. Denmark, Finland, Belgium and the Netherlands also do well in the top 200 and top 500. In contrast, southern and eastern Europe lag far behind. France and Germany do relatively poorly, except in the ranking from 301 to 500.

## Why exactly is Europe trailing the US?

Two reasons.

- Europe invests too little in research and far too little on higher education. In 2001 (most recent figures) total public and private spending on higher education in EU25 was only 1.3 percent of GDP, against 3.3 percent in the US. Even more alarming, spending on higher education expressed as spend per student was €8700 in EU25 versus €36500 in the US. Money matters. (See Figure 2 in annex to this memo, and Figure 1 in the policy brief)
- European universities suffer from poor governance, insufficient autonomy and often perverse incentives. This is particularly the case in budgets, hiring and remuneration.

Bruegel's own survey of European universities shows that both the above reasons contribute to the EU's poor performance and that autonomy, apart from having a positive effect on performance in its own right, also increases the efficiency of spending.

## How did the authors come to these conclusions?

First, we looked at the relationship between

- university performance as shown by a Bruegel **country performance index** based on the results of the 2006 Shanghai university ranking and
- university governance and funding as shown by data from a Bruegel **survey questionnaire**.

Second, we looked at how university autonomy affects the patenting impact of research funding using rich data on US universities in different states and over a lengthy period of time. (See Figure 3 in annex to this memo and Figure 2 in the policy brief).

## So what reforms are the authors proposing?

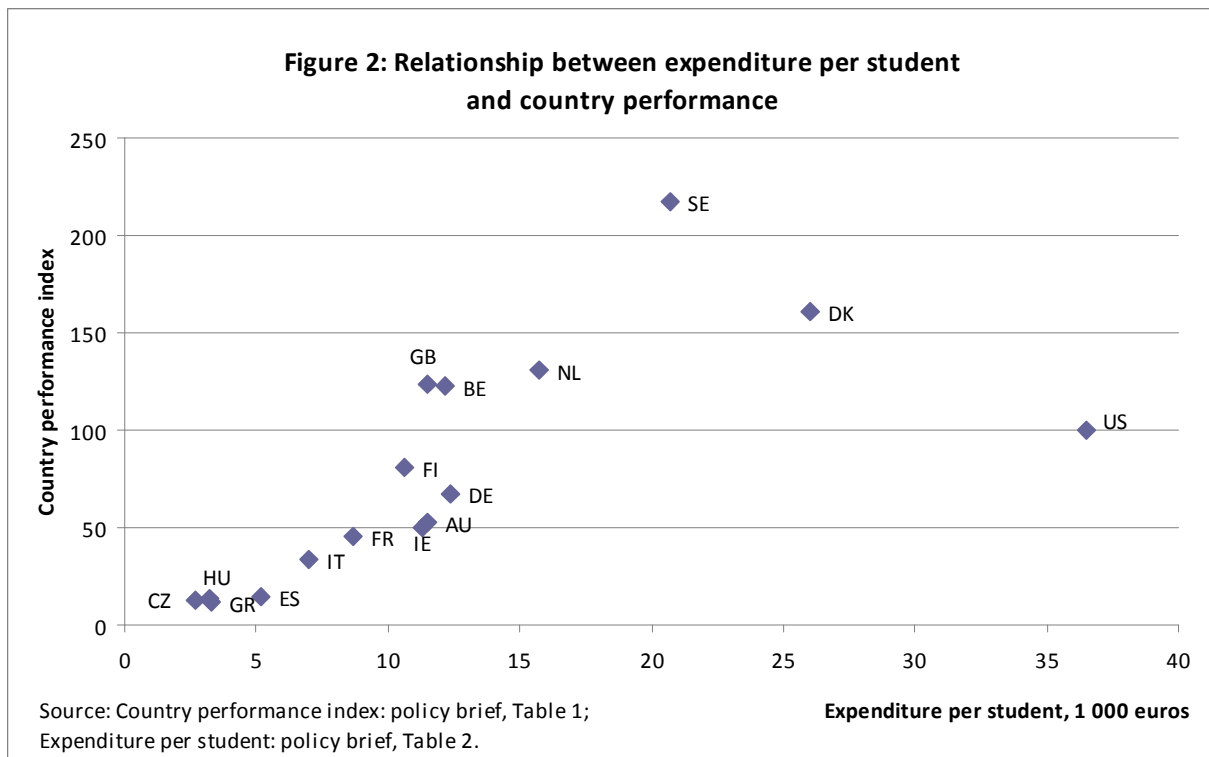
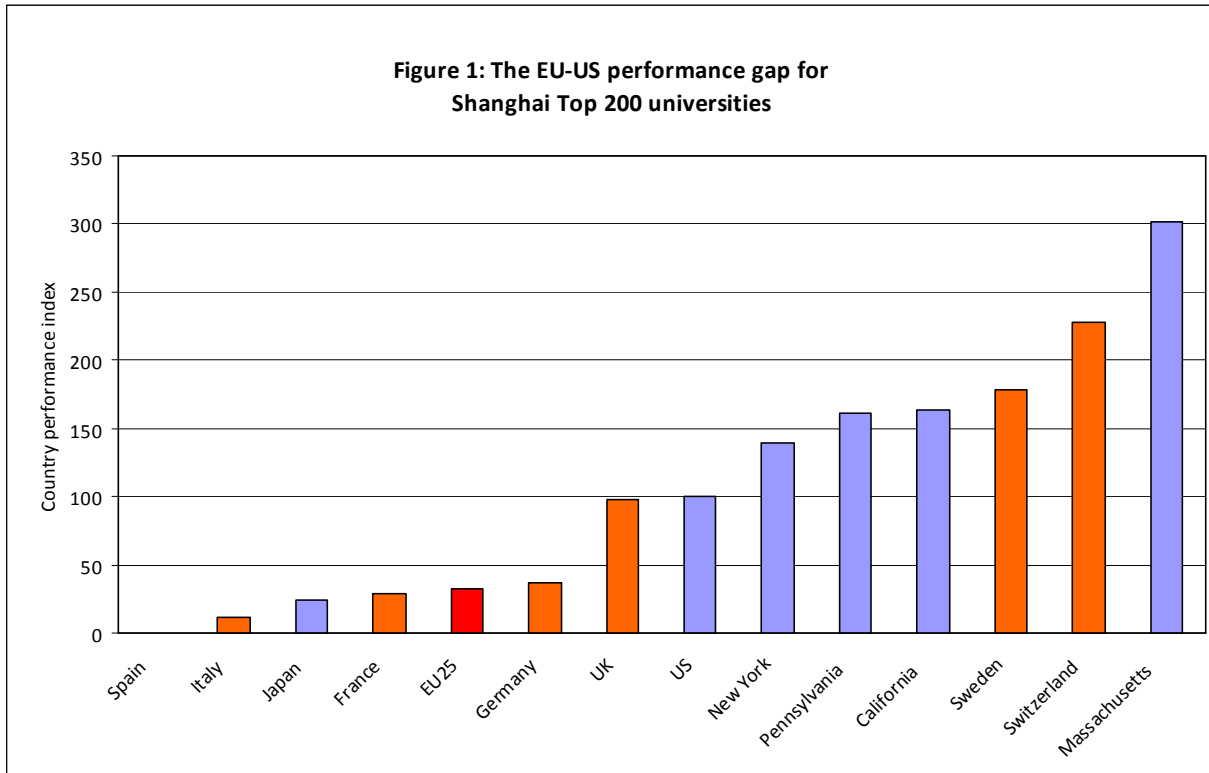
Some EU governments have already started to reform their university system. And our evidence show that more than one university system can work. However, we propose that Europe's governments should invest an additional one percent of GDP each year in higher education. The extra funding may be public or private. In order to make this extra funding 'bite', we propose that universities should be given more autonomy in three key areas: budgets, hiring and remuneration.

**Should all Europe's universities be run as private businesses in order to achieve US-level performance?**

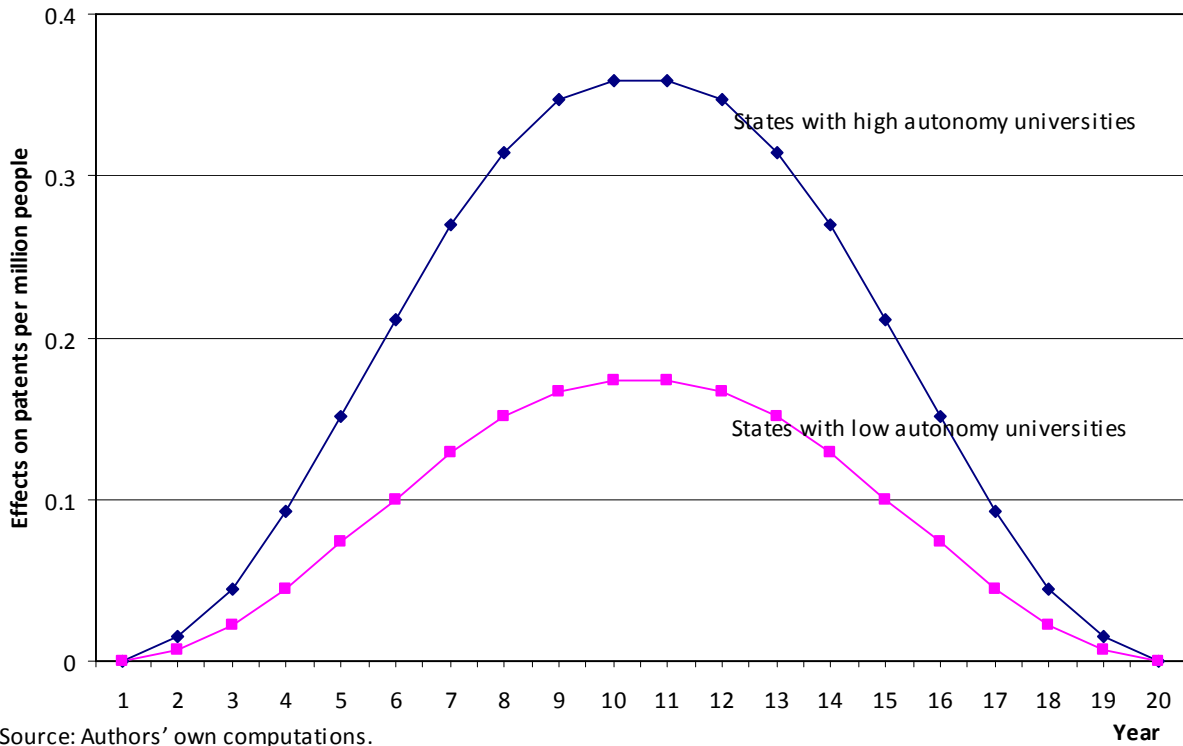
No, and this is not even the case in the US, where many universities are public. There is room for different models. For example, both Switzerland and Sweden are doing well with mostly public universities, while the UK also performs well with a higher share of private universities.

Annex

Nota bene: Figures 1 and 2, US=100



**Figure 2: Effects on patents of an increase in higher education expenditure, states with high autonomy vs. low autonomy universities**



Source: Authors' own computations.

Note: The increase in expenditure is assumed to last from year 1 to 6. The effect on patenting accordingly starts in year 2, peaks in years 10 and 11, and ends in year 20.